“LOISETTE” EXPOSED

(MARCUS DWIGHT LARROWE, alias SILAS HOLMES, alias ALPHONSE LOISETTE.)

TOGETHER WITH

LOISETTE'S COMPLETE SYSTEM OF

PHYSIOLOGICAL MEMORY

THE INSTANTANEOUS ART OF NEVER FORGETTING

TO WHICH IS APPENDED A

BIBLIOGRAPHY OF MNEMONICS

1325-1888

BY

G. S. FELLOWS, M.A.

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"PROFESSOR" LOISETTE'S SYSTEM.

"The Professor [Loisette] tells us that he believes his system 'is destined to work as great a revolution in educational methods as Harvey's discovery of the circulation of the blood in physiology,' but it is difficult to see how this is to be effected while it is kept a secret."—David Kay.

"It [Loisette's Method] certainly differs in some respects from other systems, inasmuch as what are known to other mnemonists as 'keys' and 'associations' appear here under other names."—Middleton.

"The theory of association as given by psychologists has not a leg to stand on. . . . The justification of the law of contiguity is equally absurd." [With the law of similarity.].—Loisette.

"The Loisettian art of never forgetting uses none of the 'localities,' 'keys,' 'pegs,' 'links,' or associations of Mnemonics."—Loisette.

"I have never taught my system to a mnemonical teacher or author!"—Loisette.

DR. PICK'S SYSTEM.

"Pick's method is a thoroughly practicable one, and is now largely used. Loisette, rather curiously, is the only mnemonist who condemns Pick."—Middleton.

"It was while engaged in physiological studies at Prague, that Dr. Pick first systematized the art of memory, and he has been enabled to render that quality of the mind almost independent of physical organization."—The Lancet, London, Nov. 10, 1860.

Dr. Pick calls his own method "this practical system of Mnemonics."

". . . With a view of showing how a true association of ideas assisted the memory, he [Dr. Pick] applied a test to his audience, and asked them to associate the following ideas: Memory or remembrance, history, wars, revolutions, gunpowder, explosions, steam, railways, celerity, electric telegraph, Atlantic cable, America, cotton industry, England, progress, civilization, Chinese missionaries, church, Reformation, Germany, Guttenberg, printing, and newspapers. Having only once enumerated these ideas, he requested the audience to repeat them in their consecutive order, then backwards, and afterwards indiscriminately. This was done successfully, and the audience seemed to be surprised with their own proficiency."—From Report of Dr. Pick's lecture at Oxford University, Morning Post, London, Nov. 25, 1859.
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The so-called Loisette System here presented, complete, has hitherto cost from Five to Twenty-five Dollars and the signing of a contract binding to secrecy in the penal sum of Five Hundred Dollars. If the system is worthless that fact should be made known. If it is all it claims to be, the whole world ought to have the benefit of it, and at last can have it, and at a price within the reach of the millions. Here it is, and the intelligent public can judge for themselves.

The contract signed by the writer is null and void, being obtained under false pretences as to what the system was, as set forth in the following pages.

Loisette’s alleged copyright is paralleled only by the plea of a defendant, charged with keeping a vicious dog, which had bitten the plaintiff: 1st. It couldn’t have been his dog, because his dog was tied. 2d. It couldn’t have been his dog, if he was not tied, because he hadn’t any teeth. 3d. He hadn’t any dog.

As to the copyright:
1st. Sets have been issued in this country without the word “copyright.”
2d. Enquiry at the office of the Librarian of Congress elicits the information that, as the conditions of the copyright law have not been fulfilled, there is no copyright.
3d. The pamphlets were first published in England, hence the copyright here would be invalid though all the conditions had been complied with.

Every student of the Loisette System will confer a favor by sending to the publishers a postal card bearing his name and address.

Washington, D. C., June, 1888.
INTRODUCTORY.

It should be stated, by way of explanation, that the author has no interest in any Memory System whatsoever, and is actuated solely by that keen sense of justice and innate love of liberty, characteristic of every true American.

The history of the evolution of this volume may not be without interest. The coming of "Professor" Loisette to Washington was preceded by vague rumors that the "Professor" was a "fraud." Nevertheless the writer decided to test his "unique and original system," with the determination, should it prove fraudulent, of thoroughly exposing his imposture. Every lecture was faithfully attended; and this was more than enough to awaken distrust of the "Professor," however great the value of his system. Evidence began to accumulate. The article "Memory" in Chambers' Cyclopedia contained the essential principle of his system. Dr. Holbrook's invaluable work "How to Strengthen the Memory," quoting copiously from Dr. Pick, furnished still further proof, and Dr. Pick's own work completed the chain of evidence.

It was determined to call a public meeting of all who had studied the Loisette System, and entertain the assembled company by reading, in the presence of representatives of the Press, these interesting and significant articles, with many more quite as suggestive. The plan was endorsed with enthusiasm, by many of the most prominent citizens of Washington. Then, to add to the interest of the occasion, a printed copy of these articles was to be put into the hands of every member of the class. Finally, to render the exposure complete, the publication of the entire Loisette System along with it was undertaken, and is now commended to the careful consideration of all interested in the cause of justice and fair play.

The author lays small claim to originality in this little work. He has scarcely done more than search out and connect the links in the chain of evidence. He would be the last to decry a system which has already proved of such value to many thousands, but if it has such merit, let honor be paid to whom honor is due.

Corrections of errors, and suggestions, will be gratefully received, and will be given due consideration for the next edition, soon to appear.
the laws of Inclusion, Exclusion, and Concurrence, with infinitely greater ease and certainty than it does any other mental acts. Another fact which I also discovered [in Dr. Pick's book], and which is of the most transcendent importance in training and developing the memory, is that the learning and reciting forwards and backwards of a series of words arranged in conformity to inclusion, exclusion, and concurrence, invariably strengthens the natural memory, in both its stages, to the highest degree.—Loisette, Part I., p. 46.

The mere publication of the "Loisette System" may of itself be deemed a sufficient exposure. When one devotes a large share of his energy to a sweeping denunciation of other men and other methods than his own, he is usually and justly set down, without further enquiry, as himself an impostor. But let not the System be lightly thrown aside as worthless, even though the teacher disgust every thoughtful mind. The arrogance, the egoism, the braggadocio of the charlatan is not "emblazoned on every page." Rubbish there is, it cannot be denied, but the patient and persistent seeker after hidden treasure will surely find grains of purest gold. If weary of the task and tempted to fairer fields, turn to the last pages of the little volume, read the words of commendation from eminent men who have proved its value; and you will be convinced that you have found a friend or a foeman worthy of your steel.

If the system is not original with Loisette, we submit that he has done his best to make it his. He speaks of it as "my System" 131 times, which is all that could reasonably be expected of him when we consider the number of pages in which it is simply impossible to bring it in. And, be it remembered, this does not include the frequent use of the phrases, "my Method," "my Discovery," "my Art," "my Device," etc. In this case we have a valuable illustration of the perfection of "the Art of Never Forgetting." Here "attention," as well as intention, was perfect to start with, and thus a "vivid first impression" was ensured; then the rule requiring "frequent repetition" was faithfully complied with. A careful study of the Loisette System will reveal the truth that any fact "once fixed in the mind" by this method is "fixed forever." Under these circumstances Loisette can hardly be blamed for claiming to be the originator, since we have found this to be the inevitable result of this infallible and invaluable system.

What matters it that another taught essentially the same system at least 35 years ago! He must have borrowed it from the "Professor!" Loisette claims, in his circulars, to have taught his system as early as 1866; which would naturally give him priority over one who published the same principles in 1862, in a second edition, while his lectures date back 10 or 15 years earlier!

An interesting comparison may be made between Loisette's lectures, formerly but five in number, and the Syllabus of Pick's lectures, p. 26.

It should also be borne in mind that Pick's book only pretends to give the principles which are the basis of his method, while the practical application is given only in his oral lectures.

Before reading what follows turn to page 26, and read what the press and eminent men had to say of Dr. Pick thirty-five years ago, and also the opinion to-day.

After a careful comparison has been made between Loisette's method and Dr. Pick's, special attention is called to Loisette's attack on Pick.
(page 106) where, however, he does not venture to call him by name, but characterizes him contemptuously as "an Anglicized German" with the sobriquet of Doctor." Fling are unusually becoming from an Anglicized American with the self-applied sobriquet of "Professor." Read the list of irregular verbs (page 23) and Dr. Pick's instructions in full; then you will be prepared to appreciate at its real value Loisette's criticism in the footnote: "To remember the figures 51842 it would be easier, if the precise order of the figures was not important, to arrange them thus: 12:45!!"

If a greater piece of imbecility has ever appeared in cold type, the discoverer will kindly forward it for publication. When one realizes how much Loisette is indebted to Dr. Pick for the very essence of his system, and compares the modest claims of the latter with the arrogant pretensions of the former, one cannot but feel that the use of such language as adorns the two pages mentioned is simply beneath contempt.

If the patience of the reader is not already exhausted, let him turn to Loisette's statement of the "errors of Psychologists," where will be found, to be sure, a few truisms, preceded by this note: "The following remarks are not to be read except by those who have studied Mental Science." The author has taken the liberty of correcting an obvious typographical error. Such a warning was certainly needed; for, otherwise, the few who succeeded in wading through these two pages would surely have been convinced that the brazen effrontery, the insolent presumption of such a man would make a bronze statue turn green with envy.

**PHYSIOLOGICAL MEMORY.**

It might be interesting to enquire where "Professor" Loisette got his ideas of "Physiological Memory." As so much else has been found to emanate from Dr. Pick, let us see what he has to say.

"Modern psychology, respecting which almost all writers upon Mnemonics appear to have been strangely ignorant, has, with the aid derived from the prodigious progress of physiological science, diffused a new light upon the nature of the human mind. The experiments made by Flourens and Hertwig, and which are amongst the most interesting in the annals of physiological research, prove that it [the memory] exists in the primitive nerves of the cerebrum; because, when these are removed, Memory disappears, together with the other mental and sensitive faculties.

"And hence it may likewise be inferred, that the psychological phenomena, throughout all their ramifications, are regulated by the influence of the brain. It is, therefore, evident that every circumstance or condition that influences the body, and especially the brain, is capable of influencing our mental faculties; and hence it is easily understood that physiologists and physicians, whether writing upon Mnemonics or treating patients whose memory is lost or defective, prescribe medicine and dietetic rules with a view to produce an effect upon the brain and through it upon the memory.

"It may be mentioned, however, that, in our reference to the brain as influencing the mental faculties, we intended only to show the connexion between Psychology and Physiology in regard to Memory."
Further, in his prospectus he says:

"Dr. Pick having made Psychology his special study, has thereupon founded and evoked a helping agent, at once simple and natural, and capable of being brought instantly into active operation."

In view of these statements, the explanation of the origin of the term Physiological Memory is simple enough. After the memory has been properly cultivated by the Loisettian method, "the mind acts spontaneously, and without any exercise of the will, in accordance with the laws of Inclusion, Exclusion, and Concurrence." Thus the system got its name; and doubtless the "Professor" himself could not tell you where he got it if his life depended upon it. Who has the heart to blame him?

**INTERROGATIVE ANALYSIS.**

"My memory teaching includes two distinct, unique, and original Systems. The first is the one I have been teaching many years. This method uses Analysis and Synthesis to develop and build up the fundamental Associative Power, by awakening to its highest intensity the direct and immediate appreciation of Inclusion, Exclusion, and Concurrence. My second System, which I call Interrogative Analysis, reaches the same goal by a different route."

Loisette here gives us the summary of his whole System. As to the originality of the 1st System, as he calls it, comparison with the work of his predecessor, Dr. Pick, will effectually explode his claims. And as to his claim to originality in the use of the method of Interrogative Analysis, which he terms his 2d System, it has been in use, and in the identical form in which it is used by Loisette, from time immemorial, by the most successful teachers; notably, by the great Reformer Melancthon (1497-1560), who applied it especially to the teaching of languages, and students flocked to him from all parts of Europe. While in use at the present time, to a greater or less extent, by many teachers, it has been especially revived in the so-called "Natural Method" of teaching modern languages.

The following should be read side by side with Loisette, Pt. II., p. 80.

**Das Schaf muste von allen Tieren Vieles leiden.** Da trat es vor (den) Zeus und bat, sein Elend zu mindern.

Wer muste leiden? das Schaf ... 
Von wem muste das Schaf leiden? von allen Tieren ... 
Was muste das Schaf, von allen Tieren leiden? vieles ... 
Wer trat vor? das Schaf. ... 
Vor wem trat das Schaf? vor Zeus. ... 
Wer bat? das Schaf bat. 
Was bat der Schaf? ... sein Elend zu mindern. 
Wen bat das Schaf sein Elend zu mindern? den Zeus. ... 
Heness: Der neue Leitfaden (Holt. N. Y.).

**Trans.:** The sheep must suffer much from all beasts. Therefore it went before Zeus and begged him to relieve his misery.

**Who must suffer? The sheep, etc.**

From whom must the sheep suffer? From all beasts, etc.
What must the sheep suffer from all beasts? Much, etc.
Who went before? The sheep. ... 
Before whom did the sheep go? Before Zeus. ... 
What did the sheep beg? ... to relieve his misery.
Who did the sheep beg to relieve his misery? Zeus. ...
Loisette, 1888.
Mother Day will buy any shawl.
Mother Day will buy any shawl.
Mother Day will buy any shawl.
Mother Day will buy any shawl.
Mother Day will buy any shawl.
Mother Day will buy any shawl.

Zachos, 1853.
Will you go to town to-morrow?
Will you go to town to-morrow?
Will you go to town to-morrow?
Will you go to town to-morrow?
Will you go to town to-morrow?
Will you go to town to-morrow?

The preceding sentences are quoted, italics and all, from page 180, "Introductory Lessons in Reading and Elocution," by Parker and Zachos, published by A. S. Barnes & Co., New York, in 1852.

LAWS OF MEMORY.

Compare Loisette's three laws of recollective analysis (pages 32 and 88) with the following, and also with Dr. Pick's (page 19):

"Aristotle (384-322 B.C.), the earliest writer who attempts any classification of the laws of suggestion, distinctly includes under the law of co-adjacence whatever stands as parts of the same whole; as, e.g., parts of the same building, traits of the same character, species of the same genus, the sign and the thing signified, different wholes of the same part, correlate terms, as the abstract and concrete," etc., etc.—Haven: Mental Philosophy. 1857.

"The earliest known attempt to lay down the laws whereby thought succeeds to thought, is that contained in Aristotle's treatise on memory. He enumerates three different principles of mental resuscitation, viz., similarity [inclusion], contrariety [exclusion], and co-adjacency [concurrence]. He has been followed by most other philosophers as regards all the three principles."—Chambers' Cyclopædia, Article Association of Ideas.

"The Laws of Association. . . . Accordingly it has been established that thoughts are associated, that is, are able to excite each other: 1st, If co-existent [concurrent], or immediately successive, in time; 2d, if their objects are conterminous or adjoining in space; 3d, if they hold dependence to each other of cause and effect, or of mean and end, or of whole and part; 4th, if they stand in relation either in contrast [exclusion] or of similarity [inclusion]; 5th, if they are the operations of the same power, or of different powers conversant about the same object; 6th, if their objects are the sign and the signified; or 7th, even if their objects are accidentally denoted by the same sound."—Bowen. 1861.

MASTERING THE CONTENTS OF ANY BOOK.

On the method of mastering the contents of any book at one reading, compare Loisette (page 183) with the following:

"When we read a book on a subject already familiar to us, we can reproduce the entire work, at the expense of labor requisite to remember the additions it makes to our previous stock of knowledge."—Bain: "Senses and the Intellect," p. 538, London, 1855.

"To aid the retention of the contents of a book, the chapters must be associated together by selecting the primary or leading ideas of each;
and to each of the latter, again, a few further suggestive ideas in the
chapter may be joined. The number of ideas that should be selected
from each chapter will depend on the nature of the subject, the degree
of sequence or relationship between the parts, and the completeness
with which it is desired to be remembered.”—Lyon Williams: Science
of Memory, 1866, pages 130, 131.

KNIGHT’S TOUR.

Does the use of the following key words and sentences for the so­
lution of the Knight’s Tour differ essentially in principle from the
method of Loisette? (p. 68) Or are they correlated with greater diffi­
culty?

“Sad deeds will outlaw many a rogue.
Churly riches lose a mellow heart.
Udjoyous boys meet music nowhere.
Amiable judge unwarily may sneeze.
A meek nun enough may find homage.
Would ebony ladies wiser dears have.
No merry soul will show a dull dough look.
Irony libel may shame a hero famed.
Dutch sage would know a Sunday gamer.
Robber may live alone, rich, unhappy.
Rare, new cameo modify.”

—Fauvel-Gouraud, 1845.

“Hat, tide, hill, dale, moon, rock, jewry, lawyer.
Cheese, less, mill, rat, inch, pie.
Home, time, key, honor, mop, lash.
John, rule, miss, niece, make, none, enough.
Move, not, much, top, nail.
Does, your, dear, wife, name, rose, lily.
Shoot, wild, elk.
Run, leap, lame, Jim.
Rough, maid, teach, joy.
Dine, honey, dig, merry.
Europe, army, love, Ion, Irish, nap.
Horror, Yankee, mummy, doff, hat.”

—Miller.

RATIO OF CIRCUMFERENCE TO DIAMETER.

<table>
<thead>
<tr>
<th>Fauvel-Gouraud, 1845. (2)</th>
<th>A. Loisette.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hero. My dear dolly be no chilly.</td>
<td>Cypher. Mother Day will buy any shawl.</td>
</tr>
<tr>
<td>Wand. My love, I beg ye be my nymph.</td>
<td>Wonder. My love, pick up my new muff.</td>
</tr>
<tr>
<td>Thee. A cupola seen off with a fiery top.</td>
<td>Tent. Cables enough for Utopia.</td>
</tr>
<tr>
<td>Fort. A cottage bamboo, a poem, or a glee.</td>
<td>Forearm. Get a cheap ham pie by my cooley.</td>
</tr>
<tr>
<td>Fife. A tassel, vain, or sappy grape.</td>
<td>Fis. The slave knows a bigger ape.</td>
</tr>
<tr>
<td>Section. A rare Albino, musky and fat.</td>
<td>Sick. I rarely hop on my sick foot.</td>
</tr>
<tr>
<td>Hate. A boy or peevish knife somehow rough.</td>
<td>Ate. A baby fish now views my wharf.</td>
</tr>
<tr>
<td>Elephant. An old woman, a fine miss, or a showy Jew.</td>
<td>Leaven. A low dumb knife knew a message showy.</td>
</tr>
<tr>
<td>12-Pounder. A heroic Sepoy may fire where he chooses.</td>
<td>Dosen. Argue up my fire rushes.</td>
</tr>
<tr>
<td>Thirteenth Guest. An able wholesale and heavy unanimity.</td>
<td>Threaten. A bee will lose life in enmity.</td>
</tr>
<tr>
<td>Fortune. A hackney lane or lumber’s feet.</td>
<td>4th Dean. A canal may well appear swift.</td>
</tr>
<tr>
<td>Fife of Tin. No very heavy sin.</td>
<td>Fife Thin. Never have a scene.</td>
</tr>
</tbody>
</table>

(From Appleby.)
In later editions of Loisette the sixteen pegs, “cypher” to “fife thin” have been dispensed with and the sentences have to be connected or “correlated” by other means. The exercise has been now extended to 209 figures.

HEIGHT OF MOUNTAINS.

| Mount Blanc | Idling half a day. |
| Mount Brown | Whitish sauces. |
| Popocatepetl | Take a weak wife home. |
| Sorata | Indian effigy. |
| Jungfrau | The Mohigans. |

Austere visage.*
Wood ashes.†
A pope’s hat—Hat [of] a king.‡
A new lawyer.†
A young fowl—a tame hawk.†

LATITUDE AND LONGITUDE.

| New York | A horse line; scheme all happy. |
| Rio Janeiro | Sea onion healer; swarm by. |
| Sydney | Simoom light; dull-eyed idiot. |

A new oak—Hard hickory.†
A real joiner—Any new room.*
Sidney Smith—Merry tales.†

INFALLIBLE MEMORY ALMANAC.

| Stokes, 1874. | Lobette, 1884. |
| February—A head off a tall nun. | To see a tall Ionian. |
| March—A head off a tall nun nip. | Do have dull Nanny Nebo. |
| April—All down stoop inch. | Will Dan daub a niche. |
| May—May tease a duck owner mad. | My days take inner night. |
| June—I go—a tear—a nod—enough. | A hack tore a naughty knife. |
| July—All down stoop inch. | Will Dan daub a niche. |
| August—A new ple dish—name Miss. | Now boy touch a numb mouse. |
| September—Show them a nice nag. | Ash Adam knows a knack. |
| November—A head off a tall nun nip. | Do have dull Nanny Nebo. |
| December—Show them a nice nag. | Ash Adam knows a knack. |

(From Appleby.)

HOMOPHONES.

| Loebette. | Other Mnemonists. | Loebette. | Other Mnemonists. |
| Head. | Hate. | Etch. | Dish. |
| Even. | Even. | Merry. | Merry. |
| Husk. | Husk. | Game. | Game. |
| El. | Duet. | War. | War. |

(From Appleby.)

* Fauvel-Gouraud, 1845. † Miles, 1848.
HOMOPHONES FOR KINGS OF ENGLAND.

<table>
<thead>
<tr>
<th>King</th>
<th>Fauvel-Gouraud, 1845.</th>
<th>Loissette.</th>
</tr>
</thead>
<tbody>
<tr>
<td>William I.</td>
<td>Witty (Conqueror).</td>
<td>Wit.</td>
</tr>
<tr>
<td>William II. (Rufus)</td>
<td>Wine (rough).</td>
<td>Wine.</td>
</tr>
<tr>
<td>William IV.</td>
<td>Wire.</td>
<td>War.</td>
</tr>
<tr>
<td>George I.</td>
<td>Geode.</td>
<td>Gout.</td>
</tr>
<tr>
<td>George II.</td>
<td>Gin.</td>
<td>Gun.</td>
</tr>
<tr>
<td>George III.</td>
<td>Gem.</td>
<td>Game.</td>
</tr>
<tr>
<td>George IV.</td>
<td>Jury.</td>
<td>Gear.</td>
</tr>
<tr>
<td>Anne</td>
<td>Annualy.</td>
<td>Antic.</td>
</tr>
<tr>
<td>Mary</td>
<td>Merriness.</td>
<td>Merry.</td>
</tr>
<tr>
<td>Victoria</td>
<td>Victory.</td>
<td>Victory.</td>
</tr>
<tr>
<td>Richard I.</td>
<td>*Ride.</td>
<td>Read.</td>
</tr>
<tr>
<td>Richard III.</td>
<td>*Room.</td>
<td>Rhyme.</td>
</tr>
</tbody>
</table>

HOW TO REMEMBER NAMES.

See Loissette, page 93.

Associate the name to be remembered with the looks of the person, or any peculiarity he may possess. Form a connection between these . . . . and on seeing him again, his features will recall the name. The names of places may be remembered by associating anything striking or peculiar in connection with them, with the name.—Haney: “Art of Memory,” 1866, page 45.

HISTORICAL EVENTS.

See Loissette, page 100.

Passage of the Red Sea, 1491 ............... Watery Bed.
Argonautic Expedition, 1263 ................. Hidden Gem.
Destruction of Troy, 1184 .................. Hot wood Fire.
Battle of Marathon, 490 ................... Repose.
Battle of Thermopylae, 480 ................. Refuse.
First Sun-dial, 293 ........................ Sun-beam.
Invention of Paper, 170 ................... White Wax.
First closing of Temple of Janus, 235  .... Anomaly.
Second closing of Temple of Janus, 29 .... Nap.
Battle of Salamis, 480 .................... Service.
Destruction of Carthage, 146 .............. Outrage.
Battle of Pharsalia, 48 ................... Rough.
Battle of Philippi, 42 .................... Ruin.
Death and age of Caesar, 44–56 .......... Rare (eulogy).

—Fauvel-Gouraud, 1845.

LOISETTE (1888) AND MILES (1848).

<table>
<thead>
<tr>
<th>Loissette.</th>
<th>Miles.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lisbon earthquake, 1755 ................ talk lowly</td>
<td>guilty hole</td>
</tr>
<tr>
<td>Mt. Sorata, 21,286 ...................... uneaten fish</td>
<td>a new lawyer</td>
</tr>
<tr>
<td>Mt. Ararat, 17,260 ...................... attack no Jews</td>
<td>a donkey</td>
</tr>
<tr>
<td>Founding of Rome, 753 ................... climb</td>
<td>cline</td>
</tr>
</tbody>
</table>

* Homophone for Henry, last consonant used instead of first.
It could hardly be expected that the figures for the heights of mountains, length of rivers, latitude and longitude, etc., as given by writers of 40 years ago, would agree exactly with those now accepted as correct. They serve however to illustrate the principle.

All the words used by Loisette, in the whole System, to translate figures into words, excepting only about half a dozen, are to be found in the figure dictionaries of Miles and Fauvel-Gouraud, one or both. There is scarce anything to be found in Loisette’s System which cannot, both in principle and practice, be paralleled in one or another System of Mnemonics. This successful use of the ideas of others side by side with such presumptuous claims to originality can only be explained by the requirement of secrecy under a heavy penalty, and by the fact that the books of Pick, Miles, and Fauvel-Gouraud have long been out of print, the most recent of them some 15 years.

Had “Professor” Loisette been content with claiming that his system included all the best methods employed by others, but in an improved form, few, perhaps, would have ventured to question his claims.

**USE AND ABUSE OF MEMORY.**

Immediately to repeat a multitude of names or words once repeated before, I esteem no more than rope dancing, antic postures, and feats of activity, and indeed they are nearly the same thing, the one being the abuse of the bodily, as the other is of the mental, powers; and though they may cause admiration they cannot be highly esteemed. —Lord Bacon.

Once being obliged to keep my eyes bandaged for a fortnight, and to rest my brain from serious work at the same time, I tested these systems, learning by their aid columns of logarithms, chronological tables, numbers up to the 300th decimal, and so forth, and found that all these acrobatic feats by which the memory teachers astonish their hearers are easy enough if a man will but give his mind to it, to the neglect of more important things.—John Fretwell, quoted by Dr. Holbrook.

Arbitrary arrangements to aid in recalling dates, words, and facts, which have no natural connection, are occasionally of use for a time;
but natural connections are more lasting, and are on every account to
be preferred when attainable.—*Middleton*.

The powers of memory or acquisition may be greatly economised,
but they cannot be increased as a whole. The total plastic force of
each constitution is a limited quantity, or, if increasable it is at the
expense of some other power of the system.

A man may push acquisition to the detriment of other intellectual
powers, as invention; or of powers not intellectual, as susceptibility to
emotion; and, lastly, of the physical energies, from which it is possible
that nourishment may be unduly withdrawn.—*Bain*.

It is a fact that you cannot go on storing the memory forever.
The extent of possible acquisition is great, and even marvellous, and
implies an enormous extent and complication of the physical organ, the
brain, which has, somehow or other, to provide a distinct track of
nervous communication for every distinct acquisition. Yet this organ
has its limit, which is very various in different individuals. Although
acquirement may not stop till extreme old age, yet the available total
does not increase, and may even decline long before the end of life, the
new displacing the old.—*Bain*.

A strong mental grip not passively receiving impressions, but
seizing those that are worth keeping and neglecting the rest, knowing
also what to forget, is the great characteristic of a good memory.—*John
Fretwell, quoted by Dr. Holbrook*.

All systems of mnemonics utilize this principle of association in the
culture of the recollective powers. Their aim is the endeavor to
instil, by one means or another, the habit of linking together those
thoughts that are naturally related. The more easily this is accom­
plished, the more readily does the memory become available for its work.

* * * * We do not require artificial links when, as it seems to
me, nature has, in the majority of cases supplied natural ones in the
ordinary associations of the objects we think about.—*Dr. Andrew
Wilson*.

The habit of correct association—that is, connecting facts in the mind
according to their true relations, and to the manner in which they tend
to illustrate each other . . . is one of the principal means of im­
proving the memory, particularly that kind of memory which is an es­
ternal quality of a cultivated mind—namely, that which is founded not
upon incidental connections, but on true and important relations.—*Dr.
Abercrombie*.

**DR. EDWARD PICK'S SYSTEM.**

*Laws Governing the Reproduction of Ideas.*

"The most ancient philosophers, including Aristotle, have laid down
laws and principles respecting the reproduction of ideas. These laws
and principles are based upon experience and observation, and are the
following:

1. The law of analogy.
2. The law of opposition.
3. The law of co-existence.
4. The law of succession."
1. **Analogy.**—Analogous ideas reproduce each other. Analogous ideas are those which have one or more qualities in common; for example, *tree* and *branch*. If these be analyzed, it will be found that all the qualities or attributes of the latter are contained in *inclusion* the former.

2. **Opposition.**—Opposite ideas recall each other. Those ideas are termed opposite which have one or more qualities in common, but which at the same time contain qualities . . . which exclude *exclusion* or oppose each other.

3. **Co-existence.**—Ideas which at some former period have been in the mind at one and the same time, recall each other.

**ON THE IMPROVEMENT OF MEMORY.**

“Probably the main defect of all mnemonic systems, from Simonides, who is commonly reported to have been the inventor of Mnemonics, downward, is, that not one of the numerous writers on the subject has fully studied the nature of the Memory, and based his system upon that. Had this been done, much difficulty and confusion would have been avoided, and the system would have attained greater perfection before now. We propose, therefore, to endeavor to remedy this defect, taking for our starting point what has just been said about the faculty and functions of Memory. In this endeavor our principal task will be to show how Memory can be improved and strengthened by the use of facilities arising from the true nature of the mind; and consequently on a natural system, and in a natural manner.

“The surest and most effectual way to ensure an easy and accurate reproduction of ideas is to deal with the first impression; that is to say, to impart to it strength and vivacity. If this be done, the process of reproduction will accomplish itself with little or no effort. Now, experience teaches us that it is quite in our own power to greatly strengthen the original impressions. One of the most familiar modes, and one of those most in use, is *Attention*. It need scarcely be remarked, that if attention has been paid to any object or subject the mind will receive a more powerful original impression than if we had been absent or inattentive.

**ASSOCIATION OF IDEAS.  a. ANALOGOUS OR OPPOSITE.**

“The consideration next arises as to the most effectual means of forcing or fixing our attention, so as to produce a vivid and strong impression. Such means will be found to consist in *Comparison*. With respect to comparison itself, a few explanatory remarks may be useful. We can only compare those ideas with one another which have some connection, that is to say, analogous or opposite ideas. When we thus compare two ideas, we search out and place side by side the qualities which they possess in common, and those on the other hand, by which they are distinguished from each other. Now, this operation involves an effort of the mind, and produces an attention which inevitably strengthens the impression. And if at a subsequent period either one of the two ideas which have thus been compared and analysed presents itself to the mind, it will recall the other immediately and distinctly.
"From this it follows, that if there be two ideas which have any relation or analogy with each other, and which it is desired to retain in the mind, it is only necessary to compare them. The attention required by this act of comparison is sufficient to ensure their mutual and almost simultaneous reproduction; inasmuch as when one presents itself it will recall the other.

"Now, if there be a series of such analogous or opposite ideas, which it is desired to retain by heart, the rule just described still holds good, and the task will be found easy if set about with care and deliberation. We shall here merely compare the first idea with the second, the second with the third, and so on; no more than two ideas, however, being taken up at the same time, without paying any attention to the preceding or the succeeding ideas. This rule must be rigidly attended to, in order to avoid confusion and perplexity. By this means the operation will always continue simple; there will be always two ideas, and only two, to compare at one and the same time, notwithstanding the length and number of the whole series. The reproduction of the whole is, therefore, the more certain; while, at the same time, the first idea will recall but the second, the second but the third, the third only the fourth, and so on in the consecutive series throughout. Thus none will fail, and the ideas will occur in order whenever it is desired to recall them.

EXAMPLE.

"As an example and practical illustration of the foregoing remarks, and a test of the mode of mental exercise suggested, we may compare the following ideas; but we must take care to confine our attention, from step to step, to the two ideas which we have to compare, without paying attention at the time either to those which precede or those which follow them.

<table>
<thead>
<tr>
<th>England</th>
<th>navigation</th>
<th>peace</th>
<th>tranquility</th>
<th>silence</th>
<th>meditation</th>
<th>silence</th>
<th>faith</th>
<th>honesty</th>
<th>merchant</th>
<th>India</th>
<th>hot</th>
<th>summer</th>
<th>vegetation</th>
<th>rock</th>
<th>mountain</th>
<th>Switzerland</th>
<th>travel</th>
</tr>
</thead>
<tbody>
<tr>
<td>navigation</td>
<td>steam</td>
<td>railway</td>
<td>steam</td>
<td>steam</td>
<td>telephone</td>
<td>electricity</td>
<td>thunder</td>
<td>storm</td>
<td>blow</td>
<td>windpipe</td>
<td>pipe</td>
<td>music</td>
<td>harmony</td>
<td>alliance</td>
<td>peace</td>
<td>Switzerland</td>
<td>travel</td>
</tr>
</tbody>
</table>

"Here, then, is a chain of ideas to be associated link by link so as to be capable of being recalled to the mind whenever it is desired to do so. Now, if we have taken care, in going through the list, always to compare only two ideas together, or at the same time, without for the moment paying any attention to the rest, the reader is requested to try whether he knows the list sufficiently well to go through it in the above order. If he has paid sufficient attention to, and distinctly understood, the simple principle and method of practice which has been laid down, he will be able to do so. When the first word or idea is taken, it will
immediately reproduce the second, the second will reproduce the third, and so on, with astonishing facility, through the series, which, with diligence and intelligence, may be extended to almost any length. But this is not all. Not only can all the ideas be recalled by going on consecutively from the beginning; but if any one of them be taken, all the others can be recalled when one has adequate experience in this practical system of mnemonics. Again, if, instead of beginning with the first word, the student begins with the last, and thus proceeds inversely, he will find that he can remember and recite the words or ideas with equal facility. The cause of this facility and certainty of result is, that no more than two words have been compared in the mind at the same moment. And thus, as the first can only recall the second, and the second the third, and so on, none can fail. And again inversely, the thirtieth will recall the twenty-ninth, the twenty-ninth will recall the twenty-eighth, until all the ideas have been recalled.

"We cannot too strongly insist on the importance of completely isolating each couple of ideas at the moment of comparing them, and confining our attention solely to them until the comparison be made throughout the series. An essential advantage of such isolation is, that it prevents obscurity and perplexity; the mind is not overloaded, because the difficulty of the task does not increase with the number of ideas, there never being more than two to compare at one and the same moment.

"A very usual recommendation made by some writers on mnemonics is to learn a series of words by heart, or commit them to memory, by combining them together. But it should be considered that a combination of this kind is effected, not by reflection, but by imagination, which is a very different thing. To take an example. This process of combining ideas by imagination, applied to the foregoing series, would take place in this way: England is the country of navigation, which is performed by the aid of steam; steam impels locomotives upon railways, which railways possess telegraphs, which telegraphs are worked by electricity, etc., etc. But this mode of combining ideas can never perfectly attain the desired result, because it contains the inherent defect of there being no intrinsic necessity or certainty that the primitive impression is strengthened; whilst, on the contrary, in a simple isolated comparison of two ideas, there is a complete certainty of that effect being produced. Moreover, in this process of imaginary combination, the more ideas there are to be combined the more difficult and confused becomes the task; which objection is not applicable to the system of comparing, by reflection, two isolated ideas at a time before passing to any further comparison.

ASSOCIATION OF IDEAS. b. NEITHER ANALOGOUS NOR OPPOSITE.

"When we desire to retain or to insure the power of recalling two ideas which are neither analogous nor opposite, we find that they cannot be combined directly. But the object can be accomplished in an indirect manner.

"This will be readily apparent. Each idea has some relation with a great number of other ideas. We must look amongst the ideas connected with those two which we desire to retain, for the purpose of finding points of comparison. For example: If we have to compare
or combine *paper* and *youth*, we must look for one or more ideas which by their insertion will establish a chain of relative or connecting ideas between the two which are to be combined. This process is, in some respects, an arbitrary one; and each particular person will establish his own chain of connecting links, according to his tastes or experience. Thus, one will say that *paper* can be compared with *white color*, this with *pure*, and pure with *youth*. Another will work out the combination in this way: paper—engine—force—youth. Another will compare: paper—book—imagination—youth. Thus the process of combination will vary with different persons; but in every case the comparison will be found easy; and such comparison once established, the idea of *paper* will, by means of either of those processes of thought so gone through, always recall that of *youth*. There are different ideas, which have been so often present together in the mind, that they recall each other instantly, *e.g.*, *steam* and *boat*, *boy* and *man*, *black* and *white*, *light* and *dark*, etc. In these cases no intermediate ideas are required.

By this means a combination, sufficient to insure the power of recalling any two given ideas, only one being presented to the mind, can always be obtained. It is, no doubt, desirable that the combination of two different ideas should be made by only one, but, at all events, by as few intermediate ideas as possible. Yet the number of these intermediate combining ideas does not materially prejudice the facility of their reproduction, which, indeed, often takes place with such rapidity that we are scarcely conscious of the presence or nature of the intermediate idea, so quickly does it come upon us. This is especially the case with ideas which are familiar to us.

As an illustration of these remarks, let us suppose that we are to retain the following series of ideas: Garden, hair, watchman, philosophy, copper, cloth, workman, apple, eclipse, dream, coal, balloon, microscope, idleness, silk, fountain, coast, watch, snow, etc.

We can combine the ideas in this manner: *Garden*, plant, hair of *plant*—*hair*; *hair*, bonnet, *watchman*;—*watchman*, wake, study—*philosophy*; *philosophy*, chemistry—*copper*; *copper*, cover—*cloth*; *cloth*, tailor—*workman*; *workman*, gardener, garden—*apple*; *apple*, earth or moon—*eclipse*; *eclipse*, dark, night—*dream*; *dream*, nightmare, suffocation—*coal*; *coal*, gas—*balloon*; *balloon*, distance—*microscope*; *microscope*, study, labor—*idleness*; *idleness*, hot, thirst—*fountain*; *fountain*, dying—*silk*; *silk*, China, sea—*coast*; *coast*, navigation, compass—*watch*; *watch*, Switzerland—*snow*, etc.

Thus, by the exercise of ordinary ingenuity and attention (in itself a beneficial mental exercise), combinations can be effected to any extent.

**APPLICATION OF THE ABOVE RULES.**

The process of the mental operation just described for the reproduction of a series, or of several series of ideas, can be applied in every case, where any series of words are to be retained in the memory; and the object can be accomplished, with certain differences of detail, according to different circumstances. For instance: In some cases it is necessary to know and retain a series of words in precisely the same order in which they were given; in other cases, the order of the words is not of essential importance.
"In natural history, where there are particular and distinct classifications of animals, plants and other objects, it is necessary to observe the order of the words as given; but there are many cases in which it is not so necessary.

"In cases of the latter kind, what we have to do is to arrange the ideas ourselves, so as always to combine and take together those ideas which have any relation to each other, and which, consequently, can be compared directly.

"To make this remark clear, it will be advisable to look over any ordinary grammar—the French grammar, for instance. In the grammar, under a general rule, we often find a series of words forming an exception to the rule, and which it is required to retain in the memory. Here it is, of course, essential to know all the words forming the exception; but the order in which they are given is of no importance.

"Sometimes the exceptional words or deviations from the rule are arranged in verses, and sometimes in alphabetical order; these arrangements being adopted for the purpose of aiding their retention by the memory.

"Now, if instead of adopting the metrical or alphabetical plan, we arrange the series so as to call in reflection, i.e., so as to take together the words and ideas which have any natural relation, it will be found that they will become perfectly familiar, and that the mind will retain them after only two or three attentive perusals.

"The French irregular verbs, for instance, with their English significations, are given in the French grammar as follow:

- acqüirir, to acquire.
- aller, to go.
- s'en aller, to go away.
- s'asseoir, to sit down.
- battre, to beat.
- boire, to drink.
- bouillir, to boil.
- conclure, to conclude
- confire, to pickle.
- coudre, to sew.
- courir, to run.
- croire, to believe.
- cuillir, to gather.
- dire, to say.
- écrire, to write.
- envoyer, to send.
- fuir, to shun.
- haïr, to hate.
- lire, to read.
- mettre, to put.
- Mourir, to die.
- monvoir, to move.
- maitre, to be born.
- ouvrir, to open.
- plaire, to please.
- pouvoir, to be able.
- prendre, to take.
- rêver, to desire.
- répondre, to dissolve.
- rire, to laugh.
- rompre, to break.
- savoir, to know.
- suivre, to follow.
- tressaillir, to startle.
- vaincre, to vanquish.
- valoir, to be worth.
- vivre, to live.
- voir, to see.
- vouloir, to be willing.

"Now the object of the scholar, in reference to the above words, is to be able always to recognize them as exceptions to the general rule, and to do this without reference to the order in which they occur. For this purpose, we have but to select sets of two words bearing analogy with each other, and to compare, viz.,

<table>
<thead>
<tr>
<th>new</th>
<th>with</th>
</tr>
</thead>
<tbody>
<tr>
<td>sit down</td>
<td>move</td>
</tr>
<tr>
<td>move</td>
<td>go</td>
</tr>
<tr>
<td>go</td>
<td>go away</td>
</tr>
<tr>
<td>go away</td>
<td>send</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>send</th>
<th>with</th>
</tr>
</thead>
<tbody>
<tr>
<td>follow</td>
<td>run</td>
</tr>
<tr>
<td>run</td>
<td>shun</td>
</tr>
<tr>
<td>shun</td>
<td>break</td>
</tr>
<tr>
<td>break</td>
<td>open</td>
</tr>
</tbody>
</table>
Now if this series of words be studied in the manner which we have recommended, and of which the list last given furnishes an example, namely, by comparing, or bringing before the mind at the same time, only two words, and these the ones which have a definite affinity, one or two attentive perusals will suffice to fix them in the mind for ever. But if an attempt is made to learn such a series by heart in the ordinary mode, that is to say, by repeating it over and over, without any reference to analogy, until by such repetition it remains in the mind, not only will vastly longer time be expended in the task, but the great probability is, that the whole of them will never be known perfectly, for there is no principle of connection. And should occasion arise to make use of any one of the words, it will often be necessary to repeat the whole list in order to ascertain whether the particular word needed be amongst the exceptions. This is a great difficulty and discouragement to students. But if the task of retaining or committing the words to the mind has been effected in the manner indicated in the example, not only is their reproduction or recall at any future time rendered more certain, but on any one of the words or ideas occurring, it will immediately recall the others; and there can be no doubt or uncertainty; for if a given word is not comprised in a series (as of the exceptional words just cited), it is at once known that it is not amenable to the observations which apply to that series; for instance, in the particular example given, that it does not form one of the exceptions to the general rule.

"It is here presumed that the meaning of the French words is known, or, in other words, that they are ideas available to the reader. Words belonging to foreign languages not known to us, or, indeed, any words of which we do not know the meaning, are, of course, no more than mere sounds, so far as we are concerned.

"If a series of words has to be retained in the order in which they are presented, that is to say, if we cannot group together those words which have a connection, then we have only to compare the first with the second, the second with the third, without any further regard to the first, and so on. The comparison will be made directly where any connection exists, indirectly where different ideas are given, according to the above rules."

"The following arrangement will facilitate the acquirement of the irregular verbs of the German language. They have been divided into five divisions, according to the difference of the vowels they take in the imperfect tense.

<table>
<thead>
<tr>
<th>open</th>
<th>with</th>
<th>put</th>
<th>with</th>
<th>read</th>
<th>with</th>
<th>write</th>
</tr>
</thead>
<tbody>
<tr>
<td>put</td>
<td>&quot;</td>
<td>bestow</td>
<td>&quot;</td>
<td>write</td>
<td>&quot;</td>
<td>see</td>
</tr>
<tr>
<td>bestow</td>
<td>&quot;</td>
<td>take</td>
<td>&quot;</td>
<td>see</td>
<td>&quot;</td>
<td>be able</td>
</tr>
<tr>
<td>take</td>
<td>&quot;</td>
<td>acquire</td>
<td>&quot;</td>
<td>be able</td>
<td>&quot;</td>
<td>know</td>
</tr>
<tr>
<td>acquire</td>
<td>&quot;</td>
<td>vanquish</td>
<td>&quot;</td>
<td>know</td>
<td>&quot;</td>
<td>conclude</td>
</tr>
<tr>
<td>vanquish</td>
<td>&quot;</td>
<td>beat</td>
<td>&quot;</td>
<td>conclude</td>
<td>&quot;</td>
<td>be willing</td>
</tr>
<tr>
<td>beat</td>
<td>&quot;</td>
<td>startle</td>
<td>&quot;</td>
<td>be willing</td>
<td>&quot;</td>
<td>believe</td>
</tr>
<tr>
<td>startle</td>
<td>&quot;</td>
<td>die</td>
<td>&quot;</td>
<td>believe</td>
<td>&quot;</td>
<td>be worth</td>
</tr>
<tr>
<td>die</td>
<td>&quot;</td>
<td>live</td>
<td>&quot;</td>
<td>be worth</td>
<td>&quot;</td>
<td>gather</td>
</tr>
<tr>
<td>live</td>
<td>&quot;</td>
<td>be born</td>
<td>&quot;</td>
<td>gather</td>
<td>&quot;</td>
<td>drink</td>
</tr>
<tr>
<td>be born</td>
<td>&quot;</td>
<td>laugh</td>
<td>&quot;</td>
<td>drink</td>
<td>&quot;</td>
<td>milk</td>
</tr>
<tr>
<td>laugh</td>
<td>&quot;</td>
<td>please</td>
<td>&quot;</td>
<td>milk</td>
<td>&quot;</td>
<td>boil</td>
</tr>
<tr>
<td>please</td>
<td>&quot;</td>
<td>hate</td>
<td>&quot;</td>
<td>boil</td>
<td>&quot;</td>
<td>pickle</td>
</tr>
<tr>
<td>hate</td>
<td>&quot;</td>
<td>say (calumny)</td>
<td>&quot;</td>
<td>pickle</td>
<td>&quot;</td>
<td>dissolve</td>
</tr>
<tr>
<td>say</td>
<td>&quot;</td>
<td>read</td>
<td>&quot;</td>
<td>dissolve</td>
<td>&quot;</td>
<td></td>
</tr>
</tbody>
</table>

"Now if this series of words be studied in the manner which we have recommended, and of which the list last given furnishes an example, namely, by comparing, or bringing before the mind at the same time, only two words, and these the ones which have a definite affinity, one or two attentive perusals will suffice to fix them in the mind for ever. But if an attempt is made to learn such a series by heart in the ordinary mode, that is to say, by repeating it over and over, without any reference to analogy, until by such repetition it remains in the mind, not only will vastly longer time be expended in the task, but the great probability is, that the whole of them will never be known perfectly, for there is no principle of connection. And should occasion arise to make use of any one of the words, it will often be necessary to repeat the whole list in order to ascertain whether the particular word needed be amongst the exceptions. This is a great difficulty and discouragement to students. But if the task of retaining or committing the words to the mind has been effected in the manner indicated in the example, not only is their reproduction or recall at any future time rendered more certain, but on any one of the words or ideas occurring, it will immediately recall the others; and there can be no doubt or uncertainty; for if a given word is not comprised in a series (as of the exceptional words just cited), it is at once known that it is not amenable to the observations which apply to that series; for instance, in the particular example given, that it does not form one of the exceptions to the general rule.

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"The following arrangement will facilitate the acquirement of the irregular verbs of the German language. They have been divided into five divisions, according to the difference of the vowels they take in the imperfect tense.
1. Verbs that take “a” in the imperfect, and “i” in the imperative:

- to scold, schelten.
- to speak, sprechen.
- to command, befehlen.
- to press, dringen.
- to compel, zwingen.
- to enlist, werben.
- to bind, binden.
- to wind, winden.
- to wrestle, ringen.
- to jump, springen.
- to burst, bersten.
- to flow, rinnen.
- to swim, schwimmen.
- to lie, liegen.
- to sink, sinken.
- to die, sterben.
- to spoil, verderben.
- to decrease, schwinden.
- to disappear, verschwinden.

   “a” in the imperfect,
- to forget, vergessen.
- to recollect, sich besinnen.
- to meditate, sinnen.
- to read, lesen.
- to see, sehen.
- to mistake, verschen.
- to be frightened, erschrecken.
- to pick, stechen.
- to burn, brennen.
- to stink, stinken.
- to perceive, empfinden.
- to help, helfen.
- to give, geben.
- to take, nehmen.
- to bring, bringen.
- to find, finden.
- to gain, gewinnen.
- to hit, treiben.
- to avoid, meiden.
- to separate, scheiden.

   “i” in the imperfect:
- to sit, sitzen.
- to spin, spinnen.
- to measure, messen.
- to be worth, geißen.
- to beg, bitten.
- to recover, gensen.
- to eat, essen.
- to devour, fressen.
- to drink, trinken.
- to swallow, schlügen.
- to conceal, bergen.
- to steal, stehlen.
- to break, brechen.
- to sound, klingen.
- to sing, singen.
- to do, thun.
- to happen, geschehen.
- to begin, beginnen.
- to bring forth, gebären.
- to come, kommen.
- to tread, treten.

2. Verbs which take “ie” in the imperfect, keeping the radical vowel in the imperative:

- to lend, leihen.
- to appear, scheinen.
- to seem, schweigen.
- to advise, raten.
- to show, weisen.
- to bid, heissen.
- to call, rufen.
- to cry, schreien.
- to blow, blasen.
- to push, stossen.

- to rub, reiben.
- to hew, haufen.
- to fall, fallen.
- to go, gehen.
- to run, laufen.
- to drive, treiben.
- to catch, fangen.
- to hold, halten.
- to leave, lassen.
- to avoid, meiden.

3. Verbs which take “i” in the imperfect, and double the last consonant of the root:

- to seize, to grasp, greifen.
- to pinch, kneifen.
- to bind, biegen.
- to suffer, leiden.
- to fade, verblichen.
- to yield, weichen.

- to glide, gleiten.
- to speak, sprechen.
- to stick, stechen.
- to ride on horseback, reiten.
- to combat, streiten.
- to strike, streichen.

4. Verbs which take “o” in the imperfect:

- to command, gebieten.
- to be able, koennen.
- to consider, erwägen.
- to weigh, wiegen.
- to raise, heben.
- to move, bewegen.
- to push, schieben.
- to draw, ziehen.
- to bend, biegen.
- to creep, kriechen.
- to spring forth, quellen.
- to pour, giessen.
- to offer, bieten.

- to fight, fechten.
- to shoot, schiessen.
- to resound, erschallen.
- to thresh, dreschen.
- to fly, fliegen.
- to flee, fliehen.
- to sprout, sprühen.
- to drip, tröpfn.
- to suck, saugen.
- to drink, trinken.
- to swell, schwellem.
- to enjoy, geniessen.
- to milk, melken.

5. Verbs which take “u” in the imperfect:

- to dig, graben.
- to grow, wachsen.
- to produce, schaffen.
- to bake, backen.

- to load, laden.
- to carry, tragen.
- to skin, schinden.
- to beat, schlagen.
"Here I have only been able to give the principles, which seem to me the sole scientific, and therefore the sole true, basis of a method for facilitating the process of learning by heart. The practical application of which it is capable, I explain in oral lectures. One of the most efficient results of these simple psychological principles is obtained by their application to the study of foreign languages."

"PROGRAMME OF LECTURES AND DEMONSTRATIONS ON MEMORY BY DR. EDWARD PICK.

Dr. Pick, having made Psychology his special study, has thereupon founded and evoked a helping agent at once simple and natural, and capable of being brought instantly into active operation.

"SYLLABUS.

First Lecture.—The Fundamental Principles of the System; Association of Ideas; Application of the System to a Series of Words with or without Connection.

Second Lecture.—Application of the System to the permanent Remembrance of Numbers and Statistics generally.


Fourth Lecture.—Application of the System to Foreign Languages, Proper Names, Geography, Botany, Geology, and Mineralogy.

Fifth Lecture.—Application to the Study of Languages, and to the Retention of Sermons, Lectures, Prose, Poetry, etc., General Application of the System, and the Audience tested to prove their Proficiency in it, and the Facility with which they have made themselves Masters of it."

COMMENDATIONS OF DR. PICK'S SYSTEM, 1853–1887.

(Journal des Débats—Jan. 24, 1854.)

This method has been examined by a Special Commission appointed by the Minister of Public Education; and the report of this Commission, composed of Inspectors-General of Public Education, has been expressed in terms so favorable to M. Pick, that he has been allowed to demonstrate his method before the pupils of the Upper Normal School (College of Preceptors).

(La Presse—February 1, 1853.)

By this method of M. Pick, one may become acquainted with and possessed of, for a life-time, a scientific instrument both apt and sure, which engraves on the memory, in a manner indelible, and without producing any sense of fatigue, things the most fleeting and abstract.

Thus, in the two preparatory lectures which he has already given, M. Pick, by means of his method, has succeeded in making his auditors retain, upon one hearing, a series of more than forty words. What results may not be looked for on the completion of the course?
M. Pick has consequently based his method upon the principle that it is necessary to fortify the first impressions or ideas by mutually comparing them. To enlarge upon the special application of this method would require much time; suffice it to say, that its simplicity invests it with great value, with reference as well to the study of the classics as of the natural sciences.

The practical usefulness of this German Professor's method has been instrumental in obtaining for him the honor of teaching it in the first establishment of public education in France: viz., at the Upper Normal School. We hope that M. Pick will soon resume those public lectures at the "Athénée," which, last season, met with such remarkable success.

Professor Weber, late Director of the Preceptors' College in Bremen, one of the most celebrated writers on General Education.

"I advance my conviction, based upon scientific principles. . . . This method of Dr. Pick's is really practical, and presents the inestimable advantage of being true to nature, easy to be acquired, and applicable forthwith, without any loss of time whatever."

(Morning Post, London, November 25, 1859.)

The Principal of Magdalen Hall [Oxford] introduced Dr. Pick to the meeting, and stated that that gentleman had acquired great celebrity as a lecturer on the best mode of improving and strengthening the memory, at the Universities of Vienna, Leipsic, Heidelberg, and more especially at Paris. . . . Dr. Pick then addressed the meeting, and made some passing remarks on the nature of memory, its great value, and the facility with which it can be strengthened and made more retentive. . . . He had arrived at the conclusion that it could only be attained by the application of sound and natural principles, at once simple and exact, and in perfect harmony with the intellectual nature of man. He stated that, upon those principles, his whole system was based.

From Edward Thring, M.A., the distinguished author and educator, Head Master of one of the most famous schools in England.

"It gives me great pleasure to bear witness to the excellence and power of Dr. Pick's teaching on memory. . . . The whole of my working-life as a learner of new things has been turned round and doubled in efficiency since I heard Dr. Pick. . . . Dr. Pick's method has the marvellous advantage of being the right method for acquiring all knowledge, the true way to apply mind; whilst it also has a few simple, but all-powerful, rules by which the learning anything by heart is rendered possible and lasting. I work by Dr. Pick's instructions, and I only wish everyone had the inestimable advantage of doing the same. The system is short, simple, and effectual. Practice only is required."

Edward Thring.

The School-House, Uppingham, Rutland.

October 14, 1887.
Dr. Pick’s reputation is based on grounds which educated men are quick to respect. Near the close of last year he lectured at Oxford, with the express approval and co-operation of the Principal of Magdalen Hall.

The meeting was presided over by Mr. Monckton Milnes, M.P., who, in introducing the Lecturer, bore testimony to the philosophic principles upon which the system was based. He said that Dr. Pick did not possess or profess any extraordinary faculty of memory; but that, in the pursuit of psychological studies, he had been led to consider the best means of strengthening and vivifying those ideas which he desired to retain. In confirmation of his statement, he [Dr. Pick] asked his audience to apply the system then and there in an effort to retain large groups of words in a sequence not aided by any continuation of sense. This they accordingly did, to their own evident wonder; for the string of words, easily remembered by all present, after hearing them only once, must have numbered between forty and fifty.

The system [Pick’s] is founded on natural principles, by which facts, images, ideas, and numbers may be instantly and enduringly fixed in the mind. His method can be applied to the acquiring of languages, the study of anatomy, and other subjects. For medical students especially, who have to learn and remember so much, it would prove especially useful.
After carefully reading the first four pages of this lesson, then carry out the Directions on page 5.

Notice.—Let no one be discouraged if this Lesson looks difficult; it is quite simple and easy, thanks to the use of some of the principles of my Art. All will be surprised at the shortness of the time it will take to master it, if they begin at the beginning and proceed slowly and surely.—A. Loisette.

The Loisettian School of Physiological Memory;
or,
INSTANTANEOUS ART OF NEVER FORGETTING.

PART I.
RECOLLECTIVE ANALYSIS.

"That ONLY, in an educational sense, is KNOWLEDGE to us which we have GAINED through the working of our own minds." —Joseph Payne.

PRINTED SOLELY FOR THE PUPILS OF PROFESSOR A. LOISETTE.

My System accomplishes four objects never secured or attained by any other memory method.
I. IT TRAINS AND STRENGTHENS THE NATURAL MEMORY TO THE HIGHEST DEGREE TO WHICH IT CAN BE CARRIED, AND THE PROCESS AND MODE OF IMPARTING THIS NEW MEMORY POWER ARE PLEASANT AND AGREEABLE TO ALL.
II. IN ITS CAPACITY AS A DEVICE FOR MEMORISING ANY FACTS WHATSOEVER, IT OPERATES IN EXACT CONFORMITY TO THE LAWS OF THE NATURAL MEMORY, WITH THIS DELIGHTFUL RESULT THAT EVERY TIME THE PUPIL USES IT AS A DEVICE HE INVIGORATES AND INCREASES THE POWER OF HIS NATURAL MEMORY, UNTIL AT LENGTH MY SYSTEM BECOMES NO LONGER NECESSARY.
III. THE MEMORY EXERCISES, IF LEARNED AS I REQUIRE, ALSO STRENGTHEN AND INVIGORATE THE DIRECTING POWER OF THE ATTENTION, SO THAT THE PUPIL CAN CONTINUE AT STUDY OR THINKING UNTIL HIS BRAIN POWER IS EXHAUSTED, AND REQUIRES THE RECUPERATION OF REST OR SLEEP.
IV. THESE MEMORY EXERCISES, IF LEARNED AS I PRESCRIBE, ALSO STRENGTHEN AND INVIGORATE THE INHIBITORY POWER OF THE ATTENTION SO AS TO PREVENT THE INTRUSION INTO THE MIND OF FOREIGN THOUGHTS. OR, IN OTHER WORDS, THEY PRACTICALLY CURE MIND-WANDERING.

My System is a Royal Road to all kinds of Learning, but there is no Royal Road to acquiring it. It has to be learned. The immediate object aimed at is the acquirement of a MENTAL DEXTERITY and an enormous strengthening of the natural memory; and a
person might as well hope to become a first-class Portrait Painter by reading instructions without any practice, as one of my Pupils aspire to Master the Art of Never Forgetting without doing all the exercises I prescribe; and yet children 10 years old master my System without the slightest difficulty. Do all become proficients in it? No. Why? From no fault of my System, but from a mental inability, which prevents such persons from mastering any study whatever. The infirmity of Mind-wandering incapacitates some people from taking in or absorbing the ideas or thoughts set forth in any study. Memory is the revival of a past Mental Impression. As these mental excursionists never dwell long enough on any new ideas to be able to understand or comprehend them, there are really and truly in this case no First Impressions at all, and hence there is nothing to be recalled. Until, then, these mental invalids get their Discontinuity cured, there it but slight probability that they will ever master any subject, trade, or profession. These unfortunate—who are, however, often highly gifted in other respects—will utterly fail to master my System of Memory unless they, in the case of these lessons, completely conquer this bad habit. They must carefully read over each sentence in my Lessons and then try to repeat the sense, if not the very words, of it from memory after they have absorbed and familiarised themselves with all the ideas in the sentence, in the manner set forth on pp. 54, 55, 56 and 57. They must subdue that chronic fickle-mindedness which always causes them to simply glance at the beginning of each paragraph, and to rush on to the last sentence without any distinct comprehension of what has preceded; and then to give up in despair because the two or three ideas they have acquired cannot do the work of the dozen ideas they have overlooked!! Strange as it may seem, I often find Pupils are dreadfully troubled with Mind-wandering who have never suspected the fact!! The Art of Never Forgetting is not magic—there is no trick about it—it is simply a Memory Discipline of the highest order; and to acquire it, careful Study and patient Practice are indispensable. And with these auxiliaries, and not without them, it becomes a most fascinating and useful study, for it is the Golden Key that unlocks the secrets of all kinds of learning. Every genuine student has always been charmed with these Lessons, for they are in no sense tasks, but only delightful mental recreations.

No Pupil ever receives the next Lesson until he furnishes me satisfactory proof, by carrying out my instructions and doing the prescribed exercise, that he has mastered the Lesson he has received.

My System is built on the Natural Memory. It is a Physiological Method. Memory being a primordial property of the protoplasm differentiated as nerve ganglia—similarly as contractility is a primordial property of the protoplasm differentiated as muscular fibre—it can be strengthened by practice, as the muscles are strengthened by practice, and the kind of exercise insisted upon in my System secures the highest development of the Memory in the shortest possible time. There are two stages of the Natural Memory. I. The Stage of the First or Original Impression [received into the mind through the Touch, Taste, Smell, Eye or Ear, or arising in the mind from its own operations]. II. The subsequent Revival of that Impression.
THESE STAGES REQUIRE FURTHER NOTICE.

The first impression may be defective. If there is no first impression, then there is nothing to recall and there can be no memory. If the first impression is feeble, then it makes no abiding mark; it soon fades out, and no effort can recall it. The first essential to a good memory is therefore to get vivid first impressions. There are two causes of defect in first impressions.

A deaf man can have no first impression of a stranger's voice. Not hearing it, he cannot remember it. There is nothing to remember. There was no first impression. Similarly, a blind man can have no first impression of a new colour or a strange face. He can never remember them because he has had no first impression, and has, therefore, nothing to remember. Precisely in the same way, a man who reads a book without understanding it gains no first impressions, and therefore cannot remember. There is nothing for him to remember. There may be ideas in the book, but if he has not grasped them, he has had no first impression, and he can have no memory of them. He may remember the words in which the ideas are expressed, but that is another thing. We may call this defect privative, since the person is deprived of his first impression. My system cannot, of course, give sight to the blind or make the deaf hear; but though it cannot make a first impression where none exists, it can and does enable a person to secure vivid first impressions in all cases.

The second great cause of defective first impression is lack of attention. When you come home from a walk through a crowded street, can you remember the appearance of the last three persons that you passed? No. In ninety-nine cases out of a hundred you cannot tell whether they were men or women. Yet you passed close to them, looked them full in the face, perhaps brushed against them. And you cannot remember half an hour afterwards a single particular of their appearance. Why is this? You say it is because you paid no attention; and you are quite right. The first impression was made upon your senses: it was carried to the brain; but it failed to get itself registered. You were thinking about other things. The higher brain-centres were occupied in other ways, and the new impression knocked in vain for admission. It was turned from the door. It never effected a complete entry. The first impression was so faint, so fleeting, so transient, that the strongest power of recall fails to revive it. Of such an impression there can under ordinary circumstances be no memory. But if the last person you saw before entering the house happened to be a beadle, resplendent in his official costume, you might be able to remember his appearance; if it happened to be a Chinaman, dressed in the habit of his nation, you would very probably recollect him; and if perchance it was an unfortunate soldier with half his face shot away, the memory of him would certainly be very strong and might be unpleasantly persistent. Why is there memory in these cases and none in the previous case? Because, you say, in these cases your attention was attracted; and in proportion as the attraction was strong the remembrance is strong also. You may have seen a shoemaker putting nails into the sole of a boot. With his left thumb and finger he pricks the point of the nail into the leather just far enough to make the nail stand upright. It is so feebly attached that at the least shake it fills on the floor. Then down comes the hammer and drives the nail up to the head. It is so strongly attached that the hammer cannot drive it out again. The nail is driven in much as a hammer, and none in the previous case? Because, you say, in cases when the attention was attracted; and in proportion as the attention was strong the remembrance is strong also. You may have seen a shoemaker putting nails into the sole of a boot. With his left thumb and finger he pricks the point of the nail into the leather just far enough to make the nail stand upright. It is so feebly attached that at the least shake it fills on the floor. Then down comes the hammer and drives the nail up to the head. It is so strongly attached that the hammer cannot drive it out again. The nail is driven in much as a hammer, and none in the previous case? Because, you say, in cases when the attention was attracted; and in proportion as the attention was strong the remembrance is strong also.

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Mental Science has ever suggested that it was possible to give control over the attention by a proper course of exercises, far less has any one suggested the kind of exercise necessary. Now, one of the cardinal points in my System is this very treatment of Mind-wandering. By following my instructions and doing the exercises I prescribe, the mind is tied down to the subject-matter by a tether which brings every excursion of the attention to an end with a sharp jerk; and which ends in binding the mind down to the task closely and continuously. Thus, by these unique exercises, the Habit of Attention is created, consolidated and made firm and unwavering, for all future occasions.

TIME TO LEARN MY SYSTEM.—Those persons who are engaged all day in hard labour or in mental or bodily dissipation, or in other studies, should retire an hour or two earlier at night, in order to get up an hour or two earlier in the morning, so that they can study these lessons when the mind is fresh and the body rested.

No new acquisitions can be made when the mental and physical energies are exhausted.

My Discovery, so far as it pertains to this Lesson, demonstrated what had never been suspected by any one before—that all memories—the strongest as well as the weakest—are prodigiously strengthened in both Stages by learning and reciting forwards and backwards, or, what is better still, by making and repeating from memory both ways, a series of from 100 to 500 words arranged in conformity to the three Laws given below, which Laws were revealed to me, on their Physiological, or only true side, by my Discovery.

Every First or Original Impression arouses or excites previous Ideas or Congenital Predispositions to Ideas, through the principles of Inclusion, Exclusion, or Concurrence; and whenever we recollect or recall any First Impression or Idea, we do it by passing from our present mental state, through Inclusion, Exclusion, or Concurrence, to the registration left by the aforesaid Original Impression or Idea.

[See Pages 45, 46 and 47.]

FIRST EXERCISE.

THREE LAWS OF RECOLLECTIVE ANALYSIS.

I. THE FIRST AND PRINCIPAL THING THE PUPIL REQUIRES TO DO IN THIS LESSON, IS TO LEARN THE DEFINITION OF THE FOLLOWING THREE LAWS—AND TO BE ABLE TO CLEARLY UNDERSTAND THE EXAMPLES UNDER EACH LAW.

I. INCLUSION indicates that you realize and feel that there is an overlapping of meaning between two words, or that there is a noticed or recognised idea or sound that belongs to both alike, as, to enumerate a few classes:


II. EXCLUSION means that you observe that there is an antithesis, or that one word excludes the other, or that both words relate to one and the same thing, but occupy opposite positions in regard to it, as Riches, Poverty. Hot, Cold. Old, Young. Damp, Dry. Life, Death. Love, Hate. Joy, Sorrow. Courage, Cowardice. Health, Sickness. Righteous, Wicked. Beauty, Ugliness.


[In the case of the following pairs, one word has been so often appropriated to the other, that there seems to be something in common in the meaning of the terms—but it is not so, they are mere cases of Concurrence, but of almost indissoluble Concurrence. For instance, a man might examine a "spade" in all its parts and might even make one after a model, and not even know what "dig" means. The mention of "dig" is as likely to make us think of pickaxe as of spade. "Spade" does not mean "dig," nor does "dig" mean spade. "Dig" merely means the action of the "spade" or the use to which it is put. Hence this pair of words does not furnish an example of Inclusion. But, as "dig" is frequently appropriated to "spade"—as we have often thought of those words together—this is a case of strong Concurrence. The term "swoop" is almost exclusively applied to "eagle." A certain action or movement of the eagle is termed swooping. But "eagle" does not mean "swoop," nor does "swoop" mean "eagle." We always think of "eagle" when we think of "swoop," but we do not always, or even often—think of "swoop" when we think of "eagle." It is not an example of Inclusion, but of mere Concurrence.


