Creative Power

or

Your Constructive Forces

By W. W. Atkinson and Edward E. Beals

"Build thee more stately mansions, oh, my soul
As the swift seasons roll!
Leave thy low-vaulted past!
Let each new temple nobler than the last,
Shut thee from heaven with a dome more vast,
'Til thou at length art free,
Leaving thine outgrown shell by life's unresting sea."
—Holmes (*The Chambered Nautilus.*)

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CREATIVE POWER

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CREATIVE POWER

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IMAGINATION

In this book you are asked to consider a wonderful phase of Personal Power which is latent, inherent and abiding within you—the Power of Imagination. This power is a phase of your Personal Power. Your Personal Power, in turn, is a phase of the manifestation of that POWER which is the source of All-Power, and which is expressed, manifested, and employed in all phases of Power of which you have, or can possible have, any cognizance.

By "Imagination" is meant: **"The power of the mind to create mental images or objects of sense previously perceived; the power to reconstruct or recombine the materials furnished by direct apprehension; the power to recombine the materials furnished by experience or memory, for the accomplishment of an elevated purpose; the power of conceiving and expressing the Ideal."**

By many (possibly even by you up to this time), the idea and concept of **Imagination** is

confused and confounded with that of **Fancy**; but this is an error which must be removed from the very start in your serious consideration of the subject of the Constructive Imagination, which constitutes the field of the investigation and instruction set forth in this book. Let us pause a moment, that you may note and familiarize yourself with this distinction and differentiation.

Webster says: "A distinction is now made between Imagination and Fancy. Properly speaking, they are different exercises of the same general power—the plastic or creative faculty. **Imagination** is the higher form of mental activity of the two. It creates by laws more closely connected with the reason; **it aims at results of a definite and weighty character. Fancy** is governed by laws of association which are more remote, and sometimes arbitrary or capricious. Hence the term **fanciful**, which exhibits Fancy in its wilder flights."

As you proceed with this instruction, you will perceive the special and particular characteristics which distinguish that phase of Imagination called **"Constructive** Imagination" from that other phase called **"Reproductive** Imagination"; you will also learn to differentiate between the **Passive** form of Constructive Imagination (which is little, if anything, more than Fancy), and that active form which constitutes the true **Constructive Imag-**

ination with which we have to deal in this instruction.

We ask you here to fix in your mind two pictures—each of which represents primitive man manifesting one of the two forms of Constructive Imagination. By seeing and remembering these pictures, you will always have at your command the touchstone with which you may test your imaginative processes.

The first picture is that of primitive man "sitting and thinking"—either passively contemplating the flow of the stream of Reproductive Imagination or Memory in which is pictured the experiences of his past; or else "day dreaming," and "imaging" himself playing a part in some new drama of experience, or seeing others engaged in a like occupation. This is the incomplete stage—all right so far as it goes, and often useful to the extent of supplying raw materials for higher efforts, but insufficient in itself—proper for purposes of recreation, but useless if it extends no further.

Leaving our primitive dreamer, we ask you now to contemplate the primitive man who "imagines for a purpose," who "imagines to a definite end"—see how different is this picture from that just contemplated.

Our primitive man with the dawning Constructive Imagination perceived the inadequacy of his natural physical equipment employed in his work of self-preservation, of-

fense and defense, protection of his family, and in his striving for comfort and well-being. By means of such "imagining" this class of primitive man raised the race from its position of physical weakness and comparative helplessness, to its present position of dominance over the entire world of living things. What nature had denied man in physical weapons, he supplied to himself through the exercise of his Constructive Imagination. Constructive Imagination raised Man from his original lowly place in the world of living things to his present eminence and rank. By means of its power, Man has attained heights which would have seemed far beyond him to one observing him in his original state.

Man, in his original or aboriginal state, might well have been regarded by a visitor from a higher world as a most unpromising candidate for survival in the struggle for existence—let alone for the position of mastery and rulership over the other living creatures contemporaneous with himself. He was a much weaker animal than most of the others; he was less fleet of foot, and less agile in his movements; he was less well equipped with tooth and claw. The great sabre-toothed tigers, the huge reptiles, and the other powerful and ferocious animals of his environment, were far better adapted for the struggle for existence than was this poor, puny, weak creature

called Man. It would have required a courageous imagination to pick Man as the probable winner in the struggle for existence, and the victor in the process of the survival of the fittest.

But this weak creature—this puny and insignificant animal—possessed the latent power of Constructive Imagination by which he was enabled to overcome his natural obstacles. By means of this mental power he was enabled to invent and to employ the implements, tools, and weapons with which he waged a defensive and offensive warfare against the fierce creatures of his environment; and to create the material contrivances with which he was able to overcome the handicaps of his environment with which Nature at first might have seemed deliberately to have burdened him. By means of this latent power he proved himself to be the "fittest" to survive, and the true victor in the struggle for existence.

Man lacked the strong teeth and claws of the carnivorous animals—but he created artificial claws and teeth, imitating those which Nature had so freely bestowed upon the lower animals, by making from the hard flint the spears, axes and knives, specimens of which we now find buried in the earth. By creating strong clubs from the limbs and branches of trees, he equaled and even surpassed the striking-weapons of the great beasts. By creating

bows-and-arrows, he managed to overcome the handicaps of space, and was able to touch his enemies while himself beyond their reach. He took a hint from the caves and dens of the beasts, and improved upon them for his own occupancy. He took a hint from the birds, and improved upon their elevated nests by building for himself safe refuges in the cliffs and the high trees, reaching these by ladders of his own construction. He "imagined" the plan of rolling great rocks before the entrances of his caves and dens; and he afterward "imagined" the protecting doors of wood, and windows—and later, chimneys.

He "imagined" the idea of hurling stones at his enemies by means of slings, great bows and primitive catapults, and of rolling large boulders down the mountain sides upon his enemies below. He "imagined" the idea of improving upon the floating log—in turn creating rafts, flat-boats, hollowed-out logs; he "imagined" the idea of the directing and propelling poles, paddles and oars. He observed the rolling log, and from it he "imagined" the solid clumsy wheel—then the lighter, spoked wheel—and was thus enabled to move heavy objects over long distances with comparative ease.

He "imagined" the pulley and the lever, and learned to apply them. He "imagined" implements with which to mash his food, and

grind his grain. He "imagined" the primitive hoe, and the crude irrigation or draining ditch. He "imagined" the idea of using the skins of animals as clothing for himself, to protect him against the weather. He "imagined" the idea of employing portions of trees for tent-building. He adapted common natural things, and converted them into uncommon artificial appliances for his comfort and welfare. And, finally, oh, wonder of wonders! he "imagined" the art and science of making and using fire!

And ever since, Man has continued to "imagine" things—ways of overcoming natural obstacles and handicaps, ways of converting natural things to his own use, comfort, and happiness. He "imagined" all of these things, little by little—and created them in material, objective form, following the outlines of his mental subjective form. And he still continues to "imagine" things—greater things, larger things, more complex things. He will always continue to so "imagine" things—for that is his characteristic quality, his Constructive Imagination, which distinguishes him from the lower animals. Those of the race who were successful constructive "imaginers"—either as individuals or as tribes or peoples—survived in the struggle, while the failures were crowded to the wall, or "went under." The "fittest" constructive imaginers survived, and passed on to their descendants their

knowledge, and transmitted to them their mental tendencies. Thus Man has evolved into the "imagining" animal—the creating creature.

Those individuals, or peoples of the race, who failed to keep up with the procession of the constructive "imaginers," if not actually crowded out and destroyed in the struggle, survived only to become the parasites or the slaves of the conquerors. The slave races have always possessed less developed powers of Constructive Imagination than have their masters—when slaves develop Constructive Imagination, they cease to remain slaves. When the germ of Constructive Imagination begins to work in the minds of a subject people, that people is on the way to freedom—history may be read in the light of this fact. The physical might of the masters in the end surrenders to the mental might of the one-time slaves. The cunning of the fox has often overthrown the physical strength of the lion.

The struggle for existence is still underway. The survival of the fittest is a fact of modern human existence, as well as of the past history of the race—and of the world in general. But now, more than ever, Constructive Imagination is the great element of the struggle—the great standard of the fitness to survive, succeed and accomplish. The people, the race, the nation, and the individual possessing the greatest degree of development and applica-

tion of continuous and persistent Constructive Imagination will be found to be the "fittest" to survive, all else being equal—will prove to be the ultimate winner in the struggle for existence. If Man is ever succeeded by the Superman, as some have predicted, it will be found that the Superman is possessed of superior powers of Constructive Imagination, and of a greater faculty of exercising and applying them. Such is the Law of Evolution—of Progress—of Life.

This then is the second picture. Look upon the first picture, and then upon the one just presented to you. In the first you will see the figure of the primitive man who "just sat and thought; and sometimes just sat"—the "thinking" being merely "day dreaming" and Passive Imagination. In the second you will see the picture of the Real Thinker—so well depicted in Rodin's magnificent figure of "The Thinker"; but his "thinking" is not "just thinking" —it is thinking for a purpose, and toward an end—it is Constructive Imagination directed toward a definite end and aim, and firmly held there until the right image is created; the image then being transmuted into material form.

"The Thinker" of Rodin's figure is using his Imagination just as he has learned to use his Attention and his Will—deliberately, purposively, to a definite aim and end, and in a

particular direction. He and his modern counterparts are evolving Creators. They are constructing, contriving, inventing, designing, planning, projecting—building in the mind that which afterward will be built in physical form. They are the Dreamers whose dreams shall come true; the creators of Ideals which shall become Real.

This, then, is Constructive Imagination. This constitutes the subject-matter of this book. This is the main theme of the instruction which we shall impart to you in the following pages. This is a far cry from the "mere imagination," the Fancy, of the self-satisfied masses of the people, is it not?

II

THE IMAGING FACULTIES

One of the most characteristic, essential and distinctive attributes of your mental being is the power of producing mental images. Without this power you would be unable to think, to remember, to act intelligently. If your sensations did not impress themselves upon your mind so that it was afterward possible for you to recall them as images, you would always remain a mere infant in mental development. Your experience would remain as a closed book to you, and you could never hope to profit by turning over the pages of its records. You would be no wiser at fifty years of age than you were at three. You would have no memory, no imagination, no power of rational thought based upon experience.

A "mental image" may be defined as: **"a representation in the mind, by means of an ideal picture, of an experience originally obtained through the medium of the senses."** By "representation" is meant: **"the act of re-presenting or presenting anew in consciousness, the form or picture originally experienced through sense-reports."** The **"representative powers of the mind,"** (whether of memory or

of imagination) are: **"those powers of the mind whereby it forms ideal images or mental pictures of things not present to the senses at the time: such ideal images or mental pictures being the mental reproduction of any experience whatsoever."**

While the term "image" is borrowed from optics in order to symbolize the retained mental impressions of past experiences, the figurative term must not be too literally interpreted. Not only are the images or pictures of visual impressions and experiences retained in the mind, and are possible of representation or reproduction in memory or imagination, but the impressions of sound, taste, smell, touch and muscular sensations are equally retained and are subject to reproduction. There are auditory, gustatory, olfactory, tactile and muscular images or pictures in the mind, as well as visual or optical images or pictures. In fact, the completed and composite mental image or picture of any particular thing usually is a complex product, made up of the interwoven material of several kinds of sense-reports.

There is a close relation, yet a marked difference, between the original sense-impression and its represented image or picture. After an object is removed from vision, or the eyes shut, there remains in the mind the image of the thing seen, actually existent though more obscure than when it was perceived in vision;

the same principle applies to images of impressions received through the other senses. Aristotle called these images "the phantasms which have the form of the object without the substance, as the impression of a seal upon wax has the form of the seal without its substance." Psychologists have held that sensations have their origin in the objective stimuli, while the represented image has its stimulation from within.

It is generally held by psychologists that no sensation is actually "perceived" by the mind until a mental image of it is formed. Likewise, that the mind cognizes no physical experiences unless they give rise to mental images; the mind perceives, understands, and remembers nothing but mental images. Recollection, imagination, and the processes of thought are held to be possible only by means of calling up and arranging the mental images of things which have originally arisen through sense-experience. Even the higher operations of thought, such as judgment, reasoning, abstraction, generalization, combination of ideas, proceed by means of the employment of previously acquired mental images.

The two great general classes of mental representation are (1) Memory, and (2) Imagination. In spite of the popular distinction between these two phases of mental activity, there is present in them a basic unity of nature

and essential principle. Both are processes involving the employment of representative images, and there is really no absolute line of demarcation between them or their products. It was formerly held that there existed an actual distinction between the two respective processes, the line of which was drawn as follows: (1) **Memory** reproduces or represents the **exact** image of the original mental impression, while (2) **Imagination** reproduces or represents a **variation** of such original impression, or a **new combination** of the elements of original impressions. But this absolute distinction or differentiation is not held generally by the best modern psychologists.

The present opinion is that even the best memory-images do not **exactly** reproduce the original impression; instead, they always omit certain portions, add details not in the original, and exhibit changes in arrangement of details. It is now stated as a law of psychology that "Representative images never exactly reproduce the original impression; this is true of the images of memory as well as of those of imagination." There is, of course, admitted that some representative images more closely approach exact reproduction than do others; some are more literal copies of things experienced than are others. But the elements of variation, change, addition or commission, are always present and active.

You may arrive at a correct understanding of the real distinction between the processes of Memory and those of Imagination by considering the four essential elements involved in the process of completed **Memory**, viz., (1) **Retention**, in which the mind retains the image of the impression made upon it by the sense-reports; (2) **Reproduction**, in which the mind brings again into consciousness the mental image which it has retained; (3) **Recognition**, in which the mind identifies the reproduced mental image with the object causing the original impression; and (4) **Localization**, in which the mind locates the original impression (which has been recognized) at a certain more or less definite time and place.

Now then, what are the elements involved in the processes of **Imagination**? First, you will see at once that the element of Retention must be involved, as, otherwise, the mental image could never be again brought into consciousness. Secondly, you will see that the element of Reproduction must be involved, as, otherwise, the mind would lack the power to bring again into consciousness the retained mental image. So far, at least, Imagination and Memory travel along the same road; for, in both cases, the mind must possess and exercise the power of retaining the mental image, and also the power of reproducing it in consciousness. But here the absolute identity of the two

processes cease; the stream of Representation divides itself into two branches, each of which pursues its own special course. The course of the Memory stream has been described in the preceding paragraph; that of the stream of Imagination you are now asked to consider.

In what is called **Reproductive** Imagination the mind merely reproduces a more or less correct mental image or picture of a previously experienced impression which has been retained in its subconscious storehouse. This, you will note, is precisely what Memory does in its first and second processes. Here the process may be regarded as that either of the Reproductive Imagination or of the Memory. Or, the idea may be stated in another form, viz., Reproductive Imagination is but a special instance of incompleted Memory; or else, Memory is a special case of Reproductive Imagination. There is no absolute line of distinction between the images of Reproductive Imagination and those of Memory in its second stage; both are the same product of the representative or imaginative power.

But, as we have said, here the identity ceases. In true Memory the reproduced image is now referred to the object causing the original impression—it is identified with that object by the process of Recognition. But in Reproductive Imagination the mind does not perform the process of full Recognition, i.e., identifica-

tion with the object causing the original impression. At the most, the Reproductive Imagination performs but a quasi-recognition, i.e., it identifies the image with some image previously experienced in consciousness, but with no special effort to identify it with the particular original object. In fact, the image may be a composite of several original impressions, not referable to any special object; as when we are conscious of the image of "a horse" (of a general picture of the horse-species, rather than of some particular horse).

There is a difference between (a) having a mental image in consciousness, and (b) knowing that image as the image of a particular something previously experienced in consciousness. The image may be there, though the recollection of the particular original object of the experience may be absent. As a writer says: "Having the image of an absent object, and remembering the object, are not the same. There is no complete act of memory of an absent object until the image in the mind is recognized as the image of some particular object or thing already experienced."

Thus, you see, that an image may be reproduced in Imagination, but not recognized or identified with any particular object previously experienced. Likewise, it may be reproduced in Imagination without being "localized" according to time and place. Thus true repro-

ductive imaginative images may exist without involving the third and fourth essential elements of Memory. In short, while Memory involves the four respective elements of Retention, Reproduction, Recognition, and Localization, the process of Reproductive Imagination involves but two of these elements, viz., Retention and Reproduction, respectively. The representative stream of Memory-Imagination divides into two streams just before the third stage (i.e., Recognition) is reached by Memory, and quite a bit before the fourth stage (i.e., Localization) is neared.

But though the stream of Imagination lacks the two additional elements of Memory, it takes on new and more complex powers of its own—powers lacking in the case of Memory. As the stream flows on, Reproductive Imagination may become transformed into what is known as **"Constructive Imagination"**: this by the exercise of certain powers inherent in the nature of Imagination. Constructive Imagination is that phase of the imaginative activities which is generally regarded as being typical of Imagination in general; in fact, it is the only phase of Imagination known as "Imagination" to most persons.

Categories of Imagination. The imaginative processes are classified into two respective categories, as follows, (1) Reproductive Imagination, and (2) Constructive Imagination.

Reproductive Imagination, which we have just considered, consists merely of mental reproduction of images of past experiences—an exercise of reminiscent imaging power, differing little if any from the representative or reproductive activities of Memory. **Constructive Imagination,** on the contrary, consists of (a) reproductive imaginative images, (b) subjected to the additional process of **reconstruction, recombination, and re-adaptation.**

Reproductive Imagination represents merely the images corresponding to particular past experience. Constructive Imagination, on the contrary, represents images of past experience —not in their original form, however, but instead recombined, rearranged, reconstructed, and re-adapted, thus forming a composite or complex mental image of things not previously experienced as "wholes" by the mind producing them; and often even of things having no actual existence as "wholes" in the external world. Thus, Constructive Imagination may form a mental image of a house, bridge, railway system, ship, etc., not yet built; or it may form a mental image of centaurs, winged-steeds, mermaids, winged-angels, Satanic forms with hoofs, horns and tails—which are entirely out of the realm of actual human experience.

In Constructive Imagination we have a most important element of the constructive intellec-

tual work performed by the mind of man. Without it certain phases of reasoning would be impossible. Without it, the psychological processes of association would not be manifested. Without it, the inventive faculties could not function. Without it, there could be no artistic creation. Without it, there could be no progress, no improvement, no discovery of new relations, no creative thought, no adaptation of old things to new uses and new ends. As Halleck says: "The products of the Constructive Imagination have been the only stepping-stones for material progress. The Constructive Imagination of primeval man, aided by thought, began to conquer the world. The chimney, the stage-coach, the locomotive, are successive milestones, showing the progressive march of the Imagination."

Constructive Imagination may be said to have two phases, viz., (1) **Passive Construction,** or the employment of the constructive powers of the imagination along the lines of pure fancy, or idle "day dreaming"; and (2) **Active Construction,** or employment of the constructive powers of the imagination along the lines of definite, purposeful, creative effort.

In **Passive Construction,** the Imagination may dally with the reminiscent images of past experiences, rearranging and recombining them into new forms—picturing idly the "might have been" aspects of those exper-

iences, and indulging in imaginative fancyings in which the past experiences are transformed into other experiences of a more agreeable or more exciting nature. Or, in the same way the Imagination may project itself into the future of the life of the individual, indulging in "day dreams" in which are anticipated or "imagined" the possible experiences of that future. Or, again, it may passively permit the stream of "imaginative images" — the moving-picture film of Fancy—to pass before its vision, picturing (as in a play or story) the various movements of actors, the various scenes, actions, voices, situations of the imaginative play or story; here the whole picture is composed of a series of separate though connected pictures (as in the moving-picture connected film), seen as an actual continuous movement.