Before proceeding further, let the Pupil re-read the foregoing Laws, and endeavour to satisfy himself that each example really illustrates the Law under which it is given.
Let the Pupil also make out for each of the three Laws a list of illustrations different from any of the foregoing, and send it to me for criticism. Send all the exercises on this lesson at the same time.

SECOND EXERCISE.

II. THE NEXT THING IS TO LEARN BY MEANS OF THESE LAWS THE PRESIDENTIAL SERIES, PP. 36-39.

Now let the Pupil ask what relation he finds between the following words:—

President \{ Dentist \} \{ In. by S. \}

There is nothing in common in the meaning of these words. Nor is there any antithesis between them, nor have we ever thought of them together, so that when we now think of one it recalls the other from the operation of Concurrence, but it is a case of In. by S., as the sound dent belongs to both alike.

Dentist \{ Con. \}

The meaning which common usage has assigned to Dentist, is one who draws or extracts and repairs teeth, &c. So some may deem this a case of In., as the idea of “drawing” belongs to both words, principally to dentist and wholly to “draw.” No one can think of a dentist without thinking of drawing teeth, so this is a specimen of Con., especially strong, if we have had personal experience with dentists drawing teeth.

Draw \{ and In. \}

To draw is to pull, to use force—to overcome resistance. To give up is to yield to force, to make no opposition, to surrender voluntarily. Here, then, are distinct opposites.

To give up \{ Ex. \}

Self-sacrifice means to give up one’s own interest or what is dear to one. “To give up” is to give up anything, trifling or important. “Self-sacrifice” is to give up a great deal. It is In., G. and S.

Self-sacrifice \{ In. \}

Washington being a proper name, has no significance as such, no connotation; it is a sound to which the man answers. Therefore there can be no In. by meaning here. But we have thought of Washington and self-sacrifice together, as history has informed us that he refused to be made Dictator by the army, and to be elected President for a third term. Hence it is a case of concurrence.

Washington \{ Con. \}

Although a proper name as such has no meaning, yet the parts or syllables of it may be significant words, as “wash” in Washington. Wash belonging to “Morning wash” and
"Washington," this is a case of In. by S. through the syllable "wash." It may be well to remark that in imposing a name in the first place, a reason may exist why that name is given, as Albus [white] was given to the mountains, now more euphoniously called Alps, because they were white or snow-crowned; but Alps does not mean white to the moderns. The word merely indicates or points out the mountains so called.

| Morning wash | In. |
| Dew |

If "Dew" is regarded as a "Morning wash" of the flowers, &c., then this would be a case of In. by Genus [Morning wash] and Species [Dew] of that "wash." As both imply moisture, there is something in common in the meaning of the words. It is simple In.

| Dew |
| Flower beds | Con. |

There is nothing in common in the meaning of the words. But experience has told us that in the morning the dew is often on the flower beds. It is mere Con.

| Flower beds | In. |
| Took a bouquet | Con. |

If we merely think of "flower" and "bouquet" we should have In. by whole and part—since a bouquet is a collection of flowers, and a flower is but one of a collection. But if we think of "flower beds" as a whole by itself, the relation between these two words and "bouquet" would be Concurrence, since we know that flowers are often selected from "flower beds" to make a bouquet. Thus we see that as words have sometimes several meanings, and as we can bring them into different relations according as we look at them from one or another point of view, we may therefore find or discover the relations of In., or In. and Con., or even of In., Ex. and Con., between the same pair of words, as in the case of Plough, Sword. This is a case of In., since both are cutting instruments. It is also Con., since we have thought of them together in reading about "Beating swords into ploughshares," and also of Ex., as one is the emblem of Peace and the other of War.

| Took a bouquet |
| Garden | Con. |

Although we cannot get bouquets from all gardens—kitchen gardens for instance—and although we can sometimes get bouquets from places which are not gardens, yet as we generally think of bouquets as taken from gardens, this is mere Con.

| Garden |
| Eden | Con. |

"Eden" means a place of pleasure. Hence Garden of Eden was a pleasant place—a Paradise. We have often thought of the "Garden" of "Eden"—of these words together. Hence it is Con.
The word Adams is merely the word Adam, with the addition of "s." We have often thought of Adam having been placed in Eden. It is Con.

I.—Now see if you can correctly repeat these 13 words from memory—not in doubles as in the above analysis (nor by recalling the words Inclusion, Exclusion, or Concurrence), but as a Series If not, re-think the relation between the words where your memory failed until you can repeat the 13 words in the exact order. This direction is almost universally violated. Remember you are committing to memory, not by repetition, but by analysis, and this requires that, where your memory failed, you should re-fortify the first impression only by re-thinking the relation between the words.

II.—What is really accomplished by the disagreeable act of endless repetition? Nothing, except vaguely impressing these relations [In., Ex., or Con.] on the mind by a slow instinctive absorption, whereas a conscious Thought and a reflecting Analysis accomplish the same result with a thousand-fold greater vividness by only one perusal. Besides, what is consciously learned by Analysis remains—but what is vaguely absorbed by rote is very soon forgotten. Again: suppose your memory is so weak that in one or more instances you have had to re-think the relation between the words three or more times. This is very different from mere repetition. There is no thought in mere repetition, whereas in reviving the relation between a pair of words there is a distinct act of thought. You put "brains" into the operation. And, what is more, you do not tickle the fancy or the imagination, whose burdens your memory would have to carry in addition to its own, but you invigorate and intensify the memory itself; and the readiness of the recall always has relation to the vividness of the First Impression.

III.—If you had learned these 13 words by rote it would have occupied very much longer time, perhaps 50 times as long, and if you wished to say them backwards you would have to learn them backwards!!! And this would have occupied you five times as long as learning them forwards, because you would be constantly mixing up the forward order with the return order. But, if you can NOW say them from "President" to "Adams," you can readily say them back from "Adams" to "President." Try!

IV. Now proceed in the same manner, solely by analysing the relation between the words, to learn the next set of words from "Adams" to "Madison," so as to say this last series both forwards and backwards from memory, and without mistake.

Adams } Con.
The fall } Con.
Failure } In.
Deficit } In.
Debt } In.

Adam fell from his first estate by not keeping the commandment. We have often heard or read of "the fall" of Adam. It is Con.

Failure is any kind of failure. The fall was a particular kind of failure. It is In. by Genus and Species.

Here again we have In. by Genus and Species, deficit being a special failure, a failure of revenue.

Deficit refers to lack of means of payment. Debt to the obligation and duty to pay.
Debt [bonds] {In.} This is a relation by Genus and Species. Debt covers all kinds of debts, and Confederate Bonds are a species of debt.
Confederate bonds {Con.} This is Concurrence, as Jefferson Davis was President to the Confederacy that issued the Confederate Bonds, which have never been paid.

Jefferson Davis} {In. by S.}
Jefferson } {In. by S.}
Judge Jeffreys } {Con.}
Judge Jeffreys } {Con.}

"Bloody assize" {Con.}
Bereavement }
Too heavy a sob {Con.}
Parental grief } {Con.}
Parental grief }
Mad son } {Con.}
Madison } {In. by S.}

The "Bloody assize" was held by Judge Jeffreys in August, 1685. He caused upwards of 800 to be executed, many to be whipped, imprisoned, and fined, and more than 1,000 were sent as slaves to American plantations.

The "Bloody assize" caused or was followed by great bereavement. Whoever has thought of the "Bloody assize," must have thought of the grief and mourning it caused.

This is Concurrence. A bereavement is usually accompanied by sobbing. We have often thought of heavy sobs in connection with great bereavement.

Although a mad son usually causes parental grief, yet there is nothing in common in the meaning of the words. The relation is that of Con., as we naturally expect to find that a mad son causes grief to his parents.

Now recall all the words in the reverse order from "Madison" to "President," and then in the forward order from "President" to "Madison." When, in learning a series, you have finished a set of words, always go backwards and recite all the words from where you leave off to the beginning, and then return. Every successive tenth (or thereabouts) word (in capitals) will furnish a convenient stopping place.

Never start learning anything in this course of lessons before you have read the directions, before you have understood how you are to learn it.

On no account do the learning before you do the analysing. Recollective Analysis is not grammatical analysis. What you have to analyse is the relationship between each pair of words.

Let the Pupil learn the remainder of the Presidential Series and send his Analysis thereof for criticism.

[The Names between brackets can be disregarded.]

President | To give up
dentist | self-sacrifice
draw | WASHINGTON [George]
morning wash
dew
flower-beds
*Took a bouquet*
garden
Eden
ADAMS [John]
the fall
failure
Deficit
debt
Confederate bonds
Jefferson Davis
JEFFERSON [Thomas]
Judge Jeffreys
"Bloody Assize"
bereavement
*Too heavy a sod*
parental grief
mad son
MADISON [James]
Madeira
first-rate wine
frustrating
Defeating
feet
"toe the line"
row
MONROE [James]
oar
boat
steamer
*The funnel*
windpipe
throat
quinsy
QUINCEY ADAMS
quince
fine fruit
*The fine boy*
sailor boy
Jack Tar
JACKSON [Andrew]
"Stonewall"
indomitable
*Tough make*
aaken furniture
bureau
VAN BUREN [Martin]
rent
splitting sides
Divert
recreating

harassing
HARRISON [William H.]
Old Harry
tempter
*The fraud*
painted clay
baked clay
tiles
TYLER [John]
Wat Tyler
poll tax
compulsory
*Free will*
free-will offering
Burnt offering
poker
POLK [James K.]
end of dance
termination "ly"
Adverb
a part of speech
ninth part of man
TAYLOR [Zachary]
measurer
theodolite
Theophilus
fill us
FILLMORE [Millard]
more fuel
*Hot flames*
flambeau
bow
arrow
PIERCE [Franklin]
hurt
Feeling
wound
soldier
cannon
BUCHANAN [James]
rebuke
official censure
Officiate
marriage ceremony
linked
LINCOLN [Abraham]
arm-in-arm
stroll
seaside
*Heavy Shell*
molluscs
unfamiliar word
dictionary
JOHNSON [Andrew]
son
dishonest son
Thievish boy
thieve
take
give
GRANT [Ulysses S.]
award
school prize
cramming
Fagging
labouring
haymaking
HAYES [Rutherford B.]
hazy
Vivid
glowing
camp fires
war-field
GARFIELD [James A.]
Guiteau
murderer
prison
Half-fed
well-fed
well-read
author
ARTHUR [Chester A.]
round table
tea table
cup of tea
Half-full
divide
cleave
CLEVELAND [Grover]

[None of the foregoing WORDS, as a series or part of a series, is ever to be mentioned to any one, nor how words are cemented together by my System.]

V.—I have two purposes in view in prescribing the learning of such a Series as the Presidential Series. (1) To familiarise the Pupil with the Laws of Analysis. (2) The daily recital of such a series forward and backward tends greatly to strengthen the natural memory. This daily recital is not done to learn the series, for that is done in one careful perusal; but the subsequent recitals are solely to exercise and train the memory.

VI.—My System of Memory-TRAINING accomplishes two purposes. (1) EVERY FIRST IMPRESSION will hereafter be much more VIVID than formerly. My Discovery, as well as the universal corroboration of it in practice, proves that contrary to the natural expectation, it is not sufficient merely to know the Laws of In., Ex. and Con., as a matter of mental science, but that it is necessary, in order to secure the above improvement in every first impression, to have ample practice in applying these Laws in actually analysing those relations between words where they are found to exist, and also much practice in memorising the order of such words, and especially in reciting them forwards and backwards from memory. In due time the mind will be unconsciously impressed with these relations much more vividly than formerly, in a manner not unlike the experience of the child in learning to read. At first every word must be slowly and carefully spelled, but after some practice they are rapidly read at sight without being consciously spelt. The ambitious Student who wants to acquire the peculiar and distinctive power of my System in this respect will not fail to learn and recite the Presidential Series two or three times per day for at least one month, * with no day omitted. And, if a Pupil's memory has become deteriorated through lack of exercise, or from bad habits, or through the perverting influence of mind-wandering, or bad health, or the approaches of old age, or ex-

* Of course he can still go on with his other Memory Lessons. He need not delay his second lesson until he has done this month's reciting.
cessive mental toil, and if he wishes to obtain the very highest results of this practice, let him make four Analytic Series of 100 words, each one containing as many Inclusions of meaning, and as few by sound as possible, and there will of course be intermediate Exclusions or Con­currences, or one may contain as many examples of Exclusions as he can think of, and another as many Concurrences as he can introduce, while another is so simple and plain as to be comprehensible by children nine years old. Let him send me his analysis of any or of all these new Correlators for my criticism, and then let him memorise them and daily recite them two or three times both ways with the Presidential Hept­archy and Dough, Dough Series for a month!! The rehabilitation and highest invigoration of his memory in respect to EVERY first impression will reward his exertions.

THIRD EXERCISE.

The following 65 words should be thoroughly learned by Analysis, and repeated forward and backward once or twice per day for twenty days. In the next lesson it will appear clearly why, owing to the necessarily limited choice of words, the analytical relations between them are less obvious than if the choice had been unrestricted. The less ob­vious, however, the connection, the better exercise it will be in tracing the relations of In., Ex. or Con., with which it is now the Pupil’s object to become familiar.

[None of these WORDS, as a series or as a part of a series, is ever to be mentioned to anyone.]

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<thead>
<tr>
<th>Dough</th>
<th>High Mass</th>
<th>Leap</th>
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<tr>
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<td>Noisy</td>
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<td>Egg</td>
<td>Lull</td>
<td>Honey bee</td>
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<td>Hennery</td>
<td>Chide</td>
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<td>Nag</td>
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<td>Leah</td>
<td>Lag</td>
<td>Mum</td>
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<tr>
<td>Chain</td>
<td>Run</td>
<td>The foe</td>
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<tr>
<td>Rail</td>
<td></td>
<td>Dough</td>
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*A short clumsy bird of Mauritius, now extinct.*
The second result of my System of Memory-TRAINING is that the general RETENTIVENESS, or the Power of Recalling and Reviving past impressions, is enormously increased in every respect. No one, I admit, would naturally have anticipated this result, but it was taught me by my Discovery in the first instance, and every faithful Pupil's experience fully corroborates my Discovery. This result depends on three indispensable conditions:

(a.) Each exercise in my Lessons must be learned in the exact manner I point out (and never by rote or by picture-making), and so thoroughly learned that there is the highest degree of CERTAINTY always felt in reciting it. If a Pupil says "I take no interest in the Presidential Series," or in any of the exercises of subsequent Lessons, he simply declares that he is the Teacher, and not the learner, and that he will not resort to the MEANS that my System enjoins to secure the Power of it. All my exercises have been chosen with the sole view of communicating that Power, and if the Pupil acquires it he can hereafter sport familiarly with the heaviest Memory tasks that can be imposed.

(b.) The next condition is that he should so learn all my exercises that he can recite them with the greatest possible RAPIDITY. What is learned by rote and rapidly recited concerns that particular case only. But whatever is strictly learned by my Method, and rapidly recited, strengthens the general retentiveness. A stickler for antiquated methods once asked me if committing to memory by repetition an entire Greek Grammar verbatim would not strengthen the natural memory as much as the Daily recital both ways of the Presidential Series. My answer was "Certainly not; learning the whole of that Greek Grammar by repetition would not strengthen the natural memory, but, from excessive strain, it would promote mind-wandering to an enormous degree. When you have carefully read a sentence over once you have usually exhausted and absorbed all the ideas in it, and every subsequent repetition, adding nothing new, becomes by excess of familiarity painful and distasteful. The mind will wander after the second or third repetition. In fact, learning by repetition is the cause of half the mind-wandering existing in this country. On the other hand, the recital of any Series learned by Analysis strengthens the mental cement between the thoughts. Learning by repetition impresses the Memory as the flicker of the expiring ember affects the eye. But learning by Analysis or reciting what was so learned affects the Memory as the eye is affected by the Electric Light. And the more STIMULATING the EXERTION of Memory the greater its Physiological growth, in manner as bodily muscle grows strong by judicious gymnastic exercise." And the highest possible stimulation and invigoration of the Memory is gained by rapidly reciting what has been learned by Analysis. However slowly he must recite the Presidential Series at first, he will soon be able to do it inside of a minute each way. And if it takes a long time and much patience to do this in any case, that person should know that it is because his memory is very weak, and that he requires this mental gymnastic to enable him to gain the memory he needs.

(c.) The last condition is the acquirement of absolute CONFIDENCE.
The exercises in this Lesson are NOT to be repeated before anyone. Reciting to oneself what has been learned is a very different thing from doing it before others. Whoever wishes to speak in public, or pass examinations, or think or act before others—whatever is, in short, not a hermit—should rehearse the exercises of subsequent Lessons in the presence of his friends as often as possible, until he can say them as confidently as he can now say "twice two are four"! Of course he must never give "any idea" how he has learned them—nor must he ever mention the Presidential Series, Heptarchy Series, or the Dough, Dodo Series to anyone, nor recite it to anyone, nor speak of the Three Laws of In., Ex., or Con.

(d.) The RESULT of this thoroughgoing Memory-TRAINING is to correct false habits of Memory-association, and to develop and strengthen the cementing and reviving power of the Memory to the highest attainable degree in regard to all subjects whatsoever.

(e.) Another RESULT is that the Pupil habituates his Memory to act under the control of his WILL.

(f.) Another RESULT of this genuine Memory-TRAINING is that my Pupils can hereafter learn to play or sing or speak without notes! and this is done without resort to any devices, but solely from their NEW memory-power. Musical notation, as in a tune to be remembered, is a series of complex symbols; and to resort to any device to enable you to remember that series, would be only imposing another burden on the Memory. Of course, the Student must learn and understand the symbols; and my System enables him to remember the series of symbols that make the tune, by giving him a New and Stronger Memory. What was hard or impossible for him to remember when his Memory was weak, becomes easy to him when it is powerful.

(g.) Another RESULT of this Memory-TRAINING is that after a little time the Pupil will, by a mental reflex, be affected by the relations of In., Ex. and Con. without consciously analysing them, not only between words, but between sentences, propositions, theories, chapters of books, &c.—a marvellous extension of intellectual grasp and apprehension.

And what a trifling and merely temporary burden I impose for acquiring the great and lasting power of a good Memory!!

1. Members of a Correspondence Class must always enclose a stamped directed envelope. This is the only condition on which I consent to deal SEPARATELY with Members of a Class. And private Pupils should in every case send stamped directed envelopes if they wish the most prompt replies, as writing and stamping envelopes take time, as does also sometimes deciphering an illegible name and address!! If the next Lesson does not arrive, the Pupil will know why!!

2. Every page of exercises must bear the Pupil's signature, and if he belongs to a Class the name of its Organiser must be given with the Pupil's name.

3. There is not the slightest use in sending for the next Lesson unless the request is accompanied by the EXERCISES on the previous Lesson. Besides, you should mention the name, as Recollective
Analysis, &c., not the number, of your last Lesson, as the exercises sometimes get mislaid. And whenever you refer to a past Lesson, mention its subject-matter, and not its number.

4. If pupils wish to keep their exercises, they must retain copies of them, as I never return any exercises except those which require correction.

5. After you have completed the Course, you will find that everything has been thought of and provided for. Don't try to anticipate.

6. No answer is ever given to a Post Card referring to Lessons, nor should any exercises be sent to me by book post.

Memory Athletes.—The names of those who excel in the use and application of my System I usually enter in my book entitled the "Loissettian Roll of Honour." Those who wish to have their names enrolled must give me one month's notice after completing the course, and before offering proof of their qualifications for enrolment.

The qualifications are (1) their having carried out ALL my directions in ALL the lessons—(2) their furnishing me proof of the time occupied by them in memorising ten lines of unfamiliar poetry, selected by others, and also ten lines of unfamiliar prose, selected by others, on at least ten different occasions, together with a copy of the pieces memorised. [How this can be done will be shown in future lessons.]

There must be no "conjuring" done here, by your indirectly "forcing" the attention of the Umpire to the particular portion of a column of a newspaper you hand him, whereby you thus induce him, unconsciously to himself, to select a passage already committed to memory by you!! or by your getting some one to thus "juggle" for you; but let the Umpire receive no hint from you or any one on your behalf as to what printed matter or what part of it he is to select from.

A precocious youth (not thinking that, if he did not have any property to respond to a Judgment to-day, he might have some that would have to satisfy it hereafter) recently thought he could communicate an idea of my System, in violation of his contract with me, and, as he supposed, without any possible risk to himself!! But I think he will "never forget" to keep similar engagements hereafter; for he found, to his bitter sorrow, that there was more in his contract with me than he had dreamed of. Both briber and bribed got their deserts, as they always do in such cases. My treacherous Pupil found that in taking money for what he had no right to sell, he was, in this respect, guilty of getting money under a double false pretence. Another acute youth, intending to practice a fraud on me, signed my contract, not with his own name, but with a false name, and thus rendered himself liable to a prosecution for forging another man's name, with a view to injure me, without, as he hoped, risk to himself! He will never forget the penalty that always awaits on rascality.

Any pupil having an exceptionally weak memory, or wishing to strengthen his Natural Memory to an extraordinary degree, must make one or more Analytical series himself, and learn and recite them forwards and backwards, together with the "Presidential Series," "Heptarchy Series" and the "Dough, Dodo Series," once or twice a day for an entire month, with no day omitted, but never in the hearing of anyone. Do not aim at introducing proper names, or any other special words, but merely at connecting words by analysis, such as:—water, wet, dry, moist, &c.
[None of these WORDS, as a Series, is ever to be mentioned to any-one.]

**HEPTARCHY SERIES.**

Analyse the Series and send it to me. If you memorise it, do so by learning ten or twenty words at a time, and recite both ways daily for one month, in connection with the Presidential, and Dough, Dodo Series, and in extreme cases in connection with Series of your own making.

<table>
<thead>
<tr>
<th>Heptarchy *</th>
<th>annoy</th>
<th>III.</th>
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<tbody>
<tr>
<td>seven</td>
<td>fret</td>
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<tr>
<td>&quot;Sevenoaks&quot;</td>
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*Gr., hepta, seven, and arché, rule.*

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<tr>
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<td>WARD</td>
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<td>warden</td>
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I. | WOLF | II. |
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<tr>
<td>hairy</td>
<td>blood red</td>
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IV. | STAND |
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<td>standard</td>
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V. | EDWY |
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| run ahead |      |
| pursuing officer |     |
| Beisal |      |
| bail    |      |

VI. | REDAN |
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<td>Daniel</td>
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<td>Faith's trial</td>
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<td>Swain</td>
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VII. | CANUTE |
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† See 2 Cor. vi. 15.
brown study  coach
The stage
‘All the world’s a stage’
Mundane
worldly
irreligious
Atheistic
stick
paddle
Canoe
Indian
dark
Dismal

foreboding
forerunner
Discern
bright-eyed
cheerful
warm-hearted
VIII.
Herald
arms
cannons
Howitzers
strong tubes
bamboos
hard canes
Canoe
HARDICANUTE
hardy sailor
mast-head
look out

MEMORY-TRAINING.

My System with all its exercises is solely for the purpose of DEVELOPING and TRAINING the Natural Memory to such a degree of Power that my System will be no longer required!! The exercises are not too many. They have been planned and devised as the result of many years’ teaching. Whoever learns them as I prescribe, will, when he has finished the Course, have a Memory and Concentration to his heart’s content.

RELATIVE VALUE OF THE THREE LAWS IN MEMORY-TRAINING.

Cases of In. by meaning are most important—Exclusions come next—Inclusions by S. are next—and Conclusions are last, but scarcely in all cases least.

If a Pupil finds that any one relation is weak to him, as In. by S., or Ex. or Con., he needs to develop an appreciation of that particular relation, until it is as effective to him as either of the others. And he can do this by making one or more Analytical Series wherein that relation oftenest occurs, and then thoroughly memorising the same and reciting both ways daily with the others.

But neither the Analytical Series I furnish him nor those he makes, must ever be mentioned to anyone.

THREE LAWS OF RECOLLECTIVE ANALYSIS.

[These Laws of In., Ex., and Con. (also applicable to Emotional and Volitional Acts) being physiologically specific and individualised—as indicated to me by my Discovery, and by me verified in their nature and action, by frequent trials and experiments extending over many years—are, in Origin, Process, and Justification, totally unlike what one might theoretically or speculatively imagine the operations of the intellect must be. The publication of these trials and experiments will interest students of Mental Physiology. I will mention only one—the case of a gentleman who for 10 years had tried at various times to recall the name of a playmate at school whom he had not seen for 45 years. After a slight Physiological preparation, designed to make him recall past impressions more readily, I proceeded to sound a set of words and I at once revived the lad’s name by mere Inclusion by Sound—and a weak one too—since, although the vowel sound was the same in both}
cases, yet in each it was prefaced by a different consonant! But let the Pupil regard as an Inclusion by Sound only that in which the initial consonants (if the syllables be preceded by consonants) are the same, and the vowel sounds are also precisely alike. To show the difference between weak and vivid Inclusions by S., this direction is violated several times in the Heptarchy Series, and in the Dough, Dodo Series—as Enough, Muff; Edred, Dreadnought, &c.]

[The following remarks are not to be read except by those who have studied Mental Science.]

Errors of Psychologists.—(1) Psychologists declare that Memory is an affair of the Intellect, and include it amongst the Intellectual Powers! whereas Memory is wholly different from any Intellectual Act. If Memory were an affair of the Intellect, then men of great intellect would have the most powerful general memories in regard to all subjects whatsoever! but the reverse is the rule and the exceptions occur only once or twice in a century, as in the case of Macaulay for instance. If Memory were an affair of the Intellect, then idiots would have no memories at all; and yet they often possess Phenomenal Memories.

(2) Psychologists often confound the Nature of the Memory with the Laws of Intellectual Association! They confound the associating Act or Process with the Act or Process which conserves or records the Association, as well as with the Subsequent Act which in some cases recalls the Association. When any New Impression reaches the brain, it cannot become associated with or coalescent with Previous Impressions unless those Previous Impressions have been preserved, kept in existence; and it is this Receptive and Conserving Power that constitutes the First Stage of the Memory. Association is therefore impossible without the Pre-existence of Memory. As a matter of fact, Memory is distinct from and anterior to Intellectual Association, as it exists in infants before Intellect is developed, and sometimes in a high degree in idiots who evidence only a modicum of Intellect and even in lower animals! (6)

(3) Instead of Memory being a Distinctive Peculiarity of the Intellect, it really has nothing intellectual in it; but it is a primordial function or peculiarity of every nerve cell or ganglion, causing that cell or ganglion to keep a record, through molecular re-arrangement, of every act or operation or modification or movement that takes place in it. Every cell is its own Autobiographer. The traces or History of every Mental Act, whether it be an act of the Propensities, of the Sentiments, of the Intellect, or of the Will, are preserved or recorded in the cells concerned in that Act; and afterwards the SOUL reads that record and this reading of the First Impression constitutes the reviving or Second Stage of the Conscious Memory.

(4) How, then, is Memory related to Intellectual Association? Why, Intellectual Association cannot exist or take place without it, it preserves the association and revives it, as it does all other Mental Acts or States.

(5) The Laws of In., Ex., or Con., are quantitatively and qualitatively different from the Psychological Laws—The Laws of Intellect are confined to the Intellectual Operations only—The Laws of In., Ex., and Con., including Intellectual Operations, but in an operating sense unlike the Psychological Laws, also include all Volitional and Emotional Acts or States, as well as that never absent underlying Condition that may be called the Organic Factor; and (this fact, which I discovered, is of supreme and unspeakable importance) the Memory retains what takes place in the mind directly and immediately in conformity to the Laws of In., Ex. and Con., with infinitely greater ease and certainty than it does any other mental act. Another fact which I also discovered, and which is of the most transcendent importance in training and developing the Memory, is that the learning and reciting forwards and backwards of a series of words arranged in conformity to In., Ex. and Con., Invariably strengthens the Natural Memory in both its stages to the highest attainable degree. It is for these reasons that I call In., Ex. and Con. the “Laws of Memory” par excellence.

(6) The theory of Association, as given by Psychologists, has not a leg to stand on. The Law of Similarity is said to enable one Presentation to revive another that is like it. A present Impression recalls an absent Impression, because of the reviving power which dwells in its similarity to that absent Impression. Yet all Psychologists agree that one Impression cannot be felt or cognised as similar to another unless both are present to the consciousness at the same moment! Thus, the Law of Similarity demands that the revived idea shall be both in and out of consciousness at precisely the same instant!! In other words, that an idea can operate and exert all the functions and powers of a Similar idea unless it became a Similar! The justification of the Law of Contiguity is equally absurd. Without more than alluding to the fact that this Law demands the co-operation of the supposed Law of Similarity, it will be clear that neither “Association” nor “Contiguity” actually occurs amongst the operating factors; for the Law claims that when two unrelated Mental States have occurred together, or nearly so, then the subsequent oc-
currence of a Mental State like one of the former tends to revive another Mental State like the latter of them—for no sane man can contend that the recurring state is either of those first named states! All must see that the two first named states were never associated; and, although they were contiguous, they were never either of them afterwards revived. The revived state was never either associated with or contiguous to that which revived it and the recollection of the was never contiguous to, or associated with, either of the two previous states!! Finally, Psychologists who deny that Contrast is an independent principle of association, still maintain that all our knowledge is of “doubles,” and that we cannot know “any single thing” without, at the same instant, knowing its “relative opposite”!!

After all this misreading of Nature, let us no longer look to these blind guides, these confidant introspectionists, who are forever grinding over the same eternal bag of sand; but let us enter the field of practical experiment with the Laws of In., Ex. and Con., and we shall soon find that they possess a marvellous associating power; and, after having had considerable practice with them, we shall discover that we have already made great progress in the Art of Never Forgetting.

(7) Psychologists did not suspect that the Laws of In., Ex. and Con. (of the extent and of the modus operandi of which they are ignorant) could be utilised in the work of the Memory, as indicated above (5); but, what is more important, they never suspected the existence of that higher, broader, deeper, grander Association which I call Synthetic Association, and which I myself discovered, and which, as a Device for Memorising as well as a Method for Memory-Training, the Pupil will find is wholly incomparable. But it is indispensable that the Pupil should first master this Lesson.

(8) Have Psychologists then done anything to merit our gratitude? Yes: and we can never sufficiently repay them for their thoroughly disinterested study of mental operations, with the sole aim of ascertaining what is the true manner of those operations. They have not sought to turn their knowledge to any personal advantage or to find out any practical mode by which their investigations might lead. Let them still persevere, not neglecting the modern science of Mental Physiology. The latter cannot interpret the facts it reveals without the aid of Psychology, and Psychology is not the whole truth unless supplemented by Mental Physiology. Whoever pursues both these sciences together can be sure of advancing true Mental Science to the utmost of his ability. And if he can add to existing knowledge only one new fact in Mental Science, he will be a greater Benefactor of Mankind than if he were the most successful Politician, Railway King, or Military Captain of his time.

Space fails me to go into the exposition of what I call PHYSIOLOGICAL Redintegration. Redintegration, from the Metaphysical point of view, was first suggested by St. Augustine of Hippo. [Confessions, lib. X. c. xix.] But, the meaning and mode of using the three Laws of Analysis are all the Student requires to know in this Lesson.

(1) IMPORTANT—My ambition is to make everyone of my Pupils, without a single exception, a perfect memorist. I never have any difficulty with a Pupil who has been in the habit of regular study. Such persons enjoy my lessons, and their letters to me in regard to the different lesson papers are full of gratifying praise and intelligent appreciation. These always become Memory Athletes. But my ambition meets with some discouragement sometimes in the case of Pupils who have not acquired as yet the habit of regular study, and particularly in the case of those who are troubled with Mind-Wandering. The learning of the exercises in this lesson and the daily reciting them forwards and backwards establish the habit of regular mental work, and at the same time help to cure the worst cases of Mind-Wandering. The difficulty, however, is to get these persons to do these exercises in this manner. Not accustomed to do anything methodically and thoroughly, they soon weary in attempting to do regular work on this Lesson. I have to constantly remind them that mastering my System requires in their case more application and fewer excuses—not promises, but performance. Hence these constant reminders look like scolding. But they are not so intended. They are not, in fact, intended at all for the genuine Students—but only for those who desire the improvement of their memories, but think they are unable to co-operate with me to gain this improvement; who will talk by the hour as to their fervent wishes to secure the benefits of my System, and yet who will not spend five minutes every day in studying it. Some misanthropes say, "Why care about them, then?—They possess feeble brains—poor inutritious blood, and they were born only to be 'hewers of wood and drawers of water.'" But my experience is that the weakest specimens of humanity, if above idiocy, can attain to student power and high improvement, if I can only get them to master the simple but invigorating exercises of my System. Hence, my ambition is aroused and spurred on to transform these self-neglecting Students into higher types of men and women—to make them, in short, genuine scholars and sincere thinkers. Therefore, I again invite and reinvite them to shake off irresolution and excuse-inventing, and for once make a determined effort to enjoy the luxury of study and reap the reward of mastering the Art of Never Forgetting.
FOURTH EXERCISE.

QUESTIONS ON RECOLLECTIVE ANALYSIS.

The following Questions should be carefully read and the Answers fully thought out—and if the Pupil's time admits of it, the Answers should be written out and sent to me with the prescribed exercises. You are not asked to answer the Questions from memory, but to write the Answers after finding out the information in the Lesson. No matter how gifted the Pupil may be, he will find great benefit from working out with painstaking the Replies to all the ensuing Questions:

If the Pupil is at all troubled with Mind-Wandering, let him not fail to write out all the Answers to these Questions and send them to me.

1. What objects are attained by learning my System? Can these be attained without learning it and doing the exercises required?
2. What will prevent anyone being able to master my System?
3. What is the Definition of Memory? Does Mind-wandering allow of any good first impressions? Is there anything then for Memory to recall?
4. What is necessary, first, then, in the case of persons afflicted with Discontinuity, before they can hope to master my System? What course should they pursue in studying my Lessons?
5. Of what are Mind-Wanderers sometimes strangely ignorant?
6. Is there any magic about the "Art of Never Forgetting"? How may it really be described?
7. On what condition alone does the Pupil receive his next lesson from me?
8. On what is my System built? And what kind of a Method is it?
9. What is the Physiological reason why Memory can be strengthened by practice?
10. What are the two stages of the Natural Memory?
11. What does every original impression vibrate or excite? And through what principles?
12. In recalling any original impression, from what do we pass? To what do we pass? Through what do we pass?
13. Are the notes on pages 46 and 47 to be read by those who are ignorant of Mental Science?
14. What does "Inclusion" indicate? Give examples of Inclusion—of whole and part, of genus and species, of abstract and concrete, and of similarity of sound.
15. What does "Exclusion" mean? Why is the term "Exclusion" appropriate? Give examples of Exclusion.
16. What does "Concurrence" mean? Have words, related by Concurrence, any relation to each other necessarily? Give examples of Concurrence.
17. Where only is Recollective Analysis available?
18. Where, on the other hand, is Synthesis available?
19. What exercise on the Three Laws of Recollective Analysis should you do before going further?
And in this way the Pupil can write out and answer his own questions on the rest of this lesson.

On what condition alone do I deal SEPARATELY with the Members of a Correspondence Class?

What should Private Pupils by Correspondence do in every case?

In answering the foregoing Questions, instead of repeating the Questions, use merely the corresponding numbers, and then I shall know in every case to what Question each of your replies relates.

If the Pupil does not possess perfect concentration and a thoroughly disciplined mind, let him re-read with the UTMOST PAINS-TAKING the whole of this lesson, and he will derive great benefit from such a re-perusal. Until he has mastered the Lolsetian Method of Study, he will find that many most valuable ideas escape his notice in a single reading. Many first-class students have acknowledged that they did not absorb and appreciate the full power and utility of this lesson until five or more perusals of it.

**MNEMONICS.**

[This chapter is to be carefully read only. Nothing in it is to be memorised.]

The distinctive PECULIARITY of Mnemonics is its imaginative, story-telling, picturing method of "Associations," and that climax of Artificiality, its Wheelbarrow or Key!

There are only two kinds of Mnemonical "Association." (1) The story-telling, phrase-making method. To show exactly what this is, I quote from the ablest work on Mnemonics ever published, Maclaren's "Systematic Memory," 3d Edition. To connect together and memorise the following words: "Crew, Tree, Ape, Exodus, Fire, Star, Water, Archer, Pin, Crystal, Rug, Back, Pen, Nose," he invents the following story, which, when committed to memory, he assures us will enable one to recite the series from Crew to Nose:

**The Mnemonical Story Method!!**

"The crew of a vessel once came upon a tree, among the branches of which was an ape, the only one left since the inhabitants made an exodus, owing to fire. This tree had only one leaf, and a solitary star was reflected in a pool of water underneath, beside which stood an archer trying to thrust a pin through a ball of crystal. He had a rug dangling down his back and a pen through his nose."

(2) To teach the picturing method, he shows how to learn by heart the following series of words: "Horse, Luton, Bridge, Man, Coat, Fork, Book, Mouth, Cicero, Wall, Cherry, Door, Mother, Cellar":—

**The Mnemonical Picture Method!!**

"Your Panorama will probably run something like this: Riding a horse [you can easily picture yourself riding] over Luton Bridge [make your picture] I saw a man [picture] with a coat on his arm [picture], he carried a fork in his hand [picture] and a book in his mouth [picture] which told of Cicero climbing over a wall [picture] and stealing a cherry [picture] that grew near the door of his mother's cellar [picture]. Connecting these words in some such absurd way as the above, you will find no difficulty in repeating them consecutively. The reader, who will here fairly test this experiment, will be agreeably surprised to find himself already, in a degree, master of our Science" [p. 48].

To test my accuracy, I recommend the Pupil to buy the book, published by Pitman & Co., 20, Paternoster Row, London, price 1s.
A LEGITIMATE USE OF THE IMAGINATION

in education is to enable the Pupil to realise, or picture to the mind, a description of persons he never met or scenes he never witnessed! When Macaulay read an historical account, he endeavoured to call up in mental vision the objects described; if a person, his height, look of face, style of dress, general appearance, &c., &c.; in other words, he tried to realise the force and meaning of every epithet, exactly how the person looked, as if he had his photo before him or really saw him. As with persons so with scenes, battlefields, &c., &c. He thus secured as vivid a First Impression as was possible in the absence of the things described. How different the manner of the ordinary Student who is cramming for history examination! The latter seldom tries to reconstruct to his mind's eye the persons or scenes described. He hurries through them very much as he would hasten past an open drain! or the most he does is to memorise the mere words! These descriptions have thus been to him only so much giberish. The power of realising the past and distant is a most potent force in self-education and in all education, because the Pupil obtains in this way the most vivid possible First Impression. But the Mnemonical use of the Imagination is for a different purpose, and it operates in a different way.

When the mnemonist invents stories or mental pictures, to aid the memory as he claims, he is not reviving his own experiences nor trying to construe to his mind the experiences of others, but he is perverting the use of his imagination by trying to picture as together what never existed together; in trying to imagine as true, what he knows is false; in trying to imagine as fact, what he knows is fiction; in trying to invent unnatural juxtapositions so ridiculous and absurd as to disgust the common sense even of the fabricator! He must picture to himself that he sees an archer trying to thrust a pin through a ball of crystal! with a rug dangling down his back! and a pen through his nose! He must imagine that he sees a man with a book in his mouth! that tells of Cicero climbing over a wall! and stealing a cherry! that grew near the door of his mother's cellar! Hundreds of pupils have admitted to me that even a week's use of these Mnemonical Methods had created in their minds a morbid action of the Imagination. They began to feel as if they were living in a world of Unreality—that they were leading a life of Shams and Make-Believe! and that they found themselves becoming Absent-Minded on all occasions and perpetual Day-Dreamers, and that as they received no vivid First Impressions, their memories became weak and well-nigh ruined. Such is the usual result of this perversion of the Imagination.

That the Pupil may contrast these Methods with my Method of learning the Presidential Series, I subjoin an application of both of them to that series.

The Story Method applied to the Presidential Series!!

'A "President" of the United States was once sauntering meditatively along, when he ran up against an absent-minded military "Dentist," who putting himself into a swordman's attitude at once
exclaimed, "Draw!" The alternative presented to the President was to fight or "To give up," and he decided upon the latter course, since he deemed it no "Self-sacrifice" to his honour to decline to contend with a tooth extractor. And, speaking of the great quality of self-abnegation, we find it best exemplified in "Washington," who, if he was as pure in personal habits as in moral character, must always have indulged in a "Morning wash." As he did this indoors, it made no difference to him whether there was "Dew" on the grass or not. Yet a gardener always takes great interest in a shower of morning mist because he knows it will fall on his "Flower beds." Whence, on one occasion, a poor flower girl "Took a bouquet" without asking leave; but she was discovered and arrested before she left the "Garden," out of which she was led in disgrace—as Eve originally departed from "Eden," in company with her consort in crime, Adam—from whose name the modern name of "Adams" was undoubtedly derived.

But the true Mnemonical mode of memorising such a series is by "associating" them to the words of their Key. A Key is 100 or more words that have been learned by more hard work than it takes to master my whole System. These words are localised in Pegs or Places on the floor, walls and ceiling of rooms, and then, whenever the Pupil wishes to learn anything, he "associates" in one or other of the foregoing ways each separate word, fact, or sentence, to the successive words of the Key, and then he recalls his Key-words in succession, and if he remembers his stories or pictures, he can recite the series thus "associated." The first 13 words of Gregor von Feinaigle's Key were as follows:—[1] The Tower of Babel. [2] A Swan. [3] Mount Parnassus. [4] A Looking-Glass. [5] Throne. [6] Horn of Plenty. [7] Glass-blower. [8] Midas. [9] Narcissus. [10] Goliath or Mars. [11] Hercules. [12] David. [13] Castle. Now I give the Key mode of memorising the first 13 words of the Presidential Series.

The Story Method and the Key!!

1. The "Tower of Babel" was built 4036 years before the first "President" of the United States was sworn into office. 2. The hotel called "The Swan" was kept by a man who in early life had in vain tried to become a "Dentist." 3. From several points on "Mount Parnassus," a poetical landscape painter might view some very fine scenes and, if at leisure, might sketch or "Draw" one on the spot. 4. When a monkey sees himself in a "Looking-Glass," and puts his hands behind it to find the original, he always has "To give up." The occupant of a "Throne" has sometimes been known to exhibit great "Self-sacrifice." 6. A "Horn of Plenty" would have been welcome to "Washington" when his army was starving at Valley Forge. 7. Although a "Glass-blower's" occupation is not particularly untidy, yet, out of regard to common decency, he ought always to take a "Morning wash." 8. "Midas" would have much preferred to sleep out in the "Dew," to wearing asses' ears. 9. "Narcissus" was, owing to his vanity, transformed into the principal ornament of a "Flower bed." 10. "Goliath" expecting to conquer David in their memorable duel, in anticipation of victory "Took a bouquet." 11. The statue of "Hercules" should always occupy the place of honour in the "Garden" of
a prize-fighter. 12. We have no reason to believe that "David," if he had been placed in the garden of "Eden," would have overcome the temptation of the serpent. 13. No antique "Castle" was in existence in America when John "Adams" assumed the office of Chief Executive of the United States. [The Student must notice that it requires exceptional skill to invent such sentences, and a prodigious power of the Natural Memory, combined with much study of them, to recollect them. Hence, this Method demands talents which few possess, and imposes burdens which still fewer can carry, and the stories are remembered only a short time unless constantly repeated.]

The Picture Method and the Key!!

1. You must imagine that you are on the "Tower of Babel," and that you see the mass below you select a "President" who cannot keep order. 2. You must imagine that you see a "Swan" submitting to have an operation performed on his bill by a "Dentist." 3. You must imagine that you are on "Mount Parnassus," and that you see a would-be poet trying to "Draw" up the mountain a bundle of doggerel manuscript poetry. 4. You must imagine you are standing by a "Mirror" and can see a young lady gazing into it and resolving "To give up" tight lacing, because it makes the tip of her nose red. 5. You must imagine you can see Solomon sitting on his "Throne" and admiring the "Self-sacrifice" of the woman who was ready to let her rival own her child rather than see it cut in two. 6. You must imagine you can see a trumpet, shaped like a "Horn of Plenty," through which a trumpeter is sounding the Advance to the American Army, by the command of General "Washington." 7. You must imagine you can see a mad "Glass-blower" taking his "Morning wash" in molten glass. 8. You must imagine you can see "Midas" wearing out the tips of his long ears in flicking the "Dew" off the rose-tree buds. 9. You must imagine that you see a "Narcissus," which is the only surviving flower, in a patch of ground formerly cultivated as a "Flower bed." 10. You must imagine you can see "Goliath" bragging to his friends that he will have the easiest victory over the country-boy David, who, he asserts, never took a prisoner or took a man's life, or did anything more valiant than that he "Took a Bouquet" from some rustic rival. 11. You must imagine you can see "Hercules" stealing golden apples from the "Garden" of the Hesperides. 12. You must imagine you can see "David" trying to knock apples off the tree of knowledge with his harp, for which purpose he has climbed up the gate of "Eden." 13. You must imagine you see in a ruined "Castle," Eve and her husband eating apples, which he says are hers, and she says are "Adam's." (This Method is easy to all who are endowed with extraordinary activity of imagination, and ruinous to all, as it still further cultivates the fancy to a morbid degree and causes the mind to wander to a fatal extent. As an aid to memory it cannot be depended on at all. It may help for a few minutes or hours. For a longer period, only everlasting reviews can make it endure.)

Remark.—If the Pupil were to be taught by all the mnemonic teachers in the world, and to study all their published books, he would be given no other method of dealing with the first 13 words of the Presidential Series, except, perhaps, by barbarous doggerel rhyme and
idiotic punning. These Methods are what they call "associating" words or ideas together! These stories or pictures must be *invented* and *memorised*, and *recalled* every time you wish to recite the series!! It is possible, after recalling the stories or pictures a great many times, that a person possessed of a powerful natural memory could *recite* the series without recalling the stories or pictures. But the rule (there may be an occasional exception) is that the mnemonical *means* resorted to must *always* be recalled before you can revive what they were invented to unite together. On the other hand, when a Pupil has learned the Presidential or other Series by Analysis with one careful perusal, he can *recite* the series *both* ways without thinking of the In., Ex. and Con., by which they are cemented!

Nor is this all. The practice of inventing these unnatural mnemonical stories, and making these unnatural mnemonical pictures, so cultivates the fancy, as to cause the mind to wander on all occasions.

On the other hand, *thinking out* the relations between words in any Analytical Series helps to enchain and interest the Attention, and the recital forwards and backwards strengthens both Stages of the Memory and both Functions of the Continuity.

One word more. I have never taught my System to a mnemonical teacher or author. Unless such a man is devoid of tricks and genuinely honest, he would only misrepresent my System. His Continuity, as a rule, is broken down. Making mnemonical pictures has made his fancy morbid, and he is known as "the absent-minded man." He cannot study, or control his Attention for any length of time. And he would look upon learning the Presidential Series as a mountainous task!! It would be, if he learned it by *his* System. And he has no *patience* to try to learn and practise another Method.

On the other hand, sometimes Pupils who have a bad Memory and a weak Continuity resort to a dozen or more cheap and worthless mnemonical books, and work, for perhaps months or years, at Keys and Picturing, until their mental operations are perverted by Mnemonic Artificiality, &c. Then they come to my Lessons, and prove incapable of looking at them, except through mnemonical spectacles. They read my instructions with a wandering mind and fail to grasp my meaning. (1) They jump to the conclusion that I use a Series, learned by Analysis, as a Key of Words or Pegs, to tie or associate other words to! I never did, and I do not now do anything of the sort. (2) Some of them also misunderstand my System in another respect. Whilst the unprejudiced Pupil knows he can learn such a series as the Presidential Series by one *painstaking* perusal, 10 or 15 words at a time, he also knows that I recommend him to recite such a series learned by Analysis, both ways, once or twice a day for one month, as a means of developing and strengthening his Memory and Continuity. Some of these disjointed and crack-brained victims of mnemonics get the impression that a Pupil has to repeat over an Analytic Series once or twice a day for an entire month, in order to *learn* the series!! I trust my Pupils will not allow such misleading talk in their presence without correcting it. Of course it will not be right to quote any part of the series, or to state *how* it is learned (to anyone whom you have not known to sign my contract), but the remark can be made that the daily recitals are not made to *learn* the series, but only as a Memory and Continuity-Trainer, &c.
FIFTH AND LAST EXERCISE OF THIS LESSON.

LEARNING BY "ROTE" IS NOT LEARNING AT ALL.

"Cramming" is learning by heart, by means of endless repetitions, without comprehension. It is useless, except for a temporary purpose, for what is thus learned is soon forgotten. It is ruinous in results, because it promotes mind-wandering to an alarming degree; and it is the most laborious way of learning, the hardest, the most tiresome and wearying, and it takes much longer time. Hence, in every way, it is to be condemned.

A little reflection will show that learning by heart in the usual way, by means of endless repetitions, is merely remembering a series of sights [words written or printed], or a series of sounds [words spoken], without any or the very smallest amount of comprehension, and the process is that of mere concurrence. One of the many possible proofs may be seen in the statement of Dr. Maudsley, that he had seen an idiot at Earlswood Asylum who could read a column of the Times newspaper but once, and repeat the whole of it without mistake; and he had heard of one who could, after a single reading, repeat the column forwards or backwards. These idiots possessed the visual word memory.

These cases show that memory can be perfect with no comprehension of what is learned. The following is a case of auditory word memory mentioned by Dugald Stewart—"Philosophy of the Human Mind," chap. VI., sec. 2:—"I knew a person who, though completely ignorant of Latin, was able to repeat over thirty or forty lines of Virgil, after having heard them once read to him, not indeed with perfect exactness, but with such a degree of resemblance as (all circumstances considered) was truly astonishing; yet this person (who was in the condition of a servant) was singularly deficient in memory in all cases in which that faculty is of real practical utility. He was noted in every family in which he had been employed for habits of forgetfulness, and could scarcely deliver an ordinary message without committing some blunder."

This servant possessed a prodigious memory for auditory impressions for the mere succession of sounds. The reason he could remember the 30 or 40 lines of Virgil was, that he had to attend to the sounds alone, not being capable of understanding their meaning; but, in listening to a message, he had to try to grasp the meaning, and being doubtless troubled with mind-wandering and possessing feeble powers of comprehension, he could only succeed in giving the message as he had understood it, which was pretty certain to be more or less incorrect. And being probably very weak in visual sensations, he noticed few things and therefore got no vivid sight or eye impressions. These cases—and I could add many others well authenticated—prove conclusively that rote learning or learning by heart does not necessarily require or demand any intellectual comprehension of the matter thus learned.

My System insists on Pupils always first understanding the sentence
or the matter to be learned; when that is done, *half the victory is gained*, and the rest is easily and quickly acquired. Simple sentences or propositions are readily understood—as, Iron is hard. Lead is heavy. Move the right foot forward; but suppose you have the simple sentence, "An Echidna is an Ornithodelphian." In such a case, unless the Pupil resorts to a dictionary (he should never be without the best dictionary he can afford), this sentence will be a riddle to him until he learns the meaning of it by a special study.

But complex propositions are extremely hard to be comprehended at a glance. To comprehend such a sentence, let the Pupil analyse it, that is, take it to pieces; and then, having found the simplest form to which it can be reduced, let him go on step by step, adding one idea or qualification at a time, until he has gradually, and with understanding, rebuilt the complex sentence, and in this way, if he goes through with the reconstruction two or three times from memory, he will have absorbed all the ideas of a sentence, however complex. Take the definition of Memory, "Memory is the revival of a past Mental Impression." Its simplest form is—(1) Memory is a revival. Now add on one modification at a time from memory, till you reproduce the original sentence. In this way, you will have—(2) Memory is the revival of an *Impression*. (3) Memory is the revival of a Mental Impression. (4) Memory is the revival of a *past* Mental Impression [same as (1) *FIRST IMPRESSION* and (2) its REVIVAL].

Suppose you are studying Geometry, and you wish to fix permanently in your memory the comprehension of the proposition of Prop. I., Book I., to wit: "To describe an equilateral triangle upon a given finite straight line." You take it to pieces and try to realise the meaning of each of its parts, thus: (1) A triangle. If you have learned the definition you know that a triangle is a three sided figure. &c. (2) An *equilateral* triangle. You now observe that it is a three-sided figure whose sides are equal. (3) To describe an equilateral triangle. You have merely to draw it or sketch it. (4) To describe an equilateral triangle upon a *straight line*. Here you see that you must draw it, not upon any part of the paper or board, but upon a straight line on that paper or board. (5) To describe an equilateral triangle upon a *given* straight line. You must draw it, not upon any straight line, but upon some particular straight line. (6) To describe an equilateral triangle upon a given *finite* straight line; not upon a line of unknown length but upon a line of definite length, &c. If you repeat these successive reconstructions a few times from memory, you assimilate the whole of that proposition and all its parts with pleasure and certainty.

Let us apply this method to the comprehension of the three laws, pp. 32 and 33. I. "Inclusion indicates that you realise or feel that there is an overlapping of meaning between two words, or that there is a noticed or recognised idea or sound that belongs to both alike." You can begin in different ways; but, however you begin, or with whatever part, you always start with the simplest idea, and add on new ideas successively. (1) There is an idea. (2) There is an idea or sound. (3) There is an idea or sound *that belongs to both*. (4) There is an idea or sound that belongs to both *alike*. (5) There is a noticed or recognised idea or sound that belongs to both alike. (6) There is an overlapping of meaning or there is a noticed or recognised idea or sound that belongs to both alike. (7) There is an overlapping of meaning *between two words*, or there is a
noticed or recognised idea or sound that belongs to both alike. (8) You realise or feel that there is an overlapping of meaning between two words, or that there is a noticed or recognised idea or sound that belongs to both alike. (9) Inclusion indicates that you realise or feel that there is an overlapping of meaning between two words, or that there is a noticed or recognised idea or sound that belongs to both alike.

THREE REMARKS.—(1) In meeting new or unfamiliar terms, look up in the Dictionary, not only the definition, but the derivation or what the word is made up of. You thus analyse the term—e.g., Inclusion is from "in," which means in or within, and "claudere," which means to "shut." Literally, it means "what is shut up or within." This is always a help, and sometimes a great help, in fully understanding the meaning of unfamiliar, scientific or other words, even when one is ignorant of the language from which the English word is derived. The explanation of the origin helps. (2) The practice of this method of analysis, if continued for some time in regard to sentences of complex meaning, so trains the apprehension that the mind will hereafter more quickly and fully seize the meaning and exact import of new propositions, even in cases where the method is not consciously applied. (3) In the case of this Definition of Inclusion [as well as in all other cases], if the Pupil can repeat from memory all the clauses in succession from (1) up to (9) a few times, he will retain a clearer and more vivid comprehension of that definition than if he had repeated the entire definition a hundred or more times in the usual manner.

II. "Exclusion means that you observe that there is an antithesis, or that one word excludes the other, or that both words relate to one and the same thing but occupy opposite positions in regard to it." (1) There is an antithesis. (2) You observe that there is an antithesis. (3) Exclusion means that you observe that there is an antithesis. (4) Exclusion means that you observe that there is an antithesis or that one word excludes the other. (5) Exclusion means that you observe that there is an antithesis or that one word excludes the other, or that both words relate to one and the same thing. (6) Exclusion means that you observe that there is an antithesis or that one word excludes the other, or that both words relate to one and the same thing but occupy opposite positions. (7) Exclusion means that you observe that there is an antithesis or that one word excludes the other, or that both words relate to one and the same thing but occupy opposite positions in regard to it.

REMARKS.—After carefully studying the foregoing Analysis, let the Pupil, before looking at my Analysis of it, deal in a similar manner with the definition of Concurrency, and send his Analysis to me for criticism. And with the exercises on each of the subsequent lessons, let him send me a few sentences of his own selection, analysed. And let him not begrudge the time spent in this matter, however busy he may be. It is a very good preliminary exercise of mind to qualify him for rapidly and almost unconsciously absorbing the meaning of all he hears or reads. There is another practice which is most efficacious in creating the habit of quick and exact apprehension of what one hears, sees or reads. It is the practice of preparing questions and answers on what one is studying. In this and the next lesson, I have drawn up a few questions, to which I hope the Pupil will send me his own written replies. But, in the remaining lessons, I trust the Pupil will send me his own questions and answers on them, and let them be as exhaustive and searching as possible. And if time fails him to do both the questioning and analysing of sentences, let him on no account neglect the latter, but let him send me a full set of questions and answers on these four pages. In the next and subsequent lessons, I shall present a New and Original Method of rapidly memorising prose or poetry.

III. "Concurrence is the felt relation between two ideas or impres-
sions which we have sensuously experienced or thought of together, or almost simultaneously, or history has told us are together, although having no relation necessarily. (1) Concurrence is the relation between two ideas. (2) Concurrence is the relation between two ideas or impressions. (3) Concurrence is the felt relation between two ideas or impressions. (4) Concurrence is the felt relation between two ideas or impressions which we have experienced. (5) Concurrence is the felt relation between two ideas or impressions which we have experienced or thought of. (6) Concurrence is the felt relation between two ideas or impressions which we have experienced or thought of together. (7) Concurrence is the felt relation between two ideas or impressions which we have experienced or thought of together or simultaneously. (8) Concurrence is the felt relation between two ideas or impressions which we have experienced or thought of together or almost simultaneously. (9) Concurrence is the felt relation between two ideas or impressions which we have sensuously experienced or thought of together or almost simultaneously. (10) Concurrence is the felt relation between two ideas or impressions which we have sensuously experienced or thought of together or almost simultaneously, or history has told us are together. (11) Concurrence is the felt relation between two ideas or impressions which we have sensuously experienced or thought of together or almost simultaneously, or history has told us are together, although having no relation necessarily.

REMARKS.—The dullest person ought readily to see why this method secures the comprehension of a complex sentence or proposition much more quickly and thoroughly than the method of endless repetition of the entire sentence. Every impression reaching the brain becomes affiliated on to or dovetailed in with its like, similar, or analogue that is already there registered. A single or simple idea is more likely to find its like or analogue at once and without delay than that idea will find its like or analogue if modified or mixed up with other ideas. When the mind has absorbed a simple idea, it can easily absorb that idea in connection with another idea. Then these two ideas can easily receive an accession of another idea. In this way ten modifying ideas can easily and successively be absorbed, when if the eleven ideas altogether had been presented, they could not have been understood at all. If a Chinaman looks for the first time at a page of an English book, it is all confusion to him. He recognises nothing, only slight differences between the letters and words. But if he learns a few letters of the English Alphabet, and then returns to that page, he will now recognise those letters which he has learned. When he has learned the entire English Alphabet, he will recognise all the letters on the page, but he will not know the meaning of the words. When he has learned 2000 or 3000 English words, he will probably be able to understand the entire page, which formerly had no meaning to him. The human mind must always proceed from the simple to the complex, and in this way, and in this way only, can it comprehend and understand new and hitherto unfamiliar ideas or knowledge.
PART II.
SUPPLEMENT TO RECOLLECTIVE ANALYSIS.

My system is learned, not from understanding the THEORY of it, but solely and exclusively by DOING the EXERCISES.

PREPARATION FOR MEMORIZING
DATES OR ANY NUMBERS WHATSOEVER.

HISTORICAL PREFACE.
(Not to be read except when reviewing this Lesson.)

The Masorites—those indefatigable commentators—undertook, some 1200 years ago, to make an accurate inventory of the contents of the Hebrew Bible. They counted chapters, paragraphs, verses, even all the words and letters in each book. The result of their investigations can be found printed at the end of every book of the Hebrew Bible. It is unnecessary to add that all this painstaking was done to prevent corruption or alteration of the original text of the Sacred Records.

Now comes the remarkable fact that, in order to help the memory, they represented the number of chapters, verses, &c., by means of a familiar sentence, taken at random from some portion of the Bible, the numerical value of the consonants in such a sentence giving the exact number to be remembered!! An entire sentence was seldom required for this purpose, and when only a part of a sentence sufficed, the particular words appropriated to express the number were printed in larger and bolder type, while the rest of the sentence appeared in smaller type. See almost any Hebrew Bible.

Thus, we know that the Jewish Rabbis anticipated and gave the exact model of all modern Figure Alphabets more than 1200 years ago.

Modern nations have all imitated the Jewish method of expressing numbers by the consonants of words, as more easily remembered than the figures themselves. Dr. Richard Grey, who published his Memoria Technica in 1330, expressly admits that the Hebrew practice suggested to him his own Figure Alphabet, and numerous other persons, learned in the Hebrew tongue, doubtless made Figure Alphabets for their own use without ever taking the trouble to publish them.

Previous to the time of Leibnitz, a Figure Alphabet was in use in Europe. By whom it was originated is not known. Leibnitz himself did not know. It was probably a Hebrew scholar. The earliest figure alphabet was a downright jargon. The first, so far as is known, who published a Figure Alphabet, was Stanislaus Mink von Wemsheim or Winkelmann. He made a Mnemonical Key of the 12 Signs of the Zodiac. He then divided each sign into 30 subsections, making in all 360
Key Localities! If his practice was similar to that of modern mnemonical authors, who rarely, if ever, acknowledge where they get their figure alphabets [in order that their pupils may suppose that they invented the device], and we have no occasion to think it was different, then we have an additional reason for presuming that he got his alphabet from some older and now unknown source, if not direct from the Hebrew Bible. His mode of expressing the date of his own publication, 1648, was as follows:—"aBeo iMo aGoR." At this time Mnemonics had become such a stench in the nostrils of the public, from its cultivation of unnatural Keys and Artificial Associations, that its votaries could not have secured any attention to their imitation of the Hebrew practice. But the philosopher Leibnitz, finding a Figure Alphabet in existence—probably the same one that Winkelmann had borrowed—quickly saw the utility of such a device, and at once popularised it and translated figures into words. He recommended it as a "secret how numbers, especially those of chronology, can be deposited in the Memory, so as never to be forgotten." This endorsement of the Method of translating figures into words by the great thinker Leibnitz attracted attention to the device, as soon as his opinion became known. And at once numbers of chronologists and mnemonists set to work, each one to make a Figure Alphabet for himself; and the result has been that every conceivable form of Alphabet has been used, and it would be impossible for anyone to devise any new collocation of consonants. All possible forms have been anticipated over and over again. Accordingly, I have adopted what seemed to me to be one of the best, and I have always acknowledged that it was owing to the skill and recommendation of Leibnitz that the modern un-Jewish European world has had the benefit of a practicable Figure Alphabet. Yet, when I come to deal with the words into which I translate figures, my Method is unlike that of Leibnitz himself or of any other teacher of memory!! And, in fact, it is of very little account what particular alphabet is used, provided it is made perfectly familiar. It is in Associating the figure-word with the event to which it belongs that the essential difference lies; and, in this respect, my Art of Never Forgetting is wholly incomparable.

Reflection will show that, in translating figures into words, I am not introducing an "Artificial" element into my System; because numbers applicable of themselves to everything in general, and meaning nothing in particular, are pure mental conceptions; and, in transforming them into words or phrases, I am practically only turning Abstractions into Concretes.

FIRST EXERCISE.

The first thing to be acquired is to learn the equivalents in consonants of the cypher and the nine digits, as seen in the table below. The explanations will show you how to do it.

The explanations and examples will make this acquisition very easy.
If you imagine the capital letter S cut into two parts, and the bottom half attached to the top half, it would make a nought (O). That is why S is translated into 0. C<sub>soft</sub> as in _cease_ has the same sound as S, and Z is a cognate of S—that is, it is _made by the same organs of speech in the same position_ as when making S, only it is an undertone, and S is a whispering letter. Besides, Z should represent O because it begins the word _Zero_—C<sub>soft</sub> should also stand for O for the additional reason that C<sub>soft</sub> begins the word cypher. Thus, in translating a word into figures, we always turn S, Z or C<sub>soft</sub> into (0); or, in turning figures into words, we always translate a nought (0) into S, Z or C<sub>soft</sub>. We use “t” to represent 1, because “t” has one downward stroke, and we also represent 1 by “d,” because “d” is cognate of “t.” We represent “n” by 2, because “n” has two down strokes, “m” by 3, because “m” has three down strokes, “r” by 4, because it terminates the word _four_ in several languages, and “1” by 5, because in the Roman alphabet L stood for 50, and we disregard the tens, and we make it stand for 5 or the first figure of 50; “f” by 8, because you can imagine “f” to be an eight elongated, and “v” is the cognate of “f.” “b” and “p” represent 9, because 9 is only an inverted “b,” and “p” is its cognate.
The phrase "6 Shy Jewesses chose George" gives through its initial consonants the representatives of 6, viz.: sh, j, ch, and g. The phrase "7 great kings came quarrelling" gives the letter equivalent of 7, viz.: g, k, c, and q, also the final ng. This mode of expressing a new meaning by the consonants of a word was practised by the ancient Hebrews.* Ralbag was a word invented to indicate four words by its consonants. Thus, R=R‐abbi, L=L‐evi, B=B‐en, G=G‐erson.† The representatives of the figures from 0 up to 9 are given in the consonants of the first phrase below, and in the initial consonants of the ten subsequent phrases following the figures:

"Sidney Merlish gave a bow."

<table>
<thead>
<tr>
<th>Naught (0)</th>
<th>So Zealous Ceases.</th>
</tr>
</thead>
<tbody>
<tr>
<td>One (1)</td>
<td>Tankard this Day.</td>
</tr>
<tr>
<td>Two (2)</td>
<td>headed Nightingale.</td>
</tr>
<tr>
<td>Three (3)</td>
<td>Meals.</td>
</tr>
<tr>
<td>Four (4)</td>
<td>Roadsters.</td>
</tr>
<tr>
<td>Five (5)</td>
<td>&quot;Lamps.&quot;</td>
</tr>
<tr>
<td>Six (6)</td>
<td>Shy Jewesses Chose George.</td>
</tr>
<tr>
<td>Seven (7)</td>
<td>Great Kings Came Quarrelling.</td>
</tr>
<tr>
<td>Eight (8)</td>
<td>Fold Value.</td>
</tr>
<tr>
<td>Nine (9)</td>
<td>Beautiful Poems.</td>
</tr>
</tbody>
</table>

This explanation is a help to remember the letter values of the figures. Another way to fix these values in mind for permanent use is to turn words into figures. This practice quickly enables you to convert figures into words, and to trans-

* A lady wished to remember the abbreviation L. K. Q. C. P. I. (Licentiate of King's and Queen's College of Physicians of Ireland), so she made this Phrase: "Licensed to Kill, Qualified to Cure, Patients Invited" !
† Here we see that the same consonants in the same word were used for two different purposes, one to spell the new Proper Name of Ralbag, and the other to indicate by a new use of the consonants that Ralbag was the Rabbi Levi Ben Gerson. This Hebrew practice was the undoubted origin of the double use of consonants to spell words, and, at the same time, to indicate figures by a new meaning given to the consonants. The same practice prevailed among the ancient Greeks. This Hebrew practice, besides giving origin to the Figure Alphabet, was availed of to make a secret Cypher. It was the origin of Acrostics. And it led to the use of words to express different degrees of the same thing and different persons bearing the same name, or Homophones in the case of Kings, &c., the initial letter being the same as that of the King, and the final consonant telling whether he was the first, second, third, &c., of that name. To indicate briefly the different English Henrys, for instance: Head = Hen. I., Hen = Hen. II., Hem = Hen. III., Halt = Hen. IV., Hall = Hen. V., Hush = Hen. VI., Hack = Hen. VII., and Hive = Hen. VIII. The number of ways in which these Henrys can be thus abbreviated by the use of this Hebrew Method is very large. As the principle of this Method unquestionably became the common property of the civilised world by inheritance from the Hebrews, it is rather presumptuous for mnemonical authors to claim that they originated the device. If it could be established that they invented it as well as the Figure Alphabet, without referring to the Hebrew practice, I should be delighted to award them due praise, but the proof points the other way. They have no right to assume the contrary of the fact.
late them back into figures. Facility will be attained before the 5 lessons are completed.

The great utility of this practice will appear when SYNTHESIS is mastered.