This Passive Construction has about it many of the characteristic qualities of the dream-states, in which the Imagination "runs itself" without any special direction. Many cases of its activity have well been called "day-dreams", for they ,indeed, are practically composed of "the stuff that dreams are made of." The imaginative stream flows along, obeying merely the law of association, and lacking direction or voluntary guidance. Or, stating it otherwise, the boat of Imagination is allowed to drift along, aimlessly, without the use of the helm —the pilot being wrapped in sleep or reverie.

Those who can see in Constructive Imagination merely the **passive phases** just noted, are perhaps justified in their sneers at "mere imagination"—for they judge only by what they see in that category. Those, on the other hand, who realize the tremendous importance of Active Constructive Imagination in the intellectual life of the individual, may well be pardoned for indignantly refuting the charges of the first-named critics, and for terming them "ignorant and thoughtless critics of that with which they have never met in their own experience." Each is right according to his own viewpoint—but the viewpoints are as far apart as the poles. Yet the two poles of anything, at the last, are perceived to be necessary parts of a unified whole.

Let us endeavor to illustrate the case of Imagination by reference to the better-known phases of Will—here we shall find a surprising analogy—one not generally recognized. We ask you to give careful attention and thought to what follows.

Ribot says: "Which among the various modes of mind-activity offers the closest analogy to the Creative Imagination? I unhesitatingly answer, the voluntary activity of the Will. **Imagination, in the realm of the intellect, is the equivalent of Will in the realm of movements.**"

The analogy between Imagination and Will manifests from the very beginning of each of these mental processes. In voluntary action, there is gathered together the raw materials of instinctive, involuntary and reflex movements: the Will coordinates and associates these in order to proceed. In the same way, Active Constructive Imagination gathers together the raw materials of Reproductive Imagination and Passive Constructive Imagination—the various images existing in those fields of mentality—in order that it may proceed further.

Then again, the movement in both instances is from the inner mental state toward the outer expression. Will begins with vague feelings and emotions, these rising to more or less definite desire; this in turn proceeds to actual outward expression in actions. So Active Constructive Imagination begins with the inner images of Memory or Reproductive Imagination, these then rising to the rank and character of the images of Passive Constructive Imagination; these in turn rising to the rank and character of definite outward expression in the images of Active Constructive Imagination.

Again, in Will rising to its higher stages, we always find present a more or less definite movement toward a certain end to be attained. The same more or less definite object to be attained is present in the rising processes of Active Constructive Imagination. The Will al-

ways proceeds toward the attainment of some thing desired, something tending to satisfy some inner want. In Active Constructive Imagination there is always present the urge toward the invention, creation, or construction of something more or less clearly perceived. As Ribot says: "We are always inventing for an end—whether in the case of a Napoleon imagining a plan of campaign, or a cook making up a new dish. In both cases there is now a simple end attained by immediate means, now a complex and distant goal presupposing subordinate ends which are means in relation to the final end."

Finally, we find in both Will and the Active Constructive Imagination certain frequent instances and manifestations of incomplete process—of aborted expression. Will, in its normal and completed expression, culminates in action. But in actual experience this final action often is not reached; one may desire to do a thing, and even deliberately decide and determine to do that thing—but the spring of action is never released. One may desire to arise from his bed on a cold morning, and may decide and determine to do so—but he still remains beneath the warm covers. So in Passive Constructive Imagination one may content himself with idle, passive "day dreaming", and never proceed deliberately to make his "dreams come true."

Ribot says, concerning this last point: "There are likenesses between the abortive forms of the Creative Imagination and the impotent forms of the Will. In its normal and complete form, Will culminates in an act; but with wavering characters, and sufferers from abulia, deliberation never ends, or the resolution remains inert, incapable of realization, of asserting itself in action. The Creative Imagination also, in its complete form, has a tendency to become objectified, to assert itself in a work that shall exist not only for the creative individual but for everybody. On the contrary, with dreamers pure and simple, the Imagination remains a vaguely sketched inner affair, it is not embodied in any esthetic or practical invention. Revery is the equivalent of weak desires and incompleted Will; dreamers are the abulics of the Creative Imagination."

We wish to point out another analogy here. The Passive and Active respective forms of the Constructive Imagination may be aptly compared to the respective Involuntary and Voluntary phases of Attention.

Involuntary Attention is that form of Attention in which the mind goes out toward any passing object which serves to arouse mere curiosity or transient notice—this form of Attention is the one most strongly manifested by the child or by the savage—moreover, it is the

kind of Attention which alone is generally manifested by the great masses of persons.

Voluntary Attention, on the other hand, is that form of Attention in which the mind is deliberately and determinedly directed toward, and held upon, some definite object or subject, to the end that knowledge concerning such may be acquired—this form of Attention distinguishes the mind of the true student, the scientific mind, and the trained mind in general. The analogy between these two respective forms of Attention and the two respective forms of Constructive Imagination, is so close that we need but to direct your attention to it, further comparison being unnecessary.

Thus, you have seen, there are two distinct forms or phases of Constructive Imagination, viz., (1) Passive, and (2) Active. The former you have just now considered; the latter you are now asked to consider.

Note: In our further consideration of Active Constructive Imagination, in the following sections of this book, we shall drop the term "**Active** Constructive Imagination", and shall substitute the general term, "**Constructive Imagination,**" this latter term being far more convenient than the former cumbersome technical term—and equally well expressing the essential idea embodied in the general concept of, "**Constructive Imagination actively employed toward definite ends and aims.**"

III

CONSTRUCTIVE IMAGINATION

In Constructive Imagination (i.e., Active Constructive Imagination) we find the elements of Reproductive Imagination (previously described) gathered up by the mind, its materials separated and classified, accepted or discarded according to determined values, and then deliberately and purposively employed toward the attainment of a definite end or aim. In these processes not only the Imagination, but also the Intellect and the Will play their part—the activity thus being complex, and the result that of co-ordinated mental power: yet Imagination is the main factor of the process, and the work is that of the imaginative mentality, the other mental powers merely being called in to assist.

In order rightly to comprehend true Constructive Imagination—its nature, its powers, its possibilities—you must first of all perceive that while it employs the raw material of Reproductive Imagination in common with "Passive" Constructive Imagination, yet its processes carry these materials to a higher plane of activity, there deliberately making selection of them, accepting and rejecting them accord-

ing to ascertained value, and then weaving and combining them into new forms and shapes, new arrangements and adaptations—building new structure of fact from the crude materials furnished it. Man, by his Constructive Imagination, exercises his true Creative Power—and thus becomes a true and real Creator, the Microcosm manifesting the principles of the Macrocosm.

Let us now proceed to the consideration of the various steps or stages of the processes manifested by the Constructive Imagination. It will be well for you to become acquainted with the details of these processes for they will be employed by you in your activities along these lines, and you should acquaint yourself thoroughly with the way "the wheels go round."

Dissociation. The process of Dissociation is the preliminary stage of Constructive Imagination. Dissociation is "the act of disuniting, separating, breaking-up, or parting that which has previously existed in associated or united form or condition." Practically every image of Memory or Reproductive Imagination is concrete, i.e., composed and made up of several parts or elements united in a single image. Association is the primary element in remembering experiences, or in calling them into consciousness in Reproductive Imagination. Constructive Imagination begins its work by first

separating and tearing apart the associated elements or parts of the reproduced images. It finds it necessary to tear down the old image before it can form the new image by reassembling its parts in new forms, or by combining some of these parts with the parts of other images likewise broken up by Dissociation.

Constructive Imagination without preliminary Dissociation would be as impossible as the task set by the town-council, in the familiar tale, which passed a resolution (1) that a new town-hall be built; (2) that the new town-hall be constructed of the materials of the old town-hall, and on the site of the old building; but (3) that the old town-hall be left standing, and be occupied and used until the new town-hall is completed.

Dissociation of familiar images is often quite difficult of performance. It is not easy to dissociate the color of "white" from our image of a swan—yet black swans are found in Australia. It is difficult for a dweller in the tropics to dissociate the idea of fluidity from his image of water—for he has never seen ice nor snow. It is difficult to dissociate the idea of cold weather, bare trees, etc., from our image of a December day—yet, south of the Equator, December is a mid-summer month. It was difficult for the opponents of Columbus to dissociate the idea of flatness from the earth, and to construct the image of men walking on the

other side of the globe with their heads pointing downward. It is difficult to dissociate the idea of youth from your mental image of the person whom you have not seen for many years—yet the person actually exists as a middle-aged man.

Reconstruction. The Constructive Imagination, having dissociated the elements of reproduced images, then proceeds to reconstruct these elements into new combinations and arrangements; this, either by simply rearranging the elements of a particular image, or else by combining certain of these elements with certain other elements of another dissociated image. The following are the more common forms of Imaginative Reconstruction:

(1) **Simple Partition.** You can construct a new imaginative image by simply parting some particular element of a reproduced image from its associated elements, and then discarding the latter in the reconstruction. Thus you can imagine a human hand writing a letter, but not attached to a body; or a mighty eye, seeing all things, yet not attached to a body; or a detached human head floating through space; or a headless horseman; or a tree without branches, or vice versa. In fact, you can easily form the mental image of anything parted and separated from its usual associated images. That is to say, you can form such a mental picture though you may not really believe that any

such thing does or can actually exist in that form and free from its natural associations.

(2) **Variation in Size.** You can construct a new imaginative image, or mental picture, of a familiar image magnified to almost any size. You can easily imagine giants whose baerds brush the clouds. Gulliver's Travels can be read by you and easily accompanied by your own illustrative images. The gigantic figures of ancient mythology are not beyond the powers of your Imagination. Likewise, you have no trouble in imagining a world a thousand times larger than our own, with all the familiar objects of our world magnified in like proportion. Jack's marvelous Beanstalk, rising to the skies, is an easy task for your lively Imagination, particularly in childhood.