As many mnemonists use the same Figure Alphabet which I use, the words chosen to represent the same dates may be the same in their books and in my lessons; yet, there is nothing in common in our systems, as such, since the Figure Alphabet is not their invention, and since my Method of CONNECTING the Date-word to the event is totally unlike their Methods.

RULES.

Not to be glanced at or skipped, but to be carefully studied.

1. —Two consonants of the same kind with no vowel between, provided they have the same sound, treated as one consonant, as “ll” = 5, “nn” = 2, “rr” = 4, dd = 1, &c. But the two consonants have different values, in accident = 70121.

2. —All silent consonants are disregarded, as “Ph” and “k” in “Phthisic” = 107; “b” in “Lamb” = 53, “Comb” = 73, or in “Tomb” = 13. “gh” in Bought = 91; “k” in Know = 2; “gh” in Neighbours = 2940.

3. —The equivalents of the above consonants have the same value as the consonants themselves, as “gh” in “Tough” = 18, “gh” in Enough = 28; “gh” in Rough = 48; “gh” in “Laugh” = 58, “Lock” = 57. “N” sometimes = ng = 7; as in “Bank” = 977; “n” in Bank has the sound of “ng”; n, g are not always taken together as one sound, translated into 7, but are treated separately sometimes, as in engage = 276.* X = gs or ks = 70, as in example = 70395; in oxygen = 7062. Sometimes X = Z, as in Xerxes = 04700, and then it = 0. Ci and ti = sh, as gracious = 7460; Nation = 262. dge = b of an Judge = 66. Tch = ch = 6, as in ditch = 16 (it rhymes with rich = 46). Ch sometimes = k as in Christmas = 74030. S and z sometimes = zh, which is the cognate equivalent of sh = 6,

* Pupils who have a poor ear for sounds sometimes fail to note when “n” sounds like “ng” and so means 7 instead of 2. Let them study the words “ringer” (474), “linger” (5774), and “ginger” (6264). The first syllable of “linger” rhymes with the first of “ringer,” and not with the first of “ginger;” it rhymes with “ring” and not with “gin;” and if the first syllable of “ringer” is 47, the first of “linger” must be 57; but the second syllable of “linger” is “ger,” while the second syllable of “ringer” is only “er.” So “linger” is pronounced as if spelt “ling-ger,” the “n” sounds like “ng.” “Ringer” is pronounced “ring-er.”
as in Pleasure=9564, and in Crozier=7464. Acqui-
esce=70, excrescence=7074020.

4.—No notice is taken of any vowel or of w (war=4) or y
(yoke=7), or of h (the=1), except as part of ch or sh.
Words like Weigh, Whey, &c., having no figure values,
are never counted. If one word ends with, and the next
word begins with, the same consonant, they are both
reckoned, as That Toad=1111.

[Those who are interested in remembering fractions, &c.,
see p. 71.]

SECOND EXERCISE.

Above all, let the Pupil send me his translation into
figures of the Presidential and Dough, Dodo Series, and
of the following words, which express the Dates of Access-
sion of the Kings of England from Egbert to Victoria.
And, after making this translation, he can send words
that will translate any Dates in the 16th, or 17th, or 18th
Century as an exercise in finding words to express
figures:—

Fine oak...foaming...flock...vicious...fish show...fact...
post...panel...brass...birch...Belial...bailiff...pickle...
pack up...test him...destroy...duster...the stage...athe-
istic...dismal...howitzers...discern...it is Joshua...the
wise judge...deceiving...tootsies...hot oatmeal...tutelar
...the day of hope...dead baby...tin dish...Duncan...
damask...demoniac...demagogue...to imbibe...dry theme
...drawn in...tragedy...true fame...teraphim...tearful
...to lispe...tailoring...tall elm...dual life...Doge's home
...additional...too sharp...dutch loam...wide shelf...eat
jalap...two judges...dishevel...the chief abbey...tocsin...
doctor...thickening...dog shows...toughness...die famous
...day of maying.

The following are examples of words and phrases for the
lengths of Rivers and heights of Mountains. The Pupil
should translate them into figures, and send them to me for
criticism. *How the figure-words are to be connected with the*
names will appear from the Paper on Synthesis. Let the Pupil send me other examples:

Mississippi, warm oven; Nile, wordy essays; Volga, narrow seas; Ohio, town jail; Loire, Lammas; Seine, Argosy; Thames, annals; Spree, annoyance; Jordan, an icehouse; Sorata (Andes), Indian effigy; Popocatepetl (Mexico), take a weak wife home; Mount Brown (Rocky Mountains), whitish sauces; Mont Blanc, idling half a day; Jungfrau, the Mohicans; Righi, all bustle! Konjakofski (Ural Mountains), lumbago; Saddleback, now giving; Ben Nevis, wear your sash; Snowdon, homologous.

Authorities differ as to these lengths and heights. In each case I have accepted the dictum of Mr. A. Keith Johnston, F. R. S. E.—See the latest edition of his Gazetteer.

THIRD EXERCISE.

Send me a translation into figures of the following 71 sentences:

Mother Day will buy any shawl.
My love, pick up my new muff.
A Russian jeer may move a woman.
Cables enough for Utopia.
Get a cheap ham pie by my cooley.
The slave knows a bigger ape.
I rarely hop on my sick foot.
Cheer a sage in a fashion safe.
A baby fish now views my wharf.
Annually Mary Ann did kiss a jay.
A cabby found a rough savage.
A low dumb knave knew a message showy.
Argus up my fire rushes.
A bee will lose life in enmity.
A canal may well appear swift.
Never have tidy Dick early.
Has no fear to see a new ghost.
A beam fallen at dizzy Lulu.
We will be a sure arch in a new pier.
Feeble are poems home-fed.
A butcher ran off feet soppy.
A college shall buy my mirror.
Shoot in a fury, ugly Sheriff.
Naomi may give Jack half my tea.
Shall we now cut Annie's topaz.
Peter will shear a village hedge.
Upon my ridges moor a fish.
To soar lower may nudge a Jury.
Find my map, my Chiswick.
Now choose anew our better Eden.
Coming near love kisses.
Ji-Ji has jammed a whole leaf off.
Take rough, fat, lamb-soup.
A nice patch in a funny panel.
Raise bad cattle, major.
A magic fop knew a well opossum.
Joses taught him my sole hymn.
A sailor if vain has a rich joy.
You allow no time for authorship.
Let a pert lad teach us.
A bear may muzzle a gun-case.
My shallow cool pulp-tub.
A lamb's pint of shady dew.
Come off top, my newish ditty.
A cup may dazzle at a haughty hovel.
Refuse queer, rich, new muck.
Baby Jenny wooing her pale cheek.
Melt half a flakey lining.
Any roof bought in New Cobham.
Heave it off, my sooty deep robe.
A tiny hoop of mamma shook a mummy.
China warriors usually weigh each a share.
A missive chosen at my ball.
Stitches pin our ruffs.
Going now amiss by our machine.
Full looms push chains.
No quail will shape my big pie.
A heavy ship will soon annoy a new rock.
Her puppy shone as a choice care.
Bacchus may swear at any match.
A shy heavy wife shut a bible to-day.
Suasive weapons win him fame.
Cuckoos untamed are touchy.
We buried Dobson by five.
You love Annie Laurie, you wretch of a Doge.
He may pick up pipes, Rachel.
Picus is safe to accuse us.
No Pasha may deny my awaking him.
Folk may run his ferret home.
Escape it early to-day, if you may.
Paphia's legacy pay off wholly.

* * Translate the above 71 Sentences into figures, and send them to me for criticism. On no account fail to do this exercise. * *

Translate the words in italics in this paragraph into figures. They express the specific gravities of some important metals, as given in Roscoe's Chemistry. [Here decimals are used.*] Osmium, Nina Syringa; iridium, none serious; platinum, needy souls; gold, Toby sensual; mercury, Tommy sleepish; rhodium, tiny seed; thalium, a wedded Sappho; paladium, a dead seer; lead, doughty smudging; silver, this sore chafe; bismuth, a happy Savannah home; copper, a heavy spleen; cadmium, heave a satchel low; iron, oak scoop; tin, a wig snipper; zinc, hedge spittle; antimony, witch, seek a tomb; aluminium, new Souchong; magnesium, to scare him; calcium, the slow calf; rubidium, the solid wedge; sodium, speaker; potassium, savagely; lithium, sleeper.

Those who are familiar with the pronunciation of the Welsh language may send me the translation into figures of the following name of a Welsh village. It is the longest word in the modern world:—

Llanfairpwllgwyngyllgogerychwyrndrobwllllerwyndyllynogoch.

This word of 71 letters and 22 syllables means: "St. Mary's white hazel pool, near the turning pool, near the whirlpool, very near the pool by Llankilio, fronting the red rocky islet of Gogo."

Optional Example,
Solely for those who understand ancient Greek.

The following is the longest word ever constructed in any Language, Ancient or Modern, and is from Aristophanes; it is given as an optional Exercise for Greek scholars only:—

* The pupil may skip this paragraph if not wishing to deal with chemistry or decimals. As to decimals see page 71.
The following is the translation of the foregoing Greek word—

<table>
<thead>
<tr>
<th>Greek Word</th>
<th>English Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Λεπαδό -</td>
<td>Shell-fish</td>
</tr>
<tr>
<td>-τεμαχο -</td>
<td>fish-steak</td>
</tr>
<tr>
<td>-σελαχο -</td>
<td>shark</td>
</tr>
<tr>
<td>-γαλεο -</td>
<td>lamprey</td>
</tr>
<tr>
<td>-κρανο -</td>
<td>cranium</td>
</tr>
<tr>
<td>-λειφανο -</td>
<td>scrap</td>
</tr>
<tr>
<td>-δρυμ -</td>
<td>pickle</td>
</tr>
<tr>
<td>-υποτριμματο -</td>
<td>pounded up</td>
</tr>
<tr>
<td>-σιλφω -</td>
<td>cray-fish</td>
</tr>
<tr>
<td>-μελιτο -</td>
<td>honey</td>
</tr>
<tr>
<td>-κατακχυμενο -</td>
<td>well-mixed-together</td>
</tr>
<tr>
<td>-κιχλ -</td>
<td>wag-tail</td>
</tr>
<tr>
<td>-εικοσουφο -</td>
<td>black-bird</td>
</tr>
<tr>
<td>-φαττο -</td>
<td>ring-dove</td>
</tr>
<tr>
<td>-περιστερ -</td>
<td>pigeon</td>
</tr>
<tr>
<td>-αλεκτρυνο -</td>
<td>cock</td>
</tr>
<tr>
<td>-οπτεκεφαλο -</td>
<td>roast-comb</td>
</tr>
<tr>
<td>-κεγκλο -</td>
<td>water-ousel</td>
</tr>
<tr>
<td>-πελειο -</td>
<td>wood-pigeon</td>
</tr>
<tr>
<td>-λαγηφο -</td>
<td>hare</td>
</tr>
<tr>
<td>-σιραφ -</td>
<td>syrup</td>
</tr>
<tr>
<td>-βαφη -</td>
<td>soda</td>
</tr>
<tr>
<td>-τραγανο -</td>
<td>dainty</td>
</tr>
<tr>
<td>-πτερυγων -</td>
<td>wings</td>
</tr>
</tbody>
</table>

**KNIGHT'S TOUR.**—The object of this Problem is to conduct the Knight diagonally all over the Board from No. 1 or any other number, and to return to the point whence it started without its having touched twice upon the centre of the same square in its course. The Knight, if starting from No 1, will have to go over the following squares, as will be seen by inspection of the enclosed diagram:—

```
 1 11 5 15 32 47 64 54
60 50 35 41 26 9 3 13
 7 24 39 56 62 45 30 20
37 22 28 '38 21 36 19 25
10 4 14 8 23 40 55 61
51 57 42 59 53 63 48 31
16 6 12 2 17 34 49 43
58 52 46 29 44 27 33 18—1.
```

The following unpronounceable and incomprehensible word is Dr. Richard Grey's method of expressing the above figures!—

Tour babubutefoisolosylytufadanibipefin
This is given as a mnemonical curiosity, but not to be learned.

A mnemonical teacher who could not see the stultifying absurdities of the present artificial systems, remarked of such applications of Dr. Gray's system:—"Surely, at sight of such phrases; at the cacophonism of such words; and at the essay, I will not say of retaining them in the memory, but only of pronouncing them, the reader will have undoubtedly already decided that he would much rather attempt the mastication of a collection of millstones!!"

FOURTH EXERCISE.

The following series translates the Figures of the Knight's Tour into words, which the Student can memorize in one or two readings by Analysis (if he did not learn them in the First Lesson), and thereby be enabled to hand the accompanying Diagram—not this lesson paper—to anyone, and at his command recite the Tour, beginning at any number he may name, and proceeding either way to return to the point of beginning! The Knight's Tour is admitted to be the most crooked journey on record!!

In the list of words given below the figures showing the numbers of the squares are represented by all the sounded consonants of the words.

It may be observed that, owing to the necessarily limited choice of words, the analytic relations between them are naturally less obvious than if the choice had been unrestricted. The less obvious, however, the connection, the better exercise it will be in tracing the relations of In., Ex. or Con., with which it is now the Pupil's object to become familiar.

Dough...Dodo*...Lay...Outlay...Money...Rogue...Watcher...Lair...Chase...Lasso...Mule...Rod...Gnash...Happy...Home...Dome...Egg...Hennery...Mope...Leash...Chain...Rail...High Mass...Noisy...Meek...Nun†...Enough...Muff...Hand...Match

* A short clumsy bird of Mauritius, now extinct.
† Nun sounds like "none" the opposite of "enough."
...Dip... Nile... Eddies... Ray... Dray... Heavy... Numb... House...
Lull... Chide... Lad... Lag... Run... Leap... Lamb... Jam... Rive...
Mad... Dash... Hash... Dine... Inn... Talk... May hear... Harp...
Rhyme... Leaf... Lawn... Rich... Honey bee... Bear... Nag... Mum...
...The foe!

And, above all, do not construct one or more stories after
the mnemonical imitation of children in the nursery, to contain
the above words!!! Such fanciful combinations promote
mind-wandering, and they cannot assist the memory to a per­
manent retention.

After repeating this series at least 15 times forward and as
many times backward, doing it only once each day, report
to me the exact time it takes you to go both ways when pro­
nouncing the figures instead of the words; but you need not
wait till the 15 days are up before sending for Synthesis.
Send for the next lesson as soon as you have mastered this
lesson. By daily practice you will soon be able to recite the
figures of the Knight’s Tour in the exact order, both forward
and backward, in one minute and a half. Report to me when
you have actually done so.

Recall the words to memory, but do not say them aloud;
say aloud the figures that translate the consonants of the
words.

When you can recite the figures of the Tour rapidly by
thinking through the words, you will soon be able to find the
words for any figures whatsoever.

In response to a very general demand from my Pupils, I have
just completed and printed for sale a Figure Dictionary of 28 pages,
giving a variety of words that translate all the figures from 0 up to 1000.
This will be a very great help to those who have to deal with numbers.
I supply a copy for 50 cents, provided the order contains a stamped di­
rected envelope.

If a word to express any date of four figures, or any number of four
or more figures, does not readily occur to a Pupil, he can easily make
one out of two or three words selected from this “Figure Dictionary.”
For instance, if “dandyish” was not thought of or not approved for
1216, two words might be used, giving 12 and 16, as “tow ditch,” or
“wooden dish;” or three, giving 1, 2 and 16, as “the new attaché,” or
three, giving 1, 21 and 0, as “do not chew.” If millions are to be ex­
pressed, of course only the number of millions need be signified; for
instance, as we are 93 millions of miles from the sun, “poem,”
“opium,” or “beam” might be used to express that distance. If a
Pupil wished to give more exactly the distance as estimated during the
transit of Venus in 1882, 92,700,000, he might write “he open cases
seizes.” For 93,321,000, the distance computed from the transit of
1874, “buy my mint; sauces,” would do. Ambitious Students some­
times select a word for each figure from 1 up to 1000 and learn the Series by Correlations (see Synthesis, or next lesson), and then they can instantly convert any figures whatever into words. This is a great aid in doing Memory Feats.

**THE PRESIDENTIAL AND HEPTARCHY SERIES.**

The time has now come when the Pupil can translate the Date-words, such as “Fine Oak,” &c., and “To give up,” &c., into figures, as he recites those series forwards and backwards. Let him not fail to recite both ways, at least once each day, those series, always saying the figures that translate the Date-words, and also to join with them the Dough, Dodo Series, but in this last case only thinking the words and saying the figures. Let him keep up this practice for one month, and he will find a remarkable change for the better to have taken place in his Memory and Concentration.

In the Presidential Series the words in **capitals** are the names of the American Presidents, and those in **italics** translate the dates of the beginning and end of their terms of office. To give up means 1789, the date of the appointment of the first President of the United States, Washington. Took a bouquet (1797) is the date of the close of his Presidency, and the commencement of John Adams’.

Notice that Fine Oak (827) denotes the close of the Heptarchy and also the beginning of the reign of Egbert, whose name follows that Date-word; and that the date Foaming (837), which terminates Egbert’s reign, is also the commencement of the reign of Ethelwolf, which follows that Date-word, &c. Thus, each king’s name or homophone (see page 39), is between the Date-words which indicate when he began to reign and when his reign terminated; and thus those two Date-words are directly connected with the king whose reign they open and close. And as it happens in all these cases that the end of one reign coincides with the beginning of the next reign, we see that each Date-word serves the double purpose of marking the commencement of that king’s reign which it precedes, and also the termination of his predecessor’s reign; or, in other words, each date-word indicates the finish of the king’s reign whose name precedes it and the beginning of the reign of that king which follows it; so that, if the Pupil has thoroughly memorised the Heptarchy Series, he can instantly give the date of the accession of each king by thinking of the date that precedes it, and he can as quickly give the date of the termination of that reign by thinking of the date which follows it. He can also give the entire Series of Kings, and their dates, both forwards and backwards, with great rapidity and certainty; and he can do all this without using any artificial Mnemonical “Key” “Pegs,” or “Table.” Similar remarks would apply to the Date-words in the Presidential Series of Last Lesson.

Notice that Ethelred II. (who came to the throne in 979 and later retired), was restored in 1014, in Canute’s absence. In 1016, when Ethelred died, Edmund Ironside (his son) and Canute divided the Kingdom, and on the death of Edmund, Canute became sole king, “Ward” is used for Edward I., “Warn” for Edward II., and “Warm” for Ed-
ward III., to distinguish them from the Edwards after the Conquest, "Edit," &c.

The Pupil should master this Lesson, no matter what his aim may be. It will be equally valuable to the Student of Languages and to those who will be occupied with Applied Mathematics. Besides, it is indispensable for the understanding of the subsequent Lessons. Let no Student, therefore, fail to become a thorough proficient in the principles and rules of this lesson.

I do not, as a rule, use words beginning with S, except to translate decimals and fractions, and Date-words where a doubt might otherwise arise (unless in a phrase like “To see Jiji,” “delay a spy,” &c.); and in case of the decimals, S, as the initial letter, means only the decimal point. (1) If there is an integer followed by a decimal, two separate words are used; the decimal-word begins with S, thus: 945.51 = barley sold; 71.3412 = good Samaritan. (2) If it is a decimal by itself, the S indicates the decimal point only—01 = society; 02 = Susan; 04 = saucer. (3) If it is a fraction, the words translating numerator and denominator begin with S, and the S's are not counted, the numerator-word coming first, and the denominator-word last, thus: 1/2 = soil Satan. (4) As to Date-words, just before the commencement of the Christian Era you may use an initial S, as, Stir would mean 14 B.C.; and of course Tower would mean 14 A.D.; Soar = 4 B.C., and Rue = 4 A.D. In a Date-word like Trial, to express 145 B.C., no doubt could arise; if the Pupil knows the contemporary history, he could not imagine it could be 290 later, or 145 A.D. If he fears he might not remember that it was B.C., he could remove all doubt by using the word Stroll.

IMPORTANT EXERCISE!!!—Turn the following sentences into figures and send the translation to me:—Sign your name to all the papers you send to me. Also state the name of Organiser of your Class; and, whether a Private Pupil or Member of a Class, do not forget to enclose the stamped directed envelope.

As this Lesson is a very valuable one, I append QUESTIONS thereon which may enable the Student to TEST his mastery of it before sending for Synthesis. If he have plenty of leisure he may send me Answers to all these Questions:—

1. How is my System learned?
2. What ancient nation used letters to indicate numbers?
8. Who converted numbers into specific consonants—in other words, constructed a Figure Alphabet? And when?

4. What is effected by means of a Figure Alphabet? And what advantage is there in turning figures into words?

5. How is it that, in translating figures into words, we are introducing no "artificial" element? What are we really doing?

6. What letters stand for nought—0? How does the capital S remind you of nought—0? What letter has the same sound as S? And what other reason is there why it, as well as S, should stand for nought—0? What letter is a cognate of S? And what other reason is there why it, as well as S, should stand for nought—0?

7. Why does "t" represent 1? And what is its cognate letter?

8. What letters represent 2 and 3 respectively? And why?

9. Why does "r" represent 4?

10. What letter represents 5? And why?

11. How do you connect "f" with 8, and "b" with 9? And what are the cognate letters of "f" and "b" respectively?

12. What two sentences give the letters for 6 and 7 respectively?

13. Mention a Hebrew word, whose consonants indicate four words?

14. In what sentence do the consonants of the Figure Alphabet occur? And what phrase gives the consonants for 2, 3, 4 and 5?

15. When will the utility of the Figure Alphabet, and of practice in it, appear?

16. How do you translate double consonants having only one sound—as "ll," or "nn"? Give examples. Would the "cc" in "accident" be an example?

17. How are silent consonants treated? Give examples.

18. What letters represent 2 and 3 respectively? And why?

19. What letter represents 5? And why?

20. How do you connect "f" with 8, and "b" with 9? And what are the cognate letters of "f" and "b" respectively?

21. What two sentences give the letters for 6 and 7 respectively?

22. Mention a Hebrew word, whose consonants indicate four words?

23. What words contain and connect together respectively, "t" and "d" (=1)? And "f" and "v" (=8)?

24. In what sentence do the consonants of the Figure Alphabet occur? And what phrase gives the consonants for 2, 3, 4 and 5?

25. When will the utility of the Figure Alphabet, and of practice in it, appear?

17. How do you translate double consonants having only one sound—as "ll," or "nn"? Give examples. Would the "cc" in "accident" be an example?

18. How are silent consonants treated? Give examples.

19. What value have equivalents of the Figure-Consonants? Give examples.

20. What figures do the words "bank" and "engage" represent?

21. What figures does the letter "x" usually stand for? Does it ever stand for nought—0?

22. In what words would "c" soft, and "t" not have their usual value?

23. What figures do "dg," "tch" stand for respectively?

24. Mention a word in which "ch" = k; what value would it have then? Also, words in which "s" and "z" = zh; what value would they have then?

25. How are vowels and diphthongs and the letters "w" and "y" and "h" treated? What value have words like "weigh," "whey," "high," &c.

QUESTIONS ON THE EXERCISES.

1. What are you to do with the 71 sentences?

2. What other Exercises of converting words into figures are set?

3. What are you to do with the List of Words expressing the Dates of the Accession of the Kings of England? With that giving the lengths of some Rivers and heights of Mountains?

4. What is the nature of the problem of the "Knight's Tour"? And of what use is the Diagram in giving the solution?
5. How is the solution given? How is the List of Numbers, giving the moves in order, made easy to remember? How are the words, chosen to represent the numbers in order, connected with each other?

6. Which consonants of each word are the figure-consonants?

7. How many times is it desirable to repeat the List of Words?

8. What are you to do with all the papers you send to me? Whose name, besides your own, are you to state? What are you to enclose with your exercises?

9. Why do I bid the Pupil master the rules and principles of this Lesson? To whom will it be equally valuable? And for what will it be indispensable?

TURNING FIGURES INTO WORDS.

When the pupil is able to run through the Dough, Dodo series in figures in a minute and a half, let him try how quickly he can recall the word for any of the numbers from one to sixty-four, which comprise the squares on the chess-board. So that if he is attempting to do the Knight's Tour blind-fold, and is told that square number 84 has been selected as the starting point, he can instantly recall "May hear," and be prepared to go either to 49 (Harp), or to 17 (Talk).

If he wants practice in other numbers, let him try his hand on such numbers or figures as he sees on the streets and store fronts, turning them into words. If he sees a house numbered 441, let him think how many words besides "reared," "rarity," "reward," and "arrowroot," he can find.

The pupil may at first write down the equivalents of the figures in order to find words; but as soon as possible the habit should be acquired of thinking through the figures. Besides the variety of consonants which may be employed, as "g," "k," "c," "q," and "ng," all of which equal 7; let the pupil not forget that he has at his disposal "h," "w," and "y," which have no figure value, and that vowels may be put in any position. The various sounds of the vowels must be borne in mind also: "a" having four sounds; as in "fat;" "father;" "fall;" and "fate;" "E" has two sounds, as in "bet," and "beet;" "I" has two sounds, as in "bit," and "bite;" "O" has three sounds, as in "rot," "rote," "foot" and "food;" "U" has two sounds, as in "rut" and "rude;" and then the diphthongs, oy, ow, and ew, come into play constantly. With all this material it is easy to find words for any figures whatever. If you want a number of words to choose from, all equalling 7, put it down in this form; or better still, think it out.

<table>
<thead>
<tr>
<th>NO VALUE.</th>
<th>7</th>
<th>NO VALUE.</th>
</tr>
</thead>
<tbody>
<tr>
<td>wh</td>
<td>a</td>
<td>g (hard)</td>
</tr>
<tr>
<td>w</td>
<td>e</td>
<td>k</td>
</tr>
<tr>
<td>h</td>
<td>i</td>
<td>c (hard)</td>
</tr>
<tr>
<td>y</td>
<td>o</td>
<td>qu</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ng</td>
</tr>
</tbody>
</table>

Look over this little table and see how many words you can find be-
sides whack, wag, wig, wake, week, wick, woke, wing, hag, hog, hug, hack, hang, hung, yoke, ago, ache, echo, lago, oak, go, key, caw, cow, cue and quay.

If a word was wanted for "91," by proceeding in the same manner, you will find:

<table>
<thead>
<tr>
<th>Wh</th>
<th>a</th>
<th>9</th>
<th>a</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>e</td>
<td></td>
<td>t</td>
</tr>
<tr>
<td>H</td>
<td>i</td>
<td></td>
<td>i</td>
</tr>
<tr>
<td>Y</td>
<td>u</td>
<td></td>
<td>o</td>
</tr>
</tbody>
</table>

The simple forms: bat, bet, bit, beat, and but, at once occur; but see how many more you can find, such as "whipped" and "habituated."

The pupil must be particularly careful about equivalents of consonant sounds. For instance; there are six or seven sounds of "ough" in English, as in the words, though, tough, cough, hiccough, plough, through, lough; in some of these it is equal to "8," as in tough; in others to "9," as in hiccough. Be very careful of the "sh" sound, and its cognate zh, both equal to six. It occurs in such words as: usual, (65;) tissue, (16;) noxious, (2760;) ingratiating, (27461;) luscious, (560;) pugnacious, (97260;) and Prussia, (946).

If the pupil will practise this method in the every day affairs of life, he will find it will greatly simplify the problem of remembering numbers of any description. The human mind feels the want of some concrete mode of expressing the abstract figures, and evidences of this desire may be often noticed; as when a man tells you he lives at 125 Broadway—"You can remember the number," he says, "if you think of a dollar and a quarter, (125)." Another tells you to meet him at 5 o'clock—which he tells you you can remember by the fact that you have five fingers on your hand. These are mere accidental coincidences, and besides, none of them connect the number to be remembered to the thing, or person, or event, to which it belongs; how much better to have a method of instantly finding a word for any number and cementing it to the name permanently. In the next lesson, on Synthesis, how the connection is made, is fully explained.

**FIFTH EXERCISE.**

If any of my Pupils can read the following, and find nothing applicable to his case, he is fortunate indeed. In fact, I often receive letters from Pupils admitting that until they had read my remarks on "Mind-Wandering," they had never suspected what had always prevented their mastering any study, however simple; in fact, Mind-wandering is the only obstacle which ever prevents my Pupils from ac-
quiring the full power of my System, and by its aid, mastering languages, sciences, histories, &c. And, although I do not promise or undertake to cure Mind-wandering in my Memory Course, yet, I do point out the Method of its cure in these Lessons; and not only Mind-wanderers, but all those who think they are not troubled with this infirmity, will find their natural power of Continuity greatly strengthened by carrying out my suggestions. Let us first understand what Discontinuity is. As there are two stages of Memory, so there are two elements or functions in Continuity.

As I point out in my Prospectus, "the act of Attention is twofold. It has to pursue an ever-changing route, as it passes from word to word, and from thought to thought. It must seize a meaning or thought for an instant, and then drive it out of Consciousness, or rather into Sub-Consciousness, in order to take up another. There is the Directing Force of the Attention, and the equally necessary Inhibitory Force of it. This is obvious, as Consciousness can be occupied with but one thing at a time. Hence we see that Mind-wandering, or the inability to keep the attention in any continuous channel, arises from one of two causes. (i) However eager and vehement the Pupil's desire may be to follow a train of ideas as set forth on the printed page, for instance, he will fail to sustain and keep his attention there if its Directing Force is weak, because in that case his attention soon becomes exhausted, and then fancy takes the reins and soars away from the page, even whilst the eye continues to follow the words and the lips to pronounce them!!!"

Although this result seems almost mysterious to most Pupils, a little reflection will make clear how it happens. The visual impression made by the words, and the articulatory response in pronouncing them aloud, are nothing more than an intellectual reflex. Hence but a minimum of consciousness is occupied in reading the words; therefore the mind is practically free to roam hither and thither, unless the Directing Power of the Attention is strong enough to occupy consciousness with the train of ideas. From this illustration, the Pupil ought to infer that printed matter is not suitable to train a weak directing power of attention and make it strong. Let us look at this subject in another way. A weak directing power of attention, which in the view I am about to present, might be considered the same as Will Power, is the cause of the Pupil's inability to resume work, intellectual or physical, that he has temporarily laid aside. The novelty of it is gone; and, however keen his sense of duty to renew it, however much he may be interested in returning to it and completing it, he shrinks from it, and sets his wits to work to invent excuses for neglecting it!! Such persons are ingenious and resourceful in giving reasons for postponing the discharge of manifest duties. If such a one takes up this Lesson on the Figure Alphabet, he finds it requires attention, practice, and a little time to become familiar with it. The weak directing power of his Attention breaks down. He cannot compel himself to continue at the study, and soon he throws aside the lesson, as helpless, he thinks, to proceed with it as a man who is blind and deaf. But this paralysis of his Voluntary powers was not natural to him. He began life, I admit, with this infirmity, or he ac-

* The Directing function of the Attention is divisible into automatic (as listening to a thunder clap, we cannot help doing so), and Volitional (purposed attention); we deal mainly with the latter.
quired it in early youth, but he has increased it a thousandfold. He has indulged the habit, whenever he is called upon to closely attend to anything, of neglecting it, relying upon his inventiveness for excuses for his neglect. But he little thought that every such neglect weakened his power of Attention, that every time he indulged himself in the luxury of inattention he had less power to compel his Attention afterwards. Such persons are almost sure to, sooner or later, indulge the habit of vacuity, that is, they indulge in reverie or mere absence of thought, a most ruinous habit. On the other hand, if he had struggled against this infirmity from the start, he could have mastered it. Every time a weak Attention triumphs, it is stronger. It gives strength by the effort put forth to win. If such persons will accept my advice, they will never allow themselves to postpone the performance of any duty. They can safely act on the adage, that, what is postponed is wilfully neglected. If too tired at night to study, they will insist on being called an hour earlier than usual, and then when awakened, they will get up at once and pursue their studies in the early morning, the best possible time for study. And instead of sending me excuses for not doing any of the exercises, they will do them all, making the exhaustive study of my System the occasion of training and building up the Directing Power of their Attention. In this way, they create an irresistible Continuity, and at the same time become great adepts in Memory.

But even when the Directing Force of the Attention is strong, there is always a struggle going on between it and other powers of the mind that are constantly appealed to by the links of the chain of thought that is being pursued; and unless the inhibitory power of the Attention is sufficient to suppress these contestants, the Attention wanders hither and thither, anywhere, in fact, except to the subject before the reader. Such persons are little more than automatons. They are the victims of every passing whim or impression. They think they have no power to resist temptation. If the lesson looks difficult, they sometimes imagine that they are utterly powerless to continue at it. The least discouragement paralyses all their ambition.

Let me illustrate.—A mistress and servant are in an upper room of the house, the mistress sends the servant downstairs to the kitchen for a hammer; when the servant arrives in the kitchen she cannot tell what she came there for! And this ignorance of the object of her visit there is put down to a bad memory; possibly so, but more probably it was due to lack of one or other of the functions of the Attention! When the mistress told her to go downstairs, that part of her command was listened to, but at once the servant begins to think, "I'll have a glass of beer when I get there." This train of thought is carried on while the mistress is directing her to fetch the hammer; and so of course the servant receives no first impression in regard to the hammer; and no wonder she cannot recall, when in the kitchen, her object in going there.

Let us suppose, however, that the Directing Power of her Attention enabled her to understand the order; she starts downstairs; streams of impressions are rapidly flowing into her brain through her ears and eyes. Each impression sets in motion a train of reminiscences, the last is jostled out of mind by the next. The sight of a picture calls up the thought of her brother. At the head of the stairs she is reminded of having had a long chat there with a discarded lover. At the bottom of
the stairs she hears the bark of a dog, and this makes her think of the
cry of a pack of hounds, or she may have tripped downstairs without
any thought, advancing as a wound-up automaton goes, and reaching
the kitchen in a mental state vacant and hollow as a drum. When she
reaches the kitchen she is in a very different emotional mood from that
in which she left the top of the house; and, possessing a weak reviving
power of Memory, she cannot recall the object of her going there unless
she happens to see the hammer. Her thirst being still clamorous, it
surely reminds her of the beer! Now, if the Directing Power of her
Attention had been strong, she would not have entirely lost out of her
consciousness the thought of the hammer, however many things had
occurred to her on her way to the kitchen. And if its Inhibitory
Power had been strong too, those intruders into her brain could not
have driven out of her consciousness the recollection of the hammer.
It is from a weak Directing Power of the Attention that a speaker some-
times introduces an anecdote or citation into his discourse and then
never applies it or turns it into account!

A servant at Staleybridge was notorious for forgetting errands. On one
occasion, having been sent to the grocery to get treacle, sugar, and tea,
and having been advised to repeat those words as a mnemonic aid to
his memory, he trotted along humming over in a sing-song way
"treacle, sugar, tea, treacle, sugar, tea," until, stepping into some tar
that had been spilled in front of a tallow chandler's shop he fell down.
Getting up, he proceeded on his journey in a very sorry style, singing
"Pitch, tar, tallow, pitch, tar, tallow," and arriving at the grocery, he
procured some pitch, tar, and tallow, and took them to his master as the
things he had been ordered to fetch. "This man was a fool!" exclaims
the reader. Not so, certainly. He was a victim of Discontinuity in
both its functions. He was weak in both, and the difference between
him and others is, that they are bad and he was worse. He had in-
dulged the habit of reverie or vacuity so much that he could not give
attention to anything, and therefore could not get a vivid first impres-
sion, nor keep his attention on anything by any ordinary device. With
him the sing-song soon became the main thing, and his slip into the
tar started the new jingle of "Pitch, tar, tallow," and his Memory was
so wretchedly bad that it could not correct his blunder.

Wise persons can outwit or circumvent their well-known habits of in-
attention by precautions. To prevent neglecting things on the day of
starting on a journey, they can pack up their goods a day or two before-
hand. They can put articles they wish to take with them into their
hats, &c. These are very good temporary expedients; but the wiser
course is to systematically train and develop both functions of the At-
tention.

Before showing how these functions of the Attention may be strength-
ened, let me correct a prevalent error about absent-mindedness. This
is most frequently owing to a weak Attention, but it may be due to a
strong one. The case of a weak Attention leading to absent-mindedness
was illustrated in the cases of the above servants. The case of a Power-
ful Attention in its Directing and Inhibitory functions leading to absent-
mindedness was illustrated in the case of Hogarth, the illustrious
painter, who after paying a visit to the Lord Mayor in his new carriage,
returned home on foot through a drenching rain, although his carriage
was still there waiting for him. He became so much interested in
some topic of conversation with the Lord Mayor, and his Directory Power held it so continuously before him and his Inhibitory Power so completely shut out all intruding impressions, that he rushed on through the storm utterly oblivious of his carriage or of the state of the weather.

The Attention is strengthened, not by trying to use the Attention in reading the printed page (where, as I pointed out above, there is a strong temptation for the attention to wander), but by reciting at least twice every day, for one or several months, exercises in Analysis, the constituents of which are connected by the relations of In., Ex. and Con. In reciting both forwards and backwards such a series of 100, or, better still, 500, words thus related, the Directing Power is constantly occupied in advancing through the series, and the Inhibitory power is likewise kept in incessant exercise, because the Attention cannot dwell on any word nor run off on a mental excursion; but the moment one word is thought of or uttered, it is at once thrown out of the Consciousness to give place to the next of the series. The worst possible cases—even the Staleybridge servant's—are always cured by this system of training. I admit those who are weak in either or both functions of the Attention hate to continue such a disciplinary course regularly from day to day, yet those who have the necessary ambition and persistence always achieve the grand results of acquiring in a short time a Perfect Attention.

QUESTIONS.

1.—When the reciter of a witty anecdote comes to the point of the joke, and he feels an inclination to laugh, but he does not, which function of the attention does he mainly exercise in order to maintain a grave countenance?

2.—When Mucias, according to the Roman tradition, held his right hand in the flames on the altar till the flesh was burned from the bones, which function of the attention did he exercise? If you think only one, say why. If you think he must have exerted both, explain why.

3.—Mrs. Disraeli's devotion and strength of mind. One day when setting off to drive to the House of Commons, two of her fingers were crushed by the door of the carriage, but in spite of intense pain, she concealed it from her husband as he sat by her side, in order that he might not be disturbed in an important speech which he had to make. She kept up, so it is said, till the moment when he alighted, and then fell fainting on the cushions. What function did she call into requisition in concealing her pain? Through the failure of which function did she faint away? Or how do you explain her fainting away?

PROBLEMS OF MEMORY.

4.—A witness named Sarah Money, having been called several times by the court crier, the Judge at length remarked, "As it is now tea-time, we must adjourn the court without ceremony" [Sarah Money]. Nearly everybody laughed at the judicial pun. One man only kept a grave countenance, but, after some moments, he laughed outright, as if he had just perceived the point of the joke. On reaching home, he said to his wife, "Our Judge perpetrated a brilliant pun just before adjournment. There was a witness named Mary Money, who had been called at the door a number of times, but who failed to respond. When the Judge adjourned the Court for tea, he remarked, 'As it is now tea-time, we must adjourn the court without Mary Money.'" We all laughed
at the wit of the Judge." But his wife replied, "I don't see any fun in that remark." "Ah," said the husband, "you soon will, I didn't see it at first, but it came to me at last, and it will occur to you, if you keep thinking of it." Did the husband receive a vivid First Impression, or was his failure to reproduce the pun owing to a failure of the Reviving power of his memory?

5.—Dr. Carpenter [Mental Physiology, p. 522] cites from a graduate of the University of London, as follows:—"One day I was summoned to a town at some distance to see a friend lying dangerously ill at a physician's house. While in the railway train, I found I could not remember either the name of the physician or his address. I vainly endeavored to recall them: I became much excited, but bethought me that if I consulted a Post Office Directory I should see and recognise the name. I consulted the Directory on reaching the hotel, but the name seemed not to be there. Soon after, while I was ordering some refreshment, the name flashed on my consciousness. I left the astounded waiter, rushed to the Directory, and there saw the name; and what is more, I am sure that I had noticed it on my first inspection, without recognising it as the name I sought." Remarks.—(1) Emotional excitement always tends to defeat revivals. (2) When examining the Directory, his eye followed the words, whilst his mind was doubtless wandering away to London or elsewhere, and hence he did not recognise the name when he saw it. (3) Having despaired of recalling the name, and made up his mind to return to London by the next train, his excitement subsided, and in his talk with the waiter some word was uttered that, by mere Inclusion by Sound, or some previous powerful association of Concurrency, helped to recall the wished-for name.

Let the Pupil send any other examples with his comments, that I may see if he clearly understands the difference between the two Functions of the Attention, and the two Stages of the Memory.

SIXTH EXERCISE.
INTERROGATIVE ANALYSIS.

A celebrated French writer gave a prescription for writing love letters, as follows:—"Begin without knowing what you are going to say, and end without knowing what you have said." Equally vague and indefinite is the state of mind of the Pupil who learns by heart by endless repetitions. He begins by the attempt to memorise a succession of sights and sounds, and he usually ends with nothing more. Whereas the true way to learn by heart is to ABSORB AND ASSIMILATE the thoughts, and, if this is thoroughly well done, the thoughts will carry the succession of sights and sounds along with them, that is, the exact expression.

The Analytic Method of dealing with sentences by taking them to pieces and reconstructing them, as given in last Lesson, is useful. But it is in every way inferior, even in the matter of securing the comprehension of propositions, to the Method I am now to present. This latter Method secures not only the understanding but also the retentive memorisation of sentences of any description.
My method of exhaustive Interrogative Analysis is easy to all, and it never fails in any case. The process is very simple. Propose a question on every SEPARATE thought expressed in the sentence, and then as a reply to each question, repeat the entire sentence from memory, or the main clause where it occurs, and especially EMPHASISE that word in it which constitutes the reply to the question, as exemplified below. In this way you study the THOUGHTS indicated in the sentence in a twofold manner, first in framing the question and then in emphasising the answer; and you so thoroughly master these thoughts, that they necessitate carrying the dress or clothing of them. With a careful study of the examples I give, the youngest Pupil can soon rapidly use this Method, and at length only a few questions will have to be proposed in order to learn prose and poetry verbatim. But at first, when learning say the first hundred sentences, it is necessary to put and answer all possible questions on each sentence. Observe how the mind is by this Method agreeably occupied, the Attention cannot wander, and the Pupil's pains are rewarded by a retentive recollection of the passage.

I desire that every Pupil should learn in this way, on the model below, the entire 71 sentences, pages 64 and 65 of this lesson. My object is threefold. 1. As these 71 sentences are wholly unconnected and often of very irregular construction, if the Pupil learns them by heart in this way so that he can rapidly recite them without mistake, he will have so thoroughly mastered my Method that hereafter he can learn any passage of prose or poetry in one careful interrogative perusal! 2. The learning of these 71 sentences will not only strengthen his power of Attention, but his Memory also, and make him quick to realise the meaning of all he reads hereafter. 3. By learning these sentences, he will be able to do by means of this knowledge an unequalled feat of memory, as he will see in a later lesson. Not a memory feat for show merely, but every time it is done before others the memory, continuity, and confidence are greatly increased. And if both his MEMORY and CONCENTRATION are now weak, he may have to repeat the interrogations and answers several times before he perfectly knows these 71 sentences by heart. And let him report to me the time it takes him to recite these 71 sentences without a single mistake. Let him recite them once or twice per day with increasing rapidity for 2 or 3 weeks. I will only add that it would occupy the strongest unassisted Natural Memory, weeks, if not months (owing to the total lack of connection between the sentences), to learn these 71 Sentences with the same thoroughness with which my Pupils can learn them in a few hours.

Who will buy any shawl?—"Mother Day will buy any shawl." Which mother will buy any shawl?—"Mother Day will buy any shawl." In what character is Mrs. Day here spoken of?—"Mother Day will buy any shawl." What is it Mother Day will do?—"Mother Day will buy any shawl." Has Mother Day already bought any shawl?—"Mother Day will buy any shawl." Will Mother Day buy a particular shawl?—"Mother Day will buy any shawl." What will Mother Day buy?—"Mother Day will buy any shawl." What are "shawls" used for?—Warmth. Passing from physical warmth, what name do we give to warmth of affection?—"Love." Whose love is addressed in the sentence?—"My love pick up my new muff." Who is asked to pick up my new muff?—"My love pick up my new muff." What do I ask my love to do?—"My love pick up my new muff." Whose muff is my love
asked to pick up?—"My love pick up my new muff." What kind of muff is it?—"My love pick up my new muff." What do I ask my love to pick up?—"My love pick up my new muff." What are "muffs" generally made of?—Fur. What is one special kind of fur?—"Russian." What kind of jeer may move a woman?—"A Russian jeer may move a woman." What may move a woman?—"A Russian jeer may move a woman." Is it certain that a Russian jeer will move a woman?—"A Russian jeer may move a woman." How may a Russian jeer affect a woman?—"A Russian jeer may move a woman." What is a Russian jeer likely to move?—"A Russian jeer may move a woman." What is a young "woman" often called?—Lass. With what word does "lass" form an Inclusion by Sound?—"Lasso." What is a "lass"?—"A rope with a noose used for catching wild horses." What are very strong ropes called?—"Cables." Of what are there enough for Utopia?—"Cables enough for Utopia." Is there any lack of cables?—"Cables enough for Utopia." What relation do the cables sustain to Utopia?—"Cables enough for Utopia." For what are the cables?—"Cables enough for Utopia." What sort of an island was that of Utopia?—"Imaginary." Where do we have some vivid imaginations?—"In bed." What do we think of if in bed late in the morning?—"Getting up." What is the first syllable of "getting"?—"Get." What is my request in regard to a pie?—"Get a cheap ham pie by my cooley." What do I ask to be got?—"Get a cheap ham pie by my cooley." Do I wish to pay much for the pie?—"Get a cheap ham pie by my cooley." Of what particular meat do I want this pie?—"Get a cheap ham pie by my cooley." Do I want this pie got through any person?—"Get a cheap ham pie by my cooley." By whose cooley do I want the pie bought?—"Get a cheap ham pie by my cooley." By whom do I want the pie got?—"Get a cheap ham pie by my cooley." What is a cooley?—"A dark skinned labourer in India." What is a dark skinned labourer in America?—"A Negro." What was the American Negro in 1860?—"A slave." Which "slave" knows a bigger ape?—"The slave knows a bigger ape." Who knows a bigger ape?—"The slave knows a bigger ape." Is the slave acquainted with a bigger ape?—"The slave knows a bigger ape." What kind of ape is it the slave knows?—"The slave knows a bigger ape." What does the slave know?—"The slave knows a bigger ape." For what are apes remarkable?—Tricks. What is another name with tricks?—Freaks. What is an inclusion by sound with freaks?—Frequently. What is an exclusion of frequently?—"Rarely." What is it I rarely do?—"I rarely hop on my sick foot." Who rarely hops on a sick foot?—"I rarely hop on my sick foot." Do I often hop on my sick foot?—"I rarely hop on my sick foot." Upon what do I rarely hop?—"I rarely hop on my sick foot." What foot do I rarely hop on?—"I rarely hop on my sick foot." Whose sick foot is rarely hopped on?—"I rarely hop on my sick foot." When are sick feet a great inconvenience?—At a ball. What is the characteristic of the mood in which dancers generally appear?—Cheerful. How are we to treat a "sage"?—"Cheer a sage in a fashion safe." Whom are we to cheer?—"Cheer a sage in a fashion safe." In what manner are we to cheer a sage?—"Cheer a sage in a fashion safe." In what kind of fashion are we to cheer him?—"Cheer a sage in a fashion safe."
As these 71 sentences are wholly unconnected, an analysis must be developed between the suggestive word at the end of one sentence and the suggestive word at the beginning of the following sentence. The theory is that the answers constitute the intermediate links between the first and second suggestive words. This method is virtually followed, but sometimes one or more of the analytic words appear in the questions. I will give no more interrogations on the sentences themselves. The Pupil can easily work them out and memorise them. I only furnish a model for the remaining unconnected parts. The ambitious Student, if he has time, should write out complete and exhaustive interrogations in his own language, not only for all the sentences themselves, but also for the connections between them, and send them to me for criticism.

What is a concurrence with "safe"?—Sound [safe and sound]. What is a disagreeable night sound?—Crying. Who cries?—"A baby." For what is a "wharf" used?—Unloading goods. How often is stock taken of goods?—"Annually." What is a jay?—"A bird." What do the wings of a bird enable it to do?—"To fly." What can sometimes be used instead of a double-seated carriage called a "Fly"?—"A cab." What is a vulgar name for a cabman?—"Cabby." Amid what do "savages" live?—Wild beasts. Are wild animals high or low in the scale of creation?—"Low." When is a speaker not considered "showy"?—When he argues. What word contains in the same order the first four letters of argues?—"Argus." What kind of sound generally accompanies "rushing"?—A whizzing or buzzing. To what insect is buzzing almost peculiar?—"A bee." What is an In. by S. with "enmity"?—Enemy. What used to be an excavation made to keep off an enemy?—A trench. What does a trench filled with water resemble?—"A canal." What is an Exclusion of "swift"?—Slow. What are slow people generally known to be?—Late. When is it better to be late than?—"Never." When a boy is "early" to school, has he any fear of censure?—"No," Where are "ghosts" found?—In old halls. What supports a hall's ceiling?—"Beams." If "Lulu" was dizzy, what else was she likely to be?—Unsteady. What is a concurrence with steady?—"Sure" [sure and steady]. What is a new "Pier" likely to be?—Strong. What is the opposite of strong?—"Feeble." What is a "well-fed" man likely to eat?—Meat. Who provides the raw meat?—A "butcher." What do "soppy" feet lead to?—Colds. Who prescribe for their cure?—Doctors. At what place are they educated?—"College." What is seen in the mental "mirror"?—An idea. What is the young idea taught to do?—"Shoot." If a "sheriff" is not naturalised, what must he be?—A native. In what other word do we find an In. by S. with the first syllable of native?—"Naomi." What do you say of the depth of a tea-spoon?—It is shallow. What is an In. by S. with shallow?—"Shall." What is "topaz"?—A precious stone. Which of the Apostles' names means a stone or rock?—"Peter." What rises up a few feet from the soil?—A "Hedge." What rises high up above the adjacent valleys?—"Ridges." Since a "fish" swims in water, what is the opposite of what it can do?—"Soar." What is the verdict of a "jury" sometimes called?—A finding. What is the root of finding?—"Find." What is an In. by S. with Chiswick?—Wicked. When are they unsafe?—"Now." Do we think of "Eden" as past or future?—Past. What word applied to future events expresses the op-
posite of past?—"Coming." What is an old word for "kiss?"—Buss.
By what animals are public "busses" drawn?—Horses. What word
directs a horse to the off side?—"Jee." With what is that an In. by S.? —"Jiji" (pronounced as if spelled Jeejee). What does "leaf off" sound like?—Leave off. What does that mean?—"Let alone." What is
the opposite of let alone?—"Take." How may savoury "lamb soup"
be described?—As delicious. What is a diminishing In. by meaning
with delicious?—"Nice." What is "panel"?—Compartment with
margins. If these margins are above adjacent parts, how do you speak
of them?—They are raised. What is the root of raised?—"Raise.”
What is an In. by S. with major?—Magi. What were they supposed
to be skilled in?—"Magic." What is an In. by S. with "Opossum"? —Posture. Who has an awkward posture?—A clown. What is he?—
A joker. With what does jokes form an In. by S.?—"Joses." What
is usually taken as the opposite of a "hymn"?—Song. Who usually
sings a marine song?—"A sailor." How do we often express our
"joys"?—By singing. What besides tune has a singer to heed?—
Time. Who are vainest of authorship?—Youths, when they first
see themselves in print. What is a conceited youth often found to be?—
"A pert lad." Can we usually "teach" animals?—Yes. Which one
is hard to be taught?—A "bear." Is a "gun case" deep or shallow? —"Shallow." What is "pulp"?—The soft and fleshy part of bodies. In
what animal is the flesh soft and tender?—A "lamb." What is
"dew"?—Condensed moisture. What word implies having been
"condensed"?—"Compact." What is an In. by S. with compact? —"Come." When do people troll out their "ditties"?—When they
have had too much intoxicating drink. What is a common drinking
vessel?—A "cup." If a rich person is asked to live in a "hovel"
what would he do?—"Refuse." What is "muck"?—Moistened dirt.
Who often has a dirty face?—"A baby." How may we speak of a pale
"cheek"?—It is white as snow. What eventually becomes of snow?—
It "melts." What is "lining"?—Inside covering. What is an out­
side covering?—"Roof." What is the first syllable of "Cobham"?—
Cob. If a lady sees her lover thrown from a cob, what will her heart do?
—"Heave." What is the size of a baby's robe?—"Tiny." Where do we
see a "mummy"?—At a museum. What is the character of the things
seen at museums?—Curiosities. What old curiosities have some people
a mania for?—"China." What is a share?—A part. When lovers
part in anger, what is apt soon to be sent?—"A missive." By what is
a cricket "ball" covered?—Pieces of leather. By what are they sewn
together?—"Stitches." With what word does "ruffs" make an In by S.?—
Ruffles. Where are old ruffles sometimes sold?—At auction.
What is a characteristic word of auctioneers?—"Going." Can you name
a weaving machine?—"Loom." What does a sensitive man do when
put in "chains"?—"Quail." Is "pie-crust" light or heavy?—Light.
What is the opposite of "light"?—"Heavy." Whom do you "rock" in
the cradle? Babies. Can you give the name of a "baby" dog?—
"Puppy." What class of people require "care" to be taken of them?
—Wine-inebriates. Can you name the god of wine?—"Bacchus." What
do we often associate the word "match" with?—Marriage. Is
the bride bold or shy?—"Shy." When does the moralist advise us to
act uprightly?—"To-day." What kind of arguments do some people
require to make them do this?—"Suasive." What does "fame"
mean?—Enviable notoriety. What French servants enjoy the greatest notoriety?—Cooks. With what word does cook form an In. by S.?—"Cuckoos." When is a person "touchy"?—When he is overwhelmed with a great loss. What is the greatest loss?—Death of a parent. What do we say of a parent laid in the grave?—"Buried." How many fingers are there on each hand?—"Five." What name is given to the fourth finger?—The ring finger. Of what is the ring a pledge?—Of "Love." What was a Doge?—A Venetian chief magistrate. Whom does a magistrate often try?—Pick-pockets. What is an In. by S. with pick-pockets?—"Pick." Which of Jacob's wives was Rachel?—His chosen one. If we wish to be chosen for some special object, what should we say?—"Pick us." What is a perfect In. by S. with pick us?—"Picus." Does he "accuse us"?—"No." What is another spelling for the sound of "him"?—"Hymn." Who usually sing in church in the absence of a choir?—The people. What is an old name for people?—"Folk." What does a person wish to do who regards his "home" as a prison?—"Escape." What does "May" remind you of?—"May-queen." Who was queen of beauty?—Venus. What city was sacred to Venus?—"Paphos."

If the Pupil were to attempt to learn these 71 UNCONNECTED sentences by ordinary endless repetition, and if every repetition were written out and printed, a book of several hundred pages would be filled; whereas, by my method of Assimilation, the 71 sentences are permanently learned in one hunredth part of the time required to learn them by rote.

The Pupil must never mention to anyone in what the Interrogative Analysis consists, nor how he has learned or can learn by means of it either prose or poetry.

My Memory-teaching includes two distinct unique and original Systems.

The first is the one I have been teaching many years. It makes no use of the Intellect or of the Imagination, but it appeals to the Memory to aid the Memory. Yet, indirectly and incidentally, the Intellect is invigorated, owing to the prodigious increase of concentration and the new activity of thought on the lines of Natural Association. This method uses Analysis and Synthesis to develop and build up the fundamental Associative Power, by awakening to its highest intensity the direct and immediate appreciation of In., Ex. and Con., and in this most effective way it operates as a true Memory-TRAINER, permanently strengthening both Stages of the Natural Memory and both Functions of the Continuity, so that when the Pupil has finished all the exercises in the manner prescribed, he will remember hereafter without any conscious thought or application of my System, except in the very rare cases of dealing with exceptionally complicated or technical matters. And although I use Analysis and Synthesis in thousands of practical applications, yet this Device for memorising particular things operates as a Memory-TRAINER also. Memory-TRAINING first, last, and all the time is my object and main object in this first method.

My second System, which I call Interrogative Analysis, reaches the same goal by a different route. It works from above downwards. It trains the mind to quick and instantaneous grasp of new ideas and groups of ideas. It counteracts the distracting effects of our hasty harum-scarum habits of reading, thinking and acting. It develops the prim-
ordial Associative Power, and thereby tends to secure on all occasions vivid FIRST IMPRESSIONS. Let the pupil notice that by the first Method he learns the EXACT LANGUAGE and indirectly the ideas, and that by the second Method he learns the PRECISE IDEAS and THOUGHTS and indirectly the language which clothes them. Let the Pupil master both Systems.

NOTICE.—Whenever two unrelated ideas have become so cemented together in the Pupil's mind that the thought of one of them immediately recalls the other, I can prove that in every such case the union took place originally in strict though unconscious conformity to the Method taught in this Lesson. In the natural way, however, such a connexion invariably costs the Pupil from 500 or more direct or indirect repetitions! ! ! By my Science, hundreds of such connexions that never fail can be voluntarily established in the same time that nature ordinarily takes to effect one of them! ! !
PART III.

RECOLLECTIVE SYNTHESIS.

PRINTED SOLELY FOR THE PUPILS OF PROFESSION A. LOISETTE.

A.—Analysis is applied to words or ideas between which such a relation exists, as a master of Recollective Analysis can discover. Synthesis applies where no relation exists. Before giving my method of uniting unconnected ideas or words (hereafter to be called "Extremes"), so that one will recall the other, I shall give the Mnemonical modes of dealing with such cases. The following are Pairs of unconnected Words or "Extremes": "Anchor, Bolster," ... "Arrow, Treadmill," ... "Bee, Attorney," ... "Lash, Vicarious," ... "Slain, Moon," ... "Tea, Lover," and "Pen, Nose."

Those who do not care for the history of Memory Methods, may omit the reading of the matter from here to paragraph B. But I advise all Pupils to read and study all the paragraphs.

There are ONLY three * Mnemonical methods of effecting a synthesis in such cases:—

I.—The "carpentry" method of physically uniting them in a mental picture! or, in other words, trying to imagine that you see them in physical contact. This method evokes only the infantile fancy, but no element of the constructive imagination; and, like the two other methods and the use of Mnemonical Keys, it promotes Mind-Wandering to a most disastrous extent. And the revival afterwards of this fancied juxtaposition makes an eye or sight phantom. This is the method first taught by Simonides, 550 B.C., prominently introduced into England by Gregory Von Feinaigle about 1810, and continued by Major Beniowski some years later; it is now practised by all Professors of Mnemonics. I copy from their published works the following Illustrations:—

1. "You must imagine that you see a BOLSTER tied around an ANCHOR"!
2. "You must imagine that you see a poor wretch at the TREADMILL pierced by an ARROW"!
3. "You must imagine that you see an ATTORNEY pleading whilst a BEE settles on his head!"!
4. "You must imagine that you see the word VICARIOUS engraven on the whipstock that carries the LASH"!
5. "You must imagine that you see an ox SLAIN by the light of the MOON"!

* Up to date there have been produced 400 Mnemonical Systems! all bearing different names! 200 before this century, and 200 since; yet ALL WITHOUT EXCEPTION are related to one or other of the three described in the text!
6. "You must imagine that you see a Lady and her LOVER drinking TEA together"!
7. "You must imagine that you see a man with a PEN thrust through his NOSE"!

Remarks.—(1) I grant that were you to see a "Bolster" tied around an "Anchor," it would make an impression on the sense of sight; but merely to imagine that you see it is a totally different thing! Such a mental picture is the most fleeting and evanescent of impressions—not a hundredth part so vivid as dream-pictures, almost invariably forgotten in a few hours. (2) A memory that can retain such nursery-conjunctions must be phenomenally strong for mere physical contacts, and correspondingly weak for the natural union of ideas. Yet mnemonists are always applying to these physical contacts, as well as to the two other methods, the inappropriate terms "links of thought," and "association of ideas"! (3) An intellect which can make and rely on such incongruous juxtapositions must be as distorted and out-of-joint as is the conscience of the Hindoo mother who throws her child into the Ganges. (4) If anything was ever permanently retained by these carpentry-devices, it was only after never-ceasing reviews, many times more tasking than the poorest natural memory would find it to be to learn it without assistance.

II.—The second Mnemonical method—conspicuously brought before the public by Aimé Paris in 1819–20, and published in 1845 in England and America by his pupil Francis Fauvel Gouraud—a method copied by some Mnemonical teachers when they print their lessons!—adds to the inutility of mental pictures—more truly called "mental daubs"—the rhetorical difficulty of constructing a sentence that shall contain the two unconnected words. It is an invention of the imagination!! the revival of it may be called an imagination-phantom. This way of handling the foregoing examples is as follows:—

1. "The ANCHOR, being made to steady a ship in a storm, is necessarily constructed of iron, which is a much heavier material than the slight stuff composing a BOLSTER."
2. "An ARROW dipped in poison is not more fatal in its effects than is the social influence of one who has atoned for his crimes on a TREADMILL."
3. "The BEE by its sting causes no more pain than is often inflicted by the severity of a sarcastic ATTORNEY."
4. "The LASH applied to the back of the whipping-boy who voluntarily endured the flogging a Prince had merited, caused the former to suffer in a VICARIOUS capacity."
5. "It is absurd to suppose that people are SLAIN in a satellite, probably uninhabited, like the MOON."
6. "TEA, from its sedative qualities, is well calculated to soothe the excited nerves of a LOVER who has been rejected."
7. "When a PEN is made from a quill, it comes from an animal whose NOSE is at the end of its bill."

Remarks.—(1) No one can make such sentences so as to contain a pair of unconnected ideas unless he possesses an almost marvellous constructive power of imagination. (2) These rare gifts would be utterly unavailing, unless he possessed also an absolutely perfect verbal memory; for these phrases are of no use unless they are perfectly memorised. Such a perfect verbal memory could retain these Extremes by mere "concurrency," or thinking of them together two or three times: and the mnemonical phrases thus become a useless and fatigueing burden to him—a Van which he must shoulder in order to carry his purse. But a poor memory can make no use of these phrases; for nothing else is so difficult to it as prose; and thus the means offered under pretence of aiding it are impracticable or impossible to be used.
III. The third and only remaining mnemonical method, really only a variety of the Aimé Paris Method, was invented by a Dane, named Carl Otto Reventlow, previous to 1850, and was taught orally since 1863 for a few years in England by one of his pupils. Reventlow boasted that he substituted "Reasoning for Memory." Users of this method tried to invent some common ground of comparison or contrast between unconnected "Extremes," a practical contradiction in terms. Aimé Paris resorted to any sentence that his constructive imagination could invent to contain the two "Extremes;" but Reventlow, being more restricted in his range, often produced mental freaks, more irrational and far-fetched than even the mental daubs!! As this method invariably led to a perversion of the intellect, its products might be called Subtilty-phantoms. Applied to the foregoing examples, they would appear as follows:—

1. The ANCHOR, being made of iron, is of metallic origin; the BOLSTER, being made of feathers, is of animal origin.
2. An ARROW describes an arc in its course; a TREADMILL makes a circle every time it turns round.
3. A BEE makes a flight through the air; an ATTORNEY sometimes indulges in flights of rhetoric.
4. VICARIOUS suffering is endured by one for another; a LASH is applied by one upon another.
5. Men are sometimes SLAIN by night; the MOON shines by night.
6. A LOVER uses the lips in kissing; TEA is sipped by the lips.
7. The fingers act as a holder of the NOSE in presence of a bad odour; a steel PEN is used by means of a holder.

Remarks.—(1) What was said of the Aimé Paris Method applies also to this method, with the additional remark that it is much more difficult in application and equally useless.
(2) It may be said that Recollective Analysis can neither apply to the "Mental Daubs" nor to the "Mnemonical Phrases," nor to the "Substituted Reasonings;" for Analysis applies only where there is a direct and immediate relation of In., Ex. or Con. between the two words, with no intermediate or interjected idea interposing between them; but Synthesis applies where there is no single direct or immediate relation between the two words or "extremes," but in the very nature of the ideas themselves they are wholly unconnected: for if, in any case of pretended Syntheses, there was a relation of Inclusion, Exclusion, or Concurrence, it would prove it to be a case of Analysis and not of Synthesis.

B.—We had experience in learning the Presidential Series that the application of the laws of In., Ex. and Con. enabled us to commit to memory that series in one-fiftieth of the time it would have taken had we not known those Laws. Most people could never have committed to memory such a long series by mere rote or repetition, and not one in a thousand could have learned to say that series backwards by rote alone!! Yet all my Pupils easily learn that series both ways, because Analysis affords the highest possible AID to the Natural Memory. In fact, the deepest and most abiding impression that can be made upon the Natural Memory is by impressing it with the relations of In., Ex. or Con.; because these are the Memory-Senses (if the phrase be allowed), these are the eyes, ears, touch, taste and smell of the Memory; and we have only to impress the Memory according to the laws of its own nature and the MEMORY will RETAIN the impression. And this is

*As a disciple of Hegel, he claimed he could unify the most unconnected and unrelated ideas!!! But this unification he tried to effect by adding on foreign ideas to both "Extremes," as the Mental Daubers and Phrase Makers had done before him, and thereby, like them, imposing new burdens on the Memory; besides, this method made a draft on the "Ingenuity," to which not one in ten thousand could respond.
exactly what my Art does; for I translate every case of Synthesis into an Analytic series by supplying Memory-intermediates that grow out of the "Extremes," each one of which is an instance of In., Ex. or Con. —Thus, every example of Synthesis becomes a developed or extended Analysis!!! To make this translation from Synthesis into Analysis requires no intellectual ingenuity—no constructive power of imagination—but only to recall to consciousness what we already know about the "Extremes" through In., Ex. and Con. I call these Intermediates the Correlation, because they sustain the direct, immediate and specific relation of In., Ex. and Con. to the "Extremes," having nothing in common either in principle or nature with the above Mnemotechnical "Links" or "Associations," "Phrases" or "Substituted reasonings."

In. will be represented by 1, Ex. by 2, and Con. by 3.

C.—I herewith present my Method of dealing with the above pairs of extremes:

1. ANCHOR
   1. Sheet Anchor (1) Sheet (1) Bed
   Or, ——— (8) Capstan (1) Night-cap (3) Pillow
   Or, ——— (8) Roadstead (1) Bedstead
   Or, ——— (3) Sea Bed

2. ARROW
   1. Tell (8) Apple (3) Cider Mill
   Or, ——— (8) Flight (8) Arrest (3) Convict
   Or, ——— (1) Air (1) Wind (1) Windmill

3. BEE
   1. Beeswax (1) Sealing-wax (3) Title deeds
   Or, ——— (1) Queen bee (1) Queen's Counsel
   Or, ——— (8) Driver (3) Car (1) Vicar

4. LASH
   1. Eye-lash (8) Glass Eye (1) Substitute
   Or, ——— (8) Driver (3) Car (1) Vicar

5. PEN
   1. Ink (1) Ink-bottle (1) Smelling-bottle
   Or, ——— (3) Quill (1) Feather (1) Eagle (1) Aquiline
   Or, ——— (3) Quill (1) Feather (1) Eagle (1) Aquiline

6. SLAIN
   1. Battle (3) Joshua
   Or, ——— (1) Struck-down (1) Moon-struck
   Or, ——— (3) Fallen (2) Bison

7. TREMBLE
   1. Teaspoon (1) Spoon
   Or, ——— (3) Sugar (1) Sweet (1) Sweetheart
   Or, ——— (1) Tease (1) Sir Peter Teazle (1) Old Lover
   Or, ——— (1) Oolong (1) Woolong

1. Neither Children nor Adults, who have thoroughly learned Recollective Analysis and practised its exercises, ever find the slightest difficulty in making Correlations, unless they are so afflicted with Mind-Wandering that they have never digested the impressions or knowledge they have received, or unless their intellectual operations have been twisted or wrenched out of the natural order by the perversities of early education; but even in all these cases the diligent student will be able—usually before the Five Lessons are finished—at once to correlate any word whatever to any or all the words in any dictionary. A learned Professor declared that no person unacquainted with astronomy could correlate "Moon" to "Omnibus." He did it thus: MOON—(3) Gibbous [one of the phases of the Moon]—(1) "Bus"—(1) OMNIBUS. I asked a pupil then present—a girl 9 years old—to connect them. She instantly replied, "MOON—(1) Honeymoon—(8) Kissing—(1) Bus—(1) OMNIBUS." A moment after, she gave another: "MOON—(1) Full Moon—(1) 'Full inside'—(3) OMNIBUS." Once more: "MOON—(1) Moonlight—(1) Lightning—(8) 'Conductor'—(3) OMNIBUS." Another Pupil imagined it would be impossible to Correlate the following letters of the alphabet to words beginning with the same letters, as
"A" to "Anchor," "B" to "Bull," "C" to "Cab" and "D" to "Doge"—as well as "Cooley" to "The." There are, however, no words, whether abstract or concrete, no real or imaginary things that can be named, which my Pupils cannot soon learn to Correlate together with the greatest readiness, as:—

| "A"   | (1) First Letter (1) First Mate (3) Ship | (3) "ANCHOR" |
| "B"   | (1) Aviary (3) Bird (1) Flyer (3) Flock (1) "FLICK" |
| "C"   | (1) Sea (3) Ocean Steamer (1) Cabin |
| "D"   | (1) "D.P." (1) Clerical Title (1) Venetian Title |

All possible cases to be memorised can be reduced to (1) ISOLATED FACTS, where each fact is correlated to some fact in its surroundings through which you must think as the Best Known, in order to recall it—many instances of dealings with Isolated Facts will be given in this lesson;—or, (2) SERIAL FACTS, where each fact must be remembered in the exact order in which it was presented to our minds—as is illustrated by many examples in this and subsequent Lessons.