In the same way, you can construct a new imaginative image, or mental picture, of a familiar image diminished almost to any size. Fairies, elves, gnomes, midgets, dwarfs—all are familiar to the eyes of your Imagination. You can imagine an oak-tree capable of being covered by a thimble. Gulliver's Travels can be illustrated by your own mental pictures of the Lilliputians. The mushroom throne and acorn coach of the fairies are quite easily imagined. Elephants as small as mice, whales as small as minnows, worlds as small as grains of mustard-seed—all these are easily created by a lively Imagination. The scientific Imagination

of today sees each atom as a tiny solar system composed of revolving planets—scientific fancy can easily picture each of these electronic-planets as being inhabited, and as being like our own planet in every way.

Size is comparative to the Imagination, and may be varied at will. You can imagine objects as being as large as you please, or as small, without regard to objective reality. The laws of the Imagination are very liberal in respect to size.

(3) **Variation of Position, Form, and Color.** You can construct imaginative images, or mental pictures, of familiar objects changed in Position, Form, or Color, or all these combined, without any difficulty. Here also the laws of the Imagination are very liberal.

You can imagine the familiar object in almost any new position. Thus, you may place a mountain in the middle of a valley; place a prairie on a hill-side; terrace a mountain into plains; plant a garden in a desert; combine hills, valleys, streams, rocks, in a fantastic manner having no correspondence in Nature. You can imagine men with their noses at the back of their heads, their arms and legs exchanging places, ears on their knees. In short, the Imagination can vary the positions of objects, or parts of objects, at will.

You can imagine new shapes for familiar animals, trees, features of the landscape. You

can imagine willows as straight as a pine, or spruce trees with branches like those of an oak. You can imagine roses with triangular petals; cubic eggs; octagonal oranges; cows as fleet-footed as a gazelle; crows as graceful as humming-birds; and rhinoceroses as soft-footed and sinuous as a cat. In short, the Imagination can vary the forms of objects, or parts of objects, at will. As a writer says: "The forms of objects are as flexible in the hands of the Imagination, as the clay in the hands of the potter."

You can imagine a green or red sky, blue fields of grain, red leaves on trees, white vegetation in the garden, black snow on the mountain tops. The Imagination can vary the color of objects, or parts of objects, at will. As a writer says: "The imagination can make the eye as dark as midnight, or give it a heavenly hue; paint the evening sky with golden colors, and robe the summer landscape with all the splendors of autumn."

(4) **Recombined Images.** You can construct imaginative images, or mental pictures, in which the separated elements of several dissociated things are combined in new arrangements. Thus, you can imagine the head and trunk of a man combined with the body of a horse—here you have created a Centaur. You can imagine the body and head of a man combined with the horns, legs and hoofs of a goat,

the wings of a bat, the tail of an ox—here you have Satan. You can imagine the body of a goat combined with the head of a lion, and the tail of a dragon—here you have the ancient Chimaera. You can imagine a monster with the body of a dog, with three heads—here you have Cerberus. You can imagine the head of a maiden, the body of a vulture, and the claws of the eagle—here you have a Harpy. You can imagine a woman with serpents serving for her locks of hair—here you have the Medusa. Mythology is rich in illustrations of this kind. The patient in delirium frequently "sees" pink elephants with bat-wings, dragon-tails, and eagle-claws, floating around the room. Our dreams sometimes acquaint us with similar monstrosities, when we have been unwise in choosing the elements of our late dinners. There is practically no limit to this exercise of the Imagination—the possible combinations are almost infinite in variety.

(5) **Idealization.** You can construct imaginative images, or mental pictures, in which the actual images of experience are given a more perfect, more beautiful, or more nearly an ideal form. Thus, you can picture a perfect circle, though you never have found one in Nature; a more beautiful woman than you ever have seen; a more perfectly formed horse than has ever been observed by you. The artist exercising this form of Imagination

often pictures that which Nature seems to be striving to manifest. You can also imagine ideal events—pictures of dramatic beauty; also ideal characters representing the full development of qualities which are merely partially represented, or even merely hinted at, in real life.

The poets, great prose writers, and the dramatists, manifest this form of idealistic Imagination. Homer, Virgil, Dickens, Thackeray, Scott, Milton, and above all, Shakespeare, furnish us with typical illustrations. Shakespeare has created characters which seem even more real to us than many of the actual characters of our experience. The great composers of music drew upon this phase of their Imagination and have given us harmonies and melodies never heard in nature. Artists of all kinds depend upon this idealistic Imagination for their inspiration; then they attempt to express in outward form—in painting, in sculpture, in poem, in drama, in story, in musical composition—that which they have formed first as mental images.

(6) **Invention.** You can also construct imaginative images, or mental pictures, of familiar objects adapted to new uses and ends, or of new objects adapted to familiar uses and ends. Thus the inventor imagined electricity being adapted to the business of tranmitting messages, running machinery, producing heat and

light, etc. Likewise, he imagined sewing, washing, weaving, reaping, binding, plowing, being performed by power machinery instead of by hand. The entire history of inventions is but the history of the employment of the inventive Imagination. As we have previously stated, the progress of man from savagery to civilization has been along the path of invention. Every tool, every instrument, every appliance of any kind—anything made by the hand of man in order to accomplish a new end, or an old end in a new way—is the result of the activities of his inventive Imagination.

(7) **Planning.** You can construct imaginative images, or mental pictures of the plans according to which you intend to proceed in your picture work. The general plans his battles, the architect plans his building; the business man plans his campaign of manufacture, sale, or other work. The clearer and the more definite the plan, the truer will be the result, all being equal. The mechanic, if he be a good one, will plan out in his mind the work which he expects to perform with his hands. Every work of construction, building, or general action contemplated by man, is planned and worked out in his Imagination before it assumes material form. The subjective form must always precede the objective form.

(8) **Induction.** You can make constructive imaginative images, or mental pictures, of the

probable causes of a number of particular events or happenings, along the general lines of induction. The great triumphs of scientific induction have been made in this way. The scientist groups together the mental images of a number of events or happenings seemingly operating under the same general law, or from the same general causes (the latter being unknown); he then seeks to discover the missing law or cause, and in doing so he sets into operation his inductive Imagination. He "makes scientific guesses" in this way, and then proceeds to test out the several hypotheses so obtained. Many of the great discoveries of science relating to physical laws have been made clear with the assistance of this form of Imagination.

All, or nearly all, of the observed processes of Constructive Imagination will be found to fit into one or more of the above categories without undue strain. The list, however, is not intended to be exhaustive, but is rather merely suggestive as a loose classification.

Mechanical Construction and Purposive Construction. Psychologists note a certain distinction between the different classes of the images of Constructive Imagination, i.e., of those imaginative images which do not represent with any reasonable degree of exactness any actual object of previous experience. This distinction proceeds according to the following

classification, viz., (1) Images mechanically constructed, i.e., in which the images are combined merely by **a purposeless and indefinite process** of joining together or associating parts of different reproduced images or memories: as for instance, where the head and trunk of a man are joined to the body of a horse, and the image of a Centaur thus constructed; or where the body of a woman and the tail of a fish are joined to construct the image of a mermaid; (2) Images **definitely and purposively constructed** according to a preconceived design and toward a definite end and purpose; as, for instance, where the different parts of a machine, a play, a picture, a musical composition, etc., are constructed as a mental image, particularly with the end of objective reproduction in view.

In the first of the above-mentioned cases, the imaginative construction is known as Mechanical Construction; in the second case, the imaginative construction is known as Creative Imaginative Construction, i.e., as true Constructive Imagination. The first type proceeds practically without a definite plan and purpose, and is more or less lacking in continuity. The second type proceeds with a more or less definite purpose and aim, according to a more or less definite plan, and with more or less manifestation of continuity. With the first type, we have but little to do in this

connection. With the second type, however, we are vitally concerned in this instruction; therefore, we shall now proceed to a further consideration of its distinctive characteristics.

Elements of the Constructive Imagination. Halleck says: "The Mechanical Imagination joins dissociated parts without altering them. Such products are as inferior to those of the Creative Imagination as is a pile of bricks to a finished house." The pile of bricks, to be sure, is "put together" and composed of a number of particular bricks; and so is the finished house: but in the former there is merely a haphazard throwing together, lacking plan, selection, and lack of purposive thought, while in the latter case there is a definite purpose, a selection of material according to its fitness for that purpose, and finally the employment of purposive thought directed to the end of the efficient construction of the building.

The elements of true Constructive Imagination, then are as follows: 1) Definite purpose; (2) Selection of materials according to estimated value; and (3) Employment of purposive thought, and logical reasoning based upon experience.

It is an axiom of psychology that no particular class of mental faculties manifests activity without calling to its aid certain other classes of mental faculties. There is always present a coordination of mental powers in all mental

activities, one phase of power, however, always assuming the dominant role for the time being. Accordingly, as might be expected, we find evidences of such coordination in the processes of Constructive Imagination. You should acquaint yourself with the details of such coordinative activity, which we shall now present to your attention.

Emotion and Imagination. Emotional states, such as strong feelings or interest, play an important part in the processes of Constructive Imagination. The best psychologists hold that in the imaginative process there must be present not only the "fixed idea", but also the "fixed feeling". Ribot says: "The emotional factor yields in importance to none other; it is the ferment without which no mental creation is possible. The influence of the emotional life is unlimited; it penetrates the entire field of creative invention, with no restriction whatever. This is not a gratuitous assertion, but is, on the contrary, strictly justified by facts, and we are right in maintaining the following two propositions: (1) All forms of creative imagination imply elements of feeling; and (2) All emotional dispositions whatever may influence the creative imagination."

In the process of Constructive Imagination, we find that Feeling and Emotion act as follows: (1) as an incentive to creative activity, and (2) as a coloring agent giving to the cre-

ated product the shade or tint of itself. Some psychologists have sought to limit the influence of the emotional states to such forms of Constructive Imagination as are concerned with the productions of works of art and beauty; they would deny such influence to those phases of Constructive Imagination which are concerned with the production of intellectual and mechanical inventive images. But more careful investigators are fully convinced that even in the last mentioned phases of Constructive Imagination the emotional element plays its part, and manifests a decided influence.

Some careful teachers have gone so far as to hold that the emotional element is the primal, original factor in all invention, inasmuch as "all invention presupposes a want, a craving, a tendency, an unsatisfied impulse, often even a state of gestation full of discomfort." This want, craving, often even a state of gestation and urging, of the unsatisfied impulse produces an emotional state of seeking for relief—for a relief which is possible only by the delivery of the completed idea of the invention. The inventor always experiences the changing emotional states resulting from partial success, temporary setbacks and discouragements, and, finally, the supreme joy of achievement, often reaching the stage of actual exaltation, accompanying the actual delivery of the child of the

brain. An authority on the subject says: "I challenge anyone to produce a solitary example of invention wrought out in pure abstraction, and freed from any factors of feeling; human nature does not allow such a miracle."

In cultivating and developing your power of Constructive Imagination, you will do well to begin by encouraging the emotional feeling which urges you toward creative invention. By stimulating and encouraging the feeling striving for creative expression, you are increasing the fire which generates the steam that runs the mental machinery of invention. Interest depends upon feeling—is, indeed, a phase of feeling. Interest is the mental force which directs the mind to the inventive task, and which holds the attention upon it. Interest is aroused and maintained by fanning the flame of feeling. In the activities of the Constructive Imagination, and of the Will, emotional feeling is the first requisite—the first element to be aroused.

Attention and Imagination. As might be expected, we find that Attention—Concentrated Attention—is also vitally involved in the processes of the Constructive Imagination. Definite, voluntary conscious mental activity of any kind or form requires the application of Concentrated Attention—the act of "holding one-pointed" the powers of consciousness. The "fixed idea" and the "fixed feeling" necessary

in efficient Constructive Imagination are the results of Concentrated Attention.

The following quotations from eminent authorities will serve to illustrate the principle now under consideration.

Ribot says: "Psychologists always adduce the same examples when they wish to illustrate, on the one hand, tenacious attention, and, on the other, the developing labor without which creative work does not come to pass." Newton says: "Genius is only long patience. * * * I keep the subject continually before me, and wait until the first dawning opens slowly little by little into a clear light. If I have made any improvements in the sciences, it was owing more to patient attention than to any other talent." D'Alembert says: "Genius is always thinking of the thing."

Kay says: "Possibly the most comprehensive definition of genius is the power of concentrating and prolonging the attention upon any one given subject." Grillparzer says: "Inspiration is a concentration of that which, for the time being, represents all the forces and capacities upon a single point. The reinforcement of the state of mind comes from the fact that its several powers, instead of spreading themselves over the whole world, are contained within the bounds of a single object—they touch one another, and reciprocally help and reinforce each other."

In that volume of this series entitled "Perceptive Power," we have given the most approved scientific methods of cultivating and developing the faculty of Voluntary Attention.

Once more, we wish to impress upon your mind the fact that the mind is a unity, not a mere aggregation of particular mental faculties. Each faculty is found to call upon and to make use of the special powers of the other faculties. Each mental process is found to involve the elements of several faculties. The activities of the several faculties, or groups of faculties, are found to blend into each other in harmonious effective coordination. In the consideration of any one special faculty, or class of faculties, this important fact is often overlooked.

Observation and Imagination. You have seen that the Constructive Imagination depends upon the perceptive powers for its "raw materials." Without a proper supply of these "raw materials" of perception and observation, the Constructive Imagination cannot proceed to continue and create those edifices of creative images which serve as the models or patterns of the subsequent materialization. Remember always, that the Constructive Imagination cannot create "something out of nothing." Without having first sown the field of memory with the seed of perception and ob-

servation, there can be raised no crop of Constructive Imagination.

The child with three blocks is limited in his building operations—give him nine blocks, and he will be able to effect many more combinations. This is just as true of the individual who wishes to employed effectively his Constructive Imagination: his limits are determined by the amount of perceptive material at his disposal. The Eskimo dwelling in the Arctic regions can never hope to create imaginative pictures of the things of the temperate or the tropical zones, unless, by some chance, he has gained a knowledge of the latter by means of books, pictures, or the descriptions of travelers. Even in that exceptional event, as Halleck says, "He must interpret all that he reads in terms of the scant shrubbery with which he is familiar, and his best imaginative picture of tropical foliage will be meager and dwarfed."

You will do well to cultivate your powers of Perception and Observation, in connection with your work of developing your powers of Constructive Imagination. Consult some good text book on this subject. We feel justified in calling your attention in this connection to that book of this series entitled "Perceptive Power"; it will be found to contain practical instruction based upon the best scientific methods of cultivating, developing and training the

Perceptive Powers and the faculty of Observation.

We scarcely need to point out to you that a very large part of the mental processes of any and all kinds are performed, wholly or in part, on planes or levels of consciousness below the planes or levels of the ordinary consciousness. Modern psychology has so thoroughly demonstrated this fact that we need do no more than to mention it here. As might be expected, the processes of Constructive Imagination are performed to a great extent in this way.

We might even say that the conscious performance of Constructive Imagination is limited to (1) the initiatory stages in which the germ of the creative process is carefully considered in consciousness, and the initial impulse is imparted to it; after which it is placed in the subconscious field for incubation; (2) the intermediate stages in which the partially incubated creation is raised to the plane of consciousness, there to be exaxmined by the conscious mentality; adjustments, adaptations and suggestions of improvement added; after which the incomplete process is again relegated to the subconscious levels; and (3) the last stage in which the practically completed creation is raised to the levels of consciousness for a final inspection: here the "finishing touches" are added and the work is completed. The greater part of the process, you will note, is

performed on the subconscious levels or planes of the mind.

Hoffding says: "The interweaving of the elements of the picture in the imagination takes place in a great measure below the threshold of consciousness, so that the image suddenly emerges in consciousness complete in its broad outlines, the conscious result of an unconscious process." The above statement, however, should have contained the proviso that the subconscious processes referred to were performed only after (and because) the conscious mentality previously had been actively employed in earnest and concentrated consideration of the subject in question.

The autobiographies and biographies of men of genius, great inventors, great scientists, and others actively employing Constructive Imagination, are filled with illustrations of the workings of the subconscious faculties of the mind; these show conclusively the important part played by these "below the surface" mental activities in all creative and inventive thought.

While the activities of the Constructive Imagination proceed more or less freely, or even spontaneously, and cannot properly be reduced to a mere mechanical form of procedure, nevertheless there are certain general stages or steps of the process which are sufficiently determined in form to be subject to classification. The following general classification is

offered with the understanding that it is not rigid nor exclusive; it is merely an attempt to picture the several apparently separate steps or stages of a process which, in reality, is continuous rather than composed of separated parts.

(1) **The Germ Stage.** This is the stage of the first general thought concerning the nature of the thing sought to be created by the Constructive Imagination. A writer has stated it as, "the first idea coming to the mind as a possible solution of a problem which has been put to one, or has 'struck' him, by reason of his needs and requirements, or those of others, and which has assumed nebulous form by reason of his previous observations, studies and researches."

The energy of this germ is supplied by the "desire feeling" arising from the needs of the individual, or those of others which are known to him, and which represent obstacles to the efficient expression of his nature. This desired fuller expression may be in the direction of self-preservation, health, welfare, protection, or general comfort; or that of military or commercial supremacy or success; or that of sexual expression, with its many secondary forms of manifestation. Again, it may be in the direction of mechanical invention and construction, in response to the "mechanical instinct"; or that of artistic production; or that

of social reforms and improvements. Likewise, it may be in the direction of knowledge of science or philosophy; or that of religious or theological interpretation or explanation, and all that pertains to these. In short, every form of desire, feeling, emotion, need, lack or want—every "frustrated purpose"—every emotional state which tends to manifest in will-action—may supply the motor or energizing element in the germ of Constructive Imagination.

Around this energizing element are loosely gathered the general ideas connected with the discovery and creation of that which will fill this want, satisfy this desire, comfort this feeling, fill this emotional void. The germ, so constituted, has been described by a writer as "an embryonic, unstable, and uncoordinated manifestation of the creative imagination—a transition stage between passive reproduction and organized construction."

(2) **The Incubation Stage.** This is the stage in which the germ rests in the womb of the subconscious mentality. Here the mind operates along the lines of both conscious and subconscious activity. The conscious mentality observes the new ideas to which the interested attention now is directed by reason of the demands of the incubating germ in the subconscious mental womb, and then passes them down to the subconscious plane, there to be

absorbed, assimilated and combined with similar ideative material. The subconscious mentality searches the stores of memory for associated facts, ideas and images which may be combined with the material of the germ or embryonic image.

Of this stage, a writer says: "The incubation is often very long and painful; or, again, even totally unconscious. Instinctively as well as voluntarily (subconsciously as well as consciously) the mind brings together all the materials that it can gather." Another writer says: "Here is the germ, the principle of unity, the centre of attraction, suggesting, exciting, and grouping the proper association of images, in which it becomes enwrapped and organized into a structure—an ensemble of means converging to a common end."

(3) **The Delivery Stage.** This is the stage in which the developed embryo—the evolved germ, with its accumulated associated and related images grouped around it in logical order —is raised to the plane or level of consciousness, and is "born" into the world of conscious thought and cognition. Here the happy subconscious and conscious parents exclaim: "Unto us a child is born!" As a writer says: "When the latent (subconscious) work is sufficiently complete, the idea suddenly bursts forth. It may be at the end of a voluntary tension of mind; or it may be on the occasion

of a chance remark, tearing the veil that hides the surmised image."