Let the Pupil NEVER FORGET that my System serves two distinct purposes: (1) That it is a Device for memorising any Isolated Fact or Serial Facts by means of memorised Correlations. (2) And that by memorising and repeating for a considerable period Analytic Series, and especially by making and memorising one’s own Correlations, it is an unequalled system of Memory-TRAINING. Let the ambitious Pupil learn every example I give him in the lessons in order to soon so strengthen his natural memory that he will no longer have to use the device for memorising, his natural memory permanently retaining all he desires to remember. But this grand result comes only to those who carry out all my directions with genuine alacrity—not shirking one of them—but rather doing all I require, and as many more new examples as he can think of to which he can apply my Method, and sending me for criticism all his work.

By memorising the Correlations the Pupils will find that hereafter the two extremes are united in memory without his ever having to recall the Correlations !/ and to memorise a Correlation, he must at first, if his Natural Memory be weak, repeat from memory the intermediates forwards and backwards, thus:—ANCHOR...sheet anchor...sheet...bed...BOLSTER—BOLSTER...bed...sheet...sheet...sheet anchor...ANCHOR, at least three times each way. These six repetitions from memory, three forward and three back, are only required at first. In a short time the Pupil will infallibly remember every Correlation he makes, merely from having made it, and, at last, his Memory will become so strong, that he will no longer have to make any Correlations at all. And when he has repeated the Correlation, let him repeat the two extremes, thus—"Anchor"..."Bolster"..."Bolster"..."Anchor"—"Bolster"..."Anchor"—"Anchor"..."Bolster." Nothing else is so easy to memorise as a Correlation, for a Correlation is not a "mental picture" or "story"—it is neither a proposition, sentence, or phrase. It has no rhetorical, grammatical or imaginative character, nor is it a substituted reasoning. It is simply an elemental primordial Physiological Sequence of Ideas in which one includes another, excludes another,
or in which one idea has been so united with another in past experience that the two are henceforth inseparably connected in memory—and a little practice in making and memorising these Correlations soon makes it impossible to forget them.

In ordinary experience, no two * unconnected facts are ever permanently united in memory except at a cost of 500 or more direct or indirect experiences which were required to make an unconscious Correlation; yet any pair of unconnected ideas can readily be cemented together for ever by a conscious or spontaneous Correlation repeated backwards and forwards only a few times!! A Pupil once criticised these remarks by saying that he had never repeated the ideas of "Diogenes" and "Tub" more than 10 or 20 times, and yet he should remember them together as long as he lived. But he really had had the benefit of indirectly dealing with those ideas thousands of times!! For what was his mental experience in regard to the place where human beings live? Why, it was that they live in houses—or human habitations. These ideas had been so many thousands of times repeated in his consciousness, that henceforth the mention of one would recall the other almost as by reflex action. After this inseparable bond had been established between these ideas, he reads that Diogenes lived in a Tub!! What a shock this gave to the powerfully associated ideas that human beings lived in human habitations or houses!! The relation between Diogenes and Tub had become unconsciously correlated through a most vivid intermediate of Exclusion—probably thus: DIOGENES...(2) non-human habitation...(1) TUB. The reader will instantly see that there would have been scarcely any impression made on my Pupil's mind, if his uniform experience had been that human beings had always lived in Tubs!!!! Then, and in that case, he would have remembered that the particular man Diogenes lived in a Tub, only after very many repetitions, and not before his mind had unconsciously made a Correlation between those words or ideas—very likely, thus: DIOGENES...Dye...Dye-Tub...TUB. It is an undoubted fact that no pair of unconnected ideas has ever become connected in anyone's memory until that person had made and cemented an unconscious Correlation between them. And the difference between a quick and a slow natural memory consists in the fact that the former makes an unconscious Correlation more rapidly than the latter. And the great power of my System of Memory-TRAINING is seen in the fact that whilst Pupils having quick Natural Memories can add enormous vigor to their Natural Memories by analysing and memorising their own spontaneous Correlations, yet those with the slowest Natural Memories can by the same process of making and memorising their own Correlations soon so strengthen their hitherto sluggish Natural Memories as to excel in quickness of acquisition and permanence of retention the best unassisted Natural Memories!!! And the reflecting Pupil will not fail to observe that my Method of cementing together unconnected facts is only a Scientific Development of Nature's own

* The most vivid CONCURRENCE exists where two or more objects strike or affect the senses at one and the same moment, and sometimes a single experience is sufficient to effect a permanent relation between them. When you merely think of two unconnected objects without having had any sensuous experience in regard to them, a Correlation must unconsciously or consciously unite them before they will be hereafter connected, though one or more intermediates of the Correlation may have been derived from a sensuous concurrence.
Method, just as the Microscope and the Telescope are merely Scientific Developments of the Eyesight.

Rules for making Correlations.

(1) Let the number of Intermediates be usually not less than two, nor more than four. It is a waste of labour to try to connect unconnected extremes by only one intermediate. It is only accident that enables me to connect pen and nose by the single intermediate "wiper." Accident may even enable me to find a date-word that is vividly connected with the man or event, as, Death of Charles I., Too Sharp, [1649]; again, Harvard College founded, Teach much [1638]. Necessarily, the "extremes" are in different spheres or planes of thought, and occasionally three or four intermediates are necessary to cement them together, but two usually suffice.

(2) A Correlation is a successive advance, and an intermediate must never refer back to any except its immediate antecedent, never to its second or third antecedent. A Pupil sends this:—Wavy hair... Harry... stepson... real son... more a son... MORRISON. Here, "more a son" refers to the comparison between "real son" and "stepson," but the latter is the second antecedent, and the correlation is therefore a defective one.

(3) A word may be used twice, but never three times; as, Pen... pensive... gay... nose...gay... nose... "gay" makes a weak In., and after that, it is dropped and you can go on with the rest of the word, to wit, nose.

(4) A compound phrase including a verb must never be used, since the intermediates must be the simplest elements, either sensations or perceptions [relations among sensations], or abstractions [relations among relations], or one of these with either of the others, and always exemplify either Ins., Exs., or Con.

(5) My Correlations are good for me, but they may not be so vivid to others, especially to the concurrences. To fix the date of Magna Charta (1215), the Pupil could memorise this Correlation—MAGNA CHARTA... King John... Jew's teeth... Dental. But if the Pupil did not already know that King John granted that charter, and if he did not also know the story about the extraction of the Jew's teeth, to make him pay the royal exaction, there would be no concurrences in regard to the first two intermediates, and he would have to learn the Correlation by mere repetition without aid from Analysis. In such a case, he would make and memorise his own Correlation, perhaps thus: MAGNA CHARTA... magnify... diminish... Dental... (1215). Again; Sir Christopher Wren... St. Paul's... cathedral bells... To Chic's on (born 1632)... sweet bells... tolling... burial. TAKEN HOMES (died 1723). If the fact that Sir Christopher Wren was the architect of St. Paul's were unknown to the Pupil, there would be no concurrence in his mind between Sir Christopher Wren and St. Paul's, and he would then probably proceed thus: Sir CHRISTOPHER WREN... bird... mocking bird... Mock... ridicule. To SHAME ONE (1632)... shame-faced... assumed an "alias"... Took A NAME (1723). "Carcasses... The mad jaw..." would be a case for Synthesis, and the Pupil must make a Correlation between them and memorise it, or else he must learn it by ordinary repetition!! But if he makes his own Correlations, every concurrence he uses would be a real concurrence to him, and so with his Ins. and Exs. This is a decisive, unanswerable reason why the Pupil should merely look upon my Correlations as models, but make and memorise his own Correlations in all cases, as being more vivid to him, and therefore more certainly remembered, as well as more effectively training and strengthening the Memory in both its stages.

(6) Let him observe that vivid Ins. by meaning are usually better than Ins. by S., unless the latter are perfect. "Troop—loop," is a fairly good In, by S., but not perfect. Instead of saying, "Hidden enemy... hostile troop... LOOP," it would be better to say, "Hidden enemy... ambush... snare... noose... LOOP." EAR... EEL makes a weak In. by S., although the sound of long o begins each word, but it would make a much more vivid first impression to deal with them in this way; EAR... earring... wriggles... EEL. But "Bivouac... aqueduct" is a perfect In. by S. as to the last syllable of the former and the first syllable of the latter, since those syllables, although spelled differently, are pronounced exactly alike. Hence, to connect Bivouac to Rain, we might well say, "Bivouac... aqueduct... flowing water... falling water... RAIN."

(7) Let him never—under any circumstances—make a second Correlation until he has memorised the first.

(8) Above all, let the Pupil bear in mind that although making and memorising Correlations serves the useful purpose of fixing specific facts permanently in the memory, yet
that the main object in making and memorising Correlations is to develop the latent power of the Natural Memory to such a degree that all facts are hereafter remembered without using Correlations.

(I.)—ISOLATED FACTS.

Correlate the Isolated Fact to some fact in its environment or entourage that is BEST KNOWN and which you are sure to THINK OF when you wish to recall the Isolated Fact.

1. To remember PROPER NAMES, correlate the Person’s Name to the name of some peculiarity of the Person as the BEST KNOWN, and which you are sure to THINK OF whenever you think of the Person. If you memorise the Correlation, you will instantly recall the Name whenever you think of this Peculiarity.

To remember a proper name, Mnemonics simply resorts to In. by S. But this gives no starting point, no “Best Known,” which you must certainly think of, and which will enable you to recall the name, provided you cement by a memorised Correlation the “Best Known” to the name itself; in fact, a similarity of sound alone and by itself is almost certain to mislead you into reviving itself instead of the name!

A celebrated Member of Parliament who, in the days of his youthful simplicity and before he had tested Mnemonics, gave a high opinion of its value, was to deliver an address at the Birkbeck Institution, about 8 years ago. Resolving to pay a tribute of appreciation to its founder, Mr. Birkbeck, and always having found great difficulty in remembering proper names, he thought he would fix the name of Birkbeck in his memory by the mnemonical device of finding a word that resembled it in sound; and so he said to himself, “it reminds me of ‘Pinchbeck.’”

He commenced as follows: “Before coming to the subject on which I am to speak this evening, I desire first of all to pay a deserved tribute of praise to the founder of this great Institution, the celebrated Mr. PINCHBECK!!!” A universal shout of laughter revealed to this disciple of Mnemonics that this boasted Art can get us into trouble, but that it cannot help us out: for he could not recall the real name, Birkbeck, until it was told to him. If he had mastered my System, his new memory-power would have enabled him to remember the true name without any device; or, if he had not received the benefits of my System as a Memory-Trainer, he could have infallibly remembered the name Birkbeck—which he was afraid he would forget, and which he did forget—by correlating it to the word “Founder,” which he would certainly remember, and which he did remember, thus:—FOUNDER...found...lost...calling...beckon...BIRKBECK; or, FOUNDERS...foundation...underground...grave...body-snatchers...Hare & Burke...BIRKBECK.

If he had memorised either of these Correlations by repeating them forwards and backwards two or three times, and then recalled the two extremes “Founder,” “Birkbeck,” several times, the moment he thought of Founder, he would instantly have recalled Birkbeck; for, when the Correlations are memorised, the two extremes are cemented together, without recalling the intermediates at all. But if he had thoroughly learned all my exercises, he would have received the benefit of my System as a Memory-TRAINER, and then the mere making of a Correlation is the infallible remembering the two extremes together, without ever thinking of the intermediates.
[Dr. Johnson, when introduced to a stranger, repeated his name several times aloud, and sometimes spelled it. This produced a vivid First Impression of the man's name, but it did not connect the name to the man who bore it! People who have adopted the Johnsonian Method say that they remember the name but often apply it to the wrong person! because they did not establish any relation between the name and the man himself to whom it belonged!]

<table>
<thead>
<tr>
<th>Peculiarity</th>
<th>Correlation</th>
<th>Proper Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-eyed</td>
<td>. . cross-bow...</td>
<td>Mr. Bowman</td>
</tr>
<tr>
<td>Unequal eyes</td>
<td>. . unlike size...</td>
<td>Mr. Sizer</td>
</tr>
<tr>
<td>Straight brows</td>
<td>. . browsing... sheep...</td>
<td>Mr. Shepherd</td>
</tr>
<tr>
<td>Snub nose</td>
<td>. . short... shrub... shrubbery...</td>
<td>Mr. Berryman</td>
</tr>
<tr>
<td>Regular features</td>
<td>. . straight... upright... walls...</td>
<td>Mr. Waller</td>
</tr>
<tr>
<td>Wavy hair</td>
<td>. . dancing wave... Morris dance...</td>
<td>Mr. Morrison</td>
</tr>
<tr>
<td>Black eyes</td>
<td>. . white... snow... pure as snow...</td>
<td>Mr. Virtue</td>
</tr>
<tr>
<td>Red cheek</td>
<td>. . cheeky... chastise... bruise...</td>
<td>Mr. Brewis</td>
</tr>
<tr>
<td>Bare face</td>
<td>. . dancing bear... tumbling... crooked fall...</td>
<td>Mr. Crookall</td>
</tr>
<tr>
<td>Small-pox</td>
<td>. . plague... cattle plague... sheep... lamb...</td>
<td>Mr. Lambert</td>
</tr>
<tr>
<td>Retreating chin</td>
<td>. . retiring... homebird...</td>
<td>Mr. Holmes</td>
</tr>
<tr>
<td>High instep</td>
<td>. . boots... mud... peat...</td>
<td>Mr. Pete</td>
</tr>
<tr>
<td>White hands</td>
<td>. . glovea... covered... shut-up... warder...</td>
<td>Mr. Ward</td>
</tr>
<tr>
<td>Crooked legs</td>
<td>. . broken legs... crushed...</td>
<td>Mr. Cruston</td>
</tr>
<tr>
<td>One arm</td>
<td>. . coat of arms... doorway... hall...</td>
<td>Mr. Hall</td>
</tr>
<tr>
<td>Apprehension</td>
<td>. . suspension... gallows...</td>
<td>Mr. Galloway</td>
</tr>
<tr>
<td>Mathematics</td>
<td>. . mat... door-mat...</td>
<td>Mr. Dorman</td>
</tr>
<tr>
<td>Energetic</td>
<td>. . work... labourer... spade... dug...</td>
<td>Mr. Douglas</td>
</tr>
<tr>
<td>Conceited</td>
<td>. . lofty... upper room... chamber...</td>
<td>Mr. Chambers</td>
</tr>
<tr>
<td>Sombre</td>
<td>. . sad... mourning... hat-band...</td>
<td>Mr. Hatton</td>
</tr>
<tr>
<td>Modes</td>
<td>. . violet... flower... shrub... laurel...</td>
<td>Laura</td>
</tr>
<tr>
<td>Music</td>
<td>. . stave... bar...</td>
<td>Mr. Barcroft</td>
</tr>
<tr>
<td>Violinist</td>
<td>. . violin... flute... whistle...</td>
<td>Mr. Birtwistle</td>
</tr>
<tr>
<td>Organist</td>
<td>. . pedal... foot... horse-shoe... blacksmith...</td>
<td>Mr. Smith</td>
</tr>
<tr>
<td>Cricketer</td>
<td>. . field... park... stag... hart...</td>
<td>Mr. Hartley</td>
</tr>
<tr>
<td>Painter</td>
<td>. . paint... coloured cards... whist...</td>
<td>Mr. Hoyle</td>
</tr>
<tr>
<td>Publican</td>
<td>. . beer... barrel...</td>
<td>Mr. Barrett</td>
</tr>
<tr>
<td>Clothier</td>
<td>. . cloth... cloth coat... overcoat...</td>
<td>Mr. Overstall</td>
</tr>
<tr>
<td>Plumber</td>
<td>. . plum... current... cake... victuals...</td>
<td>Mr. Whittles</td>
</tr>
<tr>
<td>Joiner</td>
<td>. . wood... ash...</td>
<td>Mr. Ashworth</td>
</tr>
<tr>
<td>Baker</td>
<td>. . flour... white flour...</td>
<td>Mr. Whiteley</td>
</tr>
<tr>
<td>Engineer</td>
<td>. . engine driver... smutty... black coat...</td>
<td>Mr. Coates</td>
</tr>
<tr>
<td>Gardener</td>
<td>. . guard... secure... hold...</td>
<td>Mr. Holden</td>
</tr>
<tr>
<td>Printer</td>
<td>. . type... picking up... pick... dig...</td>
<td>Mr. Delve</td>
</tr>
</tbody>
</table>

Make your own Correlations in each of these examples and send them to me for criticism, and give other illustrations of your own in regard to your acquaintances, completely worked out as above.

A CONTRAST.—When unconnected ideas are to be united in the memory so that hereafter one will recall the other, the teachers of all other Memory Systems invariably say, "What can I invent to tie them together—what story can I contrive—what foreign matter can I introduce—what mental daub can I imagine, no matter how unnatural or false the juxtaposition may be—or what argument or comparison can I originate—no matter how far-fetched and fanciful it may be, to help hold these 'Extremes' together?" They do not reflect that all these mnemonical outside and imported schemes must also be
remembered, and that being in the form of sentences expressing loose relations of mere physical juxtapositions or the complex relations invented by the constructive imagination or the subtlest intellect, they are more difficult to be recollected than the Extremes would be alone and without these ponderous aids!! Hence, in their professed attempt to aid the memory, they really impose a new and additional burden upon the memory. On the other hand, I simply ask the memory what it already knows about the "Extremes." The first intermediate of a correlation is directly connected through In., Ex., or Con., with the first "Extreme," and the last intermediate with the last "Extreme," and the intervening intermediates with the other two, and thus the intermediates being already in the memory, and not the result of invention or ingenuity, my Method of Correlation is purely and solely a Memory process. Thus I alone use the Memory to HELP THE MEMORY!! I use the reviving power of the memory to make a vivid First Impression between two hitherto unconnected "Extremes." I add nothing to the "Extremes." I import nothing from abroad in regard to them. I invent nothing. I simply arouse, reawaken to consciousness what is already stored away in the memory in regard to those "Extremes," and, by reciting the Correlation a few times forwards and backwards, I cement the "Extremes" themselves so vividly together, that henceforth one "Extreme" revives the other "Extreme" without the recall of the intermediates!! Nor is this all—In learning prose or poetry by heart by means of endless repetitions, the mind soon wanders, and thus discontinuity is promoted; but, in reciting a Correlation forwards and backwards from memory, the mind cannot wander, and thus the continuity is strengthened in the highest degree. Again, Memory is improved by exercise, and improved in the highest degree by making and memorising correlations, because in making them the reviving power of the memory is exercised in conformity to Memory's own Laws; and in memorising the Correlations, both stages of memory are most vividly impressed. Thus, making and memorising Correlations TRAINS both Memory and Continuity.

(2.) To remember Unfamiliar English Words or FOREIGN WORDS, correlate the Definition as the BEST KNOWN to the Unfamiliar or Foreign Word, and memorise the Correlation. In the case of Foreign Words the last Intermediate is necessarily a case of Inclusion by sound. The French word Anachorete would have for its equivalent by sound either "Anna goes late" or "Ann a core ate," or "Anna's cold hate," and perhaps to some of my readers it would sound like something else. Cravache might sound like *k  Have hash" or "Crack of lash," Pupils often disagree as to what is good Inclusion by sound, but the rule for each is to use what suits himself, and not to trouble about other people's ears. In by sound or by sense or by spelling, is sufficient if it refers to one syllable only.

**CORRELLATION.**

<table>
<thead>
<tr>
<th>English</th>
<th>Greek</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merchant...market...emporium...</td>
<td>ημιτρος</td>
</tr>
<tr>
<td>Pearl... necklace...sweetheart...Sweet Margery...</td>
<td>μαργαρίτης</td>
</tr>
<tr>
<td>Move... move on...next stage...next-of-kin...</td>
<td>κινέω</td>
</tr>
<tr>
<td>True... naked truth...pith of the matter...pithy...</td>
<td>πιθάνος</td>
</tr>
<tr>
<td>Course... coarse hair...camel-hair...dromedary...</td>
<td>δρόμος</td>
</tr>
<tr>
<td>Servant... light fare...dole out...</td>
<td>δούλος</td>
</tr>
<tr>
<td>Tanner... leather...leather purse...disburse</td>
<td>βαυσέως</td>
</tr>
<tr>
<td>Cup... tea-cup...tea-pot...</td>
<td>ποτήριων</td>
</tr>
<tr>
<td>Fettes... criminal...desperate...</td>
<td>δεσμός</td>
</tr>
<tr>
<td>Fragile... thin...rapier...&quot;thrust us&quot;</td>
<td>βραστάς</td>
</tr>
<tr>
<td>Fruit... fruit-knife...fish-knife...carp...</td>
<td>καρπός</td>
</tr>
<tr>
<td>Round... round cable...strong...</td>
<td>στρογγύλος</td>
</tr>
<tr>
<td>Bear... suffer...servitude...Israelites...Pharaoh</td>
<td>φέρω</td>
</tr>
<tr>
<td>Bride... fair...fairy...forest nymph...</td>
<td>νυμφή</td>
</tr>
<tr>
<td>Bread... baker...baker's art...</td>
<td>έρτος</td>
</tr>
<tr>
<td>Marry... lottery of life...risky game...</td>
<td>γαμέω</td>
</tr>
<tr>
<td>Join... engaged...apt to disagree...</td>
<td>έπτω</td>
</tr>
<tr>
<td>— engaged...suited...apt...</td>
<td>—</td>
</tr>
<tr>
<td>Culprit... cull...select a few...few gone...</td>
<td>φενγόνυ</td>
</tr>
</tbody>
</table>
CORRELATION.

Milk... milky way...galaxy...
Drink... water...small leak...pinhole, ...
Suffer hunger...dying of hunger...pining away...
Time... watch...chronometer...
— Father Time...old age...old crony...
Cover... covert...cave...grotto...Calypso...
Deliver... capture...lasso...
Spread... feast...Christmas...deck a church...dye a spire...
Uncover... bare...bare foot...a Kaliph's toe...
Assign... sign...mark...man of mark...hero...intrepid...
Shut... shut out...severe weather...bad climate...
I judge... condemn...refute...refuse...cry "no"
Found... establish...fix...fasten thus...tie so...
Entrust... trustee...trustee-meeting...dine...stew...
Soldier... art of war...strategy...

Heart... heart-sick...fainting...cordial...
Wickedness... dishonesty...black mail...
Book... printed thoughts...freedom of thought...liberty...
Breast... front...front view...aspect...
Spear... thrust...quick motion...hasty...
Suitor... princely suitor...married by proxy...
Ask... borrow...swindle...rogue...
Marrow... old English arrow...victory...medal...
Captain... head of hundred...century...
Surveyor... measure...dimension...
Furniture... bent-wood chairs...bent legs...supple legs...
Vine... wine...luxury...pampered...
Liar... false pretence...mendicant...
Coachman... carriage..."fine rig out"...
Cow... cow pox...vaccination...vaccine...
Sing... boatman's song...canoe...
Kill... kill by hanging...broken neck...
Redden... blush...kissing...ruby lips...
Dry... dry mouth...feverish...sick...
Man... married man...home...
War... victory... rejoicings...bells rung...
Rob... robber...hue-and-cry...policeman's rap...
Tanner... russet leather...russet apple...apple core...
Dove... married love...state of union...United States...

Columbia...columba

Garret... store-house...grain store...
Horse... race...dead-heat...equal...
Cock... spurring...goading...galling...
Lazy... tramp...knaves...
Make heavy...rich food...gravy...
Sign... musical signs...notes...
Poverty... drafty garret...sleeping draught...opium...

GREEK.

γάλα
πίπα
πεινάω
χρόνος
καλλιτέχνη
ἀκαλλιτέχνη
ἐπιτρέπω
κλεις
κρίνω
πιστεύω
στρατιώτης

LATIN.

cor
malum
liber
pectus
hasta
procus
rogare
medulla
centurio
agrimensor
supellex
pamipinus
auriga
vaca
cano
necare
rubesco
siccus
homo
bellum
rapto
corarius
subsellium
regulus and Remus...remus

Granaria
equus
gallus
ignavus
gravo
nota
inopia
CORRELATION.

Message... news... false news... nonsense... nuntius
Top... high perch... hen's perch... cackle... cacumen
Face... bare face... bare-headed bird... vulture... vultus
Useless... needful patience... irritation... irritus
Dark... dark staircase... insecure... obscursus
Writer... bad writer... scribbler... scriba
Harvest... harvest home... Mrs. at home... messis
Dog... dog's tail... tin can... canis
"...cane-carrier... cane... canis
Egg... boiled eggs... boiled hard... over-boiled... ovum
Fox... jackal... carcass... vultures... vulpes
Bread... sweat of brow... labour... pain... panis
"...bread-pan...
Table... figures... calculation... mensuration... mensa
Master... schoolboard... fines... magistrate... magister
Tree... mast... ship... harbour... arbor
Mother... wife... helpmeet... help-mate... mater

German.

Thankfulness... gratitude... altitude... high-flying... kite... Dankbarkeit
Embarrassment... slough of despond... low spirits... height... Verlegenheit
Toy... play day... free day... Friday... Freude
Sad... "sad sea waves"... boat... outrigger... traurig
Clear... clear tones... clarionet... klar
Indolent... "lazy bones"... lazy lass... lässig
Dangerous... storm... steamboat fare... gefährlich
Part... part of house... roof... tile... Theil
Empty... hollow... fox's hole... lair... leer
Take... take husband... new name... nehmen
Diffidence... shyness... shy... schen
Little... grow less... on the wane... wenig
Much... wanting... fill up... viel
Recompense... prize... game... lawn tennis... lawn... Lohn
Question... answer... fragmentary answer... Frage
Pressure... heavy load... truck... Druck
Voice... voice lozenges... stimulation... Stimme
Child... young kindred... Kind
Threaten... stinging words... stinging bee... drone... drohen
Mirror... reflection... spy-glass... Spiegel
Beetroot... red... ruby... Rübe
Potato... dig up... remove... cart off... Kartoffel
Love... lovers' meeting... meat... Liebig's Extract... Liebe
Campaign... battlefield... Field Marshal... Feldzug
Medicine... science... arts... (pr. artznel) Arznei
Evening... hour of prayer... bend the knee... Abend
Apple... "windfall"... cold wind... wrap well... Apfel
Heaven... angels... sing hymns... Himmel
Song... choir... choir leader... lead... Lied
Table... soiled with use... dirtyish... Tisch
Chair... chairman... session... Sessel
Bottle... Leyden jar... electric spark... flash... Flasche
Castle... siege... battle... lost... loss... Schloss
Honour... esteem... steam... vapour... air... Ehre
<table>
<thead>
<tr>
<th>English</th>
<th>French</th>
<th>Italian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fat</td>
<td>gras</td>
<td>fettino</td>
</tr>
<tr>
<td>Mouth</td>
<td>bouche</td>
<td>bocca</td>
</tr>
<tr>
<td>Asphalt</td>
<td>béton</td>
<td>betto</td>
</tr>
<tr>
<td>To lash</td>
<td>cingler</td>
<td>cingolo</td>
</tr>
<tr>
<td>Armchair</td>
<td>fauteuil</td>
<td>fauteux</td>
</tr>
<tr>
<td>Railway station</td>
<td>gare</td>
<td>ferrovia</td>
</tr>
<tr>
<td>Smoke</td>
<td>fumer</td>
<td>fumo</td>
</tr>
<tr>
<td>Carpet</td>
<td>tapis</td>
<td>tappeto</td>
</tr>
<tr>
<td>Head</td>
<td>tête</td>
<td>testa</td>
</tr>
<tr>
<td>Oar</td>
<td>rame</td>
<td>remo</td>
</tr>
<tr>
<td>Tears</td>
<td>larmes</td>
<td>lacrime</td>
</tr>
<tr>
<td>Canvas</td>
<td>toile</td>
<td>telo</td>
</tr>
<tr>
<td>Wave</td>
<td>vague</td>
<td>vaga</td>
</tr>
<tr>
<td>Bed</td>
<td>lit</td>
<td>letto</td>
</tr>
<tr>
<td>Pane</td>
<td>vitre</td>
<td>vetro</td>
</tr>
<tr>
<td>Gun</td>
<td>fusil</td>
<td>fucile</td>
</tr>
<tr>
<td>Shovel</td>
<td>pelle</td>
<td>pala</td>
</tr>
<tr>
<td>Side-walk</td>
<td>trottoir</td>
<td>traccia</td>
</tr>
<tr>
<td>Dirty</td>
<td>tiro</td>
<td>sporco</td>
</tr>
<tr>
<td>Faithful</td>
<td>fidèle</td>
<td>fedele</td>
</tr>
<tr>
<td>Pity</td>
<td>miséricorde</td>
<td>pietà</td>
</tr>
<tr>
<td>Misfortune</td>
<td>malheur</td>
<td>misfato</td>
</tr>
<tr>
<td>Happiness</td>
<td>bonheur</td>
<td>felicità</td>
</tr>
<tr>
<td>Hang fire</td>
<td>faire long feu</td>
<td>prendere a fuoco</td>
</tr>
<tr>
<td>Star</td>
<td>étoile</td>
<td>stella</td>
</tr>
<tr>
<td>Cake</td>
<td>gâteau</td>
<td>torta</td>
</tr>
<tr>
<td>Sword</td>
<td>épée</td>
<td>spada</td>
</tr>
<tr>
<td>Book</td>
<td>livre</td>
<td>libro</td>
</tr>
<tr>
<td>Castle</td>
<td>château</td>
<td>castello</td>
</tr>
<tr>
<td>To speak</td>
<td>parler</td>
<td>parlare</td>
</tr>
<tr>
<td>Basket</td>
<td>paniéra</td>
<td>corbello</td>
</tr>
<tr>
<td>“</td>
<td>corbéllo</td>
<td>“</td>
</tr>
<tr>
<td>“</td>
<td>bellow.</td>
<td>“</td>
</tr>
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<td>“</td>
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<td>“</td>
<td>“</td>
<td>“</td>
</tr>
<tr>
<td>Hour</td>
<td>orá</td>
<td>ora</td>
</tr>
<tr>
<td>Gold</td>
<td>óro</td>
<td>oro</td>
</tr>
<tr>
<td>His</td>
<td>suó</td>
<td>suo</td>
</tr>
<tr>
<td>Thy</td>
<td>tuó</td>
<td>suo</td>
</tr>
<tr>
<td>Uncle</td>
<td>Zio</td>
<td>cugino</td>
</tr>
<tr>
<td>Pius</td>
<td>Pio</td>
<td>pio</td>
</tr>
<tr>
<td>Month</td>
<td>mãe</td>
<td>mese</td>
</tr>
<tr>
<td>Made</td>
<td>fatto</td>
<td>fatto</td>
</tr>
</tbody>
</table>

Synonyms, as well as words having but a slight difference in sound, like Insidious and Invidious, are easily discriminated by memorised Correlations: INSIDIOUS...inside...hole...fox...TREACHERY.—INVIDIAOUS...invade...warlike revenge...ILL-WILL.

(3.) To remember the Date of the Birth and Death of great men, correlate the surname as the BEST KNOWN to the word expressing the
date of BIRTH, and then correlate the BIRTH WORD to the DEATH WORD:—

Napoleon Bonaparte.
Banishment...embarcation...
Took ship...ship...masthead...Godhead...

Robert Burns.
Scotch Poet...map of Scotland...map of the world...
The globe...geography...schoolbook...page...

Oliver Goldsmith.
Poverty...plenty...
Took enough...bread enough...prodigal son...

Henry Cavendish.
Tobacco...bird's eye view...telescopic view...
Harbinger of war...decisive battles...

The Duke of Albany.
Delicate...pale...white...
Heat...cold...fur...

Wolsey.
Butcher...steel...straight...
Wrecked...gored...horns...

Richelieu.
Abel...death of Abel...
Burial...urn burial...

Chatterton.
Forgery...crime...black gallows...
Balloon...hollow...kettledrum...

Thomas Carlyle.
"Sartor Resartus"...sarcasm...ill-tempered...ill...
Dinner pill...weak digestion...mastication...

Charles Darwin.
"Natural Selection"...the chosen one...
Greatest happiness...

Col. Burnaby.
Burning...martyr...first martyr...
Death...mourning...

George Eliot.
Adam Bede...add...
Money...£10...

Took ship.
born 1769
Divinity.
died 1821

The globe.
born 1759
Waiting page.
died 1796

Took enough.
born 1728
The younger.
died 1774

The comet.
born 1731
"The fights."
died 1779

White flame.
born 1868
To have fur.
died 1884

Direct.
born 1471
Dilemmas.
died 1530

Doleful.
born 1585
Dutch urn.
died 1642

White galloon.
born 1782
Tea cakes.
died 1770

Took a pill.
born 1795
Tough food.
died 1811

Happy.
born 1809*
To have heaven.
died 1882

Die for any.
born 1842
Day of evil.
died 1885

Advance.
born 1820
Two fives.
died 1880

* It is sufficient to indicate the figure 9, as we know that it could not have been the year 9 of the Christian Era, and, as it was somewhere about the beginning of this century, the figure 9 makes an indefinite impression definite and exact.
Let the Pupil send me examples of his own selection worked out as above.

To memorise other specific Events or Facts, Correlate the name of the Place or Fact to the Date-word or other Fact, thus:—

Great Earthquake at Lisbon, 1755— 1 7 5 5
LISBON...Listen...Hush!...
SORATA, the highest peak of the Andes, 21,286 feet high.

SORATA...sore...cured...salt fish...
The specific gravity of Iridium is 22.40
IRIDIUM...I ridicule...Ridiculous...All laugh...

HEIGHT OF ARARAT (17,260 feet)—
Noah's Ark...Ark of the covenant...
Philistines attack...

FOUNDATION OF ROME—
Seven hills—uphill...

FIRST PRINTING IN ENGLAND—
Book...pamphlet...

COUNCIL OF TRENT—
Trent...rent...rent roll...
America discovered in 1492—

AMERICA...Merry...Sad...Sad irons...Handcuffs...

North American Review was established 1815—

NORTH AMERICAN REVIEW...Criticism...
Cleverly done...

Mariner's Compass was invented, 1269— 1 2 6 9

MARINER'S COMPASS...pocket compass...
Mesmerism discovered 1788—

MESMERISM...mesmerising...impacting a fluid...
Prof. Loisette's Telephone Number is 2661—

LOISETTE...Gazette...Gaze...Tete-à-tête...

UNEATEN FISH.

NONE SERIOUS.*

17260
ATTACK NO JEWS.

753
CLIMB.

1 4 7 1
TRACT.

1 4 9 2
TURPIN.

1 8 1 5
DEFTLY.

These are facts that must be united in the memory in the exact order in which they occur. In learning the Dates of the Accession of the Kings of England, it would not answer to place William the Conqueror after Queen Elizabeth, nor Queen Elizabeth before the Conqueror. The Dates of the winnings in the Oxford and Cambridge University Boat Race, as given in the next Lesson, is an instance of Serial Facts. All prose and poetry is also an illustration where you wish to retain, not merely the ideas, but the exact expression. Each word must be remembered in the precise order in which it is set down. I only add that the first of a set of Serial Facts is always treated as an ISOLATED FACT, and connected with something THROUGH WHICH the Pupil must necessarily THINK in order to reach that fact—as “President” is united to “Washington.”

A Homophone (In. by S., with the entire name or with only a part of it) of single names can be used for a Correlating word instead of the name itself. Thus, Wolf may be used for Ethelwolf, Stand for Athel-

* See Supplement to First Lesson concerning the expression of decimals.
stan, Swain for Sweyn, Berth for Ethelbert, &c., &c. But, where there is more than one King of the same name, we may use a Double Inclusion—that is, the first one or more letters of the King’s name or place, or the first one or more letters of any syllable of his name is used, and then the final consonant is a t or a d, or n, &c., to show that it is the first of that name (as Herald for Harold I.) or the second of that name (as Heron for Harold II.), &c., &c.; or as, WarD for Edward I., WarN for Edward II., and WarM for Edward III. Here we deal with the last syllable of Edward instead of the first letter E. This discriminates the three Edwards before the Conqueror from the six Edwards who come after; for all of the latter are represented by E as the first letter of Edward and the last consonant tells which Edward it is; as, EdiT for Edward I., EdeN for Edward II., EmporiuM for Edward III., EaE for Edward IV., EeL for Edward V., and EeCH for Edward VI. The authority for the following dates is “Haydn’s Dictionary of Dates.” If the Pupil finds that his history gives different dates, he can readily adopt other Date-words and Correlations on the model of those below. If any Pupil wishes to learn science, geography, or speaking without notes, or anything else, let him memorize the following series of Kings with their dates, as hereafter given. No Pupil must learn a correlation he does not understand. He must alter it, or make another. And if he has a poor memory he must not expect to strengthen it, unless in every case he makes his own correlation and properly learns it.

The wise Judge [1066]

looking forward

The day of hope [1189]

despair
despond
pond

REED [Richard I.]

“A mocker”

“Bruised reed”

weakling
dying child

Dead baby [1199]

coffin

flowers

JONQUIL [John]
goose-quill

roast goose
dish-cover

Tin dish [1216]
tinsmith

locksmith

hemlock

HEM [Henry III.]
hemorrhage

bloody deed

Duncan’s murder

Duncan [1273]

Play of Macbeth

new edition

EDIT [Edward I.]

writing desk
desk covering
Damask [1307]
rose
garden
ÉdEN [Edward II.]
erserpent
devilish
Demoniac [1827]
furious
martingale
mart
EMPORIUM [Edward III.]
Emperor
autocrat
democrat
Demagogue [1877]
levelling
Ruin [Richard II.]
ruined health
drunkenness
To imbibe [1899]
liquid
hair-dye
HAIR [Henry IV.]
curling-tongs
heat
dried
Dry theme (1413)
threadbare topics
May Meetings
Exeter Hall
HALL [Henry V.]
hauled out
drawn in [1422]
drawing
portrait
silent mouth
HUSH [Henry VI.]
hush it up
crime
Tragedy [1461]
theatre
listeners
EAR [Edward IV.]
ear-trumpet
tromp of fame
True Fame [1488]
false
slippery
EEL [Edward V.]
mud
soft ground
terra firma

Teraphim [1483]
household gods
house
ROOM [Richard III.]
rheumy
watery eyes
Tearful [1485]
crying tears
hue and cry
hack and hew
HACK [Henry VII.]
hacking cough
impediment
To trip [1509]
to hum
HIVE [Henry VIII.]
beeswax
waxed thread
Tailoring [1547]
sewing needle
etching needle
ETCH [Edward VI.]
sketch
landscape
trees
Tall elm [1553]
Windsor Forest
Merry Wives of Windsor
MERRY [Mary]
single blessedness
Dual life [1558]
exciting life
betting man
BETSY [Elizabeth]
Betso
Venetian coin
Venetian court
Doge's home [1608]
street of water
Blackpool
JET [James I.]
black-board
slate
addition sum
Additional [1625]
add on
cut off
CUT [Charles I.]
shave
razor
Too sharp [1649]
sharp practice
too common
<table>
<thead>
<tr>
<th>COMMONWEALTH</th>
<th>Tocsin [1702]</th>
</tr>
</thead>
<tbody>
<tr>
<td>rich soil</td>
<td>alarm</td>
</tr>
<tr>
<td>Dutch loam [1658]</td>
<td>frantic</td>
</tr>
<tr>
<td>Holland</td>
<td>ANTIc [Anne]</td>
</tr>
<tr>
<td>dykes</td>
<td>antiseptic</td>
</tr>
<tr>
<td>protection</td>
<td>medicine</td>
</tr>
<tr>
<td>PROTECTOR [Oliver Cromwell]</td>
<td>Doctor [1714]</td>
</tr>
<tr>
<td>thick shell</td>
<td>disease</td>
</tr>
<tr>
<td>Wide shelf [1658]</td>
<td>GOUT [George II.]</td>
</tr>
<tr>
<td>wide-spread</td>
<td>gouty toe</td>
</tr>
<tr>
<td>bridal breakfast</td>
<td>swollen</td>
</tr>
<tr>
<td>RICH CRUMBS [Richard Cromwell]</td>
<td>Thickening [1727]</td>
</tr>
<tr>
<td>indigestion</td>
<td>projecting</td>
</tr>
<tr>
<td>Eat jalap [1659]</td>
<td>projectile</td>
</tr>
<tr>
<td>Lapland</td>
<td>GUN [George I.]</td>
</tr>
<tr>
<td>reindeer</td>
<td>fowling-piece</td>
</tr>
<tr>
<td>reign</td>
<td>pointers</td>
</tr>
<tr>
<td>INTERREGNUM</td>
<td>Dog shows [1760]</td>
</tr>
<tr>
<td>interview</td>
<td>poultry shows</td>
</tr>
<tr>
<td>two persons</td>
<td>wild birds</td>
</tr>
<tr>
<td>Two judges [1660]</td>
<td>GAME [George III.]</td>
</tr>
<tr>
<td>cattle show</td>
<td>gaming-house</td>
</tr>
<tr>
<td>dairy</td>
<td>trickster</td>
</tr>
<tr>
<td>CAN [Charles II.]</td>
<td>seared conscience</td>
</tr>
<tr>
<td>milk</td>
<td>toughness</td>
</tr>
<tr>
<td>skimming dish</td>
<td>Tarred ropes</td>
</tr>
<tr>
<td>Dishevel [1685]</td>
<td>rigging</td>
</tr>
<tr>
<td>tipsy woman</td>
<td>GEAR [George-IV.]</td>
</tr>
<tr>
<td>gin</td>
<td>royal finery</td>
</tr>
<tr>
<td>juniper</td>
<td>imperial purple</td>
</tr>
<tr>
<td>JUNE [James II.]</td>
<td>famous dye</td>
</tr>
<tr>
<td>Juno</td>
<td>Die famous [1880]</td>
</tr>
<tr>
<td>Goddess</td>
<td>glory</td>
</tr>
<tr>
<td>House of God</td>
<td>battle</td>
</tr>
<tr>
<td>The chief Abbey [1689]</td>
<td>War [William IV.]</td>
</tr>
<tr>
<td>Poet's Corner</td>
<td>camp</td>
</tr>
<tr>
<td>Poet's fancy</td>
<td>picnic</td>
</tr>
<tr>
<td>WHIM [William III. and Mary]</td>
<td>Day of maying [1887]</td>
</tr>
<tr>
<td>freak</td>
<td>merry-making</td>
</tr>
<tr>
<td>spree</td>
<td>rejoicing</td>
</tr>
<tr>
<td>intoxicated</td>
<td>VICTORY [Queen Victoria]</td>
</tr>
</tbody>
</table>

The foregoing (as well as similar exercises in other Lessons) is given as a Memory-training task, and a specimen of dealing with Names and Dates when they alone have to be learnt, and not as a model of the best way of dealing with Dates generally. They ought to be learnt in their places as you meet them in the study of History.

**INTERROGATIVE ANALYSIS.**

The supreme importance of thorough practice in this Method compels me to re-introduce it in this lesson; but let the Pupil understand that he is required to use an exhaustive Interrogative Analysis only whilst...
learning and becoming an expert in the use of the Method, not afterwards. For the benefit of the linguistic Student, I append examples worked out in different languages, but I deal with them in English also.

Video meliora proboque, deteriora sequor!—Ovid. (I see and approve the better things, I follow the worse.)

Quis videt probatque meliora?—"Video meliora proboque, deteriora sequor." Quid video?—"Video meliora proboque, deteriora sequor." Quid sentio de melioribus?—"Video meliora proboque, deteriora sequor."—Quid confiteor in probatione mea?—"Video meliora proboque, deteriora sequor." Si video meliora proboque, sequorne ea?—"Video meliora proboque, deteriora sequor." Quid facio cum deterioribus?—"Video meliora proboque, deteriora sequor."

THE SAME IN ENGLISH.

I see and approve the better things, I follow the worse. Who sees and approves the better things?—"I see and approve the better things." What is my action towards the better things?—"I see and approve the better things." What is the character of the things which I see and approve?—"I see and approve the better things." What is it that is better which I see and approve?—"I see and approve the better things." Are better things which I see and approve distinct from all others?—"I see and approve the better things." If I see and approve the better things, do I follow them?—"I see and approve the better things, I follow the worse." Who follows the worse?—"I follow the worse." What do I do in regard to the worse?—"I follow the worse." What do I follow?—"I follow the worse." Do I follow the worse things as a class or only a few of them?—"I follow the worse." Is my conduct consistent?—"I see and approve the better things, I follow the worse."

Dieu est un cercle dont le centre est partout, la circonférence nulle part.—Pascal. (God is a circle the centre of which is everywhere, the circumference nowhere.)

Qu'affirmons-nous touchant Dieu dans cette phrase?—"Dieu est un cercle dont le centre est partout, la circonférence nulle part." Quel rapport établissons-nous entre Dieu et le cercle?—"Dieu est un cercle dont le centre est partout, la circonférence nulle part." Faisons-nous mention de plusieurs cercles?—"Dieu est un cercle dont le centre est partout, la circonférence nulle part." Quelle partie de ce cercle se trouve partout?—"Dieu est un cercle dont le centre est partout, la circonférence nulle part." Où faut-il chercher le centre de ce cercle?—"Dieu est un cercle dont le centre est partout, la circonférence nulle part." Quelle partie de ce cercle est qualifiée par l'expression "nulle part"?—"Dieu est un cercle dont le centre est partout, la circonférence nulle part." Où se trouve cette circonférence?—"Dieu est un cercle dont le centre est partout, la circonférence nulle part."

THE SAME IN ENGLISH.

What being is mentioned here?—"God is a circle." What is affirmed of God?—"God is a circle." Is the attribute "circle" affirmed of "God"?—"God is a circle." What kind of circle is God?—"God is a circle, the centre of which is everywhere and circumference nowhere." What is everywhere?—"The centre of which is everywhere." Centre of what is everywhere?—"The centre of which (circle) is everywhere."
Where is the centre of this circle?—"The centre of which is everywhere." What is the relation between the centre and everywhere?—"The centre of which is everywhere." Is there anything else said about this circle?—"The centre of which is everywhere and the circumference nowhere." What is nowhere?—"And the circumference nowhere." Where is the circumference?—"God is a circle, the centre of which is everywhere and circumference nowhere."

Mit des Geschickes Mächten ist kein ewiger Bund zu flechten.—Schiller. (There is no entering into an enduring compact with the powers of fate.)


Ist keine Freundschaft zu flechten?—Mit des Geschickes Mächten ist kein "Bund" zu flechten. Ist kein ewiger Bund zu schliessen?—Mit des Geschickes Mächten ist kein Bund zu "flechten."

THE SAME IN ENGLISH.

Is there an entering into an enduring compact with the powers of fate?—"There is no entering into an enduring compact with the powers of fate." What action is impossible with regard to the powers of fate?—"There is no entering into an enduring compact with the powers of fate." Into what is there no entering?—"There is no entering into an enduring compact with the powers of fate." What is the nature of the compact into which there is no entering?—"There is no entering into an enduring compact with the powers of fate." With what is there no entering into an enduring compact?—"There is no entering into an enduring compact with the powers of fate." With what powers is there no entering into an enduring compact?—"There is no entering into an enduring compact with the powers of fate."

'Απόδοτε οὖν τὰ Καίσαρος Καίσαρι· καὶ τὰ τοῦ Θεοῦ τῷ Θεῷ.—Matt. c xxii., v. 21.

Render therefore unto Cæsar the things which be Cæsar's, and unto God the things which be God's.

Τιμάρχει ἐντολή ἐν ταύτῃ τῇ γνώμῃ;—'Απόδοτε οὖν τὰ Καίσαρος Καίσαρι.

'Εγενήθη αὕτη ἡ ἐντολή ὡς ἀκολούθει τῶν προτέρων λογομάθων, ὁ οὖν.—

'Απόδοτε οὖν τὰ Καίσαρος Καίσαρι.

Ποία πράγματα ἄναγκαιον ἐστίν ἀποδίδοι;—'Απόδοτε οὖν τὰ Καίσαρος Καίσαρι.

Τίνος εἰσὶ τὰ ἀποδοτέα;—'Απόδοτε οὖν τὰ Καίσαρος.

Τίνι ἄναγκαιον ἐστίν ἀποδίδοι;—'Απόδοτε οὖν τὰ Καίσαρος Καίσαρι.

'ΑΛΛΗΝ ἐντολή ἔχομεν, ἢ οὖ;—Καὶ τὰ τοῦ Θεοῦ τῷ Θεῷ.

Ποία πράγματα ἄναγκαιον ἐστίν ἀποδίδοι;—Τὰ τοῦ Θεοῦ.

Τίνος εἰσὶ τὰ ἀποδοτέα;—Τὰ τοῦ Θεοῦ ὁ Θεός.

Τίνι ἄναγκαιον ἐστίν ἀποδίδοι;—Τὰ τοῦ Θεοῦ τῷ Θεῷ.
Is there a command expressed?—"Render therefore unto Caesar the things which be Caesar's." Is this command given as a consequence of some previous statement?—"Render therefore unto Caesar the things which be Caesar's." Unto whom must these things be rendered?—"Render therefore unto Caesar the things which be Caesar's." What must be rendered unto Caesar?—"Render therefore unto Caesar the things which be Caesar's." Must any particular things be rendered unto Caesar?—"Render therefore unto Caesar the things which be Caesar's." Whose things are to be rendered unto Caesar?—"Render therefore unto Caesar the things which be Caesar's." What relation is there between Caesar and the things?—"Render therefore unto Caesar the things which be Caesar's." Is there any other command given?—"And unto God the things which be God's." Unto whom must God's things be given?—"Render therefore unto Caesar the things which be Caesar's, and unto God the things which be God's." What must be rendered unto God?—"Render therefore unto Caesar the things which be Caesar's, and unto God the things which be God's."

It is scarcely needful to suggest to the intelligent Student that Interrogative Analysis readily applies to all possible problems of memory. Suppose you wish to fix the date of the birth of the poet Longfellow, who was born in 1807 and died in 1882. What was the probable characteristic of the person to whom this name was first applied? He was of a tall physical structure. What name expresses the whole of the physical structure? *The physique*. Who must have an elastic physique?

A Clown. When the Clown is in the ring what do you expect?

*To have fun.*

Suppose you wish to remember the Latin for the word "Abyss." What is an abyss? An abyss is a very large pit. What is the biggest pit you have seen in England? It was a quarry. How were the men carrying about the stones in a quarry? In barrows. With what Latin word does "barrow" form an In. by S.? It sounds like the beginning of the word *barathrum*. The Latin word "*barathrum*" [Gr. βαράθρων] means "abyss."

A brief discussion may bring out into bolder contrast the UNIQUENESS of my Method. Reventlow's pupil, an Anglicised German,* who had received the sobriquet of "Doctor," taught orally,† for some years, his master's system in England. The Doctor quoted with approbation the statements of his critics, that he substituted "Reasoning for memory"! From more than 300 examples of his method, now in my possession and vouched for by his pupils as having been taken down by them in writing from the Doctor's dictation, I select one conspicuous case.

In regard to memorising the statement that "the Posterior Nerve of the Spinal Column is Sensory, and the Anterior Nerve is Motor," the Doctor remarked, "You observe that Posterior and Sensory go together,

[* Dr. Pick.]*

† See note on next page.
and that Anterior and Motor go together. The initial letters of Posterior and Sensory are P and S, and the initial letters of Anterior and Motor are A and M. By considering that A and M are in the upper part of the Alphabet and P and S are in the lower part of it, you will be sure to remember that Anterior is associated with Motor and Posterior with Sensory.” I admit that the first time one hears this method applied the novelty of the principle of it might make an impression; but, after that, the method would fail from its own demerits; because the steps of an argument are most difficult to be retained in the Natural Memory, and therefore such a method cannot possibly act as a Means for Aiding the Memory. It is obvious that, unless you first distinctly remember that Anterior is connected with Motor and Posterior with Sensory, there is nothing whatever in this case to suggest that the initial letters of those words are to be thought of together. The fact is, these ingenious conceits, special-pleading refinements, and metaphysical subtleties deal only with the accidents of a subject and not at all with its essentials, and they always require that you should retain by your unassisted Natural Memory the VERY THINGS they profess to help you to remember. So true is this, that if your Natural Memory be not marvellously retentive, your recall of the steps of the comparative method is more likely to be wrong than right. In this very case, a Pupil, although he possessed a good Memory and although he repeated the Doctor's reasoning many times to his friends shortly after he learned it, found that after six months he remembered it as follows—“A and S go together because they are far apart in the Alphabet, and hence the Anterior Nerve is Sensory!! And as P and M are near together in the Alphabet, therefore the Posterior Nerve is Motor”!! Having received no genuine aid to cement together “Posterior and Sensory,” and “Anterior and Motor”—which were the things to be united in memory—he was left to his own resources about the initial letters P and S and A and M, and it must be conceded that his original argument, in regard to them, was quite as plausible and natural as that of the learned Comparer.* This method

* Note.—He did publish a half-crown (afterwards a shilling) pamphlet, on Memory, with a view to excite curiosity without gratifying it, and thus compel his readers to resort to his personal instruction, but the little book led only to disappointment. It contained only one principle which he ever used in his actual teaching—the plan of re-arranging lists of Irregular Verbs in Foreign languages. [To remember the figures 61342, it would be easier, if the precise order of the figures was not important, to arrange them thus : 126451] The relations between nought and the nine digits are mathematically exact, but between words they are infinitely various and the plan required that he should first know the meaning of the words; and then the labour and difficulty of the re-arrangement in Groups, Families and Classes were so great, that no one ever used the device in practice, or even learned his revised lists. All the rest of the book was made up of “padding,” as it has been called. A chapter on the History of Mnemonics—another on the Memory of Animals—another on the Seat of Memory from the ancient and mediaeval point of view—another on Aristotle's speculations about association, and some crude ideas of his own, some foreign notions which he considered were “arbitrary,” but which he nevertheless thought were “ingenious.” The highest form of this “ingenuity” was exhibited in his oral teaching, in the four crucial examples in the text. The fact is, that he never developed or worked out his System, because of its impracticability and difficulty, and hence he appealed to his Pupils to send him any suggestions for the application and extension of his own System. Notwithstanding there was no restriction imposed upon the learners of this System, it has never been taught by anyone else or used anywhere for years by anyone. While the Doctor was teaching his System, the followers of the Mental Daubs of Feinagle and Beniowski, &c., railed against him bitterly; but having learned since that he really was a disciple of Beniowski, Aimé Paris and Reventlow, and that he is no longer in the field against them, and has left no disciples, they are now endeavoring to atone for their past abuse by canonising him as a Mnemonical Saint. [I
supplies what Medical Students call "Tips," which are usually remembered without recalling what they refer to! Whereas my System offers genuine scientific "Tips," if the phrase be allowed, applicable to all subjects whatsoever, and which are easily remembered.

When words are expressly arranged with no other purpose in view except to help retain certain letters, as in the case of the "6 shy Jewesses chose George" before the Pupil had learned Synthesis, it would be impossible to go wrong; but in attempting to transform such special devices into a working principle in the real business of life, where words, ideas and facts cannot be adapted to our needs, but where our methods must be adapted to them, nothing can be more misleading or disappointing than a resort to these hair-splitting and superficial "comparisons," which not one in a thousand can make and none remember unless he is subtility-mad. If a sensible man could really make much use of this method, he would cultivate such a technical microscopic habit of observation that he would soon see the spots on the sun, but not the sun. How do I manage this case? By dealing directly and solely with the facts and ideas to be united in the memory, by correlating Posterior to Sensory, thus:—POSTERIOR...Post-mortal...Insensible...SENSORY. Similarly, I connect Anterior to Motor, thus:—ANTERIOR...Ant...disturbed ant-hill!...commotion!...MOTOR. By uniting the two unconnected "Extremes" together by means of a developed Analysis memorised, I AID the natural memory in the highest possible degree.

EXTRACT FROM QUAIN'S ANATOMY.

"The branches of the External Carotid Artery are eight in number, viz.—three directed forwards, the superior thyroid, the lingual, and the facial; two directed backwards, the occipital and the posterior auricular; and three extending upwards, the ascending pharyngeal branch, together with the temporal and internal maxillary, the two terminal branches into which the artery divides."

Neither the mnemonics of Ingenuity nor the mnemonics of the Imagination can afford any assistance in memorising the facts in the foregoing passage, but they are easily learned by means of Correlations (to be memorised) as follows:—

<table>
<thead>
<tr>
<th>CAROTID...</th>
<th>Carotid...</th>
<th>rotten...ruinous...IVY (eight branches)...</th>
</tr>
</thead>
<tbody>
<tr>
<td>FORWARDS...</td>
<td>growth...advance...go forwards...</td>
<td>conduct...ductless...</td>
</tr>
<tr>
<td>THYROID...</td>
<td>Thyroid...</td>
<td>head forwards...ercial...ductless...</td>
</tr>
</tbody>
</table>

have given these details because the book, long since out of print, was the only one that ever appeared in English from a disciple of Reventlow. Although I have had thousands of Pupils who were experts in the Methods of Feinaigle, of Aimé Paris, of Reventlow and of this his Anglo-German disciple, yet I never had one such Pupil nor anyone else who ever suspected from my Recollective Analysis [until I inserted the Presidential and Hep-tarchy Series], or from their mastery of those Systems, what my method of Recollective Synthesis is—a Method which, when Analysis has been mastered as directed, becomes the easiest, quickest, and most effective means for the permanent acquisition of all kinds of knowledge. Nor is this all; none of them ever succeeded in getting rid of Mnemonical Keys, as I have done in all cases whatsoever; nor did any of them ever anticipate my Devices for dealing with difficult examples: nor did they know how to simplify and minimise the Problem of Memory in all cases: nor did anyone of them ever suspect it was possible to develop and strengthen, as I have done, the Natural Memory in both its Stages, and the Concentration in both its Functions.
spheroid ... whole earth ... many languages...

LINGUAL

tongue...mouth...face...front...back...

Occipital

Backwards...

back of head...occiput...

Auricular

occult...secret...confession...

Ornamental

golden...high-priced...high up...

Aural

Upwards...

ascending...

Ascending Pharyngeal

pharos...lighthouse...intermittent light...temporal...

Temporal

"be temperate"...maxim...

Maxillary

To memorise the attachments of muscles, the student must first of all familiarise himself by diligent dissection with the aspects of the muscles and the actual facts of their attachments. It is possible to memorise their origins and insertions by my System, merely from their written descriptions; but this is not learning. It is a vicious system of cramming, which can do no possible good. Once the student has thoroughly familiarised himself with the actual facts, he can proceed to fix these facts in his memory with definiteness and precision by my System. In dealing with facts of such complexity as the origin and insertion of muscles, it is necessary to have free recourse to the assistance of homophones, &c. In the whole of anatomy there is no task so difficult as that of learning the precise attachments of the muscles of the back. Only a small proportion of students ever master these attachments thoroughly, and those who do learn them are unable to retain them for more than a very few days together. By the use of my System it becomes easy for any student to learn the whole of the attachments, as well as all the other facts of Anatomy, or of any other study; and, once thoroughly learnt, they will never be forgotten. Let it be thoroughly understood that my System is no substitute for dissection and experiment. You can get a comprehension of anatomical facts only by actual experience, and to attempt to acquire an understanding of them from books is to substitute a knowledge of words for a knowledge of things.

[CAUTION.—Let not the medical student, nor any other of my pupils, disregard the rest of this and my other Lessons because in any particular illustration I give he sees how he can apply my System with great advantage to his studies. Let him rather master most thoroughly each exercise, whether it pertains to his studies or not, and then, when he has finished all the Lessons, he can apply my System to his studies or specialty with the skill of an Expert, and acquire permanently as much knowledge in a week by its aid as he could in a month or in many months without it.]

The following examples will indicate one way in which the student may proceed in order to memorise the attachments of the muscles of the back:

(1.) First make a homophone of the name of the muscle.
(2.) Indicate each attachment of the muscle by two words. The initial letter of the first word should indicate the part of bone to which the muscle is attached—e.g., Sp = spinous process, T = transverse process, R = rib, &c. The second word should indicate
by its consonants the numbers of the bones to which the attachment is made.

(3.) Correlate the homophone of the muscle to the first pair of words, and the first pair to the second pair.

**EXAMPLE.**

"The SPLENIUS COLLi is attached inferiorly to the spinous processes of the third, fourth, fifth, and sixth dorsal vertebrae, and superiorly to the transverse processes of the first two or three cervical vertebrae."

splenius COLLi (homophone) SCOLD.

SCOLD...cold...marble...image...SPLENDID IMAGE...
statue...statuette...chimney ornament...clock..."TIS TIME.

In the first pair of words the initial of Splendid shows that the attachment is to the Spinous processes, and the word Image indicates that the vertebrae implicated are the third to the sixth. The second pair show that the transverse processes from the first to the third are those into which the muscle is inserted.

"The SPLENIUS CAPitis arises from the spines of the seventh cervical and two upper dorsal vertebrae and from the ligamentum nuchae. It is inserted into the lower and back part of the mastoid process, and into the outer part of the superior curved line of the occipital bone."

splenius CAPitis (homophone) ESCAPE.

ESCAPE...flight...projectile...trajectory...conic section...

split...spliced...tied...ligatured...
new keel...ship...mast...
masticate...eat...drink...sip...

**REMARK.**—The impatient, impulsive and wholly unreflecting pupil sometimes says, "Easy as learning by your System is, it does take time to learn by it!!" Yes, he is quite right. It takes some time; but, the true mode of judging my System is, to compare the time required by the unassisted Natural Memory to learn the exercises of this and the other lesson papers with the time taken to learn them by the aid of my System!! Without its aid, the unassisted Natural Memory would require a very, very long time to learn them [the great majority of unassisted Natural Memories could never learn them], and a dreadfully tedious wearying work it would be!! With my System's aid, they can all be easily and pleasantly learned in one hundredth part of that time! This is the honest way to look at it.

But, this restive, uneasy, work-dreading and unstudious critic compares the time required by my System's aid to master the most difficult memory tasks, not with the time demanded by the unaided Natural Memory to learn them, but with time absolutely wasted and entirely thrown away!! His unconscious comparison is between not learning and learning them exactly and permanently!! It is this shiftless pupil who never learns anything at all, or never learns anything thoroughly, who alone complains at my System saving "ninety-nine one hundredths of the time that the unassisted Memory would be occupied in making the same acquisition with equal thoroughness!! Yet these frivolous people, if they really do apply themselves to the study of my System, often win great success and become Memory-Athletes.
PRIME MINISTERS OF QUEEN VICTORIA.
With the dates of their Administrations.

Lord Melbourne (who was also Prime Minister in the concluding part
of the preceding reign), Sir Robert Peel, and Lord Aberdeen each
formed a single administration. The other statesmen having been at
the head of more than one Government, are dealt with by means of
Double Inclusions. Thus, Lord John Russell’s first administration is
indicated by the word Rust, and his second by Run. Lord Derby’s ad­
mnistrations are distinguished from Mr. Disraeli’s by the vowel em­
ployed in the Double Inclusion—De for Derby and Di for Disraeli, the
three governments of the former being indicated by the words Deft,
Den and Deem respectively, while the two of Mr. Disraeli are signified
by Ditty and Din. The Double Inclusions for Lord Palmerston are
Pat and Pain, while those of Mr. Gladstone’s governments are Glad
and Glean and Gleam, and the Marquis of Salisbury’s Salt and Sawn.

VICTORIA...first toast...foaming tankard...foaming (1837)...southern
sea...southern seaport...Melbourne...borne...carried...horseback...ride
(1841)...ride at anchor...ship...bark...Peel...peel rushes...rush (1846)...bullrush...bull ring...iron...Rust...rusty coat...poor relation...loan (1852)...mortgage...Debt...ledger...ledger line...line (1852)...verse...chapter...
dean...Aberdeen...Scotch...leal (1855)...disloyal...Fenian...Pat...patriot
...love of country...lore (1858)... “cupboard love”...cub...lion...Den...
dent...tooth...lip (1859)...bitten lip...Pain...sharp pain...sharp taste...
chili...chill (1865)...sweat...Run...runagate...Billing’sgate...Billings...Josh
(1866)...Joshua...Jericho walls...demolish...Deem...think...act...achieve
(1868)...success...song of triumph...Ditty...funny song...making fun...
chaff (1868)...banter...mirth...Glad...glee...choir (1874)...voices...noise...
Din...cannonade...fortification...fosse (1880)...ditch...field...Glean...
wheat...full-eared...full (1885)...full moon...Spring tide...salt sea...Salt
...Lot’s wife...“pillar of salt”...effigy (1886)...polished marble...shining...
gleam...darkness...darkening water...cuttle...fish (1886)...sawfish...
Sawn.

Let the Pupil memorise the foregoing so that he can recite the Series
correctly and with the greatest speed.

Mnemonic Keys.—What folly to use an artificial Series of 100 words, which are
committed to memory only after a study that would suffice to master my entire System—
and then try to tie up to these words the Kings of England, American Presidents, &c., &c.,
by means of mental daubs or childish stories 11 On the other hand, my Pupils find that
wherever there are IDEAS, or words as their representatives, to be cemented together,
they can unite them indissolubly in their memories by means of “true links of thought”
or memorised correlations. A gentleman who, when a boy, used to commit to memory
before the public 25 or 60 lines of prose or poetry, recently told me that he never knew nor
cared to know what the prose or poetry meant 11 He invented a silly story to tie the first
line to the first Key-word, the second line to the second Key-word, &c., &c., and all he
had to do in reciting, was to think of his Key! and recall what he had tied to each word
of it. The next day he could not recall even one line of it! He added that the practice
of inventing these false mnemonic stories had cultivated his fancy to such a morbid de­
gree, that his mind now wanders uncontrollably, and as a consequence he now never re­
cieves a vivid first impression 11 and hence, he says, he has the worst memory in Eng­
land!

I am the only Teacher of Memory who has succeeded in getting rid of Mnemoni­
cal Keys—not only in some cases but in all cases, and for this emancipation, as well as
for my other Original Methods and Discoveries, I am constantly in receipt of the most ac­
cetable appreciation from my grateful clients.
NAMES AND USES OF THE NINE PAIRS OF CRANIAL NERVES.

CRANIAL NERVES...head...casque...hooP (9 pairs)...barrel of oil...oil factory...OLFACTORY (1st pair)...manufacturing...smoke...small...scent-bottle...glass...optical glass...OPTIC (2nd pair)...optician...eyeglass...sight...eye-witness...ocular demonstration...MOTORES OCULORUM (3rd pair)...ocular motions...move the eye many ways...tear in the eye...PATHETIC (4th pair)...moving...move the eye obliquely...obtuse angle...triangle...TRIGEMINAL (5th pair)...gem...sparkling...eye...eyetooth...jaw...talk...tongue...sensitive...feeling...good feeling...good taste...taste...salt water...waves...motion...ocean...sailors...absent from home...ABDUCENT (6th pair)...sent out...see out...moves the eye outwards...ordered to face outwards...AUDITORY AND FACIAL (7th pair—hearing and expression)...face...mouth...ate...EIGHTH PAIR...ate a pear...smooth skin...glossy...Glosso-pharyngeal...congeal...unfixed...vague...Vagus (or pneu-mo-gastric)...gusty...blown back...back bone...Spinal accessory...sensory and motor)...spines...sharp criticism...hypocritical...HYPOGLOSSAL (9th pair)...glossary...foreign tongue...Tongue Muscles.