The child of Imagination, so born into the world of objectivity, must be carefully handled and provided for. It must be nursed until it is strong enough to adapt itself to its new environment. The Imagination must be drawn upon (as the breasts of the mother are drawn upon for milk) in order to provide for the offspring. The young idea may perish if it is denied proper clothing and food. It must become gradually habituated to its new environment; undue exposure to the winds of objectivity may weaken or even kill it. This is more than a mere figure of speech—it bears a close resemblance to actual facts of experience, as many inventors and parents of new ideas know to their sorrow.

IV

THE BUILDER AND THE PLAN

In the processes of Efficient Constructive Imagination, directed by a definite purpose and toward a determined end, you will find it advantageous to follow the general rule given below. This rule, which is the result of a careful study of the requirements of the case made by competent investigators of the subject, is not a hard-and-fast rule to be observed absolutely by you under all circumstances; rather it is a general framework of the actual method to be followed by you, the special details being supplied by yourself. Rightly understood and intelligently adapted by you to the special circumstances of particular cases, this rule will be found to meet the requirements of practically all the cases likely to require your attention.

General Rule

I. Create a clear mental picture of the general idea representing your Definite Purpose, i.e., the particular end which you wish to accomplish; the particular obstacle which you wish to overcome; the particular result which you wish to obtain; the particular desire which you wish to satisfy; the particular ideal which

you wish to make real; the particular idea which you wish to materialize in objective form.

II. Form a comprehensive picture of the whole field of the proposed undertaking; get a comprehensive and inclusive view of the whole field of the business into which you purpose embarking; see the whole enterprise in all of its general aspects; compose a comprehensive idea including the whole matter under consideration.

III. Make a written list of all of the probable factors involved in the problem or undertaking; compile a list of all of the probable elements involved in the working out of the matter; gather together all of the ideas of the things at all likely to be called into the creative process; have within easy reach the ideas of all of the materials likely to be employed in the construction of the ideal form which you wish to materialize.

IV. Classify these ideas, elements and factors according to their general nature, their general uses, their known relations and associations; cross-indexing them under appropriate headings, and referring to the lesser elements, parts, or factors of which each is composed. Diagram and chart these ideas according to your system of classification, so as to have the whole matter under your mind's eye, and so that you may be able to grasp the ar-

rangement at a glance without having to hunt for scattered items.

V. Weigh the various factors one against the other, taking into consideration the associated and related values of each in the general idea, plan or purpose. Determine in this way which are the primary factors involved; which are the secondary; and which are the lesser values. Concentrate on the prime factors, and make these the central points in your process of Constructive Imagination—the focal centres around which you purpose grouping the associated factors or elements.

VI. Experiment by tentatively placing the secondary factors in association with and relation to the prime factors, regardless of how improbable or incongruous at first may seem such association and relation. Around the letter "A" build alphabet-block combinations of the letters B, C, D, E, F, G, etc., blocks, to see if they "make sense," or if they suggest anything of rational meaning to you. Discard all combinations that seem lacking in utility—but only after actually making the test and experiment. Continue this until you have secured satisfactory results. Where there are several apparently satisfactory, or fairly promising combinations, weigh these one against the other to determine their comparative values, discarding the lesser values, and retaining the greater, until you have secured the

"survival of the fittest." Then proceed to test out the lesser factors in the same way, working out all the details of the plan.

VII. Having reached at least a fairly satisfactory working plan, idea, invention, or solution of your problem, you should then carefully detach yourself from it—you should move from your personal point of view, and try to see it as others will see it. Thy to imagine the effect it will have on the persons whom you wish to be interested in your finished product; how it will meet their requirements, satisfy their wants, arouse their desires for it. Your own created conjunction, plan, method, design or invention naturally will seem to you as the infant appears to its mother—no mother is an unprejudiced critic of her own baby. You must see the thing as others will see it, in order to arrive at an intelligent idea of the actual degree of utility possessed by your invention, creation, composition, or contrivance. You must employ past experience, reason, judgment, discrimination and cool decision in this final testing process.

In the present, and in several following sections of this book, we shall ask you to consider in further detail the several divisions or principles composing the above-mentioned General Rule, together with certain instructions designed to promote the effective application of each of these special points.

In the General Rule of Efficient Constructive Imagination, the first step is that of: "Creating a clear mental picture of the general idea representing your Definite Purpose, i.e., the particular end which you wish to accomplish; the particular obstacle which you wish to overcome; the particular result which you wish to obtain; the particular desire which you wish to satisfy; the particular ideal which you wish to make real; the particular idea which you wish to materialize in objective form."

Definite Purpose is an essential characteristic of all true Constructive Imagination. This Definite Purpose may not be the actual purpose to objectify a subjective image already created in the mind—though often it is precisely this purpose of externalizing the created internal image. More often, however, the Definite Purpose is that of overcoming an obstacle; supplying a perceived want; discovering an efficient method of performing certain work. There is always present a "fixed idea" supported by a "fixed feeling." The more definite the purpose, the more directly does the creative work proceed to its end. The more persistent the feeling and the desire inspiring it, the stronger is the urge toward the objective materialization.

Halleck says of this characteristic of the Creative Imagination: "The Constructive Imagination is always characterized by a definite

purpose, which is never lost sight of until the image is complete. A child starts to build a house out of blocks. These are often changed and taken down many times, before the form in which they are built is such as to fix the growing, purposive image in the child's mind. Before an architect builds a house, he must form successive images, which he alters whenever they conflict with the general plan of that special dwelling. An inventor often spends years in changing and re-combining the images of parts of his machine, but he is all the while dominated by a Definite Purpose. The images must be altered until matter poured into their mold fulfills the aim of the inventor."

We would here, however, caution you against harboring the idea that the Definite Purpose is a crystallized, fixed, unchangeable archetype which the inventor strives to represent as best he can in material, objective form. Rather, the Definite Purpose is an evolving, developing Idea, moving forward as do all living forms. It advances and, usually, gradually takes on new and better forms and details; also, it frequently discards as inefficient or impracticable some of the forms or details which it had accepted at the start.

As a writer has said: "The Creative Ideal arises in the inventor and proceeds through him. Its life is a 'becoming' process, and not an unchangeable fixed form. Its 'fixed' char-

acter consists of its Continuity and Definite Purpose. * * * If we liken creative imagination to physiological generation, this Creative Ideal is the ovum awaiting fertilization in order to begin its development. * * * The Creative Ideal is a creative image tending to become real."

Before you may expect successfully to accomplish creative mental work, you must know, at least in a general way, just what you wish to create. You must select at least the general goal toward which you desire to journey. You must not be content to sing, in the words of the familiar ballad, "I don't know where I'm going, but I'm on the way." You must sketch at least the general map of the country over which you wish to travel, and to indicate with at least a fair degree of definiteness the place at which you hope to arrive at your journey's end.

We do not hold that you must necessarily work out a detailed map of that country—the details you may fill in as you proceed. Neither do we hold that you should necessarily make a mark at some particular part of the map to indicate the place at which you expect to settle down—you will be better able to do this when you arrive at that general part of the country toward which you are journeying. We do insist, however, that you should know the gen-

eral direction in which you are headed. The early settlers of America knew that they were "Going West," and most of them had a very fair idea as to just what particular section of the Far West most attracted their interest and held their attention. The matter of the precise, exact location of the place at which they expected to "take up land" was usually left to be determined when they arrived on the general scene, and had a chance to "look over" the places still open to them for settlement. This is about as much as we can ask for from you in the matter now under consideration.

All true exercise of the Constructive Imagination is inspired by a want, a lack, an obstacle, a problem, or a "thwarted purpose"—the latter being stated by an eminent psychologist to be "the occasion for all reasoning." If your every want were satisfied; if you suffered no lack; if there were no problem requiring solution, no obstacles to be overcome, no "thwarted purposes" present in your experience; then you would never be called upon to exercise your powers of Constructive Imagination. Your want, your lack, your unsatisfied desire, your "thwarted purpose"; these call into activity the creative powers of your mind.

It may not be always quite clear to you what constitutes the prime factors of your want, desire, lack, problem, or "thwarted pur-

pose"; you may find it necessary to "boil down" the thing, evaporating the excess fluid in which this essence is dissolved. You must get to the real essential elements of the problem—get "down to brass tacks." Here, as in many other instances and cases, you will find it helpful to "think with your pencil," i.e., to express in written words the essence of the somewhat hazy general idea which is present in your mind as representing your problem or want. Unless you have practiced this plan, you can have no adequate conception of its value to you in thinking and planning.

In "thinking with your pencil" for the purpose of discovering the prime factors or essential elements of your problem or purpose, you must strive to get down to the bottom of the subject—to reach the centre of the thing. Once having found this, you may work backward and forward in any direction from that focal point. The focal point may be discovered by determined "pencil thought" upon the following two questions, viz.: (1) "What is the obstacle which I wish to overcome; what is the nature of this 'thwarted purpose'; what is the gist of the difficulty; and (2) What is the first and main factor or element of my purpose in this matter; what is it necessary for me to accomplish; what is the general end to be accomplished; what is 'the big idea' which I wish to make real?"

Continue the task of analyzing and dissecting the subject until you finally reduce it to its ultimate elements of Definite Purpose. That Definite Purpose is always there, though usually hidden by a mass of comparatively non-essential ideas. It is your work to clear away this mass of encumbering material of thought, so that you may bring into plain view the precious thing at the centre of the mass. Or, employing another figure, it is "up to you" to carve away the mass of stone which hides the figure of your ideal—that ideal which is crying for release from the encumbering material; just as the sculptor with his chisel releases the hidden form of his ideal creation.

Your Definite Purpose once discovered, it becomes your Definite Ideal—the focal point around which is built the entire structure of your creation. The Definite Ideal is like the grain of sand which exists at the centre of every pearl, and about which the pearly material has gathered. It is "the big idea" around which your Constructive Imagination builds, deposits, and accumulates its wealth of material. Your Definite Ideal represents your desire, need, want, purpose, plan, design—it is the vital germ of the entire future organism—it is the seed from which will spring the downward-pressing roots, and the upward-pressing stalk. Without it there would be no creative growth. In the degree of its strength, definite-

ness, and clearness of form, so will be the degree of perfection and vigor in that which springs from it.

The importance of discovering and uncovering the Definite Ideal is not confined to its effect upon your conscious mental activities; its effect upon your subconscious faculties and powers of imagination is even greater still. By a clear conception of your Definite Ideal, and by its repeated impression upon your subconscious mentality, the idea becomes firmly, deeply and clearly "set" in the substance of the latter; and, thereafter, the subconscious faculties work steadily toward the end of the successful accomplishment of the purpose and ideal thus impressed upon it. The importance of this is realized only when you stop to think that over eighty-five percent of the activities of the mind are performed below the levels or planes of your ordinary consciousness. The fifteen percent of the work performed by your conscious faculties is confined largely to the task of supplying the subconscious faculties with the proper materials for their work, and to adapting, shaping, testing, and applying the manufactured product of the subconscious workshop.

Once having discovered and uncovered your Definite Ideal, you should strive to make as clear and definite a mental picture of it as possible. Keep the general picture in mind—

either directly in consciousness, or else "at the back of your head" so that you will know that it is there even when you are not looking at it. Keep the "big idea" always in mind, consciously, subconsciously, and superconsciously. Get the "fixed idea" and the "fixed feeling" so firmly "set" in your mind that it could not be dug out without breaking up the mind itself. This Definite Ideal—this "big idea"—must be the mental picture, the ideal form which your entire mental being is striving to make real, to materialize, to objectify. Let no other mental picture rob this "big idea" picture of its prominent position. Hang it in your mental picture gallery in such a position that it will catch your mental eye the first thing in the morning, and the last thing at night.

Having firmly established your Definite Ideal, you should next proceed to map-out your general field and to note its prominent landmarks. In the words of the second section of the General Rule, you should: **"Form a comprehensive picture of the whole field of the proposed undertaking; get a comprehensive and inclusive view of the field of the whole business into which you purpose embarking; see the whole enterprise in all of its general aspects; compose a comprehensive idea including the whole matter under consideration."**

In this process you need but to follow the general principles which already have been presented to you in the instruction concerning the discovery and visualization of your Definite Purpose—your Definite Ideal. These principles may be stated in condensed form as follows:

(1) **"Think with your pencil."** Write down all of the ideas concerning the general field and plan, and then compare these for the purpose of selection. Eliminate the non-essentials, cancel the duplications and contradictories, and arrange the selected items in a logical and orderly classification. In short, make a chart or diagram of the general field and plan, showing the ground to be covered, the obstacles to be overcome, the strong places, the weak points, etc., etc., You will do well to bestow sufficient care and attention upon this task, for your chart will be to you what his map of the battle-field is to the commanding officer.

(2) **"Visualize your Map."** Study your map until you can easily visualize it. Learn it "by heart" so that it will become as familiar as your "A, B, C's," or your Multiplication Table of childhood days. Impress your map upon your memory, so that you can bring it at will into conscious representation or recollection.

V

THE MENTAL LABORATORY

The third section of the General Rule tells you to: **"Make a written list of all of the probable factors involved in the problem or undertaking; compile a list of all of the probable elements involved in the working out of the matter; gather together all of the ideas of the things at all likely to be called into the creative process; have within easy reach the ideas of all of the materials likely to be employed in the construction of the ideal form which you wish to materialize."**

Here you proceed to supply the Constructive Imagination with the raw materials for its creative processes. You have seen that the Constructive Imagination does not, and cannot, create "something out of nothing." Instead, it creates by combination, adaptation, adjustment, transformation—always employing the material which you furnish it for the purpose. Therefore, you must supply it with the kind of mental images which are best adapted for the creation of the new forms, images or ideas which contribute to the manifestation of your Definite Purpose—your Definite Central Ideal. This material (com-

posed of mental images) is then employed both by your conscious mentality and by your subconscious mentality, in their work of weaving or fusing the fabric or form of the necessary new images.

You must get busy at this point—you have much real work ahead of you here. You must begin by acquainting yourself with the list of the things which seem likely to come into use in the working out of your Definite Purpose—your Definite Ideal. You need not be absolutely certain that all of the material being gathered in by you for this purpose really will prove necessary or even valuable in the process; gather in all that seems "at all likely" to be of some use. In case of uncertainty on this point, give the material the benefit of the doubt, and add it to your list—you may discard it later, if need be. All that you need to do at this time is to gather together such materials as seem likely to be worth consideration in the matter. And, note this, make a written list of all such items of promising material; for you will be called upon to do considerable "thinking with your pencil" in the work ahead of you.

In the first place, you must fairly saturate yourself with the subject represented by your Definite Purpose and Definite Ideal, the achievement of which is so insistently desired, so confidently expected, and so persistently

willed by you. You must learn at least the name and general character of every thing connected with or related to that subject—if but even remotely related to it. This, because the images or ideas of these related things are precisely the "stuff" upon which your Constructive Imagination must depend for the materials which it must weave or fuse into newer and more efficient images.

Every thing that ever was invented, created or composed by the Constructive Imagination, is constituted of several elements; and these elements previously existed as separate though related ideas—the same kind of ideas which you are now trying to accumulate as raw material. The men who invented, created or composed those new things were dependent upon these separate images or ideas for their material—without them these men could not, and would not have invented or created those new images. You are now in the same position as were they before their work was really begun—or rather, before their Definite Purposes and Definite Ideals had begun to assume clearly defined form and proportions.

Morse, Stephenson, Marconi, Edison, and the rest of the inventors, were once "in the same boat" in which you are now. To duplicate their processes, you must gather together the raw materials just as they did. This

should be plain enough for you; but do not proceed further until this truth is thoroughly grasped and appreciated by you. You must be well grounded in the facts of this fundamental principle before you properly may proceed to set the same into creative activity. There is no royal road to Constructive Imagination. All, high and low, always have, must now, and must always hereafter, travel the same common road leading to the goal. This "all" includes yourself.

A moment ago, we told you that "you must fairly 'saturate' yourself with the subject represented by your Definite Purpose and Definite Ideal, the achievement of which is so insistently desired, confidently expected, and persistently willed by you. You must learn at least the name and general character of every thing connected with or related to that subject—even remotely related to it." But just how are you to saturate yourself with such knowledge? Just how are you going to know at least the name and general character of everything connected with or related to that particular subject? The correct answer to these questions involves a most important method of the scientific application of Constructive Imagination, and you should consider carefully the following information given as the answer.

Consider this proposition: If some very wealthy man were to call you into his office

and then make you the following offer, you would accept it at once, and would proceed to devise the proper means to accomplish the task and win the reward—there would be no hesitancy on your part about accepting it, we are sure. Here is the hypothetical rich man's offer to you: "Mr. Blank, I want someone to prepare for me the fullest and most complete list possible of the things concerning or related to this particular subject (here naming the subject of your Definite Purpose and Definite Ideal). I will give you a salary of double the amount you are now earning, and also pay all your expenses, while you are conducting the search and preparing the list. When you have completed the list, if it is found to meet the requirements of reasonable completeness and perfection, I will make you a present of one hundred thousand dollars. Will you undertake the task?" What would be your answer? You would accept, of course.

Then, what would be the first steps in your preparation of the list? Well, you would begin by reading the best text-books covering the general subject—starting off with the descriptive articles treating upon it which you would find in the best encyclopaedias. You would saturate yourself with the subject. You would consult with persons employed in occupations necessitating at least a working knowledge of the subject. You would read the trade jour-

nals circulating among those engaged in such callings—not forgetting to read the advertisements. You would carefully consider the price-lists and catalogues of houses dealing in the supplies required in those branches of work. In short, you would seek in every possible direction, and from every possible source, for the names of the things concerning or related to that special subject.

You would seek every possible "association" of that subject—the subjects closely associated with it, and having some practical relation to it. You would discover these associations by asking yourself:

(1) What is this thing?

(2) Of what is it composed?

(3) What is its purpose?

(4) For whose use is it intended?

(5) What is its past history—its evolutionary story?

(6) What are the things most resembling it?

(7) What thing is most unlike it—its "opposite?"

and many more questions of that sort. You would seek to fill your mind with all the essential images connected with or related to your subject.

But you would not be satisfied with merely learning the names of these connected or related things—though even these are of great

importance, and really form the first step of your task. You would seek also to learn the meaning of those names. You would consult the best dictionaries, reference works, enclopaedias, etc., for the meaning of one term, you would uncover other terms closely associated with the one you are "running down" —then you would search for the meaning of these new terms. You would learn the past history—the story of the evolution of the prime factors of your special subject. You would learn the various attempts to solve certain of the problems involved; the failures and successes. You would learn the various theories advanced in the history of the subject, and the answer and objections to each. In short, you would fairly saturate yourself with the known facts concerning the subject, and the subjects associated with it. You would know the name of every thing involved in the subject, and the meaning of that name.

Briefly, you would fill your mind with the "mental images," concepts, or ideas of each and every thing connected with or related to that subject. Of course, you would use your pencil in noting down these names and their meaning—you would "think with your pencil." You would arrange your facts into classes—minor classes forming greater classes and so on. You would have on your list every important element involved in the matter. You

would know what each of these meant—you would have an adequate conception of each and every one of these elements. You would not be satisfied until your list was made as complete and as comprehensive as possible. The one hundred thousand dollar reward would inspire you; but, as you worked, the growing interest in the task itself would urge you on—you would have awakened the "creative instinct" which had been lying dormant within you.