HOW TO LEARN MORSE'S TELEGRAPHIC ALPHABET AND THE ARMY FLAG SIGNALLING CODE IN ONE LESSON.

(1) In this Alphabet, Dots and Dashes are used to represent the letters of the Alphabet. When the equivalents of each letter in Dots and Dashes are learned, the Pupil only requires practice with the machine to become an expert Telegraphic Operator.

In learning Morse's Alphabet, I use temporarily and provisionally the word Short for Dot—and the word Long for Dash—and to represent Short I use the letter S, and for Long I use the letter L. So, hereafter, L always means a Dash and S always means a Dot. The letter A is represented by a Dot and a dash, thus .------; and in my way it is represented by S, L. B is represented by a Dash and three Dots, thus ------. . . or in my way by L S S S.

(2) Now, as in my Figure Alphabet neither h alone, w or y was ever reckoned, so in this case h, w and y are never considered. But, whilst not reckoning vowels at all, nor h, w or y, however combined, I do count any two other consonants coming together as two separate consonants, contrary to the rules of the Figure Alphabet. The only consonants I consider or make use of, are L and S.

(3) The Pupil is now prepared to make a word that shall indicate Dots and Dashes. What is the equivalent, in Dots and Dashes, of the word Soil? It means [see above] SShort [Dot], and L Long [Dash], or the letter A. Now, to remember that A in the Morse Alphabet is represented by a Dot and Dash, or by .------; I must correlate the letter A to the word Soil. Memorise the Correlation, thus: A...ale...hop gardens...SoiL.

(4) To remember that B is represented by a Dash and three Dots, or by ------. . . I must correlate the letter B to the word LaSSeS, thus: B...bee...spelling bee...lads...LaSSeS. Let the Pupil not proceed to the next letter till he has thoroughly memorised the Correlation of the one he has reached—one at a time and perfectly, and he will soon be able to
instantly answer as to the equivalents in Dots and Dashes of each of the letters of the alphabet. And then, and not till then, let him commence his practice with the Telegraph machine. And if the Pupil has a poor memory let him make his own Correlations, and learn them instead of learning mine. The most rapid and reliable Telegraphic Operator I ever knew, told me that it took him three months to learn Morse's Telegraphic Alphabet or Code given below, and yet he said that if he had then known my System, he could have learned it perfectly in one hour!! By my System, the least familiar and wholly unconnected ideas can be welded together permanently by natural links.

A ale...hop gardens ... ...SoIL ......
B bee...spelling bee...lads... ...LaSSeS ...:
C sea...damaged ship...fallen mast ...LayS LooSe ----
D dear...sweetheart...jilted... ...LoSS ..
E ... ... .... ...eaSe 
F effort...rope-dancer ... ...hiS SoLeS ..
G gee...plough...furrow...old age ...life's winter...hoLLieS
H aspirate...asphalt...road... toll road...aSSeSS ...
I eye...cold eye...serpent... ...hiSS :
J jay...blue...paint...oilman ...SeLL oIL ....
K cayenne...hen...Gehenna...pit-hole...whoLeSaLe ...----
L ell...old yard...farmyard...jackass ...SLy aSS ...
M eminent...high position... ...hiLL ---
N energetic...indolent...lawless ...LawS ...
O oath...oath of allegiance... ...LoyaLly ----
P pea-seed...sow thoroughly ...SLowly Sow ----....
Q acute...cunning...deep...well...awe...LL is Low ...
R arbitrary...autocrat...ruling alone ...SoLuS ...
S Esquimau...snow...alps... ...SwiSS ...
T teacup...cracked...leaky ...hoLe ----
U yew bow...bowman...attack ...aSSaiL ...
V venous blood...loss of blood... faint sighs...SighS SoaLway ...
W double...duplicity...simplicity ...SiLLy ...
X executed...homicidal perjury ...LieS SLay ...]
Y wise...foolish...idiotic puller ...hauL a SheLL ...
Z zeal...warmth...cold...hail (or), said he...called her ...hail a LaSSie ...

& join together...overcrowded hovels...aLL iLL 

In Army Signalling by means of Flags, the above Code is used, as described above [See Manual of Instruction in Army Signalling, 1884], with a few points in addition. If the Pupil wishes to add any further particulars, or should any changes be adopted at any time, he will know how to deal with them—in fact, as in other cases, so in this, it is better for him to make and memorise his own Correlations and send them to me for criticism.

FULL STOP (.) .point...point out...see...eyes .three eyes...III, or .
ERASURE . .blot out...dot out...dotted .line...line of dots... 

8
STOP ...leave off...don’t tease...T’s...line of T’s...

GENERAL ANSWER...correct answer...right...“right to a T”...T...

REPEAT...mock...imitate...I MI, or...

SIGNALLER’S INDICATOR...indication...clear...hazy...A’s...two A’s...

CIPHER SIGN ...Ci-Ci...C C...

BREAK SIGNAL ...break...bend...lean...foreshorten...four shorts...

MESSAGE ENDS...end...extremity...lower...extremity...toe...VEto...VE...

OBLITERATOR ...literary...letter...double letter...WW...

THE BRITISH TERRITORIAL REGIMENTS.

Many who know the regiments of the line well by their now abolished numbers, cannot remember their new territorial names. They can easily learn them by the aid of Correlations. Here are specimens:

OLD NUMBER. MEMORY INTERMEDIATES. PRESENT NAMES.

1st. heath...heather...Scotch...Royal Scots.
5th. howL...loud sound...thunder...Northumberland Fusiliers.
6th. waeGe...wage war...Warwick...Royal Warwickshire Reg.
7th. Key...whiskey...fusel oil...Royal Fusiliers.
8th. waVe...water...pool...Liverpool Regiment.
9th. Bee...behave...“before folk”...Norfolk Regiment.
10th. TieS...links...Lincolnshire Regiment.
11th. weTteD...Exe stream...Devonshire...Devonshire Regiment.
12th. TwiNe...cord...strangle...suffocate...Suffolk Regiment.
13th. anTuMn...tumbler...somersault...Somerset Light Infantry.
15th. hoTeL...a lift...a crane...a stork...East Yorkshire Regmt.
16th. ThatCH...cottage...cot...bed...Bedfordshire Regiment.
17th. DuKe...earl...Earl of Leicester...Leicestershire Regiment.
18th. TouGH...hard...rock...shamrock...Royal Irish Regiment.
26th. weNCH...black girl...blackmail...Scottish Rifles (1st batt.).
90th. BuSs...mail coach...blackmail...Scottish Rifles (2nd batt.).

The purpose of this Exercise must be at once clear to any unprejudiced Englishman. Suppose a Pupil is interested in the regiment which was known as “The 19th Foot,” and wants (now that the numbers are abolished) to remember its territorial name. He can memorise this Correlation:—The 19th...“ToBy”...Laurence Sterne...Yorkshire rector...Yorkshire Regiment.” Probably, if he knows that Sterne was a Yorkshire rector, as soon as he thinks of “The 19th” and “Yorkshire Regiment” together, Uncle Toby, the brightest character in all Sterne’s fiction, at once occurs to him as an aid in translating the familiar “19” and getting at the unfamiliar “Yorkshire Regiment.” I am told that a victim of Mnemonics, who sees in every list a Key! has said that the translations of the old numbers of the regiments from “Heath” to “Noose” (used to translate old regimental numbers, and for no other purpose), are meant to form a “Key” of 20 “Pega.” Is the man ignorant that British regiments were known by number-names, and are now known by territorial names: or has the ridiculous and false way in which he once trained his imagination enabled it to distort in his mind the useful things he sees as well as the stupid things he taught himself to fancy?
To make room for this note and to make it clear to the most thoughtless that it is as isolated facts—the old number-name to the new territorial name in each case—that the regiments are dealt with, we have left out some of the Correlations which were in former editions.

From the foregoing exercises it will be seen that there are no facts, however complicated, of Science, History, &c., &c., or in Daily Life, which my System cannot cope with and render their mastery easy—proving thus the greatest possible Labour-Saver and Time-Saver, and therefore Money-Saver.

Let the Pupil endeavour to apply the principles involved in dealing with the foregoing examples to OTHER and DIFFERENT cases and send samples to me for criticism.

Let the Pupil regard my Correlations as Samples merely to show him how Correlations are made, and let him make and memorise his own in all cases. [In every case I have used the less obvious Correlations, leaving the most obvious for the Pupil.] Let the Pupil not fail to memorise the Proper Names, Dates of Births and Deaths of Great Men, and the Order and Dates of the Kings of England. But it would be better still if he learned ALL the exercises, and if he takes little interest in some of them, the better they are as a true MEMORY-TRAINER and CONTINUITY-TRAINER.

Let the ambitious Student who wishes to obtain the unrivalled advantages of my System as a Method of Study, as well as its power as a Device for memorising and as a Memory-TRAINER, write out and send me an exhaustive set of questions on this lesson with the replies to them. Let no important point be omitted. The Pupil will, if he carries out this suggestion in regard to this and the remaining lessons, derive great subsidiary advantages, the full benefit of which will be obvious in the Last Lesson.

REST FROM WORK.—Pupils who are preparing for examination or are overworked in business, sometimes excuse their not sending exercises by saying they need all their leisure time for rest. True rest is not gained in idleness, but in change of mental occupation. If a student works eight hours per day at his regular studies, and rests at the end of every two hours, by spending half-an-hour over my System, he will find every time he returns to his regular task that he comes to it refreshed; and he carries it on with greater zest and alacrity in consequence of his devotion to my System during the intermediate half-hours. Let any pupil make the experiment and he will soon discover that he nearly doubles his usual acquisition every day!!! Thus doing the exercises in my lessons prepares my pupils to return to their other work with reinvigorated minds—besides giving them a new Memory and Continuity, which will lessen the labour over their future tasks and enable them to revive more readily than formerly, even what they learned before studying my System.
NOTICE.—That Pupil who has had no mental training—who cannot think at all except in a long familiar routine—and whose unfortunate mind-wandering prevents his application to any problem for more than half-a-minute! I can yet correlate together any pair of “Extremes,” provided he really and truly uses the Method set forth in the first two pages of this Lesson. If he should ever fail to correlate unconnected words together in any case, he may be assured that it is because he has neglected to apply and make use of this Infallible Method.

WHAT MENTAL TRAINING MEANS.

Perhaps the most valuable result of all education is the ability to make yourself do the thing you have to do when it ought to be done, whether you like it or not; it is the first lesson that ought to be learned; and, however early a man’s training begins, it is probably the last lesson that he learns thoroughly.—On Technical Education, by Thomas Henry Huxley, LL.D., F.R.S.

PART IV.

PREDICATING CORRELATION.

What do I mean by Predicating Correlation? I mean the practice of finding numerous predicates of a word, predicates that are related to it through In., Ex. or Con. Suppose you desire to correlate the word “Weaver” to the word “Kin,” and suppose you cannot find intermediates as quickly as you wish to, you can turn this difficulty into a means of learning how to make Correlations, in all cases whatsoever, by proceeding scientifically and exhaustively in such cases to find as many predicates as you can that are related to each of these “extremes” through In., Ex. and Con., and only indirectly to each other; placing over the word that sustains the relation of In. to the “extreme” the figure 1, the figure 2 for Ex., and 3 for Concurrence, thus:

```
3 3 3 3 3
“The Sisters three,” Linen, Cloth, Thread, Wool, Child’s Loom,
3 3 3 3 1 1
Shuttlecock, Cloth, Spitalfields, Yarns, Spindle, Woof, Spider, Fate,
3 3 3 3 3
Web, Captain Webb, Coventry, Wool, Steam-power Loom.
```

Proceed in the same way with the next extreme, “Kin,” thus:

```
1 1 1 1 1 1
“The Sisters three,” Napkin, Doeskin, Connection, Kink, Lambkin,
1 1 1 1 1 1
Kindergarten, Kintal, Kinship, Pumpkin, Relation, Manikin, Family
1 1 1 1 1 1
```
After an exhaustive enumeration of all you know of each extreme it would be easy to make Correlations, thus:

**WEAVER.**

1. — "The Sisters three."
2. — Linen...Napkin.
3. — Cloth...Dyeskin.
4. — Thread...Connection.
5. — Thread...Snarl...Kink.
6. — Wool...Lamb...Lambkin.
7. — Child's Loom...Kindergarten.
8. — Shuttlecock...Throw...Kintel.
9. — Cloth...Sails...Ship...Kinship.
10. — Spitalfields...Cornfields...Pumpkin.
11. — Yarn...Sailors' Yarn...Narrative...Relation.
12. — Spindle...Dwindle...Dwarf...Manikin.
13. — Woof...Warmth...Affection...Family Affection.
14. — Spider...Cobweb...Old House...Household Relations.
15. — Fate...Hopeless...Sanguine...Consanguinity.
16. — Web...Deceit...Cheat...Cozen...Cousin.
17. — Captain Web...Swimmer...Fish...Fin...Affinity.
18. — Coventry...Lady Godiva...State of Nature..."One touch," &c.
19. — Wool...Hair...Hare & Burke...Accomplices in Blood...Blood Relations.
20. — Steam-power Loom...Engine...Furnace...Coal...Kindler.

By this practice of finding as many Predicates as possible of each "extreme" through In., Ex. and Con., the Pupil learns to look on "all sides" of a word or subject—a habit which can be acquired by the careful dealing in this way with all the words in the Presidential Series, and by placing over each word 1, 2, or 3, to show the relation that it bears to the Correlating Word itself. Let the Pupil send me a list of other words related through In., Ex. and Con. to each of the words in the Presidential Series.

**Remarks.**—My Pupils can strengthen their retentiveness or reviving power by recalling and describing to friends the scenes and events of the day, as soon after their occurrence and as frequently as possible. Let them also never hear a lecture or sermon without giving as full an account of it as they possibly can to their acquaintances. They will soon find in what particulars their mind wanders, and they can hereafter pay closer attention to such matters. It is a high attainment to be able to give a graphic description of a scene, a show or exhibition of any kind; but I recommend this practice because it invigorates the re-
viving power of the Memory, and helps to bring the Memory under the
control of the Will. Let the Pupil repeat many times every good story
or anecdote he hears, &c., &c. I have known many Pupils who had
naturally no command of language, and whom the phrenologists would
have discouraged from attempting to acquire instant control over words,
become fluent talkers and speakers, by acting on the suggestions here
given, and by doing all the exercises demanded by my System. And it
does not take one-tenth of the time that one might suppose. It comes
about so quickly that the Pupil can scarcely perceive when the change
took place.

ALWAYS ABRIDGE THE PROBLEM OF MEMORY.
There are three kinds of Levers:

**First Order.**—When the Fulcrum is between the Power and the re­sisting Weight. [Here the Fulcrum in the middle.]

**Second Order.**—When the Fulcrum is at one end and the Weight
nearer to it than the Power. [Here the Weight in the middle.]

**Third Order.**—When the Fulcrum is again at one end, but the Power
nearer to it than the Weight. [Here the Power in the middle.]

Or, briefly—
1st Order.—Fulcrum in the middle.
2nd Order.—Weight in the middle.
3rd Order.—Power in the middle.

When, as in 1st Order, the Fulcrum is in the Middle, it is obvi­ous that the Power is at one end and the Weight at the other end. So
by remembering in each case which is in the Middle, the Pupil necessarily
knows that the other two elements are at the ends. Since both Order
and Middle are repeated in each case, both Order and Middle may be
disregarded, and all the Pupil has to do is to correlate [and memorise
his Correlations], First to Fulcrum, Second to Weight, Third to Power,
and he knows the three kinds of Levers—

FIRST ...first piece...last piece...crumb... FULCRUM.
SECOND...minute...hour...clock...clock-weight... WEIGHT.
THIRD ...third finger...ring...political ring...political power... POWER.

OXFORD & CAMBRIDGE UNIVERSITY BOAT RACE, 1839—1885.

The thoughtful Pupil will notice the following particulars in my
Method of dealing with the above:—(1) In dealing with a series like
this, Mnemonics is hors de combat without the boasted "Wheelbarrow"
euphemistically called a "Key"—100 objects, sometimes 500 or 1000,
ideally placed on the floors, walls, and ceiling of rooms, or otherwise
localised in figured situations, called "Pegs." To this series of fixed
objects the Mnemonist "associates" by his "Links" or "Associations"
any other series, such as the Kings of England, Popes of Rome, the
Sixty-four Elements of Chemistry, the Thirty-nine Articles, the Dates
of the Oxford and Cambridge successes in the University Boat Race,
Topics or Heads of numerous Sermons, Addresses, or Lectures; in
short, everything and anything that is to be remembered!!!—a Pro-
crustes’ Bed to which everything is to be fitted by Contortion or Distortion, with the inevitable result of making this Anarchical Machine “a measure” of the Universe and of all that is therein, and the operations of the mind of the Adapter the very Climax of Artificiality! ! ! By this False Process, the Natural Sequence of Ideas in the Subject-Matter itself is always either introverted, perverted, or destroyed. I use no Key or Artificial Set of unrelated words—but by CORRELATIONS I deal directly with the things or ideas themselves. —(2) I do not even use the words Oxford or Cambridge in memorising the respective Dates of their successes! ! —(3) To indicate a Date I translate the two last figures of it into a word, as, for 1836 I use MATCH, as that translates 36—and these Date-words I Correlate together; and to indicate when Oxford won I add d or t to the Date-word, thus making in all the Oxford cases a word containing three sounded consonants (thus “A Round” = 42 and “one,” in 1842 Oxford won), and by exclusion and those words containing only two sounded consonants must be Cambridge winnings!! Similarly, in learning the Dates of the Battles of any country, we could indicate, by an added consonant, the battles won, and all Date-words lacking that designation must note the battles lost, &c. The application of this principle is varied ! ! —(4) To indicate the two years, 1831 and 1835, when no race was run, but in which a notable event occurred, I translate the entire years, as, 1831 into “DEAF MAID,” and 1835 into “A TOO HEAVY MAIL.” And to indicate the year 1877, where neither Oxford nor Cambridge won, but when there was a “dead heat,” I use the phrase, “To have a Gig.” —(5) Since the Putney course has been used, all but nine of the races have taken place on Saturday. I fix two exceptions, after having first Correlated the Time of the Races; thus, “Time”—end of time—end of the week—“Saturday.” —(6) As Oxford won continuously from 1861 to 1869, both inclusive, it is sufficient to correlate Date-words for those two years together, thereby inferentially indicating the intermediate years! ! —(7) As there was a race every year from 1856 to 1885, it would be sufficient to correlate together the Date-words for the Cambridge successes for those years, and by exclusion we should know the years also in which Oxford won or vice versa! ! —(8) All the facts mentioned in the foot notes are indicated in the course of the Correlations! ! and without the possibility of producing any confusion! ! —(9) As the colors of both Universities are blue, it is only necessary to memorise the shades of blue, as is done below.—(10) In addition to the mass of facts treated below, my Method would enable the Pupil to attach any number of additional facts to each of them by memorised Correlations, such as the number of lengths either boat won by, the names of each crew, &c., &c., &c., &c.
recite the series thus: 1829, Oxford; 1831, Cholera; 1835, Challenge; 1836, Cambridge; 1839, Cambridge; 1840, Cambridge; 1841, Cambridge; 1842, Oxford, or vice versa, &c., &c.; then recite the entire series both ways at least 20 times from memory; and then report to me how long it takes you to recite the series. And afterwards recite the series before your friends, both forwards and backwards, and let them also examine you on the lesson in any way to test your memory—never telling them how you learned the series—and only letting them have the accompanying paper.

COLOURS—Boat race...boat...blue sea...BLUE.

OXFORD...ox...heavy...heavy clouds...DARK...dark coins...pence..."d "...add "d"

CAMBRIDGE...bridge...arch...spring...LIGHT.

RACE DAY—Racing boat...sliding seat...sat...SATURDAY *

UNIVERSITY—Universal...orb...motion...speed...race—

BOAT RACE—

[1831] DEAF MAID—Dress...collar—

...death...black death...black mail—

CHOLERA †

[1835] A TOO HEAVY MAIL—Armour...champion—

...dowel...fire—

1836. MATCH—

Wedding...tour—

1836. MAP—

Route...course—

1840. RACE—

Track—

1841. ROAD—

Carriage drive...circular drive—

1842. AROUND—

Turning round...dizzy—

1845. REEL—

Stagger...mortal wound...MORTLAKE §...Killarney—

1846. IRISH—

Linen...draperies...outfitters—

OUTRIGGERS |

1849. HARP—

Rapid fingerings—

1849. RAPID—

Flight...bird...FOUL ‡...waterfowl...landfowl—

1850. LAND—

Landlord—

1850. LAIRD—

Country seat—

1856. LODGE—

House...door...lock—

1857. LOCKET—

Chain...cable...ship...keel—

KEELLESS **

1858. LEAF—

Paper...folding...overlapping—

1859. LAPPE—

Tippet...tip up...sink—

1862. LACED—

Cinders...coal—

1865. LAID—

Country seat—

1866. LODGE—

House...door...lock—

1867. LOCKET—

Chain...cable...ship...keel—

...lesson...lesson-book—

1868. LEAF—

Paper...folding...overlapping—

1869. LAPPET—

Tippet...tip up...sink—

1870. GAS—

Escaped—

1871. CAUGHT—

Taken...receipts—

1872. GAIN—

Money...registered letter...envelope—

1873. GUM—

Stick...slip...slide—

SLIDING SEATS §§

1874. GORE—

Blood...bloodshed—

1875. GUIL—

Murder...wound—

1876. GASH—

Scare...car—

1877. TO HAVE A GIG—Two wheels...equal motion...equal—

DEAD HEAT ||

...tie...knot...knotty...crabbed—

CRAB ||

1878. GIFT—

Bequest...question...open—

1879. GAPE—

Make faces—

1880. FACES—

Moonset...MONDAY §§...mouldy—

* Out of 36 races over the Putney and Mortlake course, all but 9 were rowed on a Saturday.
† Not rowed owing to prevalence of cholera. ‡ The challenge of 1834 still unaccepted.
§ First race over the Putney and Mortlake course. | First race rowed in outriggers.
¶ In this Race there was a " Foul "—that is, a collision between the Boats.
** First Race in the present style of Boats without keels. †† The Cambridge Boat sank.
‡‡ Oxford won for 9 years. §§ Sliding Seats used for the first time.
|| The Race was a Dead Heat. The Oxford bow-man caught a crab, and sprang his car when leading.
§§ Bowed on a Monday because of fog on Saturday. The first race postponed.
HOW TO MEMORISE THE RATIO OF CIRCUMFERENCE TO DIAMETER BY CORRELATIONS.

If the Pupil did not learn the 71 Sentences below when he studied Supplement to First Lesson, let him give special attention to this Exercise, as it is a very valuable one. When you have properly gone through it, and thoroughly mastered it, so as to be able rapidly, without hesitation or stumbling, to repeat the first 149 figures of the "Ratio" to your friends, much will have been accomplished towards general strengthening of your memory, cure of Mind-wandering, and promotion of Self-confidence. And, with a little perseverance and exercise of the brains, any schoolboy can master so much of this Exercise. But, besides this general improvement of valuable faculties, the Pupil will have learned how to commit to memory difficult poetry, prose, conjugations, declensions, mathematical formulae, &c., by Correlations. If you want to know what the "Ratio" means, look to page 126 of this lesson; all you have to do at present is to learn 15 of the following sentences, and by their aid say the 149 figures which these sentences represent, and which you have already written down on an exercise on your Figure-Alphabet Lesson.

Every Pupil must learn at least 15 of the following sentences by the aid of Correlations, if he did not learn them by Interrogative Analysis in Supplement to First Lesson, and then think the words in the 15 sentences, and say the 149 figures which the words in those sentences represent.

To try to learn any of the figures by repetition is not an exercise in my System.

To recite the entire series of 708 Figures of this Ratio, in the exact order, is a feat quite impracticable to one with unassisted Natural Memory. To my pupils the feat is not a difficult one.

The following sentences contain the entire series of 708 figures, translated in accordance with the Figure Alphabet in the Supplement to the First Lesson:

- Mother Day will buy any shawl.
- My love, pick up my new muff.
- A Russian jeer may move a woman.
- Cables enough for Utopia.
- Get a cheap ham pie by my cooley.

* Rowed on Monday, owing to Prince Leopold’s Funeral taking place on the Saturday.
† See Genesis i: 7.
‡ For complete details, see "Record of the University Boat Race," published by Bickers & Son, London.
The slave knows a bigger ape.
I rarely hop on my sick foot.
Cheer a Sage in a fashion safe.
A baby fish now views my wharf.
Annually Mary Ann did kiss a jay.
A cabby found a rough savage.
A low dumb knave knew a message showy.
Argus up my fire rushes.
A bee will lose life in enmity.
A canal may well appear swift.
Never have tidy Dick early.
Has no fear to see a new ghost.
A beam fallen at dizzy Lulu.
We will be a sure arch in a new pier.
Feeble are poems home-fed.
A butcher ran off feet soppy.
A College shall buy my mirror.
Shoot in a fury, ugly Sheriff.
Naomi may give Jack half my tea.
Shall we now cut Annie's topaz.
Peter will shear a village hedge.
Upon my ridges moor a fish.
To soar lower may nudge a Jury.
Find my map, my Chiswick.
Now choose anew our better Eden.
Coming near love kisses.
Ji-Ji has jammed a whole leaf off.
Take rough, fat, lamb-soup.
A nice patch in a funny panel.
Raise bad cattle, major.
A magic fop knew a well opossum.
Joses taught him my sole hymn.
A sailor if vain has a rich joy.
You allow no time for authorship.
Let a pert lad teach us.
A bear may muzzle a gun-case.
My shallow cool pulp-tub.
A lamb's pint of shady dew.
Come off top, my newish ditty.
A cup may dazzle at a haughty hovel.
Refuse queer, rich, new muck.
Baby Jenny wooing her pale cheek.
Melt half a flakey lining.
Any roof bought in New Cobham.
Heave it off, my sooty deep robe.
A tiny hoop of mamma shook a mummy.
China warriors usually weigh each a share.
A massive chosen at my ball.
Stitches pin our ruffs.
Going now amiss by our machine.
Full looms push chains.
No quail will shape my big pie.
A heavy ship will soon annoy a new rock.
Her puppy shone as a choice care.
Bacchus may swear at any match.
A shy heavy wife shut a bible to-day.
Suasive weapons win him fame.
Cuckoos untamed are touchy.
We buried Dobson by five.
You love Annie Laurie, you wretch of a Doge.
He may pick up pipes, Rachel.
Picus is safe to accuse us.
No Pasha may deny my awaking him.
Folk may run his ferret home.
Escape it early to-day, if you may.
Paphia's legacy pay off wholly.

1. You cannot wish to recite the Ratio of the Circumference to the Diameter without first thinking of the word Ratio. Correlate Ratio, as the BEST KNOWN, to the word Mother, the first word in the first sentence, thus:—

RATIO...Relation...Dearest relation...Mother.

And memorise the Correlation. You do not memorise it by reading it over, but by repeating it from memory forward and backward several times, always concluding by recapitulating the two extremes: thus, Ratio...Mother, Mother...Ratio.

Next memorise the first sentence by Synthesis, for you must see at once that Analysis will not apply to the successive words in a sentence. Hence, Mother must be Correlated to Day [unless you know some Mother Day very well indeed, so that there is a strong concurrence over the word]:

MOTHER...Lullaby...Sleep...Night...DAY.

Whenever you Correlate any part of a sentence, repeat that part so as to re-impress the Correlation on your mind; thus, "Mother Day"—She will do what? "Day" has no analytical connection with "Buy;" so you must Correlate them together—
DAY...Day-book...Buyers...“BUY.”

“Mother Day will Buy”—Buy what?

“BUY”...Cash...Cashmere...“SHAWL.”

“Mother Day will buy any Shawl.”

(a) To connect the first sentence with the second, Correlate the last prominent word in the first to the first prominent word in the second, thus:

SHAWL...Warmth...Affection LOVE.

Proceed in a similar way with the other sentences.

2. LOVE...Lovers’ quarrels...“Picking a quarrel”...PICK UP...upstart...

parvenu...NEW...Old...Old age...Muffled voice...MUFF.

(b) MUFF...Fur...

RUSSIAN.

3. RUSSIAN...Sledge...Horse...“Gee”...JEER...Taunt...Excite...Stir...

MOVE...Motion...Emotional...Tender-hearted...Womanly...WOMAN.

c) WOMAN...

Thimble...Rig...Bigging...Ropes...CABLES.

4. CABLES...Strong...Sufficiently strong...ENOUGH...“More than enough”...Sir Thomas More...UTOPIA.

(d) UTOPIA...Dreamland...Bed...Getting up...

GET.

5. GET...Get-penny...Penny Cake...CHEAP...Cheapside...Coffee-house...

HAM PIE...Hot mutton pie...Hot...Cool...COOLEY.

e) COOLEY...

Negro...Slave.

6. SLAVE...“Greek Slave”...Knows Greek...KNOWS...Letters...Capital letters...Big...BIGGER...Smaller...Small boy...Copy book...

Imitate...APE.

(f) APE...

Trick...Freak...Frequently...

RARELY.

7. RARELY...Seldom...Sell...Licence...Beer...HOP...Pole...Mast...

Ship...Sea-sickness...SICK...Feeble...Lame...Lame foot...FOOT.

g) FOOT...

Ball...Gaiety...

CHEER.

8. CHEER...Christmas...Goose...Seasoning...SAGE...Wisdom...Folly...

FASHION...Shun...Danger...Safety...SAFE.

(h) SAFE...

Sound...Noise...Crying...

BABY.

9. BABY...Bassinet...Net...FISH...Sunfish...Sunday...To-day...NOW...

Present time...Men of the Time...Biographical sketches...Sketches...VIEWS...Marine views...Land...Landing...WHARF.

(i) WHARF...

Goods...Accounts...Half-yearly...

ANNUALLY.

10. ANNUALLY...Ann...MARY ANN...Merry...Xmas...Mistletoe...

Kissing...DID KISS...Steal a Kiss...Theft...JULY.

(k) JAY...

Blue...Fly...Cab...

CABBY.

11. CABBY...Fair...Cattle...Sheep...“Lost”...FOUND...“Crier”...

Scream...Rough Usage...ROUGH...Unpolished...Uncivilized...

SAVAGE.

(l) SAVAGE...

Wild beast...Roar...Bellow...

LOW.

12. LOW...Low voice...Voiceless...DUMB...Dummy...Card...KNAVE...

Nave...Church...Prophet...KNOWS...News...Paper Note...MESSAGE...Proclamation...Bill...Showbill...SHOWY.

(m) SHOWY...

Show...“Show cause”...Argue...

ARGUS.

13. ARGUS...Wakeful...Early up...UP...Sweep...Chimney...Grate...

FIRE...Sparks...Fly up...RUSHES.

(n) RUSHES...

Rocket...Whiz...Buz...BEE.

14. BEE...“Busy”...Will...WILL...Temper...Tempest...LOSE...

LIFE IN...Death...Duel...ENMITY.

(o) ENMITY...

Enemy...Trench...

CANAL.
Correlate—(a) (b) &c.—the Suggestive Word at the end of one sentence to the Suggestive Word at the beginning of the next sentence, so that you can recite the entire 15 sentences in the exact order rapidly.

When you can do this with ease and certainty, instead of repeating the sentences, repeat aloud the figures which the sentences can be translated into, and you will thus know and be able to recite the RATIO of the CIRCUMFERENCE to the DIAMETER, expressed by the integer 3 and 148 decimals! After a little practice you can say them backwards. In repeating them either way never speak aloud the sentences or the Correlations, which must, of course, be perfectly memorised.

When you can recite from Memory the entire 149 figures in the exact order and without mistake, you can hand not this paper—but the small paper that accompanies this one, and which contains only the figures—to any acquaintance and let him hear you recite them! Of course you will not give him the faintest idea of how it is done! Recite the 149 figures at least 20 times. Do this to as many persons as you can get the opportunity. No exercise is better than this, either for the Memory, or concentration, or confidence.

You will find it good practice to learn the other 56 sentences by your own Correlations, but you need not put off learning your next lesson until you have finished the memorising of these.

It will not be difficult to learn all the 71 sentences and to practice thinking through them and saying the figures. Doing this before other people, will cause amusement and astonishment, and will be an excellent exercise for cure of discontinuity and nervousness.

Mnemonic teachers sometimes print a large number of figures selected to suit a particular scheme, so that they are known at once by one who understands the arrangement, but no other set of figures can be learned in the same way. But this set of figures is one which actually occurs, not one arranged arbitrarily to suit a system, so of course any figures could be learned in the same way.

Let me once more enjoin it upon the student to memorise at least the 15 sentences, exactly as I have directed, by repeating the parts correlated together each time, as I pointed out in the case of "Mother Day will buy any Shawl." Let him memorise my Correlations, if he cannot make any to send me. But, if he can, it is much better for him to make and memorise his own. Let him remember (1) wherever his natural memory fails, (2) to CORRELATE. In learning Conjugations, Declensions, Poetry, &c., &c., a pupil must principally rely upon the increased memory power which my System has given him, but, if in any case that fails, he must Correlate. Thus, a student, in learning the conjugation of the French Verb Avoir, could never remember what followed Ils in the third person...
plural of the Passé Défini, i.e., *eurent*. I told him to Correlate them and memorise the Correlations, thus:—

ILS...Eels...Eel-pot...Water-pot...Ewer...EURENT.

Similarly, he would Correlate the principal parts of irregular Verbs, &c., &c.

*It is often important to know the relation between a circle and its diameter, and to ascertain this, Euler constructed the following formula:—

\[
\frac{\pi}{4} = 4 \tan^{-1} \frac{1}{2} - \tan^{-1} \frac{1}{16} + \tan^{-1} \frac{1}{256}
\]

This, translated into popular language, would be as follows:—

\[\pi \] divided by four is equal to four times the inverse tangent of one-fifth, minus the inverse tangent of one-seventieth, plus the inverse tangent of one-ninety-ninth.

The Correlation of the above is as follows:—

π...Pie...Carved...DIVIDED...Half...Quarter...Fourth...FOUR...Square...Equal Sides...EQUAL...Multiples of Equals...Twice as great...Three times...FOUR TIMES...Times...Leading Article...Prose...Verse...INVERSE...Inverted Order...Rank...Gentleman...Gent...TANGENT...Tan...Hide...Drum-head...Drum...Fife...ONE-FIFTH...Less than one...Less...MINUS...Mine...Descent...Ascent...Reverse of Descent...Reverse...Inverse...INVERSE TANGENT...Circle...Eternity...Time...Man's life...Three-score-and-ten...Seventy...ONE-SEVENTIETH...Fraction...Division...Addition...PLUS...Surplus...Too many...Many words...Conversation...Converse...INVERSE...TANGENT...Tangible...Evidence...Law...General rule...“Ninety-nine times out of a hundred ” ONE-NINETY-NINTH.

Similarly, he would translate, and if his memory and attention are still weak, he would correlate and memorise any other mathematical formula, sentence, or proposition, the rule being to Correlate the Grammatical Subject to the Verb, and the Verb to the Predicate, and as many other words as the Pupil finds to be necessary. Of course he can often memorise a sentence by a few repetitions, but he will soon forget it! ! What he learns by memorised correlations he will never forget. And, after a little practice, he can memorise a whole page by memorised correlations in half the time he could possibly memorise a fourth of a page by *rote*.

Dr. William Rutherford, F.R.A.S., of the Royal Military Academy, Woolwich, founded upon Euler's formula, a computation of the ratio of the circumference of a circle to its diameter. This—the diameter being 1—was calculated to 208 places of decimals. It appeared in the "Philosophical Transactions," Part II., for 1841. It was found that the last 56 figures of the 208 were incorrect. In 1851, Dr. Rutherford corrected the error and continued the calculation to 350 decimals; and in March and April, 1853, Mr. William Shanks, of Houghton-le-Spring, Durham, founded on Machin's formula a calculation of the ratio carried on to 607 decimals. He published his calculations and their results in 1858, in a book entitled "Contributions to Mathematics." Mr. John Morgan having found some errors, Mr. Shanks corrected them and car-

*Only students of mathematics need read the portion between brackets.*
ried on the ratio to 707 decimals, in which form it was presented to the Royal Society in 1873, and is given (in figure-letters) on pages 121, 122, 123.}

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**MEMORISING PROSE AND POETRY.**

**FIRST STAGE FOR WEAK MEMORIES—THE ANALYTICO-SYNTHETIC METHOD.**

[An enumeration of all the propositions to which a sentence is reducible, supplemented by memorised Correlations.]

**SECOND STAGE FOR DEVELOPED MEMORIES.—THE INTERROGATIVE ANALYSIS.**

[A two-fold enumeration of all the distinct ideas or thoughts of a sentence.]

In committing to memory rules of grammar, definitions in the sciences, &c., &c., learners often make a very grave and life-long mistake in trying to merely learn them by heart by endless repetitions. On the contrary, the Pupil should first grasp and realise the meaning and significance of what he wishes to have at command by converting second-hand knowledge into first-hand knowledge. The former is what other people tell us. It is hearsay. It is not the result of our own observation or thinking. If we study Botany, or any facts that are addressed to the senses, we must always convert the second-hand or hearsay knowledge into knowledge at first-hand by having our own experience in regard to it. We must see and handle the flowers, &c., and then we can have knowledge of them at first-hand. So with Chemistry, Anatomy, and other departments of learning where we can have, in regard to the subject-matter, the same kind of experience which the authors of the books have had. Unless we do this, we merely learn by heart without any necessary absorption or assimilation of the ideas or views inculcated. If we read over a sentence, every subsequent re-perusal of it is done without finding any novelty in it, and the inevitable result is that, in learning it by heart by means of endless repetition, the attention begins to wander after the first perusal! ! Hence, those who learn by heart in the ordinary way become great mind-wanderers. This ruinous result would be avoided if they learn by intellectual absorption, or by converting the second-hand knowledge into first-hand knowledge. This can be done by analysing the sentence, or by reducing its meaning to its lowest terms or simplest form consistent with sense, and then adding on to this primitive form the successive modifiers of the Subject, Verb and Predicate, so as to restore by Synthesis its original shape, as was exemplified in the First Lesson and its Supplement. This should always be done in the case of unfamiliar abstract ideas, and in this way you make them your own. To illustrate: suppose the Student wishes to commit to memory Blackstone’s definition of Municipal Law: “Municipal law is a rule of civil conduct prescribed by the supreme power in a State commanding what is right and prohibiting what is wrong.” Suppose the Student has carefully read over his exposition of the different parts of this definition, and that he understands them. After this, he usually fixes the definition in his memory by endless repetition!! And if he memorises many passages in a similar manner, he
will become a great mind-wanderer! But rather than this, let him try my Method as stated above. He first says—(1) Municipal law is a rule. (2) Municipal law is a rule about right and wrong. (3) Municipal law is a rule commanding what is right, and prohibiting what is wrong. (4) Municipal law is a rule of civil conduct commanding what is right and prohibiting what is wrong. (5) Municipal law is a rule of civil conduct prescribed, commanding what is right and prohibiting what is wrong. (6) Municipal law is a rule of civil conduct prescribed by the supreme power of a State commanding what is right and prohibiting what is wrong. In this way his attention is enchained and interested; and, proceeding from the simple to the complex by successive additions, the mind has time to assimilate the ideas and an intellectual growth is the result, and the attention is strengthened and the memory most vividly impressed, and he will retain the comprehension of the definition as long as he lives. If his memory and attention are both weak, he may have to repeat the recital several times from memory [not by reading it over and over again], and he should then consolidate the definition by memorised Correlations, and similarly in other cases, he finally succeeds in making Blackstone’s idea permanently his own. Again, a Pupil sends me the following definition of the First Law of Motion, taken from a recent work: “A body in a condition of relative rest continues in that state until some force acts upon it.” Before seeking to understand the meaning of this sentence he must acquire a clear idea of the difference between absolute and relative rest. Then he proceeds—(1) Rest continues until some force acts upon it. (2) Relative rest continues until some force acts upon it. (3) A body at relative rest continues until some force acts upon it. (4) A body at relative rest continues in that state until some force acts upon it. (5) A body in a condition of relative rest continues in that state until some force acts upon it. Again, take the sentence “Mother Day will buy any shawl.” You proceed thus—(1) Mother buys a shawl. (2) Mother buys any shawl. (3) Mother will buy any shawl. (4) Mother Day will buy any shawl. Again, take the sentence—“The active principle of the stomach is a hydrolytic ferment named pepsin.” Presuming that the pupil has carefully ascertained the exact meaning of the words so that he knows precisely what the sentence means, he then goes on to fully assimilate that meaning thus: (1) The principle is a ferment. (2) The principle is a ferment named pepsin. (3) The active principle is a ferment named pepsin. (4) The active principle of the stomach is a ferment named pepsin. (5) The active principle of the stomach is a hydrolytic ferment named pepsin. In a similar manner the Pupil will proceed with any other sentence containing ideas that are unfamiliar to him or a sentence containing familiar ideas, but in an unfamiliar form; and let him note that, if only one or more points are new to him, he should manage to bring that in early in reconstructing the sentence, so as to have the benefit of the renewals of that idea as many times as possible in connection with what was before familiar. Suppose in the last sentence the idea new to him was that the ferment was hydrolytic; then he might proceed thus: (1) The principle is a ferment. (2) The principle is a hydrolytic ferment. (3) The principle is a hydrolytic ferment named pepsin. (4) The active principle of the stomach is a hydrolytic ferment named pepsin. (5) The active principle of the stomach is a hydrolytic ferment named pepsin.
"Generally speaking, a person of unsound mind cannot make a conveyance of land."
(1) A person cannot make a conveyance. (2) A person cannot make a conveyance of land. (3) A person of unsound mind cannot make a conveyance of land. (4) Generally speaking, a person of unsound mind cannot make a conveyance of land.

"An agent selling property of his own to his principal must disclose the fact."
(1) An agent selling property. (2) An agent selling property to his principal. (3) An agent selling property of his own to his principal. (4) An agent selling property of his own to his principal must disclose the fact.

"No injustice is done to a person by an act to which he consents."
(1) Injustice is done. (2) No injustice is done. (3) No injustice is done by an act. (4) No injustice is done to a person by an act. (5) No injustice is done to a person by an act to which he consents.

"He who is a friend loves, but he who loves is not necessarily a friend."
(1) A friend loves. (2) He who is a friend loves. (3) He who is a friend loves, but he is a friend. (4) He who is a friend loves, but he who loves is a friend. (5) He who is a friend loves, but he who loves is not a friend. (6) He who is a friend loves, but he who loves is not necessarily a friend.

"The first principle and source of good writing is to think justly."
(1) The principle is to think. (2) The principle is to think justly. (3) The first principle is to think justly. (4) The first principle of writing is to think justly. (5) The first principle and source of writing is to think justly. (6) The first principle and source of good writing is to think justly.

"I thank God I am no more afraid to die; but as cheerfully put off my doublet at this time as ever I did when I went to bed."
(1) I am afraid. (2) I am afraid to die. (3) I am no more afraid to die. (4) I thank God I am no more afraid to die. (5) I thank God I am no more afraid to die; but put off my doublet. (6) I thank God I am no more afraid to die; but put off my doublet at this time. (7) I thank God I am no more afraid to die; but cheerfully put off my doublet at this time. (8) I thank God I am no more afraid to die; but as cheerfully put off my doublet at this time as when I went to bed. (9) I thank God I am no more afraid to die; but as cheerfully put off my doublet at this time as ever I did when I went to bed.

"A sense organ is a structure forming the peripheral termination of a sensory nerve, and specially differentiated so as to react on a special kind of stimulus."
(1) An organ is a structure. (2) A sense organ is a structure. (3) A sense organ is a structure forming the termination of a nerve. (4) A sense organ is a structure forming the termination of a sensory nerve. (5) A sense organ is a structure forming the peripheral termination of a sensory nerve. (6) A sense organ is a structure forming the peripheral termination of a sensory nerve and differentiated to react. (7) A sense organ is a structure forming the peripheral termination of a sensory nerve.*

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* Peripheral means pertaining to or constituting the surface of a body [from Greek: peri around, and phere to bear.]
nerve and differentiated to react on a stimulus. (8) A sense organ is a structure forming the peripheral termination of a sensory nerve, and specifically differentiated to react on a stimulus. (9) A sense organ is a structure forming the peripheral termination of a sensory nerve, and specially differentiated so as to react on a kind of stimulus. (10) A sense organ is a structure forming the peripheral termination of a sensory nerve, and specially differentiated so as to react on a special kind of stimulus.

"Sensation is a simple mental state resulting from the stimulation or excitation of the outer or peripheral extremity of an in-carrying or sensory nerve."

(1) Sensation is a state. (2) Sensation is a mental state. (3) Sensation is a simple mental state. (4) Sensation is a simple mental state resulting from stimulation. (5) Sensation is a simple mental state resulting from the stimulation of a nerve. (6) Sensation is a simple mental state resulting from the stimulation or excitation of a nerve. (7) Sensation is a simple mental state resulting from the stimulation or excitation of the extremity of a nerve. (8) Sensation is a simple mental state resulting from the stimulation or excitation of the extremity of an incarrying or sensory nerve. (9) Sensation is a simple mental state resulting from the stimulation or excitation of the outer extremity of an incarrying or sensory nerve. (10) Sensation is a simple mental state resulting from the stimulation or excitation of the outer extremity of an incarrying or sensory nerve.

"Αλεν άριστειν καὶ υπερφόρον έμμεναι άλλαν." (1) Άλεν άριστειν. (2) Άλεν ό ριστειν καί έμμέναι. (3) Άλεν ό ριστειν καί υπερίρον έμμέναι. (4) Άλεν ό ριστειν καί υπερφόρον έμμέναι και λ.κ.ω.ν. (Iliad, V, 208.)

"Jus accrescendi inter mercatores locum non habet."

(1) Jus accrescendi. (2) Jus accrescendi non habet. (3) Jus accrescendi. (4) Jus accrescendi inter mercatores locum non habet. (5) Jus accrescendi inter mercatores locum non habet.

Take the sentence "Any work that deserves thorough study, deserves the labour of making an Abstract; without which, indeed, the study is not thorough." (1) The study is thorough. (2) The study is not thorough. (3) Without which, indeed, the study is not thorough. (4) Any work deserves the labour of making an Abstract; without which, indeed, the study is not thorough. (5) Any work that deserves thorough study, deserves the labour of making an Abstract; without which, indeed, the study is not thorough. Again, "Wise men ne'er sit and wail their loss, but cheerly seek how to redress their harms." (1) Wise men sit and wail their loss. (2) Wise men ne'er sit and wail their loss. (3) Wise men ne'er sit and wail their loss, but seek to redress their harms. (4) Wise men ne'er sit and wail their loss, but seek how to redress their harms. (5) Wise men ne'er sit and wail their loss, but cheerly seek how to redress their harms. Again, "Sweet are the uses of Adversity, which, like the toad, ugly and venomous, wears yet a precious jewel in her head."

(1) Sweet are the uses of Adversity. (2) Sweet are the uses of Adversity, which wears a jewel. (3) Sweet are
the uses of Adversity, which wears a jewel in her head. (4) Sweet are the uses of Adversity, which, like a toad, wears a jewel in her head. (5) Sweet are the uses of Adversity, which, like a toad, ugly and venomous, wears a jewel in her head. (6) Sweet are the uses of Adversity, which, like a toad, ugly and venomous, wears yet a jewel in her head. (7) Sweet are the uses of Adversity, which, like a toad, ugly and venomous, wears yet a precious jewel in her head. Again, "This England never did nor never shall lie at the proud foot of a conqueror." (1) England lies at foot of a conqueror. (2) England lies at the proud foot of a conqueror. (3) This England lies at the proud foot of a conqueror. (4) This England never did lie at the proud foot of a conqueror. (5) This England never did nor never shall lie at the proud foot of a conqueror.

INTERROGATIVE ANALYSIS.

An incomparable mode of securing the comprehension and retention of a sentence, is to analyse its successive parts by an exhaustive series of questions and answers. In this way, the Pupil transforms the Second-Hand Knowledge into First-Hand Knowledge. WHEN HIS MEMORY AND ATTENTION HAVE BEEN THOROUGHLY DEVELOPED AND STRENGTHENED BY HAVING MEMORISED A GOOD MANY SENTENCES, say from 100 to 200, by Interrogative Analysis, he will thereafter find it to be the most rapid and fascinating mode of learning by heart. In all respects, it is unlike learning by rote. In learning by rote, if the Pupil by accident really does absorb the meaning of a sentence, he attempts to do it by dealing with it at "one fell swoop;" but in using the method of Interrogative Analysis the Pupil must constantly think. To ask questions, he must study the meaning and purport of the sentence, and to frame his answers he must continue his scrutiny of the sentence with sleepless vigilance. Every separate thought in it is doubly grappled with—first in the question and next in the answer—and thus each idea is separately considered twice in relation to all the other parts of the sentence; and by recalling the entire sentence each time he answers a question, and by emphasising the special part that constitutes the reply (in print or writing by italicising it), he fixes permanently in mind not only all the ideas of the sentence but also its exact verbal form. Let the Pupil most carefully study the application of this Method to the sentence lately dealt with by the Analytic-Synthetic Method, to wit—"The active principle of the stomach is a hydrolytic* ferment named pepsin."

(1) What is the active principle of the stomach?—"The active principle of the stomach is a hydrolytic ferment named pepsin." (2) What is the character of the ferment which constitutes the active principle of the stomach?—"The active principle of the stomach is a hydrolytic ferment named pepsin." (3) What is the nature of that watery substance of the stomach which constitutes its active principle?—"The active principle of the stomach is a hydrolytic ferment named pepsin." (4) Of what organ in the human body is the hydrolytic ferment the active principle?—"The active principle of the stomach is a hydrolytic ferment named pepsin." (5) What is the name of the hydrolytic fer-

* Hydrolytic means pertaining to water [Greek, hydor, water; and logos, discourse.]
ment in the stomach which constitutes its active principle?—"The active principle of the stomach is a hydrolytic ferment named pepsin." (6) What is the character of that principle of the stomach which is known as the hydrolytic ferment named pepsin?—"The active principle of the stomach is a hydrolytic ferment named pepsin." (7) What factor in the operations of the stomach does the hydrolytic ferment named pepsin constitute?—"The active principle of the stomach is a hydrolytic ferment named pepsin."

But in the case of poor untrained memories, neither the Analytico-Synthetic Method nor the Method of Interrogative Analysis will suffice to retain the precise form of expression permanently. Memorised Correlations become necessary, and will continue to be necessary in learning by heart until the poor memory has been transformed into a good one. [Although I must confess that hundreds possessing very weak memories have declared that they memorise prose and poetry with great rapidity by the Interrogative Method alone, and that they never forget it.] After the above sentence has been comprehended by the foregoing Method the poor memory must usually resort to Memorised Correlations, perhaps in this way:—

ACTIVE... chief actor... warrior prince... PRINCIPLE... interest... rest... rest for digestion... digestive organ... STOMACH... machination... machine... press... hydraulic press... HYDROLYTIC... droll... laughter... excitement... FERMENT... firmament... sun... heat... burning... pepper... PEPSIN.

As an example for the application of Interrogative Analysis to a long passage, I have selected Mr. G. R. Sim's skit on the London weather of the summer of 1886 [The Referee, August 22], a piece so recent as not likely to have been learned by any of my Pupils—

THE BAROMETER.—BY A LUNATIC LAUREATE.  

I bought a barometer last July  
To foretell the wet and foretell the dry,  
And now I reside in my lonely hall  
And watch the mercury rise and fall.  
It will fall to "Stormy" and rise to "Wet"  
And down to "Gales" I have known it to get,  
But never one day since last July  
Has it stood at "Fair" or at "Fine" or "Dry."  

I have watched my barometer day and night,  
But it won't go up to the wished-for height.  
I tap at the glass, and I shake the stand,  
And I twiddle away at the index hand;  
I gave it a bang in an angry pet,  
But still the mercury sticks at "Wet";  
Then I tear my hair and I rave and cry,  
"You beast! but I'll make you point to 'Dry.'"  

I have lighted a fire around its base,  
I've turpentine-plastered its gloomy face;  
And leeches I've put on its blistered back,  
And I've given it many a sounding whack.  
It has gone to "Stormy," "Unsettled," "Snow,"  
But to anything fair it declines to go;  
In vain are the thousand tricks I try—  
That blessed barometer won't say "Dry."
I have smashed the thing into fragments small,
And the mercury's running about the hall;
And the feet of the people passing by
Are pierced with the pieces of glass that lie;
And the elegant case of the instrument
Over the wall of the garden went.
I'll no barometer own, not I,
That all the summer won't point to "Dry."

Who bought a barometer last July?—"I bought a barometer last July." What was my action in regard to a barometer last July?—"I bought a barometer last July." What did I buy last July?—"I bought a barometer last July." When did I buy a barometer?—"I bought a barometer last July." For what purpose did I buy the barometer last July?—"To foretell the wet and foretell the dry." To foretell what did I buy that barometer?—"To foretell the wet and foretell the dry." Is there any contrast between the objects or events to be foretold?—"To foretell the wet and foretell the dry." Now recapitulate from memory—

I bought a barometer last July
To foretell the wet and foretell the dry.

But what am I doing now?—"And now I reside in my lonely hall." Who now resides in my lonely hall?—"And now I reside in my lonely hall." What am I now doing in my lonely hall?—"And now I reside in my lonely hall." Where do I now reside?—"And now I reside in my lonely hall." What kind of a hall is that in which I now reside?—"And now I reside in my lonely hall." What lonely place is that in which I now reside?—"And now I reside in my lonely hall." What else am I now doing in my lonely hall?—"And watch the mercury rise and fall." And how is my attention engaged?—"And watch the mercury rise and fall." What am I watching?—"And watch the mercury rise and fall." What does the mercury do?—"And watch the mercury rise and fall." Is there any dissimilarity in the movements of the mercury?—"And watch the mercury rise and fall." Now recapitulate from memory—

I bought a barometer last July
To foretell the wet and foretell the dry,
And now I reside in my lonely hall
And watch the mercury rise and fall.

To what places will the mercury go?—"It will fall to 'Stormy' and rise to 'Wet.'" What will fall to "Stormy" and rise to "Wet?"—"It will fall to 'Stormy' and rise to 'Wet.'" Is the action of the mercury different in the two cases?—"It will fall to 'Stormy' and rise to 'Wet.'" If it rises to "Wet," will it then descend to some other place?—"And down to 'Gales' I have known it to get." To what place will the mercury descend?—"And down to 'Gales' I have known it to get." And what have I known about the movement of the mercury?—"And down to 'Gales' I have known it to get." Now recapitulate—

I bought a barometer last July
To foretell the wet and foretell the dry,
And now I reside in my lonely hall
And watch the mercury rise and fall.
It will fall to "Stormy" and rise to "Wet,"
And down to "Gales" I have known it to get.
How many times during one day since last July has the mercury stood at "Fair" or at "Fine" or "Dry"?—"But never one day since last July has it stood at 'Fair' or at 'Fine' or 'Dry.'" For how long did the mercury not stand at "Fair" or at "Fine" or "Dry" since last July?—"But never one day since last July has it stood at 'Fair' or at 'Fine' or 'Dry.'" Since when has the mercury never stood for one day at "Fair" or at "Fine" or "Dry"?—"But never one day since last July has it stood at 'Fair' or at 'Fine' or 'Dry.'" How has the mercury never been for one day since last July relative to "Fair" or "Fine" or "Dry"?—"But never one day since last July has it stood at 'Fair' or at 'Fine' or 'Dry.'" In which one of three positions has the mercury never stood for one day since last July?—"But never one day since last July has it stood at 'Fair' or at 'Fine' or 'Dry.'" The transition from one verse to the next is easily made. For instance: How do I know that the barometer has never for one day since last July stood at "Fair" or at "Fine" or "Dry"? Answer: [Because] "I have watched my barometer day and night." Who has watched my barometer "day and night"?—"I have watched my barometer day and night.". How have I busied myself day and night?—"I have watched my barometer day and night." What have I watched day and night?—"I have watched my barometer day and night." During what times have I watched my barometer?—"I have watched my barometer day and night." Do I realise my hopes in regard to the barometer rising?—"But it won't go up to the wished-for height." What is it that won't go up to the wished-for height?—"But it (the mercury) won't go up to the wished-for height." Where will it not go?—"But it won't go up to the wished-for height." Is the height to which it will not go a matter of desire or aversion?—"But it won't go up to the wished-for height." To what position will it not go?—"But it won't go up to the wished-for height." In my disappointment what do I do?—"I tap at the glass and I shake the stand." Who taps at the glass and shakes the stand?—"I tap at the glass and I shake the stand." What is it I tap at and what do I shake?—"I tap at the glass and I shake the stand." What do I do to the glass and what to the stand?—"I tap at the glass and I shake the stand." Do I play with the index hand in a light and tremulous manner?—"And I twiddle away at the index hand." At what do I twiddle away?—"And I twiddle away at the index hand." Not confining myself to the hand of the barometer, but thinking of all its intractabilities, do I get excited?—"I give it a bang in an angry pet." To what do I give a bang?—"I give it a bang in an angry pet." What do I give it?—"I give it a bang in an angry pet." In what mood do I give it a bang?—"I give it a bang in an angry pet." In what kind of a fit of peevishness do I give it a bang?—"I give it a bang in an angry pet." Does this bang make the mercury move up?—"But still the mercury sticks at 'Wet.'" Does the mercury now stick at "Wet"?—"But still the mercury sticks at 'Wet.'" At what place does the mercury stick?—"But still the mercury sticks at 'Wet.'" How is the mercury held at "Wet"?—"But still the mercury sticks at 'Wet.'" After all these humiliating defeats, do I become frantic?—"Then I tear my hair and I rave and cry, 'You beast! but I'll make you point to 'Dry'!'" How do I exhibit my rage?—"Then I tear my hair, and I rave and cry 'You beast! but I'll make you point to 'Dry'!'" What vocal exclamation ensues?—"Then I tear..."
my hair, and I rave and cry 'You beast! but I'll make you point to 'Dry'!'
---

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"Do I personify the barometer, and, if so, what term do I apply to it?---"‘Then I tear my hair and I rave and cry 'You beast! but I'll make you point to 'Dry'!'
---

Then I tear my hair and I rave and cry 'You beast! but I'll make you point to 'Dry'!" To what point am I determined to make it go?---"‘Then I tear my hair and I rave and cry 'You beast! but I'll make you point to 'Dry'!'
---

What have I done to carry out my unflinching resolve?---"I have lighted a fire around its base," &c., &c. Similarly deal with the two remaining verses, and send your work to me for criticism.

"An infant cannot exercise a power of appointment over real property."

(1) An infant cannot exercise. (2) An infant cannot exercise a power. (3) An infant cannot exercise a power of appointment. (4) An infant cannot exercise a power of appointment over property. (5) An infant cannot exercise a power of appointment over real property.

The same Interrogatively Analysed.

(1) Who cannot exercise a power of appointment over real property?
---"An infant cannot exercise a power of appointment over real property."

(2) Can an infant exercise a power of appointment over real property?---"An infant cannot exercise a power of appointment over real property."

(3) What kind of act in reference to appointments over real property cannot an infant perform?---"An infant cannot exercise a power of appointment over real property."

(4) What kind of power cannot an infant exercise over real property?---"An infant cannot exercise a power of appointment over real property."

(5) What kind of property is that over which an infant cannot exercise a power of appointment?---"An infant cannot exercise a power of appointment over real property."

There are several other modes of working out the Interrogative Analysis where the Comprehension is the main thing and the Retention of the exact expression is not insisted on. One of these is given below. Let the Pupil realise that by the Interrogative Analysis he cements new ideas on to old ones—that by exercising his own mind on the whole and all the parts of novel statements he manages to cause the unhabitual ideas to become, as it were, intercalated with his familiar knowledge, and that, in this assimilating manner, facts and principles hitherto foreign and strange to him, become familiar and entirely his own, new ideas become the same as if he had originated them.

"The intermarriage of near relatives has been universally believed to entail degeneration upon the offspring, and the act has been condemned."

(1) What has been condemned?---"The intermarriage of near relatives." (2) Why has it been condemned?---"Because it has been believed to entail degeneration." (3) Degeneration upon whom?---"Upon the offspring." (4) Has the opinion been general?---"It has been universal." (5) What has been universally believed?---"That the intermarriage of near relatives entails degeneration upon the offspring."

"Hibernation is the term applied by naturalists to express a peculiar condition of sleep in which certain animals (chiefly Cheiroptera and Rodentia) pass the winter season."

(1) What is Hibernation?---"It is a peculiar condition of sleep." (2) Who so applied it?---"Naturalists." (3) Do they so apply it to particular animals?---"Cheiroptera and Rodentia." (4) When is this peculiar condition of sleep shown?---"In the winter." (5) What does it do for these animals?---"It enables them to pass the winter season." What then is Hibernation?---"Hibernation is the term applied by naturalists to express the peculiar condition of sleep in which certain animals (chiefly Cheiroptera and Rodentia) pass the winter season."
"Histology is the science which classifies and describes the structural or morphological elements which exist in the solids and fluids of organized bodies."

(1) What is Histology?—"Histology is the science of organized bodies." (2) Of what is it the science?—"It is the science which classifies and describes the structural elements of organized bodies." (3) What other term is associated with Structural?—"Morphological." (4) Where do these elements exist [structural or morphological]?—"They exist in the solids and fluids of organized bodies." (5) What does Histology do?—"It classifies and describes the structural and morphological elements which exist in the solids and fluids of organized bodies."

"Homology, in Anatomy, is the term now used to indicate structural correspondence, while the term Analogy is employed to indicate functional resemblance."

(1) In what science is Homology used?—"In Anatomy." (2) What does it indicate?—"Structural correspondence." (3) What is meant by structural correspondence?—"It means similarity of relation in organs of animals as regards general structure or type." (4) In what does it differ from Analogy?—"Analogy indicates Functional Resemblance, while Homology indicates structural correspondence." (5) What is functional resemblance?—"It means a resemblance in the actions performed by different organs in the same animal, or by similar or unlike organs in different animals." (6) How is Homology used in Anatomy?—"Homology, in Anatomy, is the term now used to indicate structural correspondence." (7) How is Analogy used?—"The term Analogy is employed to indicate functional resemblance."

Remarks.—Reading over my Analysis merely gives the Pupil an idea of the application of the Interrogative Method; but if he makes his own Analysis of these verses, or of others, or of a passage of prose, and then at least once or twice per day for two weeks reviews from memory, first his Analysis and immediately after the passage without the Analysis, but exactly as it was printed or written, he will make the method so familiar, that hereafter he can apply it with so much rapidity and certainty, that he can usually memorize a passage of prose or poetry by a single painstaking Interrogative perusal. And when a child has learned my System, he should never be allowed to learn anything by mere rote. If he is required at first to write out his Analyses of all he learns, he will soon become so enamoured of the Method that he will always use it from choice, and always with the best results, and thus avoid the ruinous habit of Mind-wandering, and at the same time become a prodigy of quick and never-failing acquisition. Mental operations, in a general way, can be reduced to three successive stages: Sensations, Perceptions, and Reason. (a) Sensations, where impressions reach the brain through the Touch, Taste, Smell, Sight, or Hearing—often the last two being the most vivid. As learning by rote is little more than learning a succession of sights [written or printed words], or sounds [spoken words], there is mainly involved only Sensations, with scarcely any intellectual assimilation of ideas; and the reason that we learn a passage in our own familiar language more easily than we learn a passage of equal length in an unfamiliar language is obvious—in the former case the sounds of the words are familiar, and only the succession of them has to be committed to memory; but in the latter case we must memorize not only the unfamiliar sounds, but also the succession of them. Many, when children, have learned passages of Latin and Greek which they translated; in later life they can often repeat the passages, but they cannot translate them!!! This proves conclusively that when we learn by means of Sensation by means of rote, the mere succession of sights and sound have alone been permanently impressed on the mind. In learning by rote, the literal words and exact expression are everything and the sense nothing, or next to nothing; but in learning by my Method, the sense is everything, but it is so absorbed and assimilated that the exact expression is necessarily carried with it. (b) Perception, or the Relation among Sensations, is developed by the action of the mind upon the raw material furnished by Sensation. (c) Reason, or the Relation among Relations, is a mental action still further removed from Sensation. Thus we see that where ideas or thoughts are expressed in a sentence, and no sentence is without them; learning by rote does not absorb them. This method of endless repetition may temporarily memorise the exact form of expression, but it scarcely ever assimilates any of the ideas. But Interrogative Analysis compels the Pupil to absorb all the ideas, and thus he receives a vivid first impression of all the operations of Perception and Reason, in regard to both of which learning by rote gives no first impression at all. Its superiority to rote-learning is obvious from another point of view. Learning by rote requires constant review, or the acquisition is lost forever; but after the Memory and Attention have been thoroughly developed, by having made and memorised many Correlations, what is then learned by Interrogative Analysis is permanently retained without review or any more perusals. Again: learning by rote requires a long time, and the method promotes mind-wandering, but learning by Interrogative Analysis is rapidly done after the first trials and a little preliminary practice, and it fortifies and strengthens both functions of the Attention to a most surprising degree, and after a time the Pupil can, with practical instantaneousness, comprehend the most complex and unfamiliar statements, and quickly memorise them.
I have received numerous Testimonials from Actors and Clergymen, stating that this Method had been a revelation to them, for it ensured their rapid memorisation of their parts or sermons and a clear insight into the meaning of all they learned; from Lawyers, averring that this Method had taught them how to examine witnesses, and draw from them all the pertinent facts they knew, and to arrive at every possible construction of any section of a Statute; from Grammarians, stating that the practice of this Method had taught them to realise the functions of the Parts of speech more clearly than they had ever known them before; from Frivolous People who had never learned anything before, declaring that this Method had taught them to think—and from all alike the statement comes: that this Method secures Comprehension and Retention agreeably, no matter what the prose or poetry may be, and in very much less time than those results could be secured by any method that they had ever known before learning my System. I will only add, as an encouragement to the weakest-minded, that I discovered the Interrogative Method in teaching an idiot to recite from memory the Lord’s Prayer when all other devices had failed.

Let the Pupil send me at least five sentences of his own selection, dealt with by him according to Interrogative Analysis.

SURPRISING FIGURE MEMORY.

The following exercise is intended for all Pupils, but especially for those who wish to deserve a place on the "Loiselottian Roll of Honour." Any man may much astonish his friends if he can say "write down three figures," and then "three more," and so on until ten sets are written down; and then at once repeat the figures, both in threes and singly, backwards and forwards. That you may do when you can quickly turn figures into words together. Always manage that some time shall elapse between writing down the different sets of figures, so that you can translate each set into words and correlate the words together as fast as you make them, and then you can recite the figures without delay! This you can do by asking different persons to write down a set, &c., &c. Subjoined is a series of twenty figure-words connected by Synthesis and Analysis. Memorise the correlations, and then exercise yourself in thinking the figure-words and saying the figures backwards and forwards.

Damage...hurt...frightened...white...Lilies...flowers...Covent Garden...MART...shop...photographer’s shop...camera...camel hair...Bald...shaven...red beard...Rufus...shot in a wood...hide in a wood...ambush...cocoa tree...chocolate...vanilla...confections...cooked...dressed...dress...robed...coronation robes...king...viking...talking...talk...dialogue...after dinner...fruit...sweets...baby boy...clothe...clothe...cloven...mitre...mighty...devil...imp...impish...demon...angel.


Now write down thirty other figures, three figures at a time, translate each set into a word or phrase, and then connect by Correlations of your own: memorise, and repeat the figures both ways. This preliminary practice will prepare you to ask your friends to write down 10 or even 20 or more sets of three figures each for you to repeat forwards and backwards from memory!
PHARMACEUTICAL PREPARATIONS.