Well, then; this is just the way for you to go to work concerning the subject of your Definite Purpose and Definite Ideal. What you would do for the millionaire, you must do for yourself. You must work for yourself just as faithfully as you would work for such an employer. The same spirit must inspire you—the same interest must urge you on—the same "creative instinct" must be awakened. Here is what you must accomplish in this stage: **You must make an inventory of all the essential elements involved in your special subject; and each name on that inventory must be so well understood by you that it constitutes a definite mental image, concept, or idea.**

The ideal inventory of "important elements" must include (1) every discoverable important thing employed or used in connection with the subject; (2) every discoverable important fact concerning that subject; (3) every discover-

able important item of information concerning the essential application of that subject; (4) every discoverable important event or experience in the history of that subject; (5) every discoverable important cause affecting that subject; (6) every discoverable important effect produced by that subject; and (7) every discoverable important law, principle, or method employed in the processes connected with that subject.

You must know (1) of what the thing is made; (2) how it is made; (3) who makes it; (4) who uses it or may use it; (5) what the users need it for, and how they use it—and how others may use it, and the other ways in which persons may use it; (6) how it is sold (or may be sold) to those who use it; (7) the general methods of its distribution, and the extent of such. The above are but general suggestions: you must adapt them and add to them according to the special requirements of the case.

For the purposes of such list-making, we make the following suggestions: Use freely a good encyclopaedia, preferably one having a classified index, or an efficient system of cross-indexing. Use trade or professional text-books, encyclopaedias, dictionaries, reference works, etc. Read the trade or professional journals relating to your subject—paying due attention to the advertisements—for advertise-

ments, properly read, constitute a rich mine of suggestive ideas.

Before we pass on to the next step in the process of Constructive Imagination, we would again emphasize the importance of having a definite, clear idea or mental image back of every name or term representing an essential element of your problem or subject. A name or term without an associated meaning is like a skeleton without flesh, nerves and muscles—and, above all, without life. You do not know a thing merely by knowing its name—you know it only in the degree that you grasp the meaning sought to be expressed by that name. Get acquainted with your dictionary—turn its pages and put flesh and meat on the bare bones of the mere names and terms that you know—breathe life into them.

Halleck says concerning this point: "The formation of accurate images is essential to the right culture of the imagination. A good house cannot be built out of shapeless brick. The use of words without definite corresponding images is fatal to imagination. If we study any branch of science without representing to ourselves by imaginative power the meanings of the various terms, our time is somewhat more than wasted, for we are forming a bad habit. 'Molecular vibrations,' 'tension of the ether,' 'undulations of varying amplitude and length,' 'valves of the heart,'

'stamens,' 'peltate leaves,' 'Gothic arches'—these are terms which should never be used without the ability to form sharp images in each case. A person who had been talking about defective flues as causes of fires, was asked to state plainly what he meant by 'a defective flue.' It was then seen that he had no clear image corresponding to the term, which was simply a mask for his ignorance. Persons who allow themselves to use terms in this way must not expect to have much imaginative power."

Let your "meanings" of names and terms take on the aspect of mental pictures, or images, of the thing represented by the names. "See" the thing in your "mind's eye" when you are intently thinking of it—visualize it into mental life and vigor—and it will take on a world of new meaning to you when you wish to employ it as an element of Constructive Imagination. A "lively imagination," in the true meaning of that term, is an imagination in which the images are "alive," and not mere lifeless verbal skeletons of things long since passed out of actual, moving existence. Breathe the breath of life into your mental images.

The fourth section of the General Rule tells you to: **"Classify these ideas, elements and factors according to their general nature, their general uses, their known relations and as-**

sociations; cross-indexing them under appropriate headings, and referring to the lesser elements, parts, or factors of which each is composed. Diagram and chart these ideas according to your system of classification, so as to have the whole matter under your mind's eye, and that you may be able to grasp the arrangement at a glance without having to hunt for scattered items."

By following this method, after having accumulated your materials of Constructive Imagination, i. e., your concepts, ideas, or mental images of the elements involved in the future creation of new images, you will arrange them according to some logical system of classification. In this way you file away each particular concept or idea according to its proper place in a more general class, and, thereby, you are able more easily to find it when you need it. This plan, as compared with that of simply piling your ideas and concepts in a miscellaneous heap, is akin to the scientific method of filing away correspondence in a filing cabinet as compared with that of simply throwing the letters together in a barrel, box, or large drawer.

A business man is able to find the letter he needs, simply by going to his file and placing his hand on the proper compartment; he has an immense advantage over the one who has to hunt through a large mass of unfiled cor-

respondence. **It is not enough to have the idea of a thing—it is necessary to know where to find that idea when you want it.** Psychology informs us that one may far more easily remember facts filed in the memory records according to some system of logical classification, than where the facts simply exist "somewhere in the mind."

Your classification of concepts or ideas should be according to the general nature of the ideas, their natural associations with other objects, their uses. For instance, in your mental file of "Building Materials,' there would be contained the concepts of Stone, Clay, Brick, Iron, Steel, Lumber, Concrete, Cement, Tile, etc. In your mental file of "Metals," there would be found the records of Iron, Copper, Gold, Silver, Nickel, Zinc, Platinum, Lead, Tin, Antimony, Manganese, Mercury, Aluminum, Cobalt, Tungsten, etc. In your mental file of "Mechanical Devices," there would be filed your records of Axles, Shafting, Wheels, Levers, Pulleys, Cranks, Cams, Eccentrics, Winches, Windlasses, Inclined Planes, Wedges, Toggle Joints, Endless Screws, Belts, Gear-Wheels, Gearing, Couplings, etc. In your mental file of "Fibres and Textiles," there would be placed your records of Cotton, Flax, Hemp, Jute, Linen, Manilla Hemp, Noils, Ramie, Shoddy, Silk, Organzine, Floss Silk, Wool and Worsted, Coir, Artificial Silk, Arti-

ficial Cotton, Vegetable Silk, etc. In your mental file of "Dairy Products," you would place your records of Milk, Skim Milk, Casein, Cream, Butter, Cheese, Buttermilk, Milk Sugar, Ghee, Kephir, Koumiss, Whey, etc. The above illustrative examples should be sufficient to indicate the general idea of efficient and practical classification.

Each general classification, moreover, should be subjected to sub-classification. Large classes should be divided and subdivided into the lesser classes. Small classes should be raised to higher and still higher classes, and so on until the highest general class is reached. The following table illustrating "Geometrical Figures" will serve as an example of such classification:

- Plane
  - Rectilinear
    - Trilateral
    - Quadrilateral
    - Multilateral
  - Curvilinear
    - Circular
    - Elliptic
    - Parabolic
    - Hyperbolic
- Solid
  - Rectilinear
    - Tetrahedral
    - Penthahedral
    - Sextahedral, etc.
  - Curvilinear
    - Spherical
    - Conical
    - Cylindrical
    - Paraboloidal

In the above illustration we have the smallest class of figures grouped according to its most positive quality; this group raised to the respective class of Plane or Solid, as the case may be; and this last class included in the general class of "Figures." One having at hand this table, would have a complete index of his mental images representing the various forms included in the general class of "Geometrical Figures." He would have a map or diagram of his knowledge of the subject; it being understood that each of the above terms must be accompanied by a clear mental concept of each figure—a clear "meaning" of each, capable of being stated in the terms of logical definition.

The ideal theoretical system of classification would really be that in which each article was classified according to all its characteristics, its uses, its possible combinations, its associations, its relations, etc. Such a system, however, would be well nigh impossible; and, for that matter, would be far too complex and cumbersome for ordinary practical use. But you should not lose sight of the general principle, nevertheless.

The ideal for practical use would be a classification showing: **(1) every possible use or end to which a certain thing might be applied, employed or directed; and (2) every possible thing which might be applied, employed, or directed to a certain use or end.** The nearer

you approach to this ideal, in your work of classification of the things concerned with, connected with or related to the general subject of your Definite Purpose and Definite Ideal, the better will be your chances of the successful achievement of that purpose, the successful realization of that ideal.

It is said that a certain eminent inventor possesses a very complete index, and series of cross-indexes, of **nearly everything concerned with the general field in which he is working.** For instance, he has lists showing (1) all the discovered uses to which each and every such thing has been put; the discovered effects of its combinations with other things; the things most nearly related to or resembling it; and, (2), each and every such thing which has been discovered to be possible of use, employment and effect in the direction of producing or effecting a certain result, effect, combination or composition. In short, he has the **cause-relations** and the **effect-relations** of every object on his list, noted and classified, indexed and cross-indexed.

When this inventor wishes to know the possible **causes** of a desired effect, he turns to his indexes, and the information is at hand. Likewise, when he wishes to know the possible **results and effects** related to a particular thing, he puts his hand on the information in the same way. The list is kept checked up and

posted by a corps of assistants who note the reports contained in the scientific journals, etc., and also the results of their employer's own original experiments. He has built up, and maintained, a veritable encyclopaedia of information relating to the things concerned with his own particular line of work. Consequently, he not only has a wealth of valuable information on hand, but he also saves an immense amount of time and labor when he is engaged in actual experimental and inventive work.

While the illustrated instances above cited represent extreme cases, yet they serve to bring out the principle involved. It is not expected that you should undertake any such elaborate system of classification; yet you should not fail to employ its general principle to the highest degree of which you are capable, or which you find possible under the circumstances. All else being equal, the person who has (1) the greatest store of concepts or mental images concerning the general subject of his Definite Purpose and Definite Ideal; and who (2) has that material the most thoroughly classified and indexed, either in his memory or mechanically; that person will manifest the highest degree of success in his work of Constructive Imagination.

You will do well to impress upon your memory all new facts arranged according to their logical classification. You will do well also to

use your pencil in making written lists of the things involved in your creative work. In short, in every possible manner and by every possible method seek