The following examples are intended to show the Pharmaceutical Student how to memorise the preparations of the British Pharmacopoeia. The proportion of the active ingredient in the preparation is indicated by a number-word; the nature of the preparation (as powder, tincture, infusion, &c.) to which this word refers, is indicated by the initial letter of the number-word, according to the scheme given below. If the student wishes to memorise merely the proportions of the active ingredients, he will proceed as in the case of the waters, mixtures, decoctions, &c. If he wishes to memorise not only the proportion, but the time taken in making the preparation, he will proceed as in the case of the Infusions. The same model will show him how to memorise additional facts, exceptional cases, &c. If, however, he desires to remember every preparation of a given kind in the Pharmacopoeia, he will take as his model the scheme of the Confections. When it is found how easily these figures can be memorised by my System, and when it is remembered that the only other way in which such facts can be memorised, is by sheer brute force of endless repetition, the Student will be in a position to appreciate the value of my System.

The nature of the preparation is indicated by the initial letter of the number-word, as follows:

<table>
<thead>
<tr>
<th>Preparations</th>
<th>Initial Letter</th>
</tr>
</thead>
<tbody>
<tr>
<td>WATERS</td>
<td>W</td>
</tr>
<tr>
<td>CONFECTIONS</td>
<td>K</td>
</tr>
<tr>
<td>DECOCTIONS</td>
<td>D</td>
</tr>
<tr>
<td>PILLS</td>
<td>P</td>
</tr>
<tr>
<td>TINCTURES</td>
<td>T</td>
</tr>
<tr>
<td>INFUSIONS</td>
<td>Gl</td>
</tr>
<tr>
<td>LIQUORS</td>
<td>L</td>
</tr>
<tr>
<td>MIXTURES</td>
<td>M</td>
</tr>
<tr>
<td>PILLS (bolus)</td>
<td>B</td>
</tr>
<tr>
<td>POWDERS</td>
<td>P</td>
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<tr>
<td>SPIRITS</td>
<td>Sp</td>
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<td>SYRUPS</td>
<td>S</td>
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<tr>
<td>WINES</td>
<td>V</td>
</tr>
<tr>
<td>LINIMENTS</td>
<td>R</td>
</tr>
</tbody>
</table>

**WATERs—W.**

- Dill —...dilatory...lazy...bed...garden...
- Camphor —...camphor pluules...cold...wipe nose...Wipe shoes
- Caraway —...carry away...rubbish...
- Fennel —...fence...hedge...box-edging...garden...Weeds
- Cinnamon —...cinder...fire...water...
- Cherry Laurel —...cherry tree...timber...sawyer...
- Peppermint —...mint...green peas...duck...web feet
- Spearmint —...web...Weave loom

**D I L L**

1 in

**P R O S E**

1 in

**E D E R F L O W E R**

1 in

**C H L O R O F O R M**

200

**D E C O C T I O N S—D.**

Decoctions...

**A L O E S**

120

**I C E L A N D M O S S**

20
CINCHONA ...sink...stone...hardware...dough... Dotage 16
POMEGRANATE ...hard stone...date stone... Dates 10
&c.

PLASTERS—PL.
AMMONIACUM AND MERCURY...amateur...match... 1 tn
plowing match... Plow a hill 5
BELLADONNA ...belle...beauty... Plain 2
CALEFACIENTS ...warmth...fleece...pure wool... Plain wool 25
CANTHARIDES ...Spanish fly...Spain...Malaga...raisin...Plum 3
BROWN SOAP ...Pears’ soap...Erasmus Wilson...Play...Will’s son 5½
&c.
&c.

ENEMAS—N.
Mass...maize...corn...grain...{ Grains in
Nurse 40
each Enema.
ALOES ...wean...baby...
ASSAFPETIDA ...devil’s dung...Satan...Enemy of
mankind...Enemies 30
SULPHATE OF MAGNESIA...Epsom salts...Epsom...
grand stand...aristocracy...No roughs 480
ruffian...murder...RUFUS (480)...red hair...brunette...
olive brown...OLIVE OIL*

OPiUM ...poison...kill...
thirty...dirty...wash...water...Drop [thirty drops of Tinct. Opii.]
Enemies 30

INFUSIONS.
All Infusions are made with boiling water, except Chiretta and
Cusparia, which are made with water at 120°; and Calumba and
Quassia, which are made with cold water. The time required to
make the infusion is given in minutes.
Infusion...boiling water...egg-boiler...three minutes

Infusion...cold water...cold in the back...lumbago...
Calamint...Fence 1 in 20...brush...wire
ice { less dense }

Cusparia

INFUSIONS—F. Strength. Time.
CHAMOMILE ...camp...drill...
ORANGE PEEL ...peal...bell wire...wire
fence... " 1 " 20...dual 15’
COMPOUND ORANGE...Blenheim orange...apple
...pine apple...pine...Firs 1 " 40...tall 15’
BUCHU ...ewe...sheep...goats...
Gruyère cheese...Fancy 1 " 20...cheese 60’
&c.
&c.

* Each Enema contains 1 oz. of olive oil.
<table>
<thead>
<tr>
<th><strong>MIXTURES—M.</strong></th>
<th><strong>Grs. in 1 oz.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammoniacum</td>
<td>...ammonia...smelling-bottle...lady...Madam 13</td>
</tr>
<tr>
<td>Almonds</td>
<td>...almond cake..wedding cake..match.Matches 60</td>
</tr>
<tr>
<td>Creasote</td>
<td>...sickness...sea sickness...ship...Mate 1</td>
</tr>
<tr>
<td>Chalk</td>
<td>...prepared chalk...face-powder...lady...Madam 13</td>
</tr>
<tr>
<td>Compound Iron</td>
<td>...iron &amp; wood...iron clad...man of war...Man a sail 2 5</td>
</tr>
<tr>
<td>Guaiacum</td>
<td>...ache...headache...dirty head</td>
</tr>
<tr>
<td></td>
<td>...matted hair...Matted 11</td>
</tr>
<tr>
<td>Scammony</td>
<td>... ... ... ... ... Money 2</td>
</tr>
<tr>
<td>Compound Senna</td>
<td>...biliousness...Mopish 96</td>
</tr>
<tr>
<td>Brandy</td>
<td>...Brand's beef...no fat...Greece...Matapan 192</td>
</tr>
<tr>
<td><strong>CONFECTIONS—K or C hard.</strong></td>
<td></td>
</tr>
<tr>
<td>Opium</td>
<td>...laudanum..toothache...</td>
</tr>
<tr>
<td></td>
<td>carious...tooth...molar..grind...powder 1 in 40</td>
</tr>
<tr>
<td></td>
<td>(powdered opium 1 in 40)</td>
</tr>
<tr>
<td>Pepper</td>
<td>...cayenne...</td>
</tr>
<tr>
<td></td>
<td>Cadiz “ 10</td>
</tr>
<tr>
<td>Piper</td>
<td>...piper...</td>
</tr>
<tr>
<td>Pips</td>
<td></td>
</tr>
<tr>
<td>Hips</td>
<td>...hairy seeds...hair...</td>
</tr>
<tr>
<td>Roses</td>
<td>...rosy cheeked...apple...</td>
</tr>
<tr>
<td></td>
<td>Comb “ 3</td>
</tr>
<tr>
<td>Wild rose</td>
<td></td>
</tr>
<tr>
<td>Bramble</td>
<td></td>
</tr>
<tr>
<td>Scramble</td>
<td></td>
</tr>
<tr>
<td>Scammony</td>
<td>...money-bank...Bangkok...cock'scomb...Comb 1 in 3</td>
</tr>
<tr>
<td>Senna</td>
<td>...senna tea...tea-caddy...</td>
</tr>
<tr>
<td></td>
<td>Cadet “ 11</td>
</tr>
<tr>
<td>Brimstone and treacle</td>
<td></td>
</tr>
<tr>
<td>Sulphur</td>
<td>...furious...insult...</td>
</tr>
<tr>
<td></td>
<td>“you Coon, sir” “ 2 1/2</td>
</tr>
<tr>
<td>Hell fire</td>
<td></td>
</tr>
<tr>
<td>Punishment</td>
<td></td>
</tr>
<tr>
<td>Guilt</td>
<td></td>
</tr>
<tr>
<td>Turpentine</td>
<td>...Dick Turpin...pistol...rifle...</td>
</tr>
<tr>
<td></td>
<td>Corps “ 74</td>
</tr>
</tbody>
</table>
POISONS AND ANTIDOTES.

Oil, milk, or any other fatty mucilaginous substances are used to protect the coats of the stomach against the operation of oil of vitriol and other acid and corrosive poisons:—Acid....curd....curdled milk....milk....butter....melted butter....oil.

Soap and Sulphide of Potassium are antidotes against arsenic and other metallic poisons:—Metallic....lick....cat-lick....wash....soap....potash-soap....potassium....sulphide of potassium.

Narcotic poisons are neutralized by vinegar:—Narcotics....clock ticks....time....age....vintage....vinegar.

Prussic acid is neutralized by alkalis and freshly precipitated oxide of iron:—Prussic acid....sick....lie down....alkali....lie on the side....oxide of iron.

Wine, brandy, coffee and camphor, are used to rouse those who have taken laudanum or any other preparation of opium:—Opium....opium-eater....intemperate....brandy....wine....beverage....coffee....cough....cold....camphorated spirit....camphor.

Mucilage, camphor and oil, neutralize cantharides:—Cantharides....hair-grower....bald....age....mucilage....mew....cat....fur....camphor....comfort....ease....smooth....running....oil.

Ten drops of ammonia in a glass of sugared water will sober a tipsy man:—Drunk....alcohol....volatile spirits....volatile alkali....ammonia....to moan....to sigh (10 drops)....pathos....sweet tears....sugared water.

In the case of every date-word that I give, as well as in regard to all my Correlations, I earnestly advise the student to make his own, and memorise them thoroughly, and send them to me for criticism, using mine as examples or illustrations only.

The most abstract definition ever drawn up, is the following one of Evolution, by Herbert Spencer. Let the Pupil, as an optional exercise, send me his Correlations or Interrogative Analysis for cementing the different parts of it together, and also for memorising the caricature, and the citations from Mr. Spencer and Mr. Ruskin.

“Evolution is an integration of matter and concomitant dissipation of motion, during which the matter passes from an indefinite, incoherent homogeneity, to a definite, coherent heterogeneity, and during which the retained motion undergoes a parallel transformation.”

[Mr. Kirkman’s Travesty of the above.]

“Evolution is a change from a nohowish, untalkaboutable, allalikeness, to a somehowish and in-general talkaboutable not-all-allikeness by continuous somethingelseifications, and sticktogetherations.”

“Amid the mysteries which become the more mysterious the more they are thought about, there will remain the one absolute certainty, that he is ever in presence of an Infinite and Eternal Energy, from which all things proceed.”—Herbert Spencer.

The following trenchant lines contain Mr. Ruskin’s opinion concerning thoughtless students of evolution:—“It is every man’s duty to know what he is, and not to think of the
embryo he was, or the skeleton that he shall be. Darwin has a mortal fascination for all vainly curious and idly speculative persons, and has collected, in the train of him, every impudent imbecility in Europe, like a dim comet wagging its useless tail of phosphorescent nothing across the steadfast stars."

[REMARKS.—(1) Evolution does not attempt to account for the Origin of the Universe, nor offer any hint as to how it is upheld and continued in existence from age to age. (2) If, as is claimed, the above formula expresses the modus operandi of all astronomic, geologic, biologic, psychologic and sociologic changes in their general course, it must be obvious that such multiform and widely unlike changes could not have taken place in conformity to such a strict formula or Law, by mere accident/ or even a concourse of accidents!! This inference is very different from the ordinary argument from Adaptation. That applies to separate, individual cases. But this is universal, and it is exhaustive too. It starts with origins (which are assumed), and follows the history of everything—worlds, inorganic matter, organisms of all kinds, and mind too—and it proclaims that Evolution has guided ceaselessly all their operations from the first without exception!! Hence, if Evolution were established it would itself furnish a scientific proof of irresistible conclusiveness that the Universe and its Laws have had a Supreme Designer. (3) Meanwhile it is clear that, in its highest sense, Evolution has, as Mr. Gladstone claims, been believed in for centuries, and it certainly is exemplified in the cases of three speculative writers of this century. John Stuart Mill, an Agnostic nearly all his life, finally evolved into a maintainer of Theism, as appears from his three celebrated Essays. Mr. John Fiske, the most capable disciple of Mr. Spencer, has already evolved into a Philosophical Theist!! See his book, "The Idea of God, as affected by Modern Knowledge." Mr. Spencer, after relying for years upon a blank, colourless, incomprehensible UNKNOWABLE, has at length evolved into a believer in the one absolute certainty of an Infinite and eternal ENERGY, from which all things proceed/ There is more in this than might at first appear. Mr. Spencer has progressed (a) from the conception of an uncharacterisable, unanalyseable, UNKNOWABLE, to the very definite idea of ENERGY. (b) An Energy that is Infinite and Eternal. (c) An Energy from which all things proceed, as their Creator or Origin. (d) An INTELLIGENT Energy, if Evolution be true, since, according to that doctrine, everything whatsoever does not obey the impulse of Chance or Blind Fate, but is always and invariably DEVELOPING in conformity to the specific Mode and Direction of Evolution!! Should he fortunately survive a few years longer, may we not reasonably hope that this modern Pantheist will still further evolve, and at last become a believer in the Infinite and Eternal God??]

The foregoing reference is justified here, because if, as is sometimes rashly claimed, Evolution dethrones God, it would deprive Him of the glory of having created Memory—the most precious gift to man—without which Life would only consist of present sensations, and be devoid of any enjoyment in prospect or retrospect—with no materials on which imagination, Conscience, or Reason could operate, and without which Progress and Civilization were impossible.
NOTICE.—It is an achievement, grand in its results, to master my System in its character as a Device for Memorising any facts whatsoever—but it is a grander achievement to master it as a System of Memory-TRAINING, so that the Natural Memory becomes so strong that it no longer requires the aid of my System as a Device for Memorising. In this case, facts are united in the Memory by an Instantaneous Gordian Knot. To help secure this object, I recommend the Pupil, before commencing this Lesson, to go over all the previous exercises again, if he has not already memorised them thoroughly and in the exact manner required by my instructions.

PART V.

THE INSTANTANEOUS GORDIAN KNOT.

By Gordian Knot I do not mean the application of my System to numbers or geography, or history, or any of the sciences in particular—but I mean by Gordian Knot to express the RESULT of my System of Memory-training. This result, if my directions are thoroughly attended to, is such a strengthening of the natural memory that facts are held by it as firmly as if tied with the knot of Gordius—held without the use of my System as a device for memorising. In this lesson I aid the pupil by further exercises to continue his memory-training, and I suggest further methods to help him do this rapidly and usefully.

In Answers to Ever-Recurring Questions it is stated that my System has been christened by my Pupils “Instantaneous Memory” from the RAPIDITY with which whatever has been learned by it is RECALLED. I can communicate in a personal interview, in the space of one hour only, my entire Unique Theory of Physiological Analysis and Synthesis—together with the two grand features of my Original System of Memory-Training, whereby the First Impression is in all cases made most vivid, and its subsequent Revival made sure and immediate, by MEMORISING examples of Analysis, and by making and MEMORISING Correlations. After the Pupil has thus learned the complete Theory of my System, he still needs to have a good deal of practice to acquire the dexterity in its use which practice alone gives. Of course Pupils who learn my System by Correspondence have to Study my Instruction Papers without any personal tuition, and although it is no tedious process to acquire my System in this way, it is not learned so quickly as where a personal exposition is given; but it is still thoroughly acquired if genuinely studied; and, in fact, many of my best Pupils are persons whom I have never seen.

Now suppose a Pupil has correlated one “extreme” to “another extreme” and has followed my invariable requirement in memorising the Correlation, and he now wishes to recall the second “extreme,” what takes place? Why, the moment he thinks of the first “extreme” the second “extreme” instantly occurs to mind. There is no delay—no pause—no summoning up of a story, and separating it into parts, and making a vain effort perhaps to find out which was the “other extreme”; no attempt at recalling a mental picture, two-thirds of which has vanished from the memory while the remaining third only serves
to put you on a false scent. The application of my Method instantaneously recalls the fact which the Correlation had cemented to the first extreme. If any hesitation ever occurs, it is sure proof that the Correlation was not memorised in the thorough manner always insisted upon by my System.

There is another result which, after the Lessons are finished, all my faithful Pupils will be sure to find out in their future use of the System. I have just adverted to the instantaneous RECALL of any fact properly fixed in the mind by my System. I now allude to the MAKING of the Correlation in the first instance.

I.—The more Correlations the Pupil makes, the more easy the making of them insensibly becomes. Ninety-nine persons out of a hundred are satisfied with making them with constantly increasing rapidity as time goes on and experience accumulates. But many prefer to make them slowly and thoughtfully, and they refuse to take any steps to become able to make them rapidly. Such persons acquire the full power of my System, except in the matter of time.

But, if they have occasion to make hundreds of thousands of Correlations in a brief period in order to remember great masses of facts, they can, if they follow my directions, save much time.

II.—The careful making of 5000 Correlations does not so much contribute to the practically instantaneous forging of the memory-chain as does the making and thorough memorising of 50.—Nor is this all—

III.—Hitherto, as the Pupil has had quite enough to do to acquire the method of making Correlations, I have simply enjoined the memorising of every one he makes. But the time has come to speak of the proper manner of memorising them. The quick recital of the intermediates of every Correlation both ways, whilst learning them by heart, helps to impart the power to make new intermediates instantly. Hereafter this should always be done by all who would acquire the full power of my System. Rapid repeating of memory-intermediates contributes to rapid making of them. The time spent in attaining the ability of instantly manufacturing memory-intermediates differs in the case of different individuals, according to temperament, and the painstaking bestowed upon always rapidly memorising the Correlations.

IV. Those who may have found difficulty in making Correlations, can soon overcome this difficulty by making a Correlator of 25 words connected by In., Ex. and Con., every day for two weeks—analysing each and memorising it—always connecting the first word in the second-day series to the last word in the first series by analysis, so that in 12 days he has made a Correlator of 300 words constituting an unbroken chain, each word being united to the next either by In., Ex. or Con., and, the whole memorised, he will thenceforth be able to make Correlations easily and rapidly.

MEMORY ALMANAC.

Let the Pupil memorise the sentences that spell the Saturdays of the months of 1886, and he can adapt them to other years.

When the first Saturday falls on the first day of the month, the sentence "Do have dull Nanny Nebo" will apply, except to February
when it has only 28 days; * in this latter case, the last word Nebo must be left out.†

Does the sentence contain an entreaty?—"Do have dull Nanny Nebo." What is the point of the request?—"Do have dull Nanny Nebo." What is the intellectual character of Miss Nanny Nebo?—"Do have dull Nanny Nebo." What is Miss Nebo's Christian name?—"Do have dull Nanny Nebo." What is the surname to which Nanny belongs?—"Do have dull Nanny Nebo."

When the first Saturday falls on the second day of the month, the sentence "Now, boy, touch a numb mouse," always applies. [When the second day of February is its first Saturday, the sentence may be "Now, boy, touch Nebo." ] When is the request made to touch a numb mouse?—"Now, boy, touch a numb mouse." Who is requested to touch the mouse?—"Now, boy, touch a numb mouse." What is the boy requested to do?—"Now boy, touch a numb mouse." Are all the functions of the mouse in full activity?—"Now, boy, touch a numb mouse." What numb animal is the boy requested to touch?—"Now boy, touch a numb mouse."

When the first Saturday is the third of the month, this sentence applies—"My days take newer might." [Here the last Saturday is 31st. In September, April, June and November, there are only 30 days. The last word therefore must be disregarded or another sentence taken, as:—"My ties deck Norah."] Whose days take newer might?—"My days take newer might." Is it my days, months or years that take newer might?—"My days take newer might." What is the action of my days in regard to newer might?—"My days take newer might." Is it more recent or older might that my days take?—"My days take newer might." What newer thing do my days take?—"My days take newer might."

When the first Saturday falls on the fourth day of the month, the following sentence always applies:—"Hero taught Davy Noel." Who taught Davy Noel?—"Hero taught Davy Noel." What was Hero's action in regard to Davy Noel?—"Hero taught Davy Noel." What was Noel's Christian name?—"Hero taught Davy Noel." What was the surname of the man Hero taught?—"Hero taught Davy Noel."

When the first Saturday falls on the fifth day of the month, the following sentence always expresses all the Saturdays of that month:—"Will Dan daub a niche?" Is any inquiry made here?—"Will Dan daub a niche?" In regard to whom is the question asked?—"Will Dan daub a niche?" What untidy act in regard to the niche is inquired about?—"Will Dan daub a niche?" What is it which is asked if Dan will daub?—"Will Dan daub a niche?"

When the first Saturday is the sixth day of the month, this sentence always applies:—"A shy dame knows a knock." What is the character of the dame who knows a knock?—"A shy dame knows a knock." What shy person knows a knock?—"A shy dame knows a knock." Is the shy dame slightly acquainted with or positively sure of the knock?

* February has 28 days, except in leap year, which recurs every fourth year, when the number of the year is exactly divisible by 4. In the latter case it has 29 days.
† When the sentence provides for one Saturday more than there is in the month in question, all the Pupil has to do is to disregard the last word, or substitute another sentence, as shown below.
"A shy dame knows a knock." What is it the shy dame knows?—"A shy dame knows a knock."

When the first Saturday falls on the seventh day of the month, all the Saturdays of that month are expressed by the figures which the following sentence represents:—"A hack tore a naughty knave." What tore a naughty knave?—"A hack tore a naughty knave." What act did the hack perform upon the naughty knave?—"A hack tore a naughty knave." What was the character of the knave?—"A hack tore a naughty knave." What naughty person did the hack tear?—"A hack tore a naughty knave."

The dates of the first Saturdays in each month in 1886 are expressed, in order, in this sentence:—No judge may delay my garnisher.

Let the Pupil allow his friends to take an ordinary almanack and question him as to the day of the week that any day in any month of this year falls on. And in subsequent years he can make his own Memory-Almanack from an ordinary almanack by fixing merely the dates of the Saturdays of each month. For 1887 the following sentence will answer: They lie low, nay cringe amid loam. He will find this Memory-Almanack of great use to him if he learns it thoroughly.

There are many other methods of knowing the day of the week any day in the year falls on. This is the most simple and easy, and does not require a quick faculty of arithmetical calculation.

Knowing in this manner the first Saturday, even the non-mathematical mind that knows also the sentences expressing all the Saturdays (and he can easily memorise them by the use of correlations or Interrogative Analysis), can instantly tell on what day of the week any day in the month falls in this or any other year for which he has prepared and learned the Saturday words. As some are accustomed to think of Monday as the 2nd day, and others as Feria 2, it needs less thought to add 2 for Monday than 1, and so it is better that the days fixed by the figure-words be Saturdays rather than Sundays.

Example.—On what day of the week does the 29th of June fall?

Answer.—The last Saturday of June is the 26th [Will Dinah daub a niche.]; Sunday is 27, Monday 28 and Tuesday the 29th. Again, on what day of the week does the 15th of December fall? The Saturdays of December are "Hero laugh* Davy Noel." The 15th is between the 11th and 18th. The 18th is Saturday, the 17th Friday, the 16th Thursday and the 15th is Wednesday.

To tell the Day of the Week of any Date in this Century.

This may be done by Mentally going through the following little calculation:

Add together—The quotient of the last two figures of the year divided by 4; the remainder of the last two figures of the year divided by 7; the number of the given date; and an addendum (given below) for the month. The remainder of this result divided by 7 will give the day of the week.

The following Correlations will help to the memorising of this:

Day of week...day of month...four weeks in month...result of division by 4...four weeks and three days...remainder of division by 7...seven...number...number of date...date-palms...desert...silent...dumb...addendum...add...add all together...together...one family..."we are seven"...divide by 7...unite...unity...strength...main force...remainder is number of day of week.
Addenda for the months—
January...janitor...door...house...home...3
(January...Jan...Ann [2] lady...lady's proposal...leap year)
February...febrifuge...huge...6
(February...29th Feb...leap year...leap...heel...5.—If there is no remainder when the year is divided by 4, it is a leap year.)
March...foot...shoe...6
April...ape...Darwin...win...2
May...Runny...ray...4
June...Junius...us...0
July...He...beat...Jan...2
August...guess...howling wind...how...5
September...ember...ashes...wood...1
October...octavo...hymn...book...hymn...3
November...gnomon...sundial...watch...5
December...dying year...adieu...1

Some examples will make the method clear:—
On what day was the 24th May, 1819, the date of the birth of Queen Victoria?
Quotient of 19 by 4=4; remainder of 19 by 7=5; number of the date=24; addendum for May=4; Total=37, which divided by 7 leaves 2. Answer, 2d day, i.e., Monday.

On what day was the 14th April, 1865, the date of the death of Abraham Lincoln?
Quotient of 65 by 4=16; remainder of 65 by 7=2; number of the date=14; addendum for April=2; Total=34, which divided by 7 leaves 6. Answer, 6th day, i.e., Friday.

On what day was the 6th of May, 1821, the date of the death of Napoleon 1st?
Quotient of 21 by 4=5; remainder of 21 by 7=0; number of the date=5; addendum for May=4; Total=14, which divided by 7 leaves 0. Notice that when there is no remainder, the day is Saturday; therefore; Answer=Saturday.

Remarks.—In Synthesis, Predicating Correlation, and in this Lesson, I have given numerous illustrations where numbers are involved. But my System, unlike Mnemonics, does not find its special function to consist in its application to numbers. My System applies wherever there are ideas, thoughts or impressions of any kind whatsoever to be cemented together. I could have filled these three Lesson Papers with applications to the Sciences, Practical Arts, &c., where numbers would have been involved only incidentally. And, if my System is more powerful in one respect than in another, it is in learning by heart prose and poetry, in mastering the entire circle of the Sciences, History, &c.

Dealing with numbers is rather difficult to the beginner. So, in his interest, I selected the examples I have presented, because they familiarise him with Dates and Numbers in all their uses, and because also those examples offer the greatest possible variety of work for practice, and because those examples are most useful for Mental, and especially Memory Training, and finally, because those examples are most useful for Mental, and especially Memory Training, and finally, because of their great practical utility to all. At the same time the Pupil has acquired the invaluable Art of Correlating. Hereafter, he will make other applications of my System already provided for in principle in these lessons, and hence, they will cost him no trouble to deal with if he has really mastered these lessons.

Whereas, if I had filled these three Lesson Papers with applications to the Sciences only, many would not have cared for such applications, and all would have found it more difficult themselves to have applied my System to such examples as are contained in these Lessons. I may also remind the pupil of the many applications I have already made of it to cases where Numbers are not involved, and to the further fact that the whole of the next and Last Lesson are taken up with matters where Numbers are not brought into play.

THE HIGHER ANALYSIS AND SYNTHESIS.

I.—The following application of my System is extremely dangerous to all who have not had thorough practice in Analysis. Those who have not had such practice should not proceed further, until they have patiently analysed afresh the Presidential, Dough Dodo, and Heptarchy Series, and all my Correlations, as well as all their own; or, what is better still, until they have made a Correlator of 500 or 1000 words, analysed it and thoroughly memorised it. It is only in one of these ways that the Pupil realises the full power of the relations of In., Ex. and Con. And after this cultivation of the Memory to the quick appreciation of these relations, even very weak ones become vivid to him. If he make them himself. Sometimes, in the Higher Analysis and Synthesis, a Pupil feels the connection most keenly, and yet it is impossible for him to formulate the designation of what it precisely is.

Before applying the Higher Analysis and Synthesis to historical facts
it would be better to master at least one book of history in the manner described in the next lesson. After that, in carrying on historical studies, occasions will frequently occur for the application of In., Ex., and Con. to recorded facts.*

**Inclusion** embraces cases where the same kind of facts or the same principles were involved, or where different events happened during the same period; or the same figures occur in different dates with regard to somewhat parallel events. For instance, Garibaldi (the Italian), and Skobeleff (the Russian), both great and recklessly patriotic generals (Inclusion), and both favourites in France (Inclusion), died in the same year, 1882 (Concurrence); Longfellow and Rossetti, both English-speaking poets (Inclusion), died in the same year, 1882 (Concurrence).

See also examples, 1, 2, 3, 5, 6, 7, 8, 10, 11.

**Exclusions** imply facts from the opposite sides relating to the same events, conspicuously opposite views held by the same man at different periods, or by different men who were noticeably similar in some other respect; or antithesis as to the character or difference in the nationality of different men in whose career, date of birth, or what not, there was something distinctly parallel. What a vivid Exclusion there is here, for instance:—The Patriarch Abraham died 1821 B.C., and Napoleon Bonaparte died 1821 A.D.

See also examples, 2, 3, 4, 6, 7, 11.

**Concurrences** are found in events that occur on the same date, or nearly so, even if they have not much else in common. Dr. C. Darwin, who advocated Evolution, now popular in every quarter of the globe, and Sir H. Cole, who first advocated International Exhibitions, now popular in every quarter of the globe, were born in the same year, 1809, and died in the same year, 1882—double Concurrence. Many Coincidences are Concurrences. For instance, on Sunday, 21st November, a great meeting, called by agitators claiming to represent “the unemployed,” was held in Trafalgar Square, professedly to “stir up” the upper classes to an appreciation of the want by the poor of work, wages, and food. The collect for that day in the Common Prayer Book commences with the words, “stir up;” the Gospel for the day records the assembling of “a great company,” and the asking of the question, “Whence shall we buy bread that all these may eat?” (John vi. 5). The agitators allege that unfairly low wages are paid to match-box makers, seamstresses, and other workers; and in the first evening Lesson occur the words, “I will be a swift witness . . . against those that oppress the hireling in his wages” (Mal. iii. 5).

See examples 1, 3, 4, 5, 6, 7, 8, 9, 11.

As in ordinary Recollective Analysis, so in the Higher Analysis, one case frequently includes two and sometimes all three—In., Ex., and Con. Moreover, when two events are looked at together, there may be Concurrence as to one circumstance, Inclusion as to another, and Exclusion as to a third.

**Examples.**

(1) Two renowned mathematicians, Euler and D'Alembert (who both dedicated some of their works to members of reigning families), died in

* Similarly, Doctors, Lawyers, Clergymen, &c., &c., can apply these principles to their own special cases.
1783 (talk of him). D'Alembert—who died in the year of the treaties of Paris and Versailles (3 Sept. 1783), recognising the independence of the United States of America, at the conclusion of a war in which the French had sided with America—was born in 1717 (wood-cutting), date of the foundation by the French of the city of New Orleans.

The former part of this example is a specimen of Inclusion, and the latter of Concurrence.

(2) Two illustrious, uncompromising characters (Inclusion), both brilliant essayists (Inclusion), the one a representative of the music of the future, the other of the obsolete polemic of the past (Exclusion), Richard Wagner and Louis Veuillot were born in the same year, 1813, and died in the same year, 1883 (they have time—they have fame). The last point is a double Concurrence.

(3) Two foremost harbingers of modern thought (Inclusion), Voltaire and J. J. Rousseau, died in 1778 (I think of you)—(Concurrence). Both gained for themselves the reputation of having been the most reckless antagonists of Christianity (Inclusion). And still the one dedicated a church to the service of God, whilst the other in his "Emile" wrote a vindication of Christianity (Exclusion as to each of them, Inclusion as to both of them).

(4) Albrecht Dürer (1440-1528), the famous realistic German painter, died in 1528, and Paul Veronese (1528-1588), the great Italian colourist, was born the same year (oddly enough). Both were painters (Inclusion); one was the greatest of artists in black and white, the other famous for his brilliant colouring (Exclusion). In the same year the one was born and the other died (Concurrence and Exclusion).

(5) Lisbon was ruined by an earthquake in 1755 (hot coal-hole). In that same year (Concurrence) the discovery of the ruins of Pompeii was published to the world, thus reviving the recollection of the overwhelming of that city by a volcano. Both cities were destroyed by subterranean disturbances (Inclusion); the ancient event became generally known when the recent one happened (Concurrence).

(6) Galileo, founder of Modern Astronomy, born in 1564 (tall watch-er) died in 1642 (a teacher won or the journey), the very year in which Sir Isaac Newton was born. Galileo's theory was not proved but merely made probable until the existence of the laws of gravitation was established, and it was Newton who discovered gravitation. This is an instance of inclusion as to the men themselves, of Exclusion and Concurrence as to common date of birth and death.

(7) Two prominent litterati (Inclusion), one a Frenchman, the other an Englishman (Exclusion), well known for the pomposity and sonority of their style of writing (Inclusion), were born in the same year, 1709, and died the same year, 1784 (to gossip, take over)—a double Concurrence—Lefranc de Pompignan (pompous)—(In. by S.), Johnson.

(8) General Foy, an orator and artillery officer, fond of literature, was born the same year (Concurrence), 1775 (tangle), as the orator (Inclusion), Daniel O'Connell. He died in 1825 (ditiné law), the same year (Concurrence) as Paul-Louis Courier, who was also artillery officer (Inclusion), fond of literature (Inclusion) and moreover, like O'Connell, a violent pamphleteer (Inclusion).

(9) Haydn, the great composer, was born in 1732 (tongue of men), and died in 1809 (the heavy sob); this date corresponds to that of the birth (Exclusion and Concurrence) of another famous composer (Inclusion),
Mendelssohn, who himself died in 1847 (decaying), the same year as O'Connell.

(10) End of Augustus' Empire at his death, 14. End of Charlemagne's at his death, 814. End of Napoleon's at his abdication, 1814.

This is simple Inclusion as to the empires, and Inclusion by Sound as to the dates, "14" being in all, and "814" in two of them.

(11) Mary Stuart, for some time Queen of France, born in 1542 (to learn)—100 years before the death, at Cologne, of another Mary, Queen of France (Marie de Medicis)—was married to the Dauphin of France (afterwards Francis II.) in 1558 (dual life). This same date is that of Elizabeth's accession to the throne. This date again coincides with the death of the Emperor Charles V., and the commencement of the downfall of Spain, England's most powerful rival. Under this same Elizabeth, 1588 (they leave a few) the great Catholic invasion was frustrated by the destruction of the Armada, whilst 100 years later, 1688 (to shave off), a Protestant invasion (William III. 's) was invited by the Parliament and welcomed by the people. Bunyan, the great Protestant writer, died that very year.

Let the Pupil point out the In., Ex. and Con., in this example, as I have in the others; and send his analysis to me, accompanied by other specimens selected as well as analysed by himself.

See page 160.

HOW TO MEMORISE MONTHS AND DATES AS WELL AS YEARS.

Pupils sometimes ask how months and days, as well as years, can be memorised. They ought to see, from specimens already given, how to deal with hours and minutes as well, if need be. We here illustrate one method of dealing with months and days. The day of the month on which any king came to the throne, and the length of his reign, may be fixed thus:—For the name of the month take the equivalent figures of the first two consonants, thus:—For January (Jan.) 62, February (Feb.) 89, March (Mar.) 34, April (Apr.) 94, May (m-m) 33, June (n-n) 22, (62 having been already used for January), July (Jul.) 65, August (Aug.) 70, September (Sep.) 09, October (Oct.) 71, November (Nov.) 28, December (Dec.) 10. For the day of the month keep always two places, that is, where there is only one figure, prefix a nought: taking (in the case of Henry I.) for 5th, 05. Keep two places, in the same way, for the years of the reign; e.g., in the case of Mary, 06. There will then be no difficulty in distinguishing in the Date Phrase the year of accession, the month, the day of the month, and the length of the reign.

Take the phrase in the case of William the Conqueror: "The wise judge got through any day." You have already memorised the Correlation between William I. (wit) and "the wise judge" (1066), and have only to learn the rest of the phrase, "got" = 71 = hard c and t = October. "Through" = 14, i.e., "got through" means "October 14" and William I. dated the commencement of his reign from Oct. 14th, 1066. "Any day" = 21, and reminds you that William I. reigned 21 years. In the same way you can extend the other date words or phrases which you have memorised in connection with the English kings. Here are some specimens:—William I., 1066, Oct. 14—21 yrs. . . . The wise judge got through any day.
William II., 1087, Sep. 26—13 yrs. ...Deceiving is punished, Amy.
Richard I., 1189, Sep. 3—10 yrs. ...The day of hope is happy as amity is.
Bichard L, 1189, Sep. 3—10 yrs. ...The day of hope is happy as amity is.
Edward II., 1307, July 8—20 yrs. ...A damask shawl has often ease.
Mary, 1553, July 6—6 yrs. ...A tall elm-hedge less shews age.
Elizabeth, 1558, Nov. 17—45 yrs. ...Dual life inviting rule.
George I., 1714, Aug. 1—13 yrs. ...A Doctor walks a set time.
George IV., 1820, Jan. 29—11 yrs. ...Toughness I shun on a bath day.
Victoria, 1837, June 20th ...Day of Maying known once.

These are awkward sentences, but can be easily learned by the aid of memorised Correlations, or Interrogative Analysis.

ROMAN EMPERORS FROM JULIUS TO CONSTANTINE.

Roman emperors... Imperial era... ear... drum... beat... knock (27)... wound... swelling... augment... Augustus... gusty... trim sails... rigging... tar (14)... sailor... boatman... river... Tiber... Tiberius... beer... pint... mug (37)... cup... cup of flower... calix... Caligula... ligature... bleeding... blue blood... aristocrat... rat (41)... cat... claw... Claudius... land... sing praises... harp... lyre (54)... musical instrument... fiddling... burning... Nero... row... boat... ship (69)... galley... Galba... albatross... ancient mariner... curse... oath... Othello... Iago... tell-tale... Vitellius... us... we two... sweethearts... kis... (70)... passion... Vespasian... vespers... vestment... cope (79)... coping... wall... wall of Jerusalem... Titus... conqueror of the Jews... conqueror... fight (81)... brave... indomitable... Domitian... domicile... house servant... footman... page (96)... leaf... tender shoots... tender nerves... Nerva... strong nerves... stout... beef (98)... dinner-waiter... tray... Trajan... tragic end... killing a pig... dead hog (117)... pork... food... fodder... hay... hay drying... Hadrian... Adriatic... sea... unpleasant motion... to move (138)... immovable... chaste St. Anthony... Antoninus Pius... pie... pigeon pie... shooting... to shoot (161)... target... mark... Marcus Aurelius... reliable... untrustworthy... thieves (180)... pirates... captain... commodore... Commodus... commodious... cramped garret... the beam (193)... sunbeam... sunstroke... severe... Severus... severe trial... win your spurs... knighted (211)... knight... mediaeval horsemanship... caracole... Caracalla... callous... care for nothing... nothing (217)... nought... naughty... punishment... may cry... Macrinus... Rhine wine... swallow... oyster... (or, Lucrine Lake... oysters)... native (218)... talk like a native... gabble... Elagabalus... gab... conceived talk... ask for more... “no, no, no” (222)... knowing... canny... Scotchman... Sandy... Alexander Severus... Bucephalus... fine horse... animal (235)... fox... run to ground... run him in... Maximin... maxim... wise saw... sage... clever... “no muf” (238)... furs... smartly dressed... gaudily dressed... Gordian... knot... ten knots an hour... nearer home... nearer (244)... farther... father of Alexander the Great... Philip... lover of horses... harness... new rope (249)... hanging... drop... descent... Decius... decimate... destroy... annihilate (251)... late... early... cock-crow... cock... Gallus... gall... vinegar... crucify... nail him (253)... cruel death... valley of death... Valerian... (and cruel death... gallows... Gallienus)... valueless... chaff... no chaff (268)... grain... pick up grain... fowls... claws... Claudius... Claude... French painter... French wines... negus (270)... drink... drunk... reel... Aurelius... oral teaching... coaching... in a coach (276)... coach... bus... Probus... probe... feel for... search... in vain (282)... all is vanity... cares of life... Carus... caress...
...never leave you...never (284)...never say die...Diocletian...die...bullet...billet...message (306)...bulletins...constant messages...Constantine.

Let the Pupil send me his own Correlations for the above.

MEMORISING PROPOSITIONS IN EUCLID.

In regard to the Demonstration of Prop. 3, Book I. of Euclid, given below, it must be noted that what I have offered, is done mainly to help the Student to the comprehension of the Proposition, &c. I assume he is studying alone, without a teacher's aid. If he clearly understands every link in the chain of Exposition and of the Demonstration, the recollection of them is practically assured. He can then recite the Proof, etc., with the brevity and in the exact language of Euclid if he prefers.

Enunciation.—"From the greater of two given straight lines to cut off a part equal to the less."

Its Memorisation.—Does the Proposition imply that we add to or take away from the greater line?—"From the greater of two given straight lines to cut off a part equal to the less." From which of the two lines must we cut off a part?—"From the greater of two given straight lines to cut off a part equal to the less." How many given lines are there?—"From the greater of two given straight lines to cut off a part equal to the less." Are there any particular lines in question?—"From the greater of two given straight lines to cut off a part equal to the less." What kind of lines are they from one of which we cut off a part?—"From the greater of two given straight lines to cut off a part equal to the less." Given our two straight lines, what do we now proceed to do?—"From the greater of two given straight lines to cut off a part equal to the less." What do we cut off from the greater line?—"From the greater of two given straight lines to cut off a part equal to the less." What relation does the part we cut off from the greater bear to the less line?—"From the greater of two given straight lines to cut off a part equal to the less." To what is the part we cut off equal?—"From the greater of two given straight lines to cut off a part equal to the less."

Which are the two given straight lines?—"Let AB and C be the two given straight lines, of which AB is the greater." Which is the greater of these two given straight lines?—"Let AB and C be the two given straight lines, of which AB is the greater." What is required to be done with regard to these two given straight lines?—"It is required to cut off from AB, the greater, a part equal to C, the less."

Construction.—From the point A, draw the straight line AD equal to C. From what point is AD drawn?—"From the point A, draw AD equal to C." What straight line is drawn from A equal to C?—"From the point A, draw the straight line
\(AD\) equal to \(C\)." What is the length of \(AD\)?—"From the point \(A\), draw the straight line \(AD\) equal to \(C\)." Equal to which straight line is \(AD\)?—"From the point \(A\), draw the straight line \(AD\) equal to \(C\)." How is a straight line drawn from a given point \(A\), and equal to a given line \(C\)?—"From a given point, to draw a straight line equal to a given straight line." (Proposition 2.) What further use is made of the point \(A\)?—"And from the centre \(A\), at the distance \(AD\) describe the circle \(DEF\), meeting \(AB\) in \(E\)." What is the radius of the circle?—"And from the centre \(A\), at the distance \(AD\), describe the circle \(DEF\), meeting \(AB\) in \(E\)." What is described from the centre \(A\) and at the distance \(AD\)?—"From the centre \(A\), at the distance \(AD\), describe the circle \(DEF\), meeting \(AB\) in \(E\)." Where does the circle cut \(AB\)?—"And from the centre \(A\), at the distance \(AD\), describe the circle \(DEF\), meeting \(AB\) in \(E\)." Can a circle be drawn according to Euclid?—"Let it be granted that a circle may be described from any centre, at any distance from that centre." (Postulate 3.)

**Hypothesis.**—Then what about the length of the part \(AE\)?—"\(AE\) shall be equal to \(C\)." Is this proved?—"\(AE\) shall be equal to \(C\)."

**Proof.**—What follows from the fact that \(A\) is the centre of the circle \(DEF\)?—"Because the point \(A\) is the centre of the circle \(DEF\), therefore \(AE\) is equal to \(AD\)." What is equal to \(AD\)?—"Because \(A\) is the centre of the circle \(DEF\), therefore \(AE\) is equal to \(AD\)." How do we know that lines drawn from the centre of a circle to the circumference are equal?—"A circle is a plane figure contained by one line, which is called the circumference, and is such, that all straight lines drawn from a certain point within the figure to circumference are equal." (Definition 15.) What else is equal to \(AD\)?—"But \(C\) is equal to \(AD\." How is \(C\) equal to \(AD\)?—"From the centre \(A\), draw the straight line \(AD\) equal to \(C\)." (Construction.) What two lines then are equal to \(AD\)?—"Therefore \(AE\) and \(C\) are each of them equal to \(AD\." What is the result?—"Therefore \(AE\) is equal to \(C\)." What is the length of \(AE\) as compared with \(C\)?—"Therefore \(AE\) is equal to \(C\)." How is \(AE\) equal to \(C\)?—"Things which are equal to the same thing, are equal to one another." (Axiom 1.) What two lines are equal?—"Therefore \(AE\) is equal to \(C\)."

**Conclusion.**—From what straight line has \(AE\) been cut off?—"Wherefore from \(AB\), the greater of the two given straight lines, a part \(AE\) has been cut equal to \(C\), the less." What is \(AE\) equal to?—"Wherefrom \(AB\), the greater of the two given straight lines, a part \(AE\) has been cut off equal to \(C\), the less." Which is the required part?—"Wherefrom \(AB\), the greater of two given straight lines, a part \(AE\) has been cut off equal to \(C\) the less." Q. E. F. (\(=quod erat faciendum\)).

To memorise the number of the proposition, make a Double Inclusion, the first consonant of which expresses the number of the Book and the remaining consonant or consonants indicate the number of the Proposition: thus, Judge would mean the sixth Proposition of the sixth Book. Then correlate this Double Inclusion to the characterising word [always the principal or new point] of the Proposition itself, and memorise the Correlation. In this way you can recite the Propositions of each Book forward or backward without mistake, or instantly tell the number of any Proposition and the Book to which it belongs, or on any number of
a Proposition of any Book being mentioned, you can state at once the Proposition itself if you have memorised it.

B. I., P. 1.—Deed...deed-box...equal sides...EQUILATERAL...“To describe an equilateral triangle, &c.”

B. I., P. 2.—Then...thence...From...“From a given point, &c.”

B. I., P. 3.—Dam...to block up...blockade...CUT OFF...“From the greater, &c., to cut off, &c.”

B. I., P. 4.—Wither...withered...THIRD...“If two triangles have, &c., they shall also have their bases or third sides equal.”

B. I., P. 5.—Tall...long legged...equal legged...isosceles...“The angles at the base of an isosceles triangle, &c.”

B. I., P. 6.—Dish...waiter...attendant...sub-attendant...SUBTEND...“If two angles of a triangle be equal, &c., the sides also which subtend, &c.”

B. I., P. 7.—Dock...tail...end...Termination...Extremity...“On the same base, &c., there cannot be two triangles having their sides which are terminated at one extremity of the base, &c.”

B. I., P. 8.—Doe...Hurlingham...lawn tennis...contended by two sides...CONTAINED BY THE TWO SIDES...“If two triangles have, &c., and likewise their bases, &c., the angle which is contained by the two sides, &c.”

B. I., P. 9.—Dip...compass needle...quadrant...RECTILINEAL ANGLE...“To bisect a given rectilineal angle, &c.”

B. I., P. 10.—Dates...leap years...bisextile...BISECT A STRAIGHT LINE...“To bisect a given finite straight line,” &c.

B. I., P. 11.—Dotted...dots...full points...points in the book...Point in...“To draw a straight line at right angles, &c., from a given point in the same.”

B. I., P. 12.—Outdone...done without...POINT WITHOUT...“To draw a straight line perpendicular to a given straight line, &c., from a given point without it.”

B. I., P. 13.—Diadem...diamond...gem...cat’s eye...* EITHER...“The angles which one straight line, &c., either are two right angles, &c.”

B. I., P. 14.—Theatre...tragedy...tragic...touching...ADJACENT...“If at a point, &c., two other straight lines, &c., make the adjacent angles, &c.”

B. I., P. 15.—Total...teetotaler...firm step...upright...VERTICAL...“If two straight lines cut one another, the vertical, &c.”

DERBY WINNERS.

PRIVATE and PUBLIC MEMORIES.—Many persons whose memories are reliable in Private, seem to lose all control over their recollective powers in the presence of their friends. This is owing to mind-wandering and nervousness. These infirmities can be completely cured by doing Memory-feats in the presence of others. Let the Pupil who is anxious to attain the FULL POWER of my System recite the Knight’s Tour, The Boat Race, Ratio, and Derby Winners, at least 20 times—each of them—before their friends or acquaintances. This practice will

* The diphthong el is sometimes pronounced like long E and sometimes like long I. Here I adopt what seems to be the better usage, and I pronounce it as long I, making a perfect In. by S. with cat’s-eye.
strengthen their continuity, overcome nervousness, and make them understand the real nature and character of my System, and enable them to apply it readily to new and hitherto unsuspected cases. And let the Pupil hand the Listener only the papers that contain the unsolved problems—not the papers that explain how these feats are done. They should let them see the paper containing the Knight's Tour only—the Figures and Facts of the Boat Race and Ratio only—and the List of Derby Winners and their Dates only. Below, the Derby Winners from 1780 to 1790 are correlated to their date-words. The Pupil will find it a good exercise to select Date-words for the years from 1791 to 1886, and correlate those and all the Derby Winners together as I have correlated the first ten. Those who hate racing and its concomitants, and I fully endorse all their condemnation of racing immoralities, must acknowledge that this is an incomparable series for practice in making and memorising Correlations.

DERBY...Derby dog...dog face (1780)...hang-dog-look...villain...deep-dyed...DIOMED.

Vatt (1781)...vaticinator...prediction...foretelling eclipse...YOUNG ECLIPSE.

Fan (1782)...cool...blood-heat...blood...ASSASSIN.

Foom (1783)...sea...salt...SALTRAM.

Fire (1784)...rife...volunteer...SERGEANT.

Fall (1785)...apple...William Tell...AIMWELL.

Fish (1786)...bait..."gentle"...gentleman...NOBLE.

Fag (1787)...fagot...fire...peat...SIR PETER TEAZLE.

Fife (1788)...fife and drum...soldiers...massacre...SIR THOMAS.

Fog (1789)...watch...watch-dog...Skye terrier...SKYSKRAPER.

As the years follow each other without interval there is no need to correlate them together. The name of the horse is correlated after the date-word.

The names of the horses and dates will be found on the enclosed slip. In Whitaker's Almanack for 1885, p. 353, is a list of Derby Winners, with names of Jockeys and Owners, from 1864 to 1884.

When he knows the names and dates of the horses, the Pupil can, if he likes, correlate to each horse the name of the Jockey. Thus, for 1883:—St. Blaise,...Fire...coal...origin of coal...C. Wood; and to Wood, the Jockey's name, he can correlate the name of the Owner, Sir F. Johnstone, thus:—Wood...Forest...rest...last resting-place...tombstone...Sir F. JOHNSTONE. And similarly he can fix in his memory the names of the other Jockeys and Owners.

LEARNING LEDGER FOLIOS, CHEMICAL FORMULÆ, &c.

If a book-keeper wishes to learn the number of the ledger page where the name is entered, he at once correlates the name to the word that translates the figures that express the number of the page. But, in the case of the same name being entered on several different pages of the same book, he correlates the name to the words that successively express the different pages. But suppose the more difficult case of there being several different men, having the same name, as a dozen Browns, a dozen Smiths, &c., &c. what is he to do? A reperusal of the explanation of Double Inclusion, &c., in Synthesis, will give one out of the
many ways that he could resort to memorise the pages. Suppose the Smith of Edinburgh is on page 941, the Smith of Liverpool on page 53, and the Smith of Birmingham on page 745. He at once makes a word beginning with S to tell him it is Smith, and having as its remaining consonants letters which translate the number of the page. "Support" is therefore the Edinburgh Smith, on page 941; "Siloam" is the Liverpool Smith, on page 53; and "Squirrel" is the Birmingham Smith, on page 745. And if he doubt his natural memory, he correlates "Edinburgh" as the "best known" to "support," thus: EDINBURGH, burglar...transportation...SUPPORT: LIVERPOOL...pool...SILOAM; BIRMINGHAM...burr...nut...SQUIRREL. Or, if the Browns and Smiths, &c., &c., are all in the same city where he resides, he can use the name of the street as the "best known" and correlate that to the homophone as above that tells the name and the number.

Similarly, a Pupil could deal with a Chemical Formula, like Quinia —C₂₀, H₂₄, N₂, O₂. He could make a word beginning with the Symbol of the chemical element, while the remaining consonants of the word spell the figures attached to that element. C₂₀ would make Canes, H₂ would make honour, N₂ would make Nun, and O₂ would make One. By correlating these words together, and memorising the Correlations, he can at once restore the Formula from memory: [QUINIA...quinine...cat-o'-nine tails...lashes...CANES...caning...disgrace...HONOUR...purity...NUN...none...ONE]. And whatever the complication might be, he can always readily deal with it—for instance, suppose there are numbers both before and after such Symbol, as 3 C₂₀, 10 H₂₄, 2 N₂, and 7 O₂, these would be translated into: My Canes, Dishonour New Nun, and Coy One.

MULTIPLICATION TABLE.
Continued as far as 13 times 24.

In memorising this extension of the ordinary multiplication table, it is not necessary to notice the figure 1 before the 3 of 13 and in the other "teens," as the learner of course knows it must be repeated every time, and does not need to remind himself of it; therefore, "maim" may mean "3 times 13" instead of "3 times 3" mummy "may mean "13 times 13" instead of "3 times 3," "mummy" may mean "13 times 13" instead of "3 times 3;" and manor, 13 times 24.

<table>
<thead>
<tr>
<th>Number</th>
<th>word</th>
<th>numba...</th>
</tr>
</thead>
<tbody>
<tr>
<td>twice (1)3 is</td>
<td>teeth chattering...</td>
<td>gnash</td>
</tr>
<tr>
<td>3 times (1)3 is</td>
<td>mutilate...devilish...</td>
<td>imp</td>
</tr>
<tr>
<td>4 times (1)3 is</td>
<td>paper...white...</td>
<td>lawn</td>
</tr>
<tr>
<td>5 times (1)3 is</td>
<td>woven...</td>
<td>shawl</td>
</tr>
<tr>
<td>6 times (1)3 is</td>
<td>bread and jam...breakfast...</td>
<td>coffee</td>
</tr>
<tr>
<td>7 times (1)3 is</td>
<td>cricket...</td>
<td>bat</td>
</tr>
<tr>
<td>8 times (1)3 is</td>
<td>rage...passion...</td>
<td>desire</td>
</tr>
<tr>
<td>9 times (1)3 is</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 times (1)3 is</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 times (1)3 is</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 times (1)3 is</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 times (1)3 is</td>
<td></td>
<td></td>
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<td>14 times (1)3 is</td>
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<td>15 times (1)3 is</td>
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<td>16 times (1)3 is</td>
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<td>17 times (1)3 is</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 times (1)3 is</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 times (1)3 is</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 times (1)3 is</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Word</td>
<td>Definition/Example</td>
<td>Synonym</td>
</tr>
<tr>
<td>----------</td>
<td>--------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Beam...</td>
<td>&quot;own eye&quot;...tooth</td>
<td>Teething</td>
</tr>
<tr>
<td>9 times (1)3 is</td>
<td></td>
<td>1 1 7</td>
</tr>
<tr>
<td>Dismay...</td>
<td>appalling...death...</td>
<td>Demise</td>
</tr>
<tr>
<td>10 times (1)3 is</td>
<td></td>
<td>1 3 0</td>
</tr>
<tr>
<td>Diadem...</td>
<td>stage king...</td>
<td>Drama</td>
</tr>
<tr>
<td>11 times (1)3 is</td>
<td></td>
<td>1 4 3</td>
</tr>
<tr>
<td>Autonomy...</td>
<td>economy...thrift...peasant...</td>
<td>Tillage</td>
</tr>
<tr>
<td>12 times (1)3 is</td>
<td></td>
<td>1 5 6</td>
</tr>
<tr>
<td>Mummy...</td>
<td>stone box...toy box...</td>
<td>Toyshop</td>
</tr>
<tr>
<td>(1)8 times (1)3 is</td>
<td></td>
<td>1 6 9</td>
</tr>
<tr>
<td>Homer...</td>
<td>blind...deaf...</td>
<td>Deafen</td>
</tr>
<tr>
<td>(1)3 times (1)4 is</td>
<td></td>
<td>1 8 2</td>
</tr>
<tr>
<td>Meal...</td>
<td>dining table...</td>
<td>Table</td>
</tr>
<tr>
<td>(1)3 times (1)5 is</td>
<td></td>
<td>1 9 5</td>
</tr>
<tr>
<td>Match</td>
<td>safety match...safe...</td>
<td>Unsafe</td>
</tr>
<tr>
<td>(1)3 times (1)6 is</td>
<td></td>
<td>2 0 8</td>
</tr>
<tr>
<td>Mica...</td>
<td>glittering...bright...</td>
<td>Noonday</td>
</tr>
<tr>
<td>or, Macaw...</td>
<td>vivid scarlet...bright...</td>
<td>Noonday</td>
</tr>
<tr>
<td>or, Meek...</td>
<td>cowed...stray dog...</td>
<td>Unowned</td>
</tr>
<tr>
<td>or, Omega...</td>
<td>end...end of life...</td>
<td>Ninety</td>
</tr>
<tr>
<td>(1)3 times (1)7 is</td>
<td></td>
<td>2 2 1</td>
</tr>
<tr>
<td>&quot;Muff&quot;...</td>
<td>soft youth...love...</td>
<td>Enamour</td>
</tr>
<tr>
<td>(1)8 times (1)8 is</td>
<td></td>
<td>3 3 4</td>
</tr>
<tr>
<td>Mob...</td>
<td>crowded...Noah's Ark...</td>
<td>Newark</td>
</tr>
<tr>
<td>(1)3 times (1)9 is</td>
<td></td>
<td>2 4 7</td>
</tr>
<tr>
<td>Minco...</td>
<td>cut small...small cuts...</td>
<td>Notches</td>
</tr>
<tr>
<td>(1)3 times (2)0 is</td>
<td></td>
<td>2 6 0</td>
</tr>
<tr>
<td>Monday...</td>
<td>market day...profits...</td>
<td>Income</td>
</tr>
<tr>
<td>(1)3 times 21 is</td>
<td></td>
<td>2 7 3</td>
</tr>
<tr>
<td>Minion...</td>
<td>mean favourite...tricky...</td>
<td>Knavish</td>
</tr>
<tr>
<td>(1)3 times 22 is</td>
<td></td>
<td>2 8 6</td>
</tr>
<tr>
<td>Ammonium...</td>
<td>ammonia...pungent...pickles...</td>
<td>&quot;Nabor&quot;</td>
</tr>
<tr>
<td>(1)3 times 23 is</td>
<td></td>
<td>2 9 9</td>
</tr>
<tr>
<td>Manor...</td>
<td>farm...sheep...</td>
<td>Mutton</td>
</tr>
<tr>
<td>(1)3 times 24 is</td>
<td></td>
<td>3 1 2</td>
</tr>
</tbody>
</table>

The Pupil will find it a good exercise in the use of the Figure Alphabet, and of Synthesis, to continue this table to "24 times 24."

**EXPLANATIONS OF THE MACREADEY ANECDOTE.**

The student must exercise his judgment as to what is the best known to which he will Correlate an isolated fact. In the anecdote mentioned in a foot note* to Comic Lecture on Mnemonics, the actor

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* The following anecdote is taken from the *Era Almanack*, 1882, p. 86.—The Actor, whose name was Taylor, could not remember the name assigned him in his part in the play. We shall see how Mnemonics helped him!

**ASSOCIATION OF IDEAS.**—Macready was once victimised in *Virginius*. The Numitorius could not remember his own name. "You will remember it, Sir," said the tragedian, carefully pronouncing it for him, "by the association of ideas. Think of Numbers—the
should have correlated the word "Numitorius," which he could not remember, to the word "Uncle" as the BEST KNOWN that preceded it, which he could remember, or to his "cue" the word "Question," thus:


Had the actor memorized either of these Correlations, he would not have forgotten Numitorius in his performance. In all similar cases mere In. by sound, like the word "Numbers" which Macready proposed, and which is really not a genuine In. by sound, is no service to a poor memory.—A Correlation alone suffices.

To any conceivable "Isolated Fact" you can find a Best Known to which you can correlate it, and thereby always have it at command. This is true, even in cases of anticipatory memory. Instead of tying a string round your finger to remind you to buy something when you get to the bazaar, and when you get there forgetting to notice the string or forgetting what the string was intended to remind you of, correlate the name of what you wish to purchase to the name of something you are sure to think of at the place you are going to, and memorise the Correlation. When you see the Best Known, the thing you correlated to it will at once occur to mind. I will add only one more illustration: A commercial traveller was in the habit of putting his watch under his pillow, and also in the habit of forgetting that he put it there! After losing two watches in this way, he came to me to improve his memory, and asked me if my System could aid him to think of his watch and where he had put it. "Infallibly," I replied, "if there is anything you can mention which you are certain to think of when you get up, such as boots, trousers, hat, &c." "There is one thing," he rejoined, "I am more certain to think of than any article of clothing. I always think what a shame it is I have to get up." "Well, you are sure to think of the words 'get up'; that then is your Best Known. Affiliatethe word watch to it—thus 'GET UP'—Spring up—Watch Spring—WATCH." After a tour of four months he reported he had always thought of his watch the moment he awoke.

THE LOISETTIAN WATCH.

(1) The following is a provisional method to aid in keeping future engagements:

(2) First arrange and memorise Equivalents for the hours from 6 a.m. to 6 p.m., or later for each future occasion whenever he requires to remember engagements ahead—by Synthesis before noon, and by Analy-

Book of Numbers." The Numitorius did think of it all day, and at night produced, through "the association of ideas" the following effect—

Numitorius—"Where is Virginia? Wherefore do you hold that maiden's hand?"
Claudius—"Who asks the question?"
Numitorius—"I, her Uncle—DEUTERONOMY!"
sis after, thus: 6 a.m. .sick. .DOCTOR; 7 a.m. .Severn. .RIVER; 8 a.m. .eat. .loaf. .FISHES; 9 a.m. .ninepins. .PIN Cushion; 10 a.m. .tender.—beef. .KNIFE; 11 a.m. .leaven. .bread. .OVEN. NOON. 1 p.m. .WONDER; 2 p.m. .TOOl; 3 p.m. .THREE-DECKER; 4 p.m. .FOREARM; 5 p.m. .FIVES; 6 p.m. .SICKLe; 7 p.m. .SEVEN SHOOTER; 8 p.m. .EIGHT-OARED BOAT; 9 p.m. .MUSES; 10 p.m. .TENTACLES, &c. Half hours could be indicated thus: 6½. .DIPLOMA [Doctor's Diploma]; 7½. .MOUTH [River Mouth]; 8½. .NET [Fishes, Net], &c.

Let the Pupil make and memorise Hour-Equivalents for each future occasion when wanted, so that he can repeat them in connexion with the hours they respectively stand for with the greatest speed both ways.

(3) Now suppose he wishes to do some special thing at each of those hours to-morrow, or at only one, two or more of them, Correlate the Hour-Equivalent to the thing to be done at that hour, and memorize the Correlation. The last thing before going to bed to-night; and to­morrow morning, when he first wakes up, let him go through the Hour-Equivalents and revive what he had correlated to each of them. And when the clock strikes 6, 7, &c., he will think or have the means of re­calling what he had yesterday desired that he should do at that hour.

To give a few illustrations, I append—

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 a.m.</td>
<td>DOCTOR</td>
</tr>
<tr>
<td>7 &quot;</td>
<td>RIVER</td>
</tr>
<tr>
<td>8 &quot;</td>
<td>FISHES</td>
</tr>
<tr>
<td>9 &quot;</td>
<td>PIN Cushion</td>
</tr>
<tr>
<td>10 &quot;</td>
<td>KNIFE</td>
</tr>
<tr>
<td>11 &quot;</td>
<td>OVEN</td>
</tr>
</tbody>
</table>

(4) After considerable practice, he will to-morrow think of the special things, even without correlating them to the Hour Equivalents. The reason is that he has created a Habit of pre-adjustment of mind to a certain class of future events. The soldier sleeping in camp will not awaken when his name is called out loudly; but, if “turn out” is spoken quietly, it will arouse him, because to that sound his faculties are specially pre-adjusted. Similarly, when the Hours of next day arrive, my Pupil will spontaneously recall what he had resolved to do at that hour. During my busy season, I make daily 20 to 50 engage­ments for the future. I make no memoranda and I never forget the day nor the hour. And it is the same with my diligent Pupils.

(5) This “Watch,” which never tells the time of day [that is left to the mechanical watch or clock], is a mental Event-Reminder, and it only serves to call to mind what you had planned to do as the hours ar­rive. It is never wound up, unless the future event is correlated to the Hour-Equivalents, and recalled several times, and especially on the day the event is to happen.

LATITUDES AND LONGITUDES.

The method of dealing with Latitudes and Longitudes would be sim­ple enough if there were not two kinds of each; yet this difficulty van­ishes if we treat NORTH Latitudes and EAST Longitudes as ordinary figures, and resort to the special device of using figure-words beginning with an S to denote SOUTH Latitudes and WEST Longitudes [and no special device would be needed if we realized exactly what part of the Globe each place occupies].
1. Constantinople is North Latitude 41°[ready] and East Longitude 28°[knave]. CONSTANTINOPLE .. constant .. always ready .. ready... red. .. blood red .. assassin .. knave.

2. New York City is North Latitude 40°52'[horse line] and West Longitude 73°59'[scheme all happy]. NEW YORK CITY . Manhattan...hat ... band ... line ... a horse line .. steam horse .. railway .. submarine railway .. scheme all happy.

3. Sydney, South Latitude 33°51'[Simoom light] and East Longitude 151°11'[dull eyed idiot]. SYDNEY .. antipodes .. anti .. against .. disaster sighs .. Simoom light .. light .. eye .. dull eyed idiot.

4. Rio de Janeiro. South Latitude 22°54'[sea onion healer] and West Longitude 43°9'[swarm by]. RIO DE JANEIRO .. row .. garden bed .. onion bed .. sea onion healer .. cough healer .. honey .. bees .. swarm by.

Let the Pupil note that we always give the Latitude first and Longitude last. Sometimes a compound date-word will express the Latitude and Longitude together. "A ready knave" would have answered in the first example, &c.

THE HIGHER ANALYSIS AND SYNTHESIS
APPLIED TO LAW.

I.—See page 147 for remarks on Higher Analysis.

II.—The relations involved in the Higher Analysis and Synthesis are between sentences or propositions. And, although the relations are sometimes Analytic, yet, usually, they are Synthetic, made up of one or several intermediates, yet it is often extremely difficult to indicate them in detail. The mind feels them, as it were, but cannot always exactly define them or point them out to others, because they are often so complex and subtle. This extension of ordinary Analysis and Synthesis can only be effectually made by those who conceive the relations themselves. It is never, or rarely, felt or appreciated in the case of the work of others. And yet this Higher Analysis and Synthesis is of immense power in cases practically unmanageable by the unassisted Natural Memory.

III.—Suppose a Law Student wishes to memorise the following:—

MARRIED WOMEN'S PROPERTY ACT.
33 & 34 Vict., c. 93.

Here are four things to be connected in the memory. He has to remember. (1) The Title of the Act [Married Women's Property Act], (2) The years of the Parliamentary Session in which it was passed [33 & 34]. (3) The name of the reigning Sovereign [Victoria] ; and (4) The chapter (c.) of the Act [93]. If a Pupil has one or five hundred of these Acts to fix in mind, together with the highly technical symbols used, he will need genuine aid, and this is what the Higher Analysis and Synthesis offer him.

IV.—The first thing we do in dealing with a memory task is to reduce the memory problem to its lowest terms, to minimise as much as possible the work to be done. (1) Now we see in the symbolic representation of these Acts [33 & 34 Vict., c. 93], that the number of the chapter [c.] always comes last. Hence we can use a word to express that number, and we can safely omit the word "chapter," as the last
number can mean nothing else. (2) If we express the Sovereign’s name [by itself and number, or by its Homophone or Double Inclusion], in all other cases, we can safely omit the Royal name in the case of the Victorian Acts, as we know, from the omission of it, Victoria’s must be understood. (3) To express the number of the chapter or of the year or years of the reign, we can use words expressing the figures exactly, or words containing four or more sounded consonants of which we consider or reckon only the first two, and where there are three figures we will generally use words expressing three figures only. (4) Many simple devices can be used—as, for instance, to express the 6th & 7th of the Victorian era, we could use the word Showing; the 67th year could not be meant, as that number has not yet been reached, and therefore it must mean the 6th & 7th. And sometimes any of the above or other devices may, in special cases, be violated, rather than reject a good memorising phrase, as, “Humbug” might be used to express 3, when otherwise it would mean 397, according to the above. To express the 29th year of reign, “Nobody” could be used, as it could not mean 291.

V.—Let us now deal with 33 & 34 Vict., c. 93. We have seen that we can safely omit Victoria and chapter, or its abbreviation c. All we have to do then is, turn 33 & 34, and 93, into a phrase that will sustain a synthetic relation to the words or title of the Act; viz., “Married Women’s Property Act.” As this Act is in defence of married women’s rights, it is in their hands a defensive weapon, a boomerang if you please! And, as Mamma would be understood to mean a species of married woman, i.e. a married woman who is a mother, the following phrase will express the title of the Act by In., and its symbolic expression, and will be readily remembered:

Mamma’s marital boomerang!!

33 & 34 [Vtx. c.] 9 3.

VI. Maried Woman’s Property Act, 1874.

37 & 38 Vic., c. 50.

Make less quarrelling!

3 7 [& 38 Vic., c.] 5 0, (18) 7 4

VII. Habeas Corpus Act.

31 Car. II. c. 2.

Might can annoy.

3 1 [Charles II. c.] 2.

When right or wrong doing has succeeded in putting a man in prison, this Act is available for his relief. This memorising phrase is a case of Ex., between the title of the Act and the translation of the figures and symbols.

VIII. Naturalization Act.

33 Vic., c. 14.

Members transformed.

3 3 & 14.

As naturalization transforms citizens of Foreign States into English citizens, this fact is suggested by In. by the above memorising phrase.

IX. Libel Act.

6 & 7 Vic., c. 96.

Showing Pitch.

6 7 9 6.
X.

Statute of Frauds.
29 Car. II., c. 3.
Nobody can humbug.

XI.

Charitable Trustees Incorporation Act.
35 & 36 Vic., c. 24.
Millenium much nearer!

As charitable societies are designed to ameliorate the condition of the people, the result is suggested by In., in the opinion of very sanguine persons, by the above phrase.

XII.

Judgments.
1 & 2 Vic., c. 110.
To know idiots!
1 & 2 [Vic., c.], 1 10.

Those who think that people who go to law are little better than fools, must hold that the Judgments of the Courts enable us to know the idiots!

XIII.

Public Parks Act.
34 & 35 Vic., c. 13.
Morbid multitudes demonstrating.
3 4 3 5 [Vic., c.] 1 3.

For a pupil who knows the effect and tenor, the contents of the Statutes, it would be only the work of a few hours to frame phrases to enable him to remember the Title, Dates, &c., of hundreds of them. I was told that this Act was designed to give policemen new powers to prevent rioting in Public Parks. If this is so, the above phrase is very appropriate. If it is not, the intelligent Pupil can easily frame another in its stead. In fact, this kind of work is not only very interesting, but very easy, if the Pupil understands the object and meaning of the Acts.

XIV.

Flogging Garotters.
26 & 27 Vic., c. 44.
Enjoy a whining roar.
26 2 7 [Vic., c.] 4 4.

When garotters are brought out of their cells to be flogged, they are said to whine and beg piteously, but when the lash is applied, they roar vociferously.

XV.

Government Stock Bound by Judgments.
3 & 4 Vic., c. 82.
My airy venture!
3 and 4 [Vic., c.] 8 2.

A judgment debtor who had invested money in Government Stock, hoping thereby to defeat the claims of his creditors, well might say, My airy venture!

XVI.

Statute of Distributions.
22 and 23 Car. II., c. 10.
None nimbly "can" distribute.
2 2 and 2 3 Charles II., c. 1 0.

There is sense in this phrase, considering how tediously slow courts moved. Besides, it contains an In. by S.; yet this is quite sufficient
with sentences as with words only, if the Pupil has strengthened his memory by using my lessons as a Memory-Trainer.

XVII INTESTATES, DISTRIBUTION OF EFFECTS OF.

1 Jas. II., c. 17.

Do a “June” outing!

1 Jas. II., c. 1 7.

I have dealt with this Act as a mere crammer would, who merely commits to memory and cares not at all to understand his subject!!! There is here no relation between the Title of the Act and the phrase used to help to retain it. In this case, the title must be correlated to the phrase, and the parts of the phrase correlated together, in some such way as follows: INTESTATE...will not made...made...done...Do...perform...Juniper...JUNE...sixth month...sick monk...indoors...outdoors...OUTING. No amount of repetition could fix these sentences so quickly and so permanently together as correlations memorised. But the true way to memorise these Statutes is to know their meaning and purport, and then it is an easy thing to make appropriate phrases that will never drop out of memory.

[In XVII., one year only is mentioned (1); but in XV., two years are given (22 and 23). If pains are taken to secure recollection of the one-year cases, there will be no need to deal with more than one year in the two-year cases. You will know that another year is to be added—that is, the next higher. This makes the translation much more easy.]

Those who would like another method of memorising the Titles and Dates of Statutes, can in memorising, for instance, “Statute of Frauds, 29 Car. II., c. 3,” use the Double Inclusion Can for Charles II., translate 29 into Niobe, and 3 into Hum; and Correlate thus:—FRAUDS...conjuring tricks...inexhaustible bottle...CAN...waterpot...water...tears...NIODE...grief...outcries...HUM. Of course, he could in all such cases try to construct a sentence, usually awkward, like: “Frauds can nab a hymn;” but the parts of such a sentence must be correlated together and thoroughly memorised as FRAUDS, cunning devices, canny...CAN receiving vessel...catch...NAB, “nablight”...light...trifling...serious...HYMN, else it might escape the memory at the very moment it is wanted. Take the case of “Estates Tail, Stat. De Donis, 13 Ed. I., c. 1.” Translation of formula:—“A dumb eddy too.” Estates tail...tailor...cutter...“cut off”...no gift...donum...De Donis...destroy...speechless...“A dumb EDDY too.” Take the case of “Statute of Uses, 28 Henry VIII., c. 10.” Translation of formula:—“Knock (27) a hive (Henry VIII.) twice” (c. 10)...Uses...service...silver service...silver knocker...Knock a hive twice.”

Suppose it is the sense of a case, instead of the title of a Statute, which he wants to remember: for instance, the leading case on Easements, “Sury v. Pigott,” in which it was decided that a right of watercourse is not extinguished by unity of seizin of the two properties between which the navigation runs, whereas a right of way is unless it be “a way of necessity,” also that the length of enjoyment which gives a prescriptive right of way by land or water is 20 years. Correlate thus—EASEMENT...well meant...ill meant...surly...SURY...too sure...obstinate...pig-headed...PIGOTT...hot pig...boiled pork...boiled in water...WATER...fire and water...EXTINGUISH...fire engine...get out of the way...WAY...ways and means...mean...necessitous...way of NECESSITY...“knows no law”...knows (20).
THE INTERROGATIVE METHOD—continued.

Let the Student first analyse by the Interrogative Method the whole of "The Seven Ages" before looking at my Analysis of it, and then carefully compare his own Analysis with mine, so far as mine goes; and then let him send me his Analysis for criticism.

THE SEVEN AGES.

All the world's a stage,
And all the men and women merely players:
They have their exits and their entrances;
And one man in his time plays many parts,
His acts being seven ages. At first, the infant,
Mewling and puking in his nurse's arms.
And then, the whining school-boy, with his satchel,
And shining morning face, creeping like snail
Unwillingly to school. And then, the lover,
Sighing like furnace, with a woful ballad
Made to his mistress' eyebrow. Then, the soldier,
Full of strange oaths, and bearded like the pard,
Jealous in honour, sudden and quick in quarrel,
Seeking the bubble reputation
Even in the cannon's mouth. And then, the Justice,
In fair round body, with good weapon lined.
With eyes severe, and beard of formal cut,
Full of wise saws and modern instances;
And so he plays his part. The sixth age shifts
Into the lean and slipper'd pantaloon,
With spectacles on nose, and pouch on side:
His youthful hose well sav'd, a world too wicla
For his shrunk shank; and his big manly voice,
Turning again toward childish treble pipes
And whistles in his sound. Last scene of all,
That ends this strange eventful history,
Is second childishness, and mere oblivion;
Sans teeth, sans eyes, sans taste, sans everything.

(1) How much of the world is a stage ?—" All the world's a stage." (2) The whole of what is a stage ?—" All the world's a stage." (3) What is the whole of the world ?—" All the world's a stage." (4) If all the world is a stage, who are the players ?—" All the men and women merely players." (5) What portion of men and women are players ?—" All the men and women merely players." (6) What are all the men and women ?—" All the men and women merely players." (7) Are the men and women anything but players ?—" All the men and women merely players." (8) What have these male and female players ?—" They have their exits and their entrances." (9) Who have their exits and their entrances ?—" They have their exits and their entrances." (10) What are the going off and coming on of actors called ?—" They have their exits and their entrances." (11) What assertion is made of the players ?—" They have their exits and their entrances." (12) What does one man in his time play ?—" And one man in his time plays many parts, his acts being seven ages." (13) When does one man play many parts ?—" And one man in his time plays many parts, his acts being seven ages." (14) What does one man do ?—" And one man in his time plays many parts, his acts being seven ages." (15) How many parts does one man play ?—" And one man in his time plays many parts, his acts being seven
ages."  (16) If he plays many parts or characters, what are his acts?—

"And one man in his time plays many parts, his acts being seven ages."

(17) What are seven ages in a man's time?—"And one man in his time plays many parts, his acts being seven ages."  (18) What is affirmed of a man's acts?—"And one man in his time plays many parts, his acts being seven ages."  (19) What is the first of the seven ages?—"At first, the infant, mewling and puking in his nurse's arms."  (20) At what time does the infantile age begin?—"At first, the infant, mewling and puking in his nurse's arms."  (21) What is the infant doing?—"At first, the infant, mewling and puking in his nurse's arms."  (22) Where does the infant mewl and puke?—"At first the infant mewling and puking in his nurse's arms."  (23) In whose arms does he mewl and puke?—"At first the infant, mewling and puking in his nurse's arms."  (24) What are the Shakesperian names for the infantile murmuring and vomiting?—"At first the infant mewling and puking in his nurse's arms."  (25) What age follows that of the infant?—"And then the whining school-boy, with his satchel and shining morning face, creeping like snail unwillingly to school."  (26) How do you know that the school-boy's age succeeds that of a previous one?—"And then the whining school-boy, with his satchel and shining morning face, creeping like snail unwillingly to school."  (27) What is an audible characteristic of the school-boy?—"And then the whining school-boy, with his satchel and shining morning face, creeping like snail unwillingly to school."  (28) What sort of a boy is the one instanced here?—"And then the whining school-boy, with his satchel and shining morning face, creeping like snail unwillingly to school."  (29) What does he carry with him?—"And then the whining school-boy, with his satchel and shining morning face, creeping like snail unwillingly to school."  (30) What kind of a face does he wear?—"And then the whining school-boy, with his satchel and shining morning face, creeping like snail unwillingly to school."  (31) How is his morning face?—"And then the whining school-boy, with his satchel and shining morning face, creeping like snail unwillingly to school."  (32) How does he move?—"And then the whining school-boy, with his satchel and shining morning face, creeping like snail unwillingly to school."  (33) What does he creep like?—"And then the whining school-boy, with his satchel and shining morning face, creeping like snail unwillingly to school."  (34) In what mental condition does he go to school?—"And then the whining school-boy, with his satchel and shining morning face, creeping like snail unwillingly to school."  (35) Whither goes he unwillingly?—"And then the whining school-boy, with his satchel and shining morning face, creeping like snail unwillingly to school."  (36) What age succeeds the school-boy's?—"And then the lover, sighing like furnace, with a woful ballad, made to his mistress' eyebrow."  (37) In what respect does he resemble a furnace?—"And then the lover, sighing like furnace, with a woful ballad, made to his mistress' eyebrow."  (38) What does the lover's sighing resemble?—"And then the lover, sighing like furnace, with a
woful ballad made to his mistress' eyebrow.” (43) Does the lover's sighing bear any resemblance to a furnace?—“ And then the lover, sighing like furnace, with a woful ballad, made to his mistress' eyebrow.” (44) Has the lover anything with him?—“ And then the lover, sighing like furnace, with a woful ballad, made to his mistress' eyebrow.” (45) What kind of a ballad is it?—“ And then the lover, sighing like furnace, with a woful ballad, made to his mistress' eyebrow.” (46) To whose mistress' eyebrow is the lover's ballad made?—“ And then the lover, sighing like furnace, with a woful ballad, made to his mistress' eyebrow.” (47) To whose eyebrow is the lover's ballad made?—“ And then the lover, sighing like furnace, with a woful ballad, made to his mistress' eyebrow.” (48) To what part of his mistress' face is the lover's ballad made?—“ And then the lover, sighing like furnace, with a woful ballad, made to his mistress' eyebrow.” (49) To whose eyebrow is the lover's ballad made?—“ And then the lover, sighing like furnace, with a woful ballad, made to his mistress' eyebrow.” (50) Who is full of strange oaths?—“ Then the soldier, full of strange oaths, and bearded like the pard; jealous in honour, sudden and quick in quarrel, seeking the bubble reputation even in the cannon's mouth.” (51) Is he lavish or sparing of his oaths?—“ Then the soldier, full of strange oaths.” (52) What is he full of?—“ Then the soldier, full of strange oaths.” (53) What kind of oaths is the soldier full of?—“ Then the soldier full of strange oaths.” (54) How was he bearded?—“ Then the soldier, full of strange oaths and bearded like the pard.” (55) What relation has the soldier's beard to the (leo)pard?—“ Then the soldier, full of strange oaths and bearded like the pard.” (56) What is the soldier's attitude in regard to honour?—“ Then the soldier, full of strange oaths, and bearded like the pard, jealous in honour, sudden and quick in quarrel, seeking the bubble reputation even in the cannon's mouth.” (57) In regard to what is he jealous?—“ Then the soldier, full of strange oaths, and bearded like the pard, jealous in honour, sudden and quick in quarrel, seeking the bubble reputation even in the cannon's mouth.” (58) How is he affected in regard to quarrelling?—“ Then the soldier, full of strange oaths, and bearded like the pard, jealous in honour, sudden and quick in quarrel, seeking the bubble reputation even in the cannon's mouth.” (59) In what is he sudden and quick?—“ Then the soldier, full of strange oaths, and bearded like the pard, jealous in honour, sudden and quick in quarrel, seeking the bubble reputation even in the cannon's mouth.” (60) What does he seek even in the cannon's mouth?—“ Then the soldier, full of strange oaths, and bearded like the pard, jealous in honour, sudden and quick in quarrel, seeking the bubble reputation even in the cannon's mouth.” (61) In the mouth of what does he seek the bubble reputation?—“ Then the soldier, full of strange oaths, and bearded like the pard, jealous in honour, sudden and quick in quarrel, seeking the bubble reputation even in the cannon's mouth.” (62) Is he anxious for the bubble reputation?—“ Then the soldier, full of strange oaths, and bearded like the pard, jealous in honour, sudden and quick in quarrel, seeking the bubble reputation even in the cannon's mouth.” (63) Where does he seek the bubble reputation?—“ Then the soldier, full of strange oaths, and bearded like the pard, jealous in honour, sudden and quick in quarrel, seeking the bubble reputation even in the cannon's mouth.” (64) In the mouth of what does he seek the bubble reputation?—“ Then the soldier, full of strange oaths, and bearded like the pard, jealous in honour, sudden and quick in quarrel, seeking the bubble reputation even in the cannon's mouth.” (65) In
what part of the cannon does he seek the bubble reputation?—"Then
the soldier, full of strange oaths, and bearded like the pard, jealous in
honour, sudden and quick in quarrel, seeking the bubble reputation
even in the cannon's mouth." (66) How is emphasis given to the fact
of his seeking the bubble reputation in the cannon's mouth?—"Then
the soldier, full of strange oaths, and bearded like the pard, jealous in
honour, sudden and quick in quarrel, seeking the bubble reputation
even in the cannon's mouth."

Let the Pupil send me, besides the analysis of the "Seven Ages,"
at least ten sentences of his own selection dealt with by the Interroga­tive Method.

In response to numerous requests by pupils preparing for examina­tions, I have prepared and printed a series of "Coaching" papers on
the following subjects [the price for each is 5 shillings, but for Materia
Medica it is £1, and for Figure Dictionary it is 15 pence]:—(1) How to
learn Greek—(2) How to learn Latin—(3) How to learn German—(4)
How to learn Italian—(5) How to learn French. More than 100 ex­amples of the application of my Method in each of these papers are
given dealing with the difficulties Students encounter in learning those
languages. I have received many very high encomiums for these
papers, as well as for (6) How to learn Chemistry—and (7) How to learn
Botany—Part I., on Structural Botany; and (8) Part II., on Systematic
Botany, and also on (9) How to learn a Book, as applied to an entire
chapter of a Law Book—(10) Materia Medica—(11) Figure Dictionary,
containing numbers from 0 to 1000, each translated into several words.
This last is invaluable to those who have to deal with dates and other
figures if they have not had time to exercise themselves on the Figure
Alphabet as much as they should have done.
The Pupil can hand the paper containing only the Name and Dates
of Accession of the English Kings since and before the Conqueror, and
also the List of Derby Winners with their Dates and the Figures of the
Ratio, to their friends, for them to hear them give names and the order
both ways in each, with their Dates, as well as the Numbers of the
Ratio, and he can write out a list of the French Kings and their dates
for his friends to hear him recite them.

HABITUALLY CORRELATING.

Few realise the fact that a new mental habit can be acquired and
perfected in vastly less time than a new physical habit. But this habit
of making Correlations—being only the doing CONSCIOUSLY that
which the mind has always done unconsciously and instinctively, but
very slowly and only after numerous repetitions—is acquired more
quickly than any other new mental habit. The indirect advantages of
acquiring this power are quite as great as the direct advantages.
Wherein do the achievements of a Genius differ from those of other
men? Not so much in his original endowment with a higher grade of
THINKING POWER, as in this, that from his greater SURENESS of
Memory all the pertinent facts of a case are more vividly before his in­
tellect and kept there by his strong concentration when he has occasion
to form opinions or draw inferences. Thus, the practice of making
Correlations, by accustoming the mind to appropriate and MAKE USE OF
acquired facts and ideas, similarly qualifies the ordinary intellect to use to the very best advantage the vast stores of knowledge which my System may have helped to accumulate.

But the grand advantage of making and memorising one's own Correlations, is that soon it will not be necessary to make any more of them. The latent power of the Memory having been fully developed, the new Memory will carry all burdens imposed on it, and retain everything that one cares to remember, except, of course, very complicated matters, where the use of the Method may be needful.
NOTICE.—Learning by rote is done by means of many repetitions followed by more reviews. Learning by comprehension is accomplished through the understanding a subject, perpetually renewed by frequent re-perusals; but a permanent retention is only secured by the Art of Never Forgetting, which, if faithfully and perseveringly practised, eventually enables its master to recall at will any past knowledge as easily and certainly in the presence of others, as in the quiet of his own library.

PART VI.

HOW TO SECURE

THE CERTAINTY OF NEVER FORGETTING.

I.—It is not to be supposed that the Art of Never Forgetting applies to a time previous to the period in which the Pupil learned the Art. All this portion of his life rests of course upon his unaided Natural Memory, except that the Art of Never Forgetting enables him to recall such previous impressions more quickly than formerly.

II.—The Art of Never Forgetting does not refer, in the early stages of the student’s career, to any case in which it has not been specially applied, except in an indirect manner, and only so far and as fast as his natural memory has been strengthened by the System. His Natural Memory, however, has been improved exactly in proportion to the pains that he has taken to carry out all my directions, and also in the degree that time has had its play in giving full development to organic growth. The Natural Memory becomes more powerful as the consciousness of In., Ex., and Con. becomes habitually more sharp and well-defined—a result of practice only. The habit of always indicating the character of the intermediates of a Correlation, and particularly the habit of always memorising one’s Correlations,* rapidly develops the Natural Memory—in a way not unlike that in which the observing powers of the portrait painter are strengthened in regard to the lineaments of faces; before he learnt his art, all faces were demarcated by certain general differences, but he now notices individualities and characteristics that for-

*In every case where Correlations are mentioned, the student could of course use the Interrogative Analysis.
merely entirely escaped his scrutiny. Similarly, the Memo-
rist discerning in every mental act one or more of the three
memory relations more markedly and obtrusively than be-
fore, the first impressions become more strongly cemented
together even where the System is not designedly applied,
and their recall is thereby greatly facilitated. Nor is this
all; the practice of concentrating the attention upon the “ex-
tremes” when studying to link them together promotes the
power of “concurrence” to an almost unlimited extent. Be-
sides, the agreeable shock of surprise experienced by the
student in making Correlations causes him to return to this
practice with renewed zest, and always with the added
skill acquired in previous exercises. And then the habit of
memorising all his Correlations greatly facilitates making
new ones as well as remembering them with constantly dimin-
ishing effort, until at length—not of course whilst learning
my System, nor necessarily immediately afterwards, but in
due time—in some cases weeks, in other cases months, in
very rare exceptional cases perhaps a year—the making of
Correlations thereby becomes the remembering of them; in
other words, all Correlations are henceforth self-memorised ! ! !
—a power for rapid and never-forgetting acquisition not eas-
ily estimated and certainly unlikely to be over-estimated.

There is a final stage to which all the diligent cultivators
of the Art of Never Forgetting are sure to arrive if they pos-
sess average ability, and have never permanently injured
their memory and other faculties by dissipation or other
perverse habits, and are not thwarted and palsied in all their
mental operations by a weak continuity. In this stage, ex-
cept perhaps for a grand Memory Display, the Natural Mem-
ory having become so strong and retentive, Correlations are
no longer required. The student having now become a
Memory Athlete, his Natural Memory is so vigorous as to
enable him to carry any burdens of recollection with perfect
ease. This result may be certainly attained by all students
of the Art of Never Forgetting, whether old or young, if
they faithfully carry out all my instructions, not otherwise.

But this highest possible strengthening of the Natural
Memory through the TRAINING power of my System, is not
at all necessary in ordinary cases and for ordinary purposes
—yet it is always necessary where the Pupil desires to derive
the utmost possible benefit from my System. Even if a Pupil
never rises above the necessity of making and memorising
Correlations in all cases where he wishes to remember any­
thing, he can still learn a task by memorized Correlations or
Interrogative Analysis in one-twentieth part of the time that
he could possibly accomplish the same result with equal thor­
oughness by his unassisted Natural Memory.

III.—What then is the meaning of the Certainty of Never
Forgetting? It means that if you wish to retain and never
lose your hold on ANY FACT WHATSOEVER, you have an
infallible resource for doing so by means of a memorised Cor­
relation. This is the veritable philosopher's stone that turns
an otherwise EVANESCENT IMPRESSION into the pure
gold of a PERMANENT retention:

IV.—It must here be observed that the Art of Never For­
getting, as such and in its own capacity, has nothing what­
ever to do with the comprehension of a study. That is taken
for granted throughout. Whatever be the subject-matter
under consideration, whether the pupil be listening to a lect­
ure or reading a book, the understanding of the lecture or
book is assumed—the business of the Memorist commences
only when its Retention is required. Let no one imagine
that my System is a Substitute for grasping the meaning and
mastering the facts and principles of any subject. Let the
Pupil avail himself of all possible aids for the understanding
of his Lessons—the assistance of teachers, actual inspection
or personal manipulation where possible, and an exhaustive
study and pondering of the matter in hand; and when his
intellect has in this manner absorbed all the necessary and
pertinent ideas of the topic under his consideration, he will
then make use of my System to INDELIBLY IMPRESS all
these facts, principles, and ideas in his Memory. To illus­
trate my views in detail let me remark that there are three
grades of Memory: (1) Mere verbal memory, or learning by
Rote. (2) The memory of Comprehension. (3) The memory
of Retention.

(1) Learning by ROTE is learning by heart by means of endless repe­
tition. Acquisition in this way is done by brute force of memory,
without any aid from intellectual contact with the subject-matter it­
self. It is simply committing to memory words without any pretence
of absorbing or assimilating the ideas they represent, their meanings,
or the relation they sustain to each other. This is cramming: The
crammer is indifferent how ignorant he may really be or continue, if
he only succeed in passing the ordeal of examination. And here is
seen one of the greatest sins of Mnemonics; by means of its Key,
a youth with a first-rate Natural Memory, can string together a few
facts, events, words, or sentences, that enable him to show off for a short time without the slightest genuine knowledge of the subject-matter of the display.

A Pupil of mine who had given up the "associations" of Mnemonics in despair, but who had learned how to use its key, finding how easily he could make and memorize Correlations, actually made seven mnemonic keys of 100 words each on the principle of an Analytic Series. He used four of these keys in History, and three of them and the Analytic Series in Chemistry and Political Economy! His excuse for violating the principles of my System was that he was in a hurry, and that, whereas he had failed in three previous examinations with mnemonic aid, and that of good coaches, he succeeded at last through the assistance of my System, because Correlations prevented his forgetting any of the facts correlated! But at what a sacrifice of time and sense he purchased this victory! To connect all the statements of Fact or Proposition he wished to remember he had to select a Suggestive Word in each of them and correlate it to his Keys, which sustained no relation whatever to the Subject-Matter!!! How much more easily he could have correlated those Suggestive Words together, and thus have preserved the Original Connection of ideas! Instead of maintaining the Sequence of the Scientific Development of the Subjects, he made each Proposition an Isolated Fact, bearing no relation to anything except these outside and unconnected Keys!!!—with the inevitable consequence of being obliged to recall to mind all the words in a Key until he came to the particular Fact or Proposition he required! and it would not have obviated this difficulty if each of his keys had spelt the figures from 1 up to 100. When I pointed out his stupendous blunder he acknowledged his mistake, and confessed that, if he had followed my Method pure and simple, he could have done his work in half the time he had spent upon it and have intelligently mastered the subjects themselves, instead of merely memorising an enormous mass of undigested and unrelated facts, as is always the case where a mnemonic "Wheelbarrow," alias Key, is used.

Suppose the learner by rote attempts to study Geometry. He commits the demonstrations to memory, and he has no more conception of what the figures, lines, and angles, and their relations mean than he has of copies of hieroglyphics. Instead of first thoroughly studying and thinking out the import of each Definition, Postulate, and Axiom, and then learning the Demonstrations by Analysis, since the successive steps are always Inclusions or Exclusions, he does not strive to understand them at all, but merely memorises everything verbatim, with the certainty of soon forgetting all he has learned. Suppose he takes up Structural Botany, and he has got to the Flower, he reads that the Flower has four Whorls or Parts—(1) The Calyx, (2) Corolla, (3) Stamens, and (4) Pistil; and that the Calyx is composed of leaves called Sepals—the Corolla of Petals—the Stamen of the Filament, Anther, and Pollen; and the Pistil of the Ovary, Style, and Stigma. He wants to remember all these new and wholly unfamiliar facts and these technical words; and he does so by repeating them over and over again, parrot-like, until he can say them by rote. They must be repeated until the mind succeeds in forming unconscious Correlations—the weakest of all—mere sound Inclusions and sound Concurrences!!!—no In-
elusions or Exclusions of meaning, nor any Concurrences of Sense or Ideas; nor are they consciously repeated forward and backward with a recapitulation of both extremes! The things themselves have not been carefully studied and closely inspected, nor have the descriptive words become connected by concurrence with the facts for which they stand. The case is almost on all fours with trying to learn mere gibberish—"full of sound and fury, signifying nothing". No wonder, then, that learning by rote produces only short-lived impressions. Such a course promotes mind-wandering; it leaves no permanent trace, and it usually breaks down the health. It is not study; for long ago Montaigne taught that learning by heart is not learning.

(2) The Memory of Comprehension is that which follows or survives the understanding of a subject. This method of acquiring knowledge is taught in Kindergarten Schools and elsewhere by Object Lessons. It is superior in every way to learning by rote. The student of this method, if attempting to learn the aforesaid Botany lesson, would insist on having real Flowers before him. He would dissect many of them—identifying each part as he proceeded—until by dint of observations repeated, and the recalling of the technical names in connection with the observations, he fixed the special terms and their applications clearly in mind. This is the true course to pursue in any new scientific study. Yet it cannot be relied upon except by those having unusually trustworthy Natural Memories. The retention is more permanent than in the case of learning by rote. Still, perpetual reviews are necessary to conserve the recollection of the facts learned by the method of Comprehension. A poor memory may receive a message, be able to repeat its import and details on the spot, and yet forget half of them before a street is crossed or ten minutes have elapsed. Even supposing a pupil perfectly understands a definition, description, experiment, or demonstration, the relation which one part of a subject bears to another, the part to the whole and the whole to the part, yet this is no assurance that he will permanently or for any considerable period retain all this knowledge. A reader may be able to tell you the contents of a chapter or even a whole book immediately after reading it, who invariably forgets all about it the next day, week, month, or year!! There is always a memory, however evanescent, that follows the contact by rote with any subject—a more prolonged memory that ensues from the comprehension of a subject; but a permanent retention is only secured, alike by the best or worst natural memories, by the Art of Never Forgetting.

(3) The memory of Retention—

Let me first enumerate a few Pupils who are not usually prepared to proceed to apply my System to their studies or business. (1) The over-confident, sharp Pupil.—The dull Pupil, if really ambitious and persistent, usually wins a fine success. Why? He feels the need of guidance and accepts it, and patiently and perseveringly works out all my exercises exactly as prescribed. He may progress slowly at first, but he soon acquires new strength, and at length outstrips the over-confident, sharp Pupil. Why? The latter believes he knows what he wants; not having gone through the System, and not having experienced its benefits as a Memory-Trainer, he judges superficially, omits the very exercises that he most needs, or neglects all alike; and, when he finds that he has not received the new power that my Testimonials
avouch, he is half inclined to think that they are exaggerated, until he finds he has been outrun by dull Pupils. His fault was that he did not do what he was told to do in the way he was told to do it. In one sense, my Pupils, to get the full power of my System, must be obedient learners, or else it is not my System that they have learned!! (2) Those who are fancy-ridden or dreamers. Their imagination seems to be perpetually stimulated to create difficulties, to conjure up theoretical objections, and to go mad on impossible cases. Instead of learning each lesson as it has been given, they set themselves up as teachers or as critics of my System; they arrive at this lesson with no true conception of the previous lessons, and they have received very little benefit at all from the exercises. Their best course would be to turn back, lay aside their own imaginings, and faithfully carry out all my directions; and if they can really do this, they can finish my System with the usual advantages. When they settle down to study, they find it difficult to do so because of Mind-wandering. When such as these sometimes claim that they have spent from 10 to 20 hours on each lesson!! I have no trouble in satisfying them at an interview that they really did not devote more than two hours to each lesson, the rest of the time having been given up to day-dreaming!! For the purpose of mastering my Memory Lessons, the worst mind-wanderer can sufficiently strengthen his Attention by reciting, every day, both ways, the Analytic Series in the First Lesson, whilst going through the course. Memorising Correlations is better practice still, if they are memorised in the exact manner I prescribe. (3) Those who imagine that they have really not had the time or health to study and learn the lessons. As to lack of time, I can conceive of no one in want of time to improve his memory, if he be in earnest. The busiest men always have the most leisure. It is only the unmethedical who know not how to use their spare time. Many of my best Pupils have learned my System in going to and in returning from business—or in those numerous snatches of time that are usually absolutely wasted. As to lack of health, if the Pupil is no worse than when he ordered the lessons, he still has health good enough to learn them. Of course, if he is downright ill, he must postpone study till he is better. As to health generally, it seems to be almost universally overlooked. This is wrong every way. Presuming that due preparation is first made for the future world, it is certain that no one can do justice to this world who neglects his health. Whether for business, pleasure, or study, everyone should maintain himself in the perfect condition of a Derby Horse winner, if he hopes to get all out of life that there is in it, consistently with the highest moral and religious ideal. How many hours a day can a man study if he is in perfect health? Not 12, 14, or 16 hours, of the 24, as ambitious students suppose, who are determined to ruin their health by overwork—but from six to eight hours are all that the best-endowed and healthiest student can advantageously devote to study; and, in this case, there should be a rest of from one to two hours between every two hours' study. In this way, the highly strained attention has a chance to recuperate, and a return to study is made with reinvigorated brain and unflagging energies. If the student under exceptional circumstances must study more than six or eight hours per day, let there be also frequent changes from one study to another, as unlike each other as possible, so as to call into action other faculties not exerted in the previous lesson. And let
there be plenty of exercise that promotes the circulation and perspiration, but no exercise that strains or wearies. These six or eight hours of study secure greater progress than can be possibly gained under the usual conditions. And the rest between the study hours need not all be devoted to exercise or amusement—but a portion might be given to learning or reviewing my System. This would call into requisition faculties and powers not used in the regular studies, and hence it would be no task or burden, but a recreation that would greatly increase the acquiring and retaining powers during the working hours. To show that the foregoing views of health are sound, I may add that I have received many Testimonials from University Graduates, admitting that my recommendations in regard to health and the amount and mode of daily study, together with my Art of Never Forgetting, had been of more real service to them than all their College studies. One Senior Wrangler says it was 11 years from the time he resolved to become a Senior Wrangler till he realised his ambition; that he studied during Term time, for all these years, from 12 to 16 hours daily, and utterly ruined his health by this ill-directed labour; and he adds, that if he had had the benefit of my Art at the outset, and had followed my directions in regard to health, the manner and time of study, he could have achieved the same proficiency in three years, and saved his health into the bargain!! (4) Those who come to the study of my System in an exhausted, worn-out condition. Such persons after a hard day’s work, and a long evening of other study or excitement or dissipation, take up my lessons just before retiring!! With brains used up or enfeebled to the lowest minimum, they hope to learn from the printed page!! Impossible—They should exercise a little will-power and retire one or two hours earlier than is their wont, and then rising an hour earlier than usual, give attention to my lessons when their minds are fresh and rested, and in a condition to absorb new knowledge. (5) Those who instead of first mastering my System, before attempting to apply it, hope to save time by trying to learn it whilst applying it to their studies!! This is insanity, and it almost never succeeds. The Pupil has to learn an entirely new System—altogether different from any Artificial System; or his own previous method of learning—and, to assimilate this new Method, he must have practice in it at first with no other aim except to understand it and to grow familiar with it. As well undertake to learn arithmetic whilst performing the duties of a bookkeeper!! No, he must first require considerable dexterity in arithmetical rules before he attempts the task of a bookkeeper. And before applying my System, he must in like manner know it, and be facile in its methods. This only requires a few hours of genuine study on each Lesson, not weeks or months; and when it has become thus mastered, the Pupil can accomplish by its aid as much in one week as he could without it in many weeks or months. However much pressed for time a candidate for an examination may be, or however near it may be, my advice always is, "Either master my System first and then resume your work of preparation, or else postpone all thought of my System till the examination is over." The student must be in earnest with my System—it does no good to flirt with it. (6) Those who have tried to learn my System by rote, or by the mnemonical methods of story-telling or picture-making, or by the jaw-breaking Abracadabras of Dr. Grey. Strange as it may seem, the number who do this is alto-
gether too large. Not long since, a teacher of a Private School actually spent three hours each day for three weeks trying to make pictures between each pair of words in an Analytic Series!!! He was trying to learn by post, and at last he called upon me for an explanation why he could not learn that series in 54 hours when I claimed it could be done in from one to three hours! After pointing out that he had tried to learn it in his or the mnemonical way, and not in mine, I proceeded to go over the three laws with him; and then, in less than two hours all told, he had perfectly learned the 100 words by my Method. Yet, when he first called, he stoutly insisted that he had followed my Method!!

To show how impossible it is for some people to understand, much more to adopt, new ideas, I may allude to the case of a recent Pupil, who had been, in youth, drilled in the mnemonical system of Dr. Grey. He found it difficult to learn my System because he was all the time trying to translate it into the barbarous jargon of Grey's Memoria Technica!!! I gave an illustration of the preposterous absurdity of Grey's System in the Knight's Tour. To show how twisted and contorted a mind must be that can use this method in adult years, I here add Grey's Formula for memorising the Dates of the Accession of the English Kings, from the Conqueror to George III.

Wil-conseus Rutkoi Henray. — — — —
Stephobil & Hensobcuyf Richein Jann Hethdas & Eddoild.
Edsetyp Edtertes Bisetoip Hefotoun Hefjuddque.
Hensifeid Edquarfaux Ed-Rokt Hensip/ci Henocly.
Edsextos Marylut Elstuk Jamsyd Caroprimel.
Carsecoek Jamsetf Wilselk An, yd Gebo—doisy.

A Pupil sometimes complains that he cannot make Correlations (he cannot have really tried) and so he says he has learned mine; but, instead of doing so as I prescribe, he has sometimes repeated the two extremes by rote, and totally disregarded the intermediates whilst pretending to learn the Correlations!! No wonder, when such a Pupil has finished, that he cannot do much more in the same time than he could before he looked at my System! And this leads me to say that apparently many persons have not derived sufficient mental discipline from school or college to enable them to learn any new art wholly by themselves. Such persons are impatient to get to the end of the journey before having travelled half the distance! Although I tell them in my Prospectus and Lessons over and over again that it is from DOING the EXERCISES that the new power comes, yet these warnings fall unheeded—they never think of them—they slight the exercises or never do them at all, or never do them in my way, and thus they have not acquired the power spoken of in my Testimonials.

(7) Those who have merely learned the exercises without having absorbed the PRINCIPLES that presided over them, and who hence lack the power of applying the System to any case not mentioned in these Lessons! They are like some timid doctors who can never prescribe for a patient unless they can find a medical report giving a case having exactly the symptoms their patient exhibits; or like case-lawyers who can never argue or advise from legal principles, but only from parallel cases where the facts were precisely similar to those in the case before them. The examples in my lessons are, however, so varied that the dullest Pupil must find any case provided for, if he carefully re-ex-
amines the lessons. Although I give many illustrations of its application to remembering Proper Names in Synthesis, yet I receive occasional inquiries from correspondents in these words, "Kindly tell me how I am to remember Proper Names when I am introduced to strangers!" An actor recently said, "I find no help in your System for remembering cues;" yet I had given him a practical illustration in the case of the Macready Anecdote. Another says, "I can use your system in all my wants, except how to learn prose and poetry," yet he has had the application of my Method to learning 15 unconnected sentences!!! Wherein consists the difference between learning 15 unrelated sentences, and 25 consecutive paragraphs or stanzas or verses of poetry, except that the verses or paragraphs may be long; the principle involved is exactly the same in both cases. And the same reply is applicable to persons who cannot see how my System applies to learning rules of grammar, descriptions of muscles, arteries or diseases in medicine. This incompetency to see how the principle that governs an example already given is to be applied to new cases, arises from lack of reflection, lack of use of the reason that human beings are supposed to possess. However, this inability quickly vanishes when the Pupil reviews all my Lessons and incessantly asks himself, as he proceeds, "What other cases can I apply this principle to?"

(8) Those who think they can, by the use of my System, at the commencement of professional study, absorb 50 or 60 pages per day of new and unfamiliar reading!!! Only a miracle could enable them to do so. In fact, no mistake is more fatal than for the student to imagine he can rapidly read and absorb the ideas in his first Law, Medical or Science work!!! The mastery of one book gives him the use and benefit of all the ideas of that work in his subsequent reading in the same profession. The last few books of his professional course he can read rapidly, but never the first, second or third. If the medical student really masters Anatomy and Physiology, he will find that most of his subsequent reading either makes use of the knowledge derived from those subjects, or that it dovetails in with it. If the Law student masters Contracts at the outset, he will find all his subsequent reading easier. Thus, it is recorded of Lord St. Leonards that, having (as Sir Edward Sugden) been asked by Sir T. F. Buxton what was the SECRET OF HIS SUCCESS; his answer was, "I resolved, when beginning to read Law, to make everything I acquired perfectly my own, and never to go to a second thing till I had entirely accomplished the first. Many of my competitors read as much in a day, as I read in a week!!! But, at the end of twelve months, my knowledge was as fresh as on the day it was acquired, whilst theirs had glided away from their recollection." ("Memoirs of Sir T. F. Buxton," chap. xxiv.)

Supposing that the Pupil, having arrived at this place in this Lesson, has really qualified himself to proceed, I will add here what I have said before very many times, that my System presupposes the comprehension of a subject. That is not all. I take it for granted in this Lesson that the Pupil has carried out all my instructions in the preceding Lessons, and that he has thus already attained increased RETENTIVENESS from my System as a Memory-TRAINER. These facts being assumed, Correlations step in and photograph the understanding of it permanently on his memory. Suppose the Pupil has understood the Lesson on the Flower,
he can at once identify and name each part of it. He has looked up the
derivation of the technical terms, and he has thought out the inclusions
involved in the derived and original meanings, and he has assimilated
the reasons why these terms are used. At length he proceeds to fix
these terms in his memory by means of Correlations. What has been
accomplished by the comprehension of a subject? There has been made
a vivid First Impression. The relation of each part to the whole, and
of the whole to the parts, has been understood; there has been a dove-
tailing, an intertwining of all the new ideas, and of all the fresh knowl-
edge, into and amongst the old ideas and old knowledge already stored
up in the mind. The things themselves, the facts and their relations,
are what are thought of and considered; and although words—in this
case not mere words, but truly the representatives of things—are used
in Correlations, yet, when memorised, there has resulted a CONSOLI-
RATION of the facts and ideas regarding the matter under considera-
tion. To use a crude illustration, it may be said the complete and per-
fect understanding of a subject has created a heat in the brain, and the
knowledge lies amongst its elements, like melted lead in the crucible
over the fire; and instead of its being left there to oxidise into scum or
dross, * Correlations pour the molten ore into moulds, that fashion it as
it solidifies into any permanent shape required.

To the Student commencing the study of Botany there is one word
that is "well known"—the word Flower. To this he attaches in a chain
the four whorls, or successive principal parts of the Flower, by means
of Correlations, memorising each one as soon as he makes it. Although
I have over and over again insisted on the proper method of memorising
a Correlation, yet all my Pupils do not practise my Method. But no
Correlation is memorised unless the Pupil, after reading it over, then
turns away and repeats from memory [not reading it over and over
again!] the Extremes and Intermediates, forwards and backwards, from
two to six times each way, and then recapitulates the two Extremes,
always repeating the Correlation more rapidly each time than before.
More pains than this is rarely, if ever, necessary, even in the case of the
weakest memory, even during the period of Memory-Training; and in
no case is it necessary after the Pupil has strengthened and invigorated
his memory by a sufficient amount of practice. To Flower he correlates
Calyx, Calyx to Corolla, Corolla to Stamens, and Stamens to Pistil, thus:
[or, better still, makes and memorises his own Correlations in this as in
all other cases]

FLOWER...bread...bread-provider...caterer...Calyx...licks...tongue...
voice...many voices...chorus...Corolla...Rolla...Peruvian Hero...Peru-
vian bark...tonic...staying power...Stamens...stays...ropes...pulley...pul
...trigger...pistol...PISTIL. The Pupil might repeat the words by rote—
Flowe, Calyx, Corolla, Stamens, Pistil, a thousand times! / / this
would not make so definite and vivid an impression on his memory as
the memorising of the connecting Correlations would, a feat of a few
minutes only. After he has memorised the Correlations that unite the
four parts together, he then correlates to each part the sub-parts that
belong to each, thus: CALYX...lictor...scurge...criminals...pals...SEPALS.
And to Corolla he correlates its component parts, thus: COROLLA...rol-

* Dr. Bain says: — "It is quite possible to read so as to comprehend the drift of a book
and yet forget it entirely."
licking, frolicsome, lambs, pet-lambs, petals. And to Stamens he correlates its component parts, thus: STAMENS, mendicant, rugged dress, habiliment, filament, fil., organ pipe, anthem, ANTHERS, Polyanthus, pollen. And to Pistil he correlates its component parts, thus: PISTIL, shot, Shotover, OVARY, vary, fashion, style, stylus, lustre, honour, disgrace, stigma.

Suppose the Student is studying Anatomy, he has the pictures in the text-book and the skeleton before him to enable him to get the correct impression of the different parts of it. And when he has mastered the theory and details, he wishes to impress them permanently on his memory. There are only two methods possible—as stated in my Prospectus:

(1) The first is the traditional method of learning by rote or endless repetition. A celebrated coach in Anatomy says that no one can learn Anatomy until he has learned and forgotten it from three to seven times!! In learning any book in this way, each sentence would be repeated over and over again, and then reviewed and relearnt and forgotten and learned again! and then at last the Pupil, if he possessed a first-rate cramming memory, might answer questions on it; but would be utterly unable to begin at the first section and go on and give the contents of each succeeding section till the close. In learning a book by rote, the number of times that each sentence and section are repeated, if actually written out and printed, would doubtless cover 5,000 to 50,000 or more pages! and even then the Pupil passes his examination, if he really does "pass," partly by luck and partly by merit; and all his life he is constantly referring to it, and repeating it, and studying it, over and over again—showing really that he possesses little more than a Reference Memory in regard to it!! But let us he candid and confess the truth; tens of thousands every year and during successive years try the various professions—law, medicine, divinity, or sciences, history, &c., &c.—and utterly fail to "pass," even respectably, because they lack the extraordinary MEMORY necessary to acquire knowledge by rote.

(1) What a prodigious saving of time, and what a different result, when the Pupil applies my Art to the study of Anatomy! After first getting a clear idea of the matter he is dealing with, he then correlates together the principal grand divisions of the subject—(1) Trunk, (2) Cranium, (3) Extremities (arms and legs), and (4) Unclassified bones. Beginning with the word "Bones" as the Best Known and the subject-matter under consideration, he proceeds thus: BONES...breastbone...breast...chest...TRUNK...elephant's trunk...head...CRANIUM...top...bottom...EXTREMITIES...extremes...beyond rules...unclassifiable...UNCLASSIFIED BONES. When he has memorised these Correlations, he can recall the four grand divisions, forwards or backwards. He then proceeds to correlate together all the leading points connected with the first division. There are 33 vertebrae in the trunk or spine. He fixes this fact thus: TRUNK...box...stone box...MUMMY [33]. He then correlates the sub-parts together thus: TRUNK...travelling convenience...serviceable...CERVICAL...service...pecuniary service...endorsement...DORSAL...dormitory...sleeping apartment...slumber...LUMBAR...barrel...barrels of flour...sacks of flour...SACRAL...sacrifice...a cock to Xesculapius...COCCYGEAL. When he has thoroughly memorised these Correlations, he then deals with each sub-part thus: CERVICAL...neck...
...neck yoke...YOKE [7]. In this way he fixes the number of bones or vertebrae in the Cervical region, and in a similar way he deals with the number of bones in the other parts. Then taking the word Vertebra as his "best known," he correlates to it all there is to be known about it, as the Centrum, Neural ring, Processes, &c., &c. When he finishes Anatomy in this thorough manner, he knows it; and he never has to learn it again or review it; and he has spent upon it but one-half the time he would have spent upon it if learning by rote, with the certainty in that case of having to learn and forget it three or six times more!!!

Although this thorough method of imprinting impressions takes the beginner considerable time, yet he could not in four times the amount of that time make the same permanent impression on his memory by endless repetitions. But this is not all. When he has applied my System in the above way for one or two weeks, he can then accomplish as much in one week as he could without it in a month—with the result of soon forgetting what he had learned by rote, and never forgetting what he had learned by my System.

If the Pupil, in endeavouring to understand the subject-matter of his study, cannot use his natural senses, he must use his intellect to secure the meaning or comprehension of it, and here he must incessantly use the method pointed out in Predicating Correlation, and look at the new ideas on all sides of them to make sure that he understands them. If he is learning Geography, he must carefully study the maps—even copy them—or, what is better still, try to copy them from memory, and then compare his ideal copy with the original map, until he can make a nearly perfect map himself from memory. When he has thus got a correct idea of the Counties of Ireland, for instance, he could then proceed in impressing them on his memory by memorizing the following Correlations:

**COUNTIES IN IRELAND.**

**Four Provinces.**

_Ireland_...Irish frieze...overcoat..._Ulster_...stir..._Leinster_...lend...money..._Munster_...Cork...no weight...naught..._Connaught_.

_Ulster_...Ulric Zwingle...preacher..._pew_ (9 counties).

_Leinster_...spinster..._Diana_ (12 counties).

_Munster_...minster..._huge_ (6 counties).

_Connaught_...know nothing..._know all..._all_ (5 counties).
Ulster... cloak... fur trimmed... trim... Antrim... ant hill... crowded... London... Londonderry... done... don... Donegal... galling... tyrannical... Tyrone... throne... firmly established... Fermanagh... man... Cavan... van... fair... many gain... Monaghan... agony... poisoned arrows... arms... Armagh... armed... light armed... feather... Down (... soft... lenient... Leinster).

Leinster... lint... wounds... cries... loud... Louth... mouth... carnivorous... meat... Meath... east... Westmeath... sheath... long sword... Longford... long number... count... King's County... Queen's County... crown... gold... gild... Kildare... daring... knock down... double knock... Dublin... double wick... Wicklow... burnt low... candle wax... Wexford... vex... insult... vulgar... low... Carlow... laid low... killed... Kilkenny (... any man... man... Munster).

Munster... monster... dragon tail... tip... Tipperary... dip in water... Waterford... swim... safety belt... Cork... bottle... wine... sherry... Kerry... Kerry cow... Jersey cow... small... limited... Limerick... rick... on fire... glare... Clare (... clairvoyant... nothing seen... Connaught).

Connaught... canoe... boat... galley... Galway... may... Mayo... may go... Sligo... sly... creeping... stepping lightly... Leitrim... rim... cup... old China... common delf... Roscommon.

Of course the towns in each county may be dealt with in a similar manner, for instance:—Antrim... Antrim... interim... in the meantime... race... against time... fast... Belfast... fast growing... fungus... Carrickfergus... hay carrier... hayfork... pole... spear... arm... Glenarm... armed men... Ballymena... Ballymoney... Ballycastle.

If the subject is intellectual and not in any way directly addressed to the senses, as in History, Political Economy, Logic, &c., &c., the Pupil must secure the comprehension of the subject by making abstracts of it in his own language, as set forth hereafter.

A few words on three topics not heretofore fully considered:

I.—RETIENING THE CONTENTS OF A BOOK IN ONE READING:—

(1) You will not read the book with the rapidity with which some young ladies are said to devour the latest novel! They are often suspected of skipping pages at a time in order to discover the
different stages of a plot, until a thoroughly aroused curiosity compels them to hasten at once to the last chapter to fall upon the dénouement. This is not the style of perusal I contemplate.

(2) Nor is it to be supposed because you know how the method is to be applied that it will therefore work itself. It has to be applied carefully and methodically. This necessarily demands a little time. Those who possess good health and good continuity, and a mastery of the System, accomplish the retention of a work in vastly less time than would be possible for them without my System, and the study has been a pleasure and never a task. On the other hand, those who are in the possession of poor health or of weak concentration, or who are overburdened with business anxieties, domestic cares, or competitive worries, would very seldom, if ever, master any book in the ordinary way by mere repetition. These persons are extremely unfavourably situated to do justice to my System, and it costs them more time and trouble to master any book than the former class. A student admitted that he had carefully read a manual of English History completely through sixteen times and then failed in the examination. To have obtained a lasting knowledge of this History by my method would probably have occupied him as long as he was formerly engaged in two or three of the sixteen fruitless perusals of it. There is, however, only this difference between this unfortunate student and the great majority of those who succeed in the examinations through cramming. He forgot all his historical knowledge before the examination—they usually forget theirs shortly after! In fact, a student or a man in advanced years who has really mastered any book so that he never has to refer to it again is a wonder! Take the memories of members of the learned professions—they are usually only REFERENCE memories! They know where to find the coveted knowledge, but they do not possess it or retain it in their minds. On the other hand, the student who masters a book by my method really knows the contents of it, and he is thus enabled to devote to other purposes an enormous amount of time in the future that other people have to spend in perpetually refreshing their superficial acquirements. And this is to be added, that the average student who has carried out all my instructions can even now learn as much by my Method in any stated time as he could learn without my Method, and with equal thoroughness, in many, many times as long a period! And if any one who has been pressed for time or who has been in a panic about an impending examination, or who has been too much troubled with Discontinuity, too ill in general health, or too idle, to do more than superficially glance at my lessons—if any such person doubts his competency to accomplish as much as the diligent student of average ability has done, then let him turn back and really and truly MASTER my System [for he does not even know what my System is, unless he has faithfully carried out to the very letter all my instructions], and then and not before he will probably find that the achievements of the average diligent student of my System are quite within the easy range and scope of his own powers.
(3) In regard to the subject-matter of the book, you do not care to occupy yourself with what you are already familiar, and in most books there are a great many things that you already know. In many works, too, there is a great deal of padding-matter inserted to increase the bulk of the book, and possessing no permanent interest. There is also very much repetition—the same matter, in a new dress, is reintroduced for the sake of additional comments or applications. You do not trouble yourself with these iterations. The contents of a book which demand your attention are the IDEAS which are NEW to you, or the NEW USES made of familiar ideas.

Students who have not learned to exercise any independent thought often confess that in reading any book they are always in a maze. One thing seems just as important as another. To them the wheat looks exactly like the chaff. As an illustration that the power of Analysis is entirely wanting in many cases, I may mention that I once received a letter in which the writer had literally copied one of my full page advertisements, and then added, "Please send me what relates to the above!" A modicum of mental training would have led him to say, "Kindly send me your Prospectus."

The power to discriminate between the important and the unimportant is greatly increased by making Abstracts of Essays. A great authority on education says, "Any work that deserves thorough study, deserves the labour of making an Abstract; without which indeed the study is not thorough." Let the ambitious student make an Abstract of any chapter of John Stuart Mill's Logic, and then compare his work with the Analysis of this same chapter by the Rev. A. H. Killick (published by Longmans), and he will at once see the enormous difference between the essentials and the non-essentials—the difference between the subject of discussion and the explanation or exposition of it. The student's abstract, if printed, would extend over twenty to thirty pages. Mr. Killick's only occupies two or five pages. But do not reverse the process and read Mr. Killick's Analysis first, and then make your Abstract. The latter, however, is the easier, the usual and the useless method. Let the student continue this comparison till he attains very nearly the brevity and discrimination displayed by Mr. Killick. Or, if he prefers History, let him make an Abstract of any chapter of Green's Short History of the English People, and then compare his digest with that of Mr. C. W. A. Tait's Analysis of the same chapter (published by Macmillan & Co.). It would be a capital training for the student to abstract the whole of Green's Work and compare his abridgment of each chapter with that of Mr. Tait. After considerable practice in this way in making Abstracts and comparing his work with that of such Masterly Abstractors as Dr. Killick and Mr. Tait, the student is prepared to make abstracts of his own text books. The difficulties some students meet with in attempting to make Abstracts would be very amusing if they did not indicate an almost total failure of educational training in the matter of thinking for one's self. Recently a Pupil brought me a work on Physiology, written for general readers, and, pointing to a paragraph in it that occupied nearly a whole page, exclaimed, "The only way I can make an Abstract of that paragraph is to learn it by heart!!!" A glance at it showed me that I could ex-
press the gist and pith of it in the following sentence:—"The pulse beats 81 times per minute when you are standing, 71 times when sitting, and 66 times when lying down." After a re-perusal of the paragraph he remarked, "You are right. That is all one cares to remember in that long passage." To his request for me to memorise the Abstract, I replied by asking what is the "Best Known" in it. Why, "pulse," of course. It is merely occupied with the number of times the pulse beats per minute in different positions of the body. Now correlate (memorising your correlations as you proceed) "Pulse" to "standing" and "standing" to a word expressing 81 (feet); "sitting," to a word that translates 71 (caught), and "lying down" to a word that spells in figures 66 (judge). The bodily positions being exhaustively enumerated need not be correlated together. "PULSE...beating...fighting...stand-up fight...STANDING...stand...small table...table legs...FEET. SITTING...rest...arrest...CAUGHT. LYING DOWN...lies...perjury...trial...JUDGE." After making the most careful abstract a poor memory will forget it entirely, and a first-class memory will not retain it long from merely turning made the abstract. To consolidate and translate the comprehension into a permanent retention, the unfailing power of Memorised Correlations is needed. And this power the Art of Never Forgetting ALONE provides.

These preliminary studies will qualify the young student to distinguish the main ideas from the subordinate ones, and he will then know when reading a book what to attend to and what to reject. Try a short essay first, then a longer one; and at last, when you are familiar with the method, attack any book, and you will cope with it successfully. Not much practice in this way will be required to enable you to know, from a glance at the table of contents, just what to assail and what to disregard. And in all your first attempts in reading a technical work, make out an Abstract of each chapter in writing, and then deal only with this Abstract. Whenever the Subject is not treated in a desultory manner, but with logical precision, you will soon be able to find Suggestive or Prompting Words in the Sequence of Ideas and in the successive Links in the Chain of Thought that runs through the exposition. If there is no such sequence of Ideas or Chain of Thought running through it, it may serve as an amusement, but is little likely to command serious study. In a short time you will be able, in the language of Dr. Johnson, "to tear out the heart of any book." Hazlitt said that Coleridge rarely read a book through, "but would plunge into the marrow of a new volume and feed on all the nutritious matter with surprising rapidity, grasping the thought of the author and following out his reasonings to consequences of which he never dreamed." Such a result is rarely attained even by the ablest of men, but it is the ultimate goal at which every student should aim—an aim in which he will be largely assisted by the ART OF NEVER FORGETTING.

It is the novelties of Fact, Opinion, Illustration, &c., set forth in your Abstract that you correlate together, thus: You correlate the Title of the First Chapter to the Title of the Book; next, the Titles of the Chapters to each other, and then you correlate, in each chapter, the first leading idea or proposition to the title of the chapter, the second leading idea to the first, &c., &c. In this way you will proceed until you have absorbed all the new ideas, facts, statistics, or illustrations, or whatever you wish to retain. You can then test yourself on the work
by calling to mind whatever you have thus cemented together. One reason that ordinary readers totally fail in retaining the leading ideas of a book is that they have nothing to which to tie the ideas—they have no method to assist them in the matter of retention. But when they CORRELATE the Points, Facts, Principles, &c., to Correlating Words found in the text, they seize hold of whatever they wish to remember with an unrelaxing grasp. A memorised CORRELATION is the panacea for retention of any and all facts whatsoever. And one book learned in this thorough-going manner will so strengthen the natural memory, in both its stages, that Abstracts and Correlations will no more be needed, or only on exceptional occasions.

The foregoing exhaustive mode of dealing with a book is recommended to those who possess very weak natural memories not yet made powerfully retentive by my System as a Memory-TRAINER. If, however, Pupil possesses a good natural memory, and a mastery of my System as a Device for memorising, and he has also greatly added to the power of his Concentration as well as his memory by doing all my exercises, he will not use my System, even in the reading of the first book, except now and then—certainly not constantly, but only occasionally. Although not necessary in case of good memories strengthened by my System, yet I do most earnestly recommend the most gifted and highly endowed to deal with one book in the above thorough-going manner. The gain to intellectual comprehension from having carefully abstracted it, and the prodigious gain to the memory from having made and memorised so many Correlations, will produce results that will last through life, and make all subsequent acquisitions easy and delightful.

Let no Pupil attempt the learning of a book in the way I describe until he has properly done the exercises in the previous lessons—until he has conscientiously gone through my course of Memory-training.

Pupils have remarked to me that the practice in summarising will take a long time, quite as long as they expected to take over the whole five Lessons. It may take a long time, but no one must regard time spent in acquiring ability to discriminate between the essential and the non-essential in a book, as time given to the learning of my System. For, as I say in my prospectus, "I do not mean that my System communicates comprehension of the book; its function is not to aid in understanding," but to aid in memorising that which is understood. I have found that, owing to defective education, ability to get at the gist of a book new to the reader is generally wanting among all classes of society, so I give in the preceding pages instruction on a subject with which I had not bargained to deal.

HOW TO LEARN HISTORY.

1. Divide your subject under heads, into groups. Find out the few main decisive events and group the subordinate facts under them. Take the four Invasions of England. Discriminate what they had in common—enlarged Inclusions. Discriminate wherein they differed—enlarged Exclusions. Discriminate and note the accompaniments of each—the producing causes, the resulting effects—enlarged Concurrences. In this way, you assimilate, absorb the real situation, and you vividly impress all the facts on your mind, because you put "brains" into your reading—your attention is all the time interested, and you thus live over yourself the lives of others—you convert second-hand knowledge into first-hand knowledge; and when you have studied out the subject and condensed it into an abstract, use Correlations to fix it permanently in your mind.
2. On these principles make your abstract, and make it in as few words as possible, arranging these words as far as you can in natural sequence, according to the laws of In., Ex. and Con., and on the right half of the page of a good-sized blank-book.

3. In a column parallel to the column containing the abstract, write down the chief words of your abstract, connecting them by Correlations where there is no natural connection.

4. Try to keep the general thread of the narrative fairly clear. To do this, it will be necessary to use frequent parentheses.

The student will find that the act of abstracting and methodically arranging the ideas presented to him, will do more to impress them on his memory than six ordinary perusals, and he will be able to abstract the second book he tries almost as rapidly as he would read it in the usual way.

In course of time he will be able to dispense with an elaborate and conscious use of Abstracts and Correlations.

I subjoin Abstract and Correlations as to a portion of the first chapter of Green's "Short History of the English People." As you deal with History, so you would deal with any other work.

HISTORY OF THE ENGLISH PEOPLE.

[The following was sent me by a young lady. If she finishes one book in this way, she can read many books hereafter, and neither make an Abstract or Correlation, and yet infallibly remember them all.]

THE ENGLISH PEOPLE... English... English lion... den... Denmark... Jutland... Jutes... Jute... coarse cloth... sackcloth... Saxons... saxhorn... thrilling note... tingle... English... common name... unity... prominence of one tribe.

SOCIAL ORGANISATION... socialism... great landowners... free landholder... hold weapon... weaponed man... private war... Public justice... penalty... money compensation... wrong... murder... blood-wite... wight... individual... family to family... family ties... Blood-bond (kinsman responsible for each other)... alliance... war... peace... peaceful occupation... tilling the land... landholder... freeholder... freeman... independent individual... independent community... jealous of boundaries... (marches... mark)... bounds... enclosure... belt of land... 'land for the people'... common... common ground... death ground... death... kill... kill criminals... open enemy to law... secret foe.

[The English people came originally from Denmark (Sleswick was then termed England). They consisted of three tribes, the Jutes, the English, and the Saxons. Their common name (the English) indicates their unity and the prominence of one tribe.]

SOCIAL ORDERS... freemen... too free... blunt... churlish... ceorls... ceorls... ceorls... nobles... blood... turtle's blood... aldermen... elected... elected leaders... leadership... Sovereignty... sovereign people... assembly of the people... legislation... administration... minister... minster... bark... sacred tree... cut down... cut short... debate... moot point... moot hill... Wittenagemot... wit... wisdom... Council of wise men.

Social Orders. There were two social orders, the freemen or ceorls, and the ceorls, or men of noble blood, from whom were elected by the people the caldormen to be leaders in war and peace. The actual sovereignty rested in the whole body of the people, who assembled for purposes of legislation and administration round a sacred tree or round a moot hill, where also the Wittenagemot, or council of wise men assembled.

[c. Social Orders... priest's orders... priest... Religion.]
RELIGION—natural religion... nature-worship... (public worship...) priests... authority... important... unimportant)... chief deity... (from whence we derive... tung)... name we derive... Woden's day... Wednesday... Thursday... (Thor's day... Thor)... Thun... storm rotation... calm... air... air... Friday... (Frea's day... freedom... joy... peace... prosperity)... (from whose... Fruitfulness)... Saturday... (satyr... Socrates)... wages... due... Tuesday... (Twe's day... hue... dark... dark god... gloom... death)... Easter Tuesday... Easter... (Eostre... east... dawn... rising... spring)... resurrection... Death goddess... (fate... weird... Wyrd)... sword-wielding woman... shield maiden... breast-plate... heart... core... Nicor... (nyx... water-spirit... Old Nick... black... smith... Wayland... Weland... land... sea... fish... gill... Egl... eagle... feathered... arrow... archer.

[5. English Religion... England... Britain.]

BRITAIN... invasion of Britain... Caesar... Julius Caesar... (seize her... seize goods... sell all)... sales...+sailor... (54)... conquest... more conquests... forward... force... water... land... agriculture... Agricola... (rich... Fire 54)... Roman governor... Roman civilisation... civil... cities... streets... roads... intercourse... commerce... natural produce... agriculture... ground... underground... rotating... gold mine... wealth... (decayed fortunes... decay)... landed proprietors... property... chattels... serfs... absolute power... despotic government... heavy taxation... duties... trade... trade-guilds... exclusive... hereditary caste... cast down... broken... divided... division... union... guild... town... Romanised towns-people... un-Romanised country people... north country... Northern Britons... Scotch... Scots... Picts... picking and stealing... raids... thieves... "stop thief"... call... recall of legions... (crowds... crowd round... go round... rotate 411)... Britain defended... enemies... Picts... (tottering)... neighbours... (dissension)... home rule... English rule... English hire defenders... fender... fire place...ingle... English... shipping... (rigging)... wire rope... wire fence... poultry yard... hen... Hengist and Horsa.

Let no pupil memorise this before he has read the chapter in Mr. Green's book. The Correlations ought not only to bring to mind the facts in the summary, but the fuller details given in Chapter I. of Mr. Green's valuable work—not the words literally, but the sense entirely. Instead of using the Correlations given here, make your own; and, instead of using the summary given here, make your own digest. A pupil, if he uses someone else's Correlations, is like a man walking on crutches, and if he uses someone else's summary, is like a swimmer on bladders, or a child in leading strings.

Let the thoughtful Pupil note the contrast between this method of reading history, and the usual method. In the latter case, the eye may follow the words and sentences and paragraphs, and even pronounce them aloud, and all the time the reader is thinking of something else!!! He thus gets no First Impression. He absorbs but one fact or idea out of 1000! But, in using the above Method, the reader must think of the subject matter. He cannot make the abstract if his mind wanders; he thus absorbs all the per-

* A character in "Kenilworth."
† The "s" is to remind the pupil that it is 54 and 55 B.C. and not A.D. See "Figure Alphabet," page 60.
tinent ideas in abbreviating the statement, and he then clinches them and consolidates them in his memory by the memorised Correlations. Although a little slow at first, he soon gains speed, and what is more, he soon likes the method, because he remembers what without it he could never retain, and because also he finds the making the abstract and the needful Correlations, and memorising them, are pleasing intellectual occupations. In this way he really does master the history, and he henceforth carries all its facts and events in his head for the rest of his life.

MEMORISING MILITARY TACTICS.

Turning force...mill-stream...river...varying depth...danger to bather...risk...fear...run...Bull Run...flat race...winner...first...last...first...lay subject...Lord Chancellor...Chancellorsville.

Bull Run...bony bull..."seven lean kine"...seven animals...seven miles...Union Mills...mill-stone...Stone Bridge...fixed bridge...fix passage...six passages...at each passage...Burlington Arcade...Mississippi arcade...a Confederate brigade...two brigades in reserve...reservoir...fish pond...they fixed a shallow dock (1861, July 17)...deep pool...dive (on the 18th)...duck...Fed...Federals...union...uniting point...Centreville...focus...burn black...Blackburn's Ford...dark and starlight...Astronomer Mitchell...Mitchell's Ford...much...skulk...retract of Federals...treat...delicious odour...nose (on 20th)...ridge..."Stone toll" (Jackson's brigade)...pier...Chelsea...Mitchell's Ford...Chesimals...Zuni assagai...sting...Bee's brigade...stung hand...ball...behind Bue's ford...ride ball...bullets...wound...wound (on the 21st)...shillelagh...Irish...Mitchell Henry...Mitchell's Ford...Portland stone...Stone Bridge...froth and water...neds...Sudley's Ford...ford the R'd Sea...Pharaoh...dream of fat kine...well-fed vision...Federal division...divide...dividing line...at Centreville (the reserve remained)...centre of body...stomach...feed carefully...fed right..."the Federal right"...right to buy...can afford...across at Sudley's Ford...forge...red hot...Red House...field...boundary...line...plummet...mason...left at Stone Bridge...Bridge of Sighs...faint sigh...mild line...behind Bue's ford...ride ball...bullets...wound...wound...last...cobler's last...hob nail...nail-maker...Kirby Smith...iron...rail...road...well-fed flogged horse...Federal flank and rear...rearing horse...broken in...Federals broke...broken pan...panic.

General Sir E. B. Hamley, in his "Operations of War explained," uses the first battle of Bull Run and the battle of Chancellorsville, to illustrate the risk run by a force which crosses a river to turn the enemy's flank.

In the seven miles between Union Mills (on the Alexandria railway) and Stone Bridge (on the road from Alexandria to Warrenton), there are six passages over the Bull Run stream. A Confederate brigade guarded each of the six passages (while two brigades were in reserve) on July 17th, 1861. On the 18th the Federals marched from Centreville, and Tyler's division tried to pass at Blackburn's and Mitchell's Ford, but it was made to retreat. On the 20th Stoneman Jackson's brigade reinforced the Confederates, and was posted in the rear of Mitchell's Ford. Bee's brigade was in the rear of Bull's Ford. On the 21st a Federal division marched for Mitchell's Ford (Federal left), another for Stone Bridge (Federal centre), and another (Federal right) for Sudley's Ford (beyond the Confederate left), while the Federal reserve remained at Centreville. Of the Federal right the advanced guard crossed at Sudley's unopposed (and were afterwards met by a part of the Confederate Stone Bridge brigade), and the rear at Red House, opposed by Bee's brigade. Eventually the Federals formed line, their left at Stone Bridge and their right a mile and a half from the river, on the Confederate side of it. Supported by reinforcements from the right (including Jackson's brigade), and the last brigade from the reserve, the Confederate forces which now opposed the Confederates of Johnson's force, which had arrived by the Manassas railway, fell on the flank and early's brigade on the rear of the Federals, who broke and fled. The brigades at M'Lean's Ford and Union Mills, threatening Centreville, increased the Federal panic.

REMARKS.—That portion of the above which one person would remember without aid, another person must needs resort to memorised Correlations to fix permanently in mind. Again, the ability to make a good abstract of a chapter or of a book, is often more useful to the reader of a new and unfamiliar work than the ordinary University education. Yet no two abstracts would epitomise the same passage in precisely the same way. Nor, again, would two good Lollisets make Correlations alike or necessarily between the same Extremes of this Abstract. Hence, the foregoing Abstracts and Correlations are offered only as suggestions to the genuine student. But if the inevitable idler and amiable critic exclaims, "All such thoroughness takes time," he simply means that he does not wish to learn history at all, for if he really does desire to master it, he knows perfectly well that he could make abstracts, correlate and memorise them, in one hundredth part of the time in which he could possibly learn the same work with equal thoroughness by endless repetitions.
SPEAKING WITHOUT NOTES,
is a practice similar to that of reciting Riddles, or the 71 sentences of
the Ratio, the Series of American Presidents, or Kings of England, if
he has learned them, except that in speaking without notes you en­
large more or less on each topic; but in reciting Riddles, or the sen­
tences of the Ratio, or a Series of Names and Dates, you pronounce
those and those only. A young clergyman is very apt to imagine that
he will correlate together 20 to a 100 propositions in every discourse—
a theoretical conjecture never verified in fact. In practice, he will find
that he will very rarely correlate more than ten propositions together,
and he will correlate sub-propositions, citations, or illustrations to the
respective propositions to which they belong. Each person will man­
age this matter as he finds most convenient to himself, or, if he desires
to literally memorise his discourses, he can do so in the manner pointed
out in learning the sentences of the Ratio. But, by one who speaks
without notes is generally understood one who has only memorised his
leading ideas, and it is always a judicious practice for a beginner to re­
hearse his leading topics and their amplifications in private that he may
test his memory, and then become familiar with a procedure in private
in order to be sure to be perfect in it before the public. This private
discipline is all the more necessary in the early stages of extempore
speaking, if the speaker is at all troubled by nervous anxieties or mind­
wandering.

After the clergyman has decided on his text, or the speaker on any
subject has selected his special topic, the next step is to think it out—
to make his plan—his mode of development of his ideas—their order
and sequence, illustrations, &c. All this will constitute an outline—
the SKELETON OF THE DISCOURSE. This should usually be com­
mited to paper. If he possesses the requisite command of language
to enable him to express his views, all he now requires to do is to thor­
oughly memorise this Skeleton.

When this is done, the orator will have no occasion to have any notes
before him to refer to, and thereby to remind his audience that he is
merely rehearsing fervour a week or more old; but, having the exact
order of ideas in his memory, he can proceed to speak on each succes­
sive topic until he has exhausted all the points and illustrations that
he had intended to use.

A speaker, who had learned my System as he claimed, wrote to me
that he had carefully memorised a skeleton of a lecture, and when he
delivered it, he forgot two important points!! To my inquiry how
many times he had recited from memory to his friends the Boat Race
and the Ratio, so as to secure confidence before others in recalling
what he had learned, he replied, "Not once—did not deem it neces­
sary." I then directed him to recite from memory the entire Ratio of
708 figures, at least 20 times before other people, and when he had
done this, he more carefully memorised another skeleton of a lecture,
and he did not miss a point, although he was interrupted several
times!! Nor has he forgotten a single point on any occasion since.
Those who wish to acquire the full power of my System, must faithfully
carry out all my directions, and then they will find their reward is
much greater than they had hoped for.
As one example worked out is worth reams of general direction and precepts, I propose to give a speaker's method of dealing with such a skeleton by the application of my System to the following abstract of a sermon.

2 Kings, V. 21, 22.

"So Gehazi followed after Naaman, and when Naaman saw him coming after him, he lighted down from the chariot to meet him, and said, Is all well? And he said, All is well; my master hath sent me."

THE HISTORY AND CHARACTER OF GEHAZI.

ABSTRACT.

N.B.—The words in italics are those between which Correlations are necessary.

INTRODUCTION.—
The Bible, like the Sun, sheds its influence over all. Tells about subjects more than kings, poor men than rich, servants than masters: about bad men men no less than good: good servants—such as Eleazar, Joseph, Obadiah: and bad ones no less, among whom, Gehazi.

SUBJECT—Gehazi's History suggests a warning.

I.—HIS CHARACTER—hypocrisy. Originally the servant of Elijah, he long succeeded in deceiving Elisha also. Temptation at length made him throw off the mask.

So temptation tries all. The clear well is disturbed by a stone, and the mud rises. The ants' nest is touched, and it is in commotion. Hazah, an instance of self-deception: and so Gehazi ripened for guilt.

II.—HIS GUILT.—His covetousness led him to deceive with a lie, 1st Naaman; 2nd, his master. What daring, to attempt to deceive the Lord's Prophet!

III.—HIS PUNISHMENT.—Leprosy in his own person, and in his family for ever.

Its bitterness threefold: 1st, extensive: 2nd, intense: 3rd immediate.

IV.—PRACTICAL LESSONS.

(1) Such characters common.
(2) Their existence no argument against religion.
(3) Warning against love of money.
(4) Warning against dishonest business speculations of the day, as a path to affluence and position.
(5) Concluding exhortation.

CORRELATIONS.

The text is first correlated to the title, "Gehazi. —hazy...obscure...commonalty— Kings.

2. V. 21, 22.

Royal hunt.............. (=A hen will hunt no one.)
The main Divisions are now connected with the Text, by a Correlation between the first of them and the suggestive word of the Text phrase—
Place-hunter...interest..."friend at Court"—1. INTRODUCTION.
The Divisions are next correlated to each other; by means of which a rapid survey may be taken of the subject as a whole.
Presentation at Court...King—2. SUBJECT.
Warning from—lowly...valley...mist...haze—Gehazi’s
—staff...old age...“tales of a grandfather”—history
—historical personage—3. HIS CHARACTER.
—bad character...crime—4. HIS GUILT.
—verdict...sentence—5. HIS PUNISHMENT.
—birch-rod...schoolboy—6. PRACTICAL LESSONS.

Lastly, the several points in each Division are correlated to each other, the first of them being in each case connected by a Correlation with the heading of the Division itself. Care should be taken, in addition, to connect by a Correlation the last word of the Abstract in any Division with the Heading of the Division immediately following. It will be sufficient to give an example in the case of the first three Divisions.

I. INTRODUCTION.
—Acquaintance...relatives...family—The Bible,
—divinity...Sun God—like the Sun,
sheds its influence
—Sunday...Sabbath...holy...whole—over all:
—omnibus...hotel—it tells about
—Tell...apple...application...situation—servants more
than masters:
—wages...reward...good service—good servants,
—child...question...“eh, Sir?”—such as Eleazar,
—lazar...leprous...spotted...variegated...coat of
many colours—Joseph,
—sheavea...Ruth...Obed—Obadiah:
(1) and bad ones, no
less; amongst whom
—weather...haymaking...hay—Gehazi.
—servant—

2. SUBJECT. Gehazi’s history
—discourse...exhortation...advice—suggests
—prompt...timely notice—a warning.
—storm signal...sign...hieroglyphic—
3. **His Character.**

—actor...mask— Hypocrisy.
—deceit...subtlety...serpent— Temptation
—attempt...do...make— made him
—compulsion...restraint— throw off the mask
—throw...ball...bal masqué—
—disguise...detective...thief...trial— Temptation
—drink...adulteration...thief— terrors
—judge...judgment hall— all.
—altogether...decided— The clear
—leap over...spring— well
—ill...calamity...distressed— is disturbed
—broken rest...broken pane— by a stone
—pebble...gravel...soil— and the mud
—muddy water...spring— rises;
—early rising...sluggard— the ant's
—insect...leaf...twig— nest
—egg...yoke...ox goad— is touched, and it is in
—stirred...disturbance— commotion
—motion...wheel...nut...hazel— Hazael, an instance
—a sale...mock auction...deception— of self-deception.
—deceit...seat...set— So
—tears...a sob...a sigh— Gehazi
—gaze...peer...pear— ripened
—seasoned...hardened...criminal— for guilt

Let the Student send me his own Correlations in lieu of the foregoing, and an example of his own completely worked out as above, whether his example be a Sermon, a Scientific or Literary Address, or a Speech on any other subject. I will return it to him with my criticism provided he enclose a stamped directed envelope.

After two or more Abstracts or Skeletons have been worked out carefully in this exhaustive manner, less pains will thereafter suffice. As the Pupil's memory grows stronger and his confidence in the method increases, he will need to correlate together only a few catchwords.

**HOW TO USE THE "LOISETTIAN SPY-GLASS."**

The following is an account, by one of my Students, of a Feast of Memory that my Pupils have performed for many years, although this particular one is the first to call it the "Loisettian Spy-Glass":—

One evening at a party, I conceived the idea of what I call the "Loisettian Spy-Glass." I challenged the company to elect one of its number to place 50 different articles on a table in a private room, and then the entire company was to be invited into the room, and all of us were to have just time enough given to take a deliberate look at each article, when we were to return, and I would be the only one who could remember and mention all the 50 articles. The trial was made, and I alone was successful. The highest number reached by anyone else
was 19! To the question, "How could you remember them all?" my reply was, "I looked at the articles through the "Loisetian Spy-Glass," or, in plain language, the Loisetian System had enabled me to remember them all. Since then I have successfully remembered 100 such articles after little more than a glance at them. In short, I believe I could take a mental inventory of a small Civil Service store, and un-failingly remember every article, without making a single mistake.

Taking a hint from the foregoing, which I have copied into my Prospectus, another Pupil sends me the following list of articles, which had been placed on a table in a private room, which he correlated together, and was thereby enabled to remember without mistake—the highest number remembered by his most successful competitors being only 15!—

**FIFTY ARTICLES ON THE TABLE.**

Opera-glass...corkscrew...hammer...ring...scissors...key...flower...doll...duster...bracelet...book...Noah's ark...mouse-trap...boot...collar...string...music...ruler...wig...filter...bun...foresps...sandwich...egg-boiler...pen...cheese...lace...egg...chalk...shell...letter-weight...gum bottle...slate...fig...glove...work-box...ball...trumpet...pack of cards...flat iron...warming-pan...counters...timepiece...gimlet...diary...newspaper...skipping-rope...map...cheese-board...tippet...

These are his own Correlations—by means of which he remembered all these articles:

OPERA GLASS...Glass...bottle...cork...CORKSCREW...Screw...nail...HAMMER...Hamper...luncheon...dinner...bell...RING...Finger...nail...SCISSORS...Cutter...boat...river...quay...KEY...bunch...bunch of flowers...FLOWER...Petal...pet...idol...DOLL...Sawdust...DUSTER...Dust...road...race...brace...BRACELET...Let...letters...printing...BOOK...Leaf...tree...bark...ark...NOAH'S ARK...Ararat...rat...rat trap...MOUSE TRAP...Mouse...cat...puss..."Puss in Boots"...BOOT...Lace...lace collar...COLLAB...Neck...necktie...tie...STRING...Fiddle-strings...MUSIC...Bar...iron...iron ruler...RULER...King...crown...head...WIG...False hair...fall...waterfall...water...FILTER...Charcoal...wood...bundle of wood...bundle...BUN...Bonnet...head...forehead...FORCEPS...Force...forcemeat...meat...SANDWICH...Sand...sandglass...EGG BOILER...Egg...chicken...bird...plume...quill...PEN...Nib...nibble...CHEESE...Cheesemonger...hunger...appetite...tight lacing...LACE...Lay...lay an egg...EGG...White of egg...white...CHALK...Cliff...sea-shore...shell...SHELL...Fish...scales...LETTER WEIGHT...Letter stamp...gum label...GUM BOTTLE...Gums...mouth...roof of mouth...roof...SLATE...Sum...figures...FIG...Date...palm...hand...GLOVE...Boxing...box...WORK BOX...Cotton...reel...dance...BALL...Toss...bull...horn...TRUMPET...Trump...whist...cards...PACK OF CARDS...Cardboard...board...ironing...FLAT IRON...Flat...pancake...pan...WARMING PAN...Bed...counterpane...COUNTERS...Coin...mint...thyme...TIME-PIECE...Time...mark time...drill...hole...GIMLET...Let..."Letts' Diary"...DIARY...Chronicle..."Daily Chronicle"...NEWS-PAPER...Lines...rope line...rope...SKIPPING ROPE...Rope...Europe
Let the Pupil make and memorise his own Correlations in each of above cases and send them to me for criticism.

CAUTION.—Let the Pupil not attempt to do this Feat until he has repeated before others from memory at least 10 to 20 times The Knight’s Tour, The Ratio, and one or two other exercises that I may have given him. When he can think, and recall past thoughts readily in the presence of others, when his retentiveness has been greatly improved by his having made and memorised a great many Correlations, then he can do this Feat with invariable success, commencing with 25 articles, gradually increasing in number till he can remember 100. When challenged to show what he can do, let him challenge his challenger to take part in this Feat, and he will beat him every time; since his challenger will have no method to assist him and no Correlation to make his memory infallible. Let the ambitious Student perform this Feat as often as possible, not merely to astonish his friends, but to gain confidence in the use of his memory, and readiness in the application of my Method—results which will go far to make him successful in any walk of life. When any of my Pupils is challenged to prove what he can do, the true test is not to compare his efforts with what has been told his critics, or what they have read about anyone else; but, the only honest criterion is between what he could do before learning my System, and what he can do now in the same time.

MEMORISATION of LATIN, GREEK, or other Foreign Sentences.

Latin Sentence. Translation.

Res, aetas, usus semper aliquid ap-portat novi. (Terence.) Thing (experience), age, custom always brings something new.

Video meliora proboque, deteriora sequor. (Ovid.) I see the better things and approve of them, I follow the worse.

To remember such sentences, correlate, if necessary, all the words to one another, or those parts only where you find that your natural memory fails you. For instance, the first of the above sentences may be memorised thus: Res (rase) graze...eat...Aetas (ass)...beast of burden...useful...Usus (use)...useless...Empty...Semper (December)...Christmas...tide...water...liquid...ALIQUID (quidnunc) news...reporter...Port...APPORTAT (tat) tatter...old...New...Novice...NOV.

Memorisation of the second sentence—VIDEO (vide) see...see better...AMELIORATE...MELIORA...(meal) linseed...lint...Wound...probe...PROBOQUE (pro) contr...contrary...oppose...deter...DETERIORA (deteriorate) inferior...follower...sequence...SEQUOR.

The following distich contains all the letters of the Greek Alphabet:

GR. Ψυχή, βλέψων ἄνω, ξείνων δέπληθεο τάντων.

Gr. Psyche, blepsem ano xeinon d’epiletheo panton.

Lat. Soul, look thou upward, foreign forget thou all things.

g. Μηδέ σ’άγγι νυκῶν πρός ξοφόεντα δέμας.

R. Mede s’age nikon pros zophoenta demas.

L. That not thee lead conquering towards dark things the body.
My soul, look thou on high; heed not things foreign to thy nature, lest the body triumph over thee, and lead thee into darkness.

**The Distich in Capital Letters.**

ΨΥΧΗ ΒΛΕΨΩΝ ΑΝΩ ΤΙΝΙΛΘΕΟ ΠΑΝΤΩΝ·
ΜΗΔΕ ΣΑΓΗ ΝΙΚΩΝ ΠΡΟΣ ΖΟΦΩΝΤΑ ΔΕΜΑΣ.

Distich...couplet...couple...single...soul...psychology
...ΨΥΧΗ...key...water...bubble...bleb...ΒΛΕΨΩΝ...plebian...ann...ἀνω...no...more...plus...sign + ...ΕΙΝΩΝ...known...let know...inform...infirm...debile...ΔΕΜΑΣ...theism...pantheism...πάντων...pan...pot...drink...mead
...Μηδε...Eden...fall...bend...sag...σαγη...agon...sharp pain...sharp point...cone...πίκων...nickname...libel...prosecution...προσ...prostrate...lying down...sofa...
ζοφωντα...end...aim...dame...Δεμας.

**Accumulations of Facts, Principles, Citations, Illustrations, Proverbs, Anecdotes, &c., &c., on any particular subject.**

Suppose you recognise the fact that you are a social being, you will then realise the duty of becoming an ENTERTAINER. By my Art, you can soon accumulate and have at instant command hundreds of anecdotes, conundrums, &c., &c. (1) The first thing to be done is to memorise, say for instance the following Riddle:—"Why was Noah the greatest financial genius ever known? Because he managed to float a Company of Limited Liability whilst the rest of the world was in liquidation." You might make two or three Correlations, and, by memorising them, infallibly remember the conundrum and its answer. But, for the sake of illustration, I will correlate together all the principal words, thus: Why...know...why...know...NOAH...flood...fire...grate...Greatest...smallest...small...fine...financial...money...money-king...deverhead...Genius...fool..."yes, no"...Known...well-known...well-being...be
...because...cause...bringing to pass...manager...managed...man of war...float...buoy...single...company...accompaniment...music...stop...limit...Limited...limited responsibility...liability...tie...tie down...rest...BEST OF THE WORLD...globe...water...liquid...liquidation, or using Interrogative Analysis exhaustively for illustrating, thus: What indicates this to be an enquiry?—"Why was Noah the greatest financial genius ever known?" Is this enquiry made in regard to the present, past or future?—"Why was Noah the greatest financial genius ever known?" In regard to whom is the question asked?—"Why was Noah the greatest financial genius ever known?" What enquiry is made concerning Noah?—"Why was Noah the greatest financial genius ever known?" In regard to what was Noah the greatest genius?—"Why was Noah the greatest financial genius ever known?" In what degree was Noah a financial genius?—"Why was Noah the greatest
financial genius ever known?" Does this enquiry imply that there has often been such a genius?—"Why was Noah the greatest financial genius ever known?" Was the existence of this genius a matter of conjecture or of positive knowledge?—"Why was Noah the greatest financial genius ever known?" How do you know that he possessed this great financial genius?—"Because he managed to float a company of limited liability whilst the rest of the world was in liquidation." Who managed to float a company?—"Because he (Noah) managed to float a company of limited liability whilst the rest of the world was in liquidation." What did Noah do in regard to this company?—"Because he managed to float a company of limited liability whilst the rest of the world was in liquidation." What did he manage to float?—"Because he managed to float a company of limited liability whilst the rest of the world was in liquidation." What kind of company did he manage to float?—"Because he managed to float a company of limited liability whilst the rest of the world was in liquidation." When did he manage to float this company?—"Because he managed to float a company of limited liability whilst the rest of the world was in liquidation." Whilst he floated this company, was there anything not floated or in liquidation?—"Because he managed to float a company of limited liability whilst the rest of the world was in liquidation." The rest of what was in liquidation?—"Because he managed to float a company of limited liability whilst the rest of the world was in liquidation." Is the assertion made of the rest of the world?—"Because he managed to float a company of limited liability whilst the rest of the world was in liquidation." In what condition was the rest of the world?—"Because he managed to float a company of limited liability whilst the rest of the world was in liquidation." In this manner, with as many or as few Correlations or Interrogations as he finds needful, the Pupil will always first memorise the citation, adage, anecdote, riddle, or whatever else he wishes to remember.

(2) The next step is to Correlate the first anecdote, citation, illustration, &c., to the CLASS to which it belongs, and through which you must think to get to it by correlating the prompting or suggestive word to that class. In the case of the above riddle, the class would be the word Financial or Financial Genius, and to this you would correlate the word Noah; or you could start, as I do in the case of the following Riddles, and connect the prompting word "wrathful" in the first riddle to the word riddle itself, and the word "wrathful" to the Prompting word in the next, to wit, "sneeze," and so on till hundreds of riddles are cemented together, always presuming that the Student first memorises a riddle when he first meets it, as I did the "Noah" riddle above. Similarly, he can tie up hundreds or even thousands of facts to the class to which they belong, doing one at a time as he finds them. In this way, any one could easily learn an entire book of anecdotes, a dictionary of quotations, masses of facts, experiments, &c., &c., by correlating them to the classes to which they belong, and then stringing together all those that come under that class, as these Riddles are united together below.
RIDDLES.

[...questions...disputing...quarrelsome...]

1. Why is a wrathful man exactly like 59 minutes past 12? Because he is just upon the point of striking one (1).

2. When does a man invariably sneeze five times in succession? When he cannot help it.

3. When is a bonnet not a bonnet? When it becomes a woman.

4. Why is a blacksmith the most dissatisfied of mechanics? Because he is always striking for his wages.

5. Why is an Irishman rolling over in the snow like a mounted policeman? Because he is pat-rolling.

6. Why is a game of cards like a timber yard? Because there are always a great many deals in it.

7. Why do ducks put their heads under water? For divers reasons.

MENTALLY REPORTING SERMONS OR LECTURES.

In these cases you correlate together the leading Propositions, Facts, or Illustrations which you wish to remember. The process is exactly the same as that pursued with the Riddles or the sentences of the Ratio, with this difference, that the Riddles and the sentences of the Ratio are selected for you, but, in mentally reporting, you have to make your own selection of the Points or Topics of the discourse you wish to report. No one would attempt to remember all the words and sentences spoken. It is only the leading ideas you wish to carry away. But even then you have a triple work to do. You have to select your Propositions to be remembered and also the Suggestive Words in them, and then correlate together these Suggestive Words, and all the time you are doing these onerous feats, you are anxious lest you may omit some important remark or idea!! Some people are so troubled with this nervous anxiety that all their efforts to think, select, and correlate are completely paralysed! But let not the most courageous and steady of nerve attempt too much the first time he tries, nor even the second or tenth time. “Make sure of a few things, even although you lose many things,” should be his motto, until he can coolly plan and rapidly execute. But let no one attempt to report an address until he can make Correlations very rapidly, and until he has had genuine practice in making abstracts of essays, chapters, &c. That secures a mastery of the method to be used, and its application to Mental Reporting becomes thenceforth easy and delightful if he can restrain all nervous anxieties. The best Method for the beginner is to take careful notes while listening, and then on his way home, or immediately on reaching home, let him thoroughly memorise his notes by my System, and not lay his notes aside, as is usually done, with the resolve, rarely carried out, of memorising them subsequently. But let him memorise
them while the matter is all fresh in his mind. In this way he soon strengthens his Natural Memory and his power of abstracting to such a degree that he can listen and take away with him everything he desires to remember. And, on all occasions, let him give an account to some one of the lecture, and with as much detail as possible. After his memory has been thus developed and strengthened to its utmost, he will not have to use Correlations or Interrogative Analysis and Abstracts. Successful Mental Reporting is one of the final and crowning triumphs of the Art of Never Forgetting.

[MORE THAN 1500 APPLICATIONS OF MY SYSTEM!!—There are 500 applications of the Laws of In., Ex. and Con. in the First Lesson, and in the subsequent lessons, including this one, there are more than ONE THOUSAND Correlations, each one of which is a distinct and separate application of my System. No one can learn and use all these applications of my System in the exact way I point out, by regarding my Correlations, date-words, homophones, &c. as Samples only, and using his own date-words, Correlations, &c., without having his concentration greatly strengthened and becoming a genuine Memory-Athlete.]

MEMORY AND SUCCESS.—If a manufacturer is about to engage 1000 men, what is the secret principle that guides his choice, always assuming that the applicants are trained to the business? It is: "Can they remember to do exactly as they are told to do?" And if, from pressure of hard times, he is obliged to discharge half of them, who have to go? Those whose treacherous memories prevent their remembering their instructions, and who are always or occasionally offering excuses for omissions, blunders, or mistakes. And the same course is taken in every other department of life. In short, the HIGHEST SUCCESS is possible with a good memory: impossible without it. And FAILURE always haunts the steps of those possessing unreliable memories. Therefore, my final words to my Pupils are, "Get Health, get Competency in your calling, but above all get—if you have not already acquired—The LOISSETTIAN Art of Never Forgetting."
APPENDIX TO LOISETTE SYSTEM.

THE LOISETTIAN SCHOOL OF PHYSIOLOGICAL MEMORY.

PRESIDENTS OF THE UNITED STATES OF AMERICA.

*General George Washington,        From 1789 to 1797
John Adams,                          From 1797 to 1801
*Thomas Jefferson,                   From 1801 to 1809
*James Madison,                      From 1809 to 1817
*James Monroe,                       From 1817 to 1825
John Quincy Adams,                   From 1825 to 1829
*General Andrew Jackson,             From 1829 to 1837
Martin Van Buren,                    From 1837 to 1841
†General William Henry Harrison,     1841
John Tyler,                          From 1841 to 1845
James Knox Polk,                     From 1845 to 1849
†General Zachary Taylor,             From 1849 to 1850
Millard Fillmore,                    From 1850 to 1853
-General Franklin Pierce,            From 1853 to 1857
James Buchanan,                      From 1857 to 1861
*Abraham Lincoln,                    From 1861 to 1865
†Andrew Johnson,                     From 1865 to 1869
*Ulysses S. Grant,                   From 1869 to 1877
Rutherford Birchard Hayes,          From 1877 to 1881
†General James A. Garfield,          1881
General Chester A. Arthur,           From 1881 to 1885
Grover Cleveland,                    1885

Pupils who have mastered my System, learn the above series, which gives the Order of Succession, Dates of Accession, and the time of termination of Official Service of the American Presidents, in a single careful perusal.

Printed expressly for the Pupils of Professor A. Loisette.

* Those who were in office more than four years were re-elected for a second term.
† Those who were Presidents for less than four years, died in office and were succeeded by Vice-Presidents. President Lincoln was murdered forty days after the commencement of his second term of office, when Vice-President Johnson became 17th President.
THE KNIGHT'S TOUR.

It goes without saying to the Chess player, that the move of the Knight is L shaped, one leg of the L being always twice as long as the other, and that in this celebrated Tour he makes correct Knight's moves all the time; but in popular language we may say: the object of this Problem is to conduct the Knight all over the Board from No. 1 or any other number, and to return to the same point whence it started without its having rested upon the centre of any square more than once in its course. The following is a diagram of the tour:

The crookedness of this journey must be apparent to any one. If he start from square 1, he would have to touch successively the following squares, reading the series from left to right and not in columns.

1—11  5  15  32  47  64  54  60  50  35  41  26  9  3  18
7  24  39  56  62  45  30  20  37  22  28  33  21  36  19  25
10  4  14  8  23  40  55  61  51  57  42  59  53  63  48  31
16  6  12  2  17  34  49  43  58  52  46  29  44  27  33  18—1
To do this tour "blind fold" or without seeing the board, has always been one of the star tricks of professional chess-players; and yet any of my pupils can do it after their second lesson in my system. The method of Dr. Richard Grey, a celebrated teacher of Mnemonics, applied to this problem, would necessitate committing to memory the following unpronounceable and uncomprehensible word!

TOUR babubutefoisoloslyutufad aunibipefiusaudolizepedeki kebisanelazoboyetozulaububupo dunutautokibasau bedapifonotuk udosenofepitak.

I can hardly offer a better example of the folly of artificial systems.

THE OXFORD AND CAMBRIDGE UNIVERSITY BOAT RACE.

<table>
<thead>
<tr>
<th>DATE</th>
<th>WINNER</th>
<th>DATE</th>
<th>WINNER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1839</td>
<td>OXFORD</td>
<td>1865</td>
<td>OXFORD</td>
</tr>
<tr>
<td>[1831*]</td>
<td></td>
<td>1866</td>
<td>OXFORD</td>
</tr>
<tr>
<td>[1833†]</td>
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<td>1867</td>
<td>OXFORD</td>
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<td>CAMBRIDGE</td>
</tr>
<tr>
<td>1842</td>
<td>OXFORD</td>
<td>1872</td>
<td>CAMBRIDGE</td>
</tr>
<tr>
<td>1845‡</td>
<td>CAMBRIDGE</td>
<td>1873‡</td>
<td>CAMBRIDGE</td>
</tr>
<tr>
<td>1846§</td>
<td>CAMBRIDGE</td>
<td>1874</td>
<td>CAMBRIDGE</td>
</tr>
<tr>
<td>1849</td>
<td>CAMBRIDGE</td>
<td>1875</td>
<td>OXFORD</td>
</tr>
<tr>
<td>1849§</td>
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<tr>
<td>1852</td>
<td>OXFORD</td>
<td>1877‡‡</td>
<td>OXFORD</td>
</tr>
<tr>
<td>1854</td>
<td>OXFORD</td>
<td>1878</td>
<td>CAMBRIDGE</td>
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<tr>
<td>1855</td>
<td>CAMBRIDGE</td>
<td>1879</td>
<td>OXFORD</td>
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<tr>
<td>1857†</td>
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</tr>
<tr>
<td>1861</td>
<td>OXFORD</td>
<td>1883</td>
<td>OXFORD</td>
</tr>
<tr>
<td>1862</td>
<td>OXFORD</td>
<td>1884‡‡</td>
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<tr>
<td>1863</td>
<td>OXFORD</td>
<td>1885</td>
<td>OXFORD</td>
</tr>
<tr>
<td>1864</td>
<td>OXFORD</td>
<td>1886</td>
<td>CAMBRIDGE</td>
</tr>
</tbody>
</table>

* Not rowed owing to prevalence of Cholera.
† The challenge of 1834 still unaccepted.
‡ ‡ First race over the Putney and Mortlake Course.
§ First race rowed in outriggers.
‡ In this Race there was a "Foul"—that is, a collision between the Boats, and it was rowed over the same year, each University winning a race.
† First Race in the present style of Boats without keels.
** The Cambridge Boat sank.
‡‡ Sliding Seats used for the first time.
†† The Race was a Dead Heat. The Oxford bow-man caught a crab, and sprung his oar when leading.
§§ Rowed on Monday because of fog on Saturday. The first race that was postponed.
‖ Rowed on Monday, owing to Prince Leopold's Funeral taking place on the Saturday.

Mnemonics is hors de combat without the boasted "Wheelbarrow" euphemistically called a "Key"—100 objects, sometimes 500 or even 1000, ideally placed on the floors, walls and ceiling of rooms, or otherwise localised in figured situations called "Pegs." To this series of fixed Objects the Mnemonist "associates" by his "Links" or "Associations" any other series, such as the Kings of England, Popes of Rome, the Sixty-four Elements of Chemistry, the Thirty-nine Articles,
the Dates of the Oxford and Cambridge successes in the University Boat Race, Topics or Heads of numerous Sermons, Addresses or Lectures; in short, everything and anything that is to be remembered!!! —a Procrustes' Bed to which everything is to be fitted by Contortion or Distortion, with the inevitable result of making this Anarchical Machine "a measure" of the Universe and of all that is therein, and the operations of the mind of the Adapter the very Climax of Artificiality!!!

By this False Process, the Natural Sequence of Ideas in the Subject-Matter itself is always either introverted, perverted or destroyed.

My Pupils easily learn all the facts of the Oxford and Cambridge University Boat Race, as above, or any other facts whatever, without the use of any Artificial Appliances.

**KINGS OF ENGLAND BEFORE THE CONQUEST.**

<table>
<thead>
<tr>
<th>King</th>
<th>Reigns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egbert</td>
<td>827 to 837</td>
</tr>
<tr>
<td>Ethelwulf</td>
<td>837 to 857</td>
</tr>
<tr>
<td>Ethelbald</td>
<td>857 to 860</td>
</tr>
<tr>
<td>Ethelbert</td>
<td>860 to 866</td>
</tr>
<tr>
<td>Ethelred I</td>
<td>866 to 871</td>
</tr>
<tr>
<td>Alfred the Great</td>
<td>871 to 901</td>
</tr>
<tr>
<td>Edward I, The Elder</td>
<td>901 to 925</td>
</tr>
<tr>
<td>Athelstan</td>
<td>925 to 940</td>
</tr>
<tr>
<td>Edmund I</td>
<td>940 to 946</td>
</tr>
<tr>
<td>Edred</td>
<td>946 to 955</td>
</tr>
<tr>
<td>Edwy</td>
<td>955 to 958</td>
</tr>
<tr>
<td>Edgar, The Peaceable</td>
<td>968 to 975</td>
</tr>
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</table>

**KINGS OF ENGLAND SINCE THE CONQUEST.**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>William I</td>
<td>1066 to 1087</td>
</tr>
<tr>
<td>William II</td>
<td>1087 to 1100</td>
</tr>
<tr>
<td>Henry I</td>
<td>1106 to 1135</td>
</tr>
<tr>
<td>Stephen</td>
<td>1135 to 1154</td>
</tr>
<tr>
<td>Henry II</td>
<td>1154 to 1189</td>
</tr>
<tr>
<td>Richard I</td>
<td>1189 to 1199</td>
</tr>
<tr>
<td>John</td>
<td>1199 to 1216</td>
</tr>
<tr>
<td>Henry III</td>
<td>1216 to 1272</td>
</tr>
<tr>
<td>Edward I</td>
<td>1272 to 1307</td>
</tr>
<tr>
<td>Edward II</td>
<td>1307 to 1327</td>
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<tr>
<td>Edward III</td>
<td>1327 to 1377</td>
</tr>
<tr>
<td>Richard II</td>
<td>1377 to 1399</td>
</tr>
<tr>
<td>Henry IV</td>
<td>1399 to 1413</td>
</tr>
<tr>
<td>Henry V</td>
<td>1413 to 1422</td>
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<tr>
<td>Henry VI</td>
<td>1422 to 1461</td>
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<td>Edward IV</td>
<td>1461 to 1483</td>
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<td>Edward V</td>
<td>1483</td>
</tr>
<tr>
<td>Richard III</td>
<td>1483 to 1485</td>
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<tr>
<td>Henry VII</td>
<td>1485 to 1509</td>
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<tr>
<td>Edward II, The Martyr</td>
<td>975 to 979</td>
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<tr>
<td>Ethelred II</td>
<td>979 to 1013</td>
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<td>Swayne</td>
<td>1013 to 1014</td>
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<tr>
<td>Canute the Great</td>
<td>1014</td>
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<tr>
<td>Edmund II, Ironside and Canute</td>
<td>1016 to 1017</td>
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<tr>
<td>Canute (alone)</td>
<td>1017 to 1035</td>
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<tr>
<td>Harold I, Harefoot</td>
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<tr>
<td>Harold II</td>
<td>1040 to 1042</td>
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<tr>
<td>Harold III</td>
<td>1043 to 1066</td>
</tr>
<tr>
<td>Edward III, The Confessor</td>
<td>1066</td>
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**THE RATIO OF THE CIRCUMFERENCE TO THE DIAMETER EXPRESSED BY THE INTEGER 3, AND 707 DECIMALS READING FROM LEFT TO RIGHT.**

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</tbody>
</table>
| 4 | 4 | 5 | 9 | 2 | 3 | 0 | 7 | 8 | 1
To recite even 150 of the Figures of this Ratio in the exact order is a feat practically impossible to the unassisted Natural Memory.

COMPLETE LIST OF DERBY WINNERS,
From 1780 to 1886.

<table>
<thead>
<tr>
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<td>1781</td>
<td>Young Eclipse</td>
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<tr>
<td>1782</td>
<td>Assassin</td>
</tr>
<tr>
<td>1783</td>
<td>Saltire</td>
</tr>
<tr>
<td>1784</td>
<td>Sergeant</td>
</tr>
<tr>
<td>1785</td>
<td>Aimwell</td>
</tr>
<tr>
<td>1786</td>
<td>Noble</td>
</tr>
<tr>
<td>1787</td>
<td>Sir Peter Teaze</td>
</tr>
<tr>
<td>1788</td>
<td>Sir Thomas</td>
</tr>
<tr>
<td>1789</td>
<td>Skyscraper</td>
</tr>
<tr>
<td>1790</td>
<td>Rhadamanthus</td>
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<tr>
<td>1791</td>
<td>Eager</td>
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<tr>
<td>1792</td>
<td>John Bull</td>
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<td>1793</td>
<td>Waxy</td>
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<td>Dædalus</td>
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<td>1795</td>
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<td>Didelot</td>
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<td>Pharamond's Sister's Colt</td>
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<td>1798</td>
<td>Sir Harry</td>
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<td>1799</td>
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<tr>
<td>1856</td>
<td>Ellington</td>
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<td>1857</td>
<td>Blink Bonny</td>
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<td>1858</td>
<td>Beadaman</td>
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<td>1859</td>
<td>Musjid</td>
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<td>1860</td>
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<td>1861</td>
<td>Kettlebum</td>
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<td>1863</td>
<td>Macaroni</td>
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<td>1864</td>
<td>Blair Athol</td>
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<td>1865</td>
<td>Gladiateur</td>
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<td>1866</td>
<td>Lord Lyon</td>
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<td>1867</td>
<td>Hermit</td>
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<td>1868</td>
<td>Blue Gown</td>
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<td>1882</td>
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<td>1883</td>
<td>St. Blaise</td>
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<td>1884</td>
<td>St. Galien</td>
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<td>1885</td>
<td>Melton</td>
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<td>1886</td>
<td>Ormonde</td>
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</table>

My Pupils, through the aid of my Art of Never Forgetting, can recite the entire series forwards and backwards, and can also give the year of any horse and the horse of year, on these being asked at random, up and down the entire list, without resort to that huge Babel of Mnemonical Artificiality called a "Key," or sometimes hon-
ored by the pet name of "Wheelbarrow," or a collection of "Pegs" 100 in number, or any recourse to its "Mental Daubs" or "Nursery Associations." By means of the inexhaustible fertility of my System, my Pupils can easily add the Pedigrees of the Winners, and the names of their Jockeys and Owners. Learning the List of Derby Winners in this thorough manner is mere pastime for those who have mastered my System.

STUDENTS OF THE LOISETTE SYSTEM.

The Loisette System has had large numbers of students in all parts of the country. The following list is taken from the "Professor's" circulars.

Philadelphia.......................... 1500
Baltimore............................. 1100
Washington............................ 1150
Detroit................................. 1005
Univ. of Penn......................... 400
Meriden, Conn........................ 200
Norwich................................ 250
Wellesley College..................... 400
Boston.................................. 1210

TESTIMONIALS OF THE LOISETTE SYSTEM.

(Frank H. Foster, Professor in Church History in Oberlin Theological Seminary.)

October 10, 1887.

"The more I use your system, the better I like it"

Examination Passed, and Gold Medal Won.

40 HAWKINS ST., LONDONDERY, IRELAND.

December 8, 1887.

I can fully endorse your statement that it is calculated in the highest degree to strengthen the Natural Memory, besides being unrivalled as a device for memorizing. At the Irish Intermediate Examinations, held in June, I was awarded in the Senior Grade a £40 prize, the English Gold Medal, and £4 for English Composition, and I obtained the second place in Ulster, and the fourth in Ireland, against 219 competitors, although I was a year and a half below the prescribed limit of eighteen.

As far as memory goes, I feel that this result was due to you. I believe that any school-boy who had mastered your system, and was taught as I was, would be able to carry all before him in any examination and against any rivals.

WILLIAM A. GOLIGHER.

(Mark Twain.)

HARTFORD, March 4, 1887.

DEAR SIR:—Prof. Loisette did not create a memory for me; no, nothing of the kind. And yet he did for me what amounted to the same thing, for he proved to me that I already had a memory, a thing that I was not aware of till then. I had before been able, like most people, to store up and lose things in the dark cellar of my memory; but he showed me how to light up the cellar. It is the dif-
ference, to change the figure, between having money where you can't collect it, and having it in your own pocket. The information cost me but little, yet I value it at a prodigious figure.

Truly yours, S. L. Clemens.

(Rev. Francis B. Denio, Professor of Hebrew in the Bangor Theological Seminary.)

If I had been a master of this System twenty years ago, I should have been saved three or four years of the drudgery of repetition, on which I have hitherto relied to fix any knowledge, and especially that of the vocabulary of a foreign language. . . . I have decided that hereafter I shall try to induce all my students to master this system before they engage in their linguistic studies under my direction.

(Hon. W. W. Astor.)

I have now mastered your System quite thoroughly and use it constantly.

One feature that I value not the least is that the habit of its use has greatly strengthened and improved my natural memory.

June 5, 1884.

(New York Tribune, March 25th, 1887.)

The System of Memory Training that is taught by Prof. Loisette is creating a stir among mind workers, second to nothing of its character that has ever been attempted in this country.

(Dr. Andrew Wilson, and R. A. Proctor.)

Dr. Andrew Wilson has said respecting the System:—Whether regarded as a device for memorizing, or in its more important aspect as a System of Memory Training, Prof. Loisette's method appears to me admirable.

I have tested it in my own case on those matters in which my memory is least trustworthy, perhaps because least exercised; and I have been surprised to find how easily and pleasantly I can fix such matters in my mind, almost without an effort, yet in such a way that I am satisfied they are there for good. . . . I have no hesitation in thoroughly recommending the System to all who are earnest in wishing to train their memories effectively, and are therefore willing to take reasonable pains to obtain so useful a result.

R. A. Proctor.

(Quoted from Knowledge, January 25, 1884.)

Sir Edward H. Meredith, Bart., writes, in a letter to a friend:—The late Judah P. Benjamin, Q. C., once said to me, "Apply to Prof. Loisette; he gave me a new memory and his method of study is the best I know of. His System is too good for the idle and frivolous; but anyone who can devote to it the smallest modicum of application will find it easy, interesting and of the greatest value. . . . By his System I have already learned one book in one reading, and I intend to learn many more in the same way. . . . The lessons have been worth hundreds of pounds to me."

Mandaleen Lodge, October 1, 1886.
This Bibliography of Mnemonics, in its own field—publications in Latin and English—is believed to be fairly complete, from 1325 to 1888.

Corrections of errors discovered, or additions suggested, will be gratefully received.

The following works have been freely consulted: "Bibliotheca Americana," "Bibliotheca Britannica," "American Catalogue," "English Catalogue," Poole's Index, also the works of Feinaigle, Pick, and Middleton; all of which contain admirable critical bibliographies, more or less extended.

In justice to the reader, a few words should be added with reference to some of the more important books in the following list. Of Fauvel-Gouraud's *Phrenomnemotechny*, the North American Review for July, 1845, said: "This is one of the most remarkable books it has ever fallen to our lot to examine. In style, manner, and matter, it will hereafter rank among the most curious of the curiosities of literature." Dr. Pick's *Memory and a Rational Means of Improving It* needs no commendation here. The extracts so fully quoted elsewhere amply attest its merit. The perusal of Appleby's *Loisette's Art of Never Forgetting Compared with Mnemonics* will well repay every student of Loisette. The author's acknowledgments are due for valuable suggestions. Dr. Holbrook's *How to Strengthen the Memory*, with no pretensions as a "system," contains the latest and best yet written on the all-important subject. He quotes freely the best authorities, notably Pick, and always with due acknowledgments. Kay's *Memory: What it is, and How to Improve it*, the last fourth of which deals with the cultivation of the memory, might more appropriately be called a *Cyclopedia of Memory*; so replete is it with information on every conceivable topic connected with memory. The broad scholarship and discriminating judgment of the distinguished author were never more successfully enlisted.

Prof. White's *Natural Method of Memorizing and Memory Training*, the name of which correctly characterizes it, is pre-eminently the work of a scholar. As a System none of its predecessors is more worthy of the careful attention of scholars, and none has been more appreciatively received.

1325. Thomae Bradwardini *Ars Memorativa*, MS. Manuscript in British Museum.
1430. *Ars Memorandi Notabilis per Figuras Evangelistarum vel Memoriale quatuor Evangelistarum*. Small Fol. This is supposed to be the first attempt towards a system of superficial memory.

* Works on the training of the Memory have been included, whether known as Mnemonics or not.
† The chief works in French and German have also been included.
1450(?). Tractatus Artis Memorativa.
1470. Matheoli Perusini tractatus Artis Memorativa. 8°.
1475(?). Perusinus, Matt. Tractatus Clarissimi et Medica de Memo-
ria. 4°
1482. In nova mirabiliique ac perfectissima Memoriae Jacobi Publicii,
prologen felicer incipit. 4°.
1485. Publicius Jacobus: "Opera." Includes the Ars Memorativa.
Venice.
1488. Ars Memorativa per Johannem Priiss. fol. Argent.
1491. Petrus de Ravenna. Ars Memorativa. Went through nine edi-
tions. 4 vols. Venice.
1502. Comm. in Aristotele. Lib. Physicorum, de Anima, de Memoria,
&c.
1515. Nicholai Chappusii de mente et memoria libellus utilissimus.
4° [Paris].
1515. Jacobi Colinaei Campani de Memoria Artificiosa compendiosum,
opusulum impressit Ascenius. 4°. [Paris] [bl. let.].
1519. Albertus Magnus. Varii Tractatus Parvi de Sensu et Sensato,
de Memoria et Reminiscencia, &c. Venice.
1523. Fries. Laurenz: A Short Advice how Memory can be Wonder-
fully Strengthened. Strauburg.
1530. Paraphrasis in Aristotelem de Memoria.
1533. De Kyrpse, Joannis Romberch: Congestorium Artificiosae Me-
moriae. Venice.
1536. Discours notables des moyens pour conserver et augmenter la
16°. Lyon.
1540. Aristotle. De Memoria et Reminiscentia, Lat., per Nic. Leoni-
cum. 8vo. Venice.
1555. De Memoria reparanda, augenda servandaque, lib. unus: et de
Romæ.
1556. Campensis, Claud. Commentariii in Aristotelis librum de Me-
1570. Artificialis libellus, autore Joann. Spangenberg. Herd. 8° Wite-
berg.
1562. The Castel of Memorie by Guilemhus Gratsholus Bergomatis,
1574. Cosmi Rosselli Thesaurus Artificialis, Memoriae. 4°. Venet.
1582. Bruno, Jordano: De Compendiosa Architectura et complementa
Artis Lullii. Parisiis.
1583. Artificialis Memoriar Libellus Authore Thoma Watsono Oxoni-
ensi, Iuris Utriusque studioso. MS.
1583 Dickson, Alexander: De Memoriae virtute Prosopopæia. 8vo.
London.
1593. Schenkel, Lamprecht: De Memoria, lib. i.
1600. F. Philippi Gesvaldi Plutosofìa, Patav.
1602. Siri, Victor: Memoire Recondite dall’ anno 1601, 8 tom 4to.
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1628. Lettera a Andrea Valieri ove si tratta della Memoria locale e del modo facile per acquistarla. MS.


1641. Burke, Thos.: Scripture Inquiry, or Helps for Memory in the Duties of Piety. 8vo. London.


1685. Walkis, John: The Strength of Memory.


1695. Ars Magna et admirabilis specimenibus variis confirmata. 8°.


1708. Fr. Guivard: Traité de Mnémotechnie, Lille.

1715. Erhardt, Thomas: Ars Memoriae. 8 vols. 8vo.
1752. Hill, William: Memory of Language and Rhyming Expositor. 18mo. 1a. 6d. London.
1773. Evans : The Tablet of Memory; or, the Historian's Assistant. 12mo, 1a. 6d. London.
1783. Helps for Short Memory. 12mo. 6d. London.
1812. von Feinaigle, Gregor: "The New Art of Memory, to which is prefixed some accounts of the principal systems of artificial Memory from the earliest period to the present time." 12mo. 12s. London.
1813. Needham, S. : "Reminiscencia Numeraris; or, the Memory's Assistant." 12mo. 2 vols.
1823. Aimé Paris and Adrien Berbrugger: "Résumé des diverses specu-
1827. Objet des cours (de mnémonique.) Paris.
1828. Paris, Aimé : Première suite autographie d'applications spéciales
1829. Darby, W. : Mnemonica ; or, The Tablet of Memory.
1830. Snooke : Calendar of Memory.
1831. de Castilho : Recueils de Souvenir de Mnemotechnie. Saint
Milo.
1831. Kästner, Chr. A. L. : Mnemonices quaedam in scriptura sacra
vestigia.
1833. Beniowski's Phrenotypics.
Bordeaux.
1834. Paris, Aimé: Mémoire adressé . . . de mnémotechnie à
1834. Paris, Aimé : Principes et applications diverses de la mné-
1835. De Castilho A. M. & J. F. : Dictionnaire Mnémonique
1838. Valpy : Poetical Chronology.
1838. Jukes, Mrs. : Aids to Memory.
1841. Otto, Carl (Reventlow) : Lehrbuch der Mnemotechnik. Stutt-
gart.
1844. Cannon, J. W.
$1.75. New York.
1845. Fauvel-Gouraud, Francis : Phrenomnemotechy. $2.00. New
York.
1846. Harris, L. H.: Mnemonics; or, Philosophical Memory. Newark, Ohio.
1846. Johnson, L. D.: Memoria Cyclopaedia, or the Art of Memory. Taunton, Mass.
1847. Hill, Wm.: Educational Monitor.
1849. Hamilton's Mnemonic Chronology of British History. 7s. London.
1852. Hill, Wm.: Memory of Languages. 5th ed. London.
1855. Parker, L.: Key to Philosophy of Memory. New York.
1861. Pick, Edward: On Memory and Rational Means of Improving it. 8vo. 2s. 6d. London, Trübner. (5th Ed., 1873, 12mo, 1s.)
1864. Slater, Mrs.: Sententiae Chronologicae.
1866. Girdlestone, E. D.: Memory Helped, or Dr. Grey's System explained. London.
1869. Mackay Alex.: Facts and Dates. 12mo. 4s. London, Blackwood.
1873. Belton, Wm.: Memory Almanac. 6d. Liverpool.
1874. Fairchild's The Way to Improve the Memory. London.
1875. Courley, W. H.
1877. Head, F. W.: Statutes by Heart. 8vo. 1s. 6d. London, Stevens & Son.
1880. Hartley, Chas.: How to Improve the Memory. London.
1880. Laurie, Thos.: The Whole Art of Memory. London.
1885. Miller, Adam: Mental Gymnastics. $1.00. Chicago, Miller.
1885. Middleton, A. E.: All about Mnemonics. 1s. London.
1886. Hedley, A. P.: Natural Memory. fol. 4 pp. 10s. 6d.
1886. Chavauty, Abbé.
1887. Appleby, F.: Natural Memory. 15s. London.
N. D. Petrus Colouik Ars Memorativa. 4°.
N. D. Anacardina à la Arte de Memoria.
N. D. Epiphani de Moirans Ars Memorise admirabilis omnium nescientium exceedens captum.
N. D. Franc: Conti de Arte Memorise.
N. D. Hieronymus Megiserus de Arte Memorise.
N. D. Alvaro Ferreya de Vera: Trattato de Memorise artificiosa.
N. D. Nelson: Memory.
N. D. Watson: Compendium Memorise Localis. 8vo.
N. D. Copland, Robert: The Art of Memory. 8vo. London.

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Revue de Mnémonique (Monthly), Ed. by Abbé Chavanty. 1866
Memory, (O. A. Brownezon,) Democratic Review, 12:40 ................. 1843
Southern Literary Messenger, 4:680. ........................................... 1838
Fraser, 29:546 ................................................................. 1843
Museum of Foreign Literature, 5:391 ........................................... 1824
(J. Hamilton) Good Words, 5:148 ........................................... 1891
Same article, Eclectic Mag., 62:104 ........................................... 1898
Memory, (A. J. Faust,,) Appleton's Jour., 24:524 ................. 1880
R. Usher, People's Jour., 7:244 ........................................... 1848
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Blackwood's, 128:421 ......................................................... 1880
Same article, Eclectic Mag., 95:729 ........................................... 1897
Christian Observer, 34:517,581 ............................................. 1894
And Absence of Mind, All The Year Round, 20:365 ................. 1871
And Its Caprices, Litteff's Living Age, 34:606 ......................... 1851
And the Will, Litteff's Living Age, 189:56 ......................... 1878
Art of, Analectic Mag., 4:117 ............................................. 1814
Art of (F. Bowen), No. Am. Rev., 61:260 ........................................ 1845
Art of, Chambers' Jour., 42:342 ............................................. 1865
Artificial (R. J. Wilmot), London Quar. Review, 9:125 ............. 1813
Cornhill, 29:581 ................................................................. 1873
Same article, Eclectic Mag., 83:18 ............................................. 1874
Artificial, Dublin Rev., 81:172 ............................................. 1877
Intellectual Power, Litteff's Living Age, 84:513 ......................... 1864
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Chambers' Jour., 51:157 .......................................................... 1874
Memory, Double (G. C. Robertson), *Mind*, 1:552 ........................... 1876
Essence of, *Dublin Univ. Mag.*, 92:95 .......................... 1878
Fiaules of (F. B. Cobb), *Galaxy*, 1:149 .......................... 1879
Illusions of, *Cornhill*, 41:416 .............................. 1879
Same article, *Littell's Living Age*, 145:432 .......................... 1879
Same article, *Eclectic Mag.*, 94:686 ............................. 1879
In Education, *Westm.*, 2:393 .............................. 1876
Morbid, *Once a Week*, 3:255 .............................. 1860
Offices and Moral Uses of, *Christian Exam.*, 56:209 ........................... 1853
Of Faces, *Spectator*, 58:1258 ............................. 1868
Phenomena of (S. H. Dickson), *Lipp.*, 3:159 ........................... 1866
Physiological, (R. W. Brown), *Sc. Am. Sup.* No. 429 ........................... 1834
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Tricks of, *Knowledge*, Jan. .............................. 1880
Where and How We Remember (M. A. Starr), *Pop. Sci. Mo.*, 25:609 ........................... 1884
Memories, Good, *Every Sat.*, 11:618 ............................. 1871
Great, *Dublin Univ. Mag.*, 60:377 ............................. 1862
Same article, *Eclectic Mag.*, 57:549 ............................. 1862
"Professor" Loisette owed his great success in the lecture-field to Mr. R. F. Foster, until recently his business manager, audiences were secured for his introductory lectures such as he had never before addressed, and his classes (which had never exceeded two or three hundred) suddenly increased to more than a thousand. In a recent interview with Mr. Foster it was learned that he had given up a responsible and remunerative position with one of the largest manufacturing houses in Baltimore, to go with Loisette, and spent twelve weeks in his New York office before going into the lecture-field with him.

This time was spent in thoroughly reorganizing the entire business. In December, 1887, Mr. Foster started on the road to organize the first class at the Michigan University, going thence to Baltimore, Detroit, Philadelphia, and Washington.

From Loisette's contract with Mr. Foster, the following extracts are taken:

"Said Foster to be employed as said Loisette's assistant in said Loisette's business of teaching the 'Loisettian System of Memory,' or the 'Art of Never Forgetting.' Said Foster to be employed either in travelling for the purpose of organizing classes in such places as hold out reasonable promise of a class of 200 or more, outside of N. Y. City, or in the instruction of classes in New York. It is further agreed that, as compensation for such services, said Loisette agrees to pay said Foster one-fifth, or twenty per cent., of the total amount received from any class organized by said Foster after the expenses of organizing the class have been deducted."

According to Loisette's own advertisements, the classes organized by Foster, are from December 10th to March 16th—fourteen weeks—as follows:

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of Pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan University</td>
<td>400</td>
</tr>
<tr>
<td>Baltimore, Md.</td>
<td>1,087</td>
</tr>
<tr>
<td>Detroit, Mich.</td>
<td>1,005</td>
</tr>
<tr>
<td>Philadelphia, Pa.</td>
<td>1,500</td>
</tr>
<tr>
<td>Washington, D.C.</td>
<td>1,100</td>
</tr>
</tbody>
</table>

Total number of pupils: 5,092

Estimating the average expense for each city at $500, we have $2,500 to deduct from $25,000, realized from 5,000 pupils at $5 each. Of this Loisette received about $18,000 and Foster $4,500, besides expenses. From this it would seem that a man must have strong reasons for resigning a position that had paid him over $50 a day for more than fourteen weeks, and for which he had a four years' contract.

It might also be interesting to know what induced Loisette to release a man who was putting $1,300 a week into his pocket, which he
had to travel only a few miles, and talk about four hours a week to earn.

Mr. Foster is a native of Edinburgh, Scotland and is connected with some of the best families in Great Britain. Lord Kinloch, for many years Lord Provost of Scotland, was his first cousin, and he numbers among his immediate relatives the Bishop of Kildare, the Rev. Dr. Moody Stewart, and the Sandfords, of whom Sir Herbert is well known in America, having been British Commissioner to our Centennial in 1876. Knowing these facts, it was not surprising, on meeting Mr. Foster, to find that he was thoroughly ashamed of ever having had any connection with Loisette.

He entered into his engagement on representations that Loisette had a legitimate, well-established, and permanent business, and as no one appeared to dispute his claims, he supposed him to be the original and gifted man he professed to be. Mr. Foster soon discovered that he himself knew a great deal more of the "marvellous" system of memory in its practical application than Loisette, who was as subject to mind-wandering and had as poor a memory as any of the mental wrecks whom he so vividly portrays as "mnemonical teachers." Suspicious of the genuineness of his claims to originality were first awakened by his obvious ignorance of the matter in his own lesson papers. For example, he pretended to teach thousands to do the Knight's tour, although he did not know a knight's move from a pawn's. Pupils, from time to time, called attention to the similarity of his system to others, especially to Pick's, as set forth in "Chambers's Cyclopaedia."

When asked about these matters, Loisette's stereotyped reply was that he had taught this system for over thirty years, and that a correspondence pupil in Germany gave the ideas in question to Pick, who came to England in 1862 and published them as his own. "The only correlation Pick gives in his book," Loisette would say, "he stole bodily from me. All the rest is pure mnemonics, and rot." It is interesting to read the Gazette de Lyon, January 21, 1851, and the Journal des Débats, January 24, 1854, reporting Pick's lectures before the Inspectors-General of Public Education in Paris in this connection, especially when it is known that at that time, so far from Loisette's being a memory teacher in London, he was an undergraduate at Yale College. Moreover, we have Loisette's own testimony. In his prospectus, issued in London in 1883, may be found these words: "Due notice will be given in the daily newspapers of Professor Loisette's first public address in London."

Among the unpleasant features of the office experience was the necessity of constant and well-sustained falsehood. Loisette advertises certain coaching papers for which pupils constantly remitted money. As no such papers ever existed, except in his imagination, or possibly in London, his manager wanted to return the money, but Loisette insisted on writing to the remitter that the present edition was exhausted and that another was in the hands of the printer, and copies would be mailed, etc., etc. Pupils' money was retained, and they were kept waiting for months on such excuses. some of them, like Mr. Julius King, of Columbus, Ohio, writing continuously, but in vain. Loisette's "Whist Memory" is a deception and a fraud. Mr. Foster, an expert on whist, and author of "Whist at a Glance," soon found that the $25 course in nothing to do with that game, but was merely a trick of re-
membering cards as dealt from the pack. This trick Loisette himself was never able to do by his own system, and his pupils, if they ever studied it at all, found it to be not only a year's solid work, but absolutely worthless when learned. Discovering that Mr. Foster knew something worth teaching about the real article of whist, Loisette proceeded to charge pupils $50 for "Whist Inferences," intending to turn them over to him for their training. One of these, a Mr. Dodge, of Wall Street, insisted on personal instruction, and Loisette having pocketed the $75—$25 for his "marvellous" memory system and $50 for his (or Foster's?) "Whist Inferences"—tried to wheedle Mr. Foster's system out of him for his personal use and aggrandizement.

Unfortunately his ideas were not as easily stolen as Dr. Pick's, or this country might by this time be flooded with advertisements of "Marvellous Whist Discovery—perfect cure for ruffing—any trump signal learned in one evening—wholly unlike Cavendish." Failing to obtain even a hint from Mr. Foster, he bought a copy of every book on whist, and proceeded to learn the rudiments of the game, in order to give a New York club man and an expert player fifty dollars worth of "inferences." The outcome is not known, but the "inference" is that Loisette was obtaining money under a false pretense and that Mr. Dodge was robbed. Loisette's cure for "discontinuity," price $10, consists in this: "Make a series of your own, consisting almost entirely of exclusions." Very few fish are caught on that hook. As to the $50 "Art of Illustration," if any one has ever been foolish enough to subscribe for it, he can obtain a position in a dime museum on application.

One peculiar feat of memory the "Professor" was an adept in. He never forgot a face. So good was his memory in this respect that, if a man whom he had never seen before came into the office with a smile, and a "How do you do, Professor," he was always welcomed as warmly as an old pupil. This usually evoked the question, "Remember me, do you?" "Why certainly; recollect you perfectly." If the visitor had been a pupil he was much impressed, if not, he had to listen to a wonderful story of his marvellous resemblance to a pupil whom the "Professor" had not seen for twenty-two years. In Philadelphia he tried this confidence-game style of recognition on Mr. Lum Smith of the Herald, and of Comstock fame, at the same time refusing him a ticket to his lectures, which he greatly regretted when he found out who he was.

Some of his talks on Memory would do credit to Baron Munchausen, especially his "Bob Chase" story. When any one objected to his contract or picked flaws in it, his invariable formula was, "Never mind! Judah P. Benjamin drew up that contract and it has stood seven lawsuits!" Apart from the curious analogy between this statement and the German proverb about a "seven in every lie," it would be interesting to know why he should call on Judah P. Benjamin to draw up a contract for him, as he was himself a lawyer by profession and practised in Nevada during the sixties. It is a poor compliment to Benjamin's skill that the form of the contract has been altered twice within the past two years; the words, "in his own way in every respect" being added at one time, and "heirs, executors, administrators and assigns" at another. Considering the "marvellous" and "original" improvements Loisette has made in memory-training it is not remarkable that he can improve on Judah P. Benjamin's legal documents.
Positive information came to hand at last, in confirmation of what had been long suspected, that Loisette was not Loisette at all. It has been pretty conclusively proved by Appleby, that Loisette originally taught pure and simple mnemonics, with afterward a sprinkling of Dr. Pick's ideas! as he did not have the full benefit of the marvellous system he now teaches until a few years ago. The following from his own prospectus is peculiarly apropos: "Even if vivid imagination exist, and extraordinary memory too, then oftentimes the so-called 'association' does not recall the word it was framed to recall, as happened to me—then a practiced mnemonist," &c. It is to be feared that Loisette's many pupils will shed tears when they hear to what a terrible extent his practice as a mnemonist has ruined his own memory, for one of the things his associations utterly failed to recall, for the reasons stated above, was his own name. In order that it may not be lost to posterity, we hope some brilliant pupil will correlate it to the register of Yale College, where it is to be found in the class of '54, thus:

**Marcus Dwight Larowe,**
born at Cohocton, Steuben Co., N. Y., May 5, 1832.

President Dwight, and some, at least, of the faculty, can easily point it out.

The final reason which induced his manager to throw up his contract, and that in spite of the protests of his many friends that he was only quarrelling with his bread and butter, is embodied in his letter of resignation, as follows:

```
908 Madison Ave.,
Baltimore, Md.
25th Apr. 188&

Prof. A. Loisette:

"Dear Sir:—I wish to say to you that for some time past I have felt considerable alarm regarding the character of the man I have been engaged in introducing to the public, and this uneasiness has just culminated in the information that he has paid over $1,000, either as damage or hush-money, in order to keep from the public a charge which I hoped, when I was first informed of the woman who made it, he would stoutly deny and defend himself against. I have for some time been aware of rumors that he was living under a false name, and that the whole account of himself was a series of falsehoods and misrepresentations. I have also been at some pains to investigate his career from the time he was at Yale College to the time he was engaged at the Polytechnic in London, and the general result, coupled with my own experience of him, has been such that I must decline, on moral grounds, to have anything further to do with him, as I do not propose to be caught in the branches when the tree falls. It has never yet been necessary for me to earn a livelihood by misrepresentation or fraud, and I decline to continue in any capacity which compels me to present and introduce to the public as a scholar, a gentleman, and a leader in the cause of education, one whom I know to be a humbug and a fraud.

Respectfully,
B. F. Foster."
```
MORE LIGHT.

Loisette, 1888.

To remember proper names, correlate the person's name to the name of some peculiarity of the person as best known, and which you are sure to think of whenever you think of the person.

Appleby, 1880.

Required the day of the week for Jun. 18, 1848, date of Battle of Waterloo. 7) 1815 (2 and 1 over; 4) 1815 (3 and 3 over not required); then 1 added to 3 = 4. Add day of week, 18 = 22, added to key number for Jun., which is 0, gives 22, and this divided by 7 gives 3 and 1 over, which is Sun., the answer required.

Loisette, 1888.

On what day was the 18th of Jun., 1815, the date of the battle of Waterloo?

Quotient of 15 by 4 = 3; remainder, 15 by 7 = 1; number of the date, 18; addendum for Jun. = 0; total, 22, which, divided by 7, leaves 1. Answer, first day, i.e., Sun.

Sayer, 1867.

tomtit—drum
tempting—delicious
tempter—divinity
tame tale—tipple

MULTIPLICATION TABLE.

Loisette, 1888.

13 × 11 = 143 diadem—drama
tomtit—drum
13 × 13 = 156 autonomy—tillage
tempting—delicious
13 × 13 = 169 mummy—toyshop
tomb—the ship
13 × 14 = 182 Homer—deafen
tempter—divinity
13 × 15 = 195 meal—table
tame tale—tipple
13 × 16 = 208 match—unsafe
thump dish—insufficient
13 × 17 = 221 mica—noonday
dumb dog—noonday
13 × 18 = 234 muff—enamour
tame dove—enamoured
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<td>diorama</td>
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<td>ronron</td>
<td>Europe</td>
<td>retour</td>
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All of the preceding comparisons are taken from Appleby.
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DISTRICT OF COLUMBIA, ss.:

G. S. Fellows, being first duly sworn, deposes and says that he has carefully examined the foregoing volume from page 29 to page 205, and that the same is an exact copy of Professor Alphonse Loisette's System, entitled "Physiological Memory; or, The Instantaneous Art of Never Forgetting," as the same was furnished by him to his pupils in Washington, typographical errors alone excepted.

G. S. FELLOWS.

Subscribed and sworn to before me by the said G. S. Fellows this 18th day of June, A.D. 1888.

EDWARD J. STELLWAGEN,
Notary Public, etc., etc.
I am playing in New York today (you know I have a letter today that he left with my ad).

I suppose a private class $50 might answer at a regular rate for private classes $50 for 1st, $25 for each additional member. Or if that would be too much, $5 for each $50 if no bad habits.

I leave tomorrow night for Potsdam.

Send me there an accurate expense statement just by date. I had no idea you were taking so much time with these two places. Still, I hope you are getting help by classes in both High & Ball.

Allen's here. (Signed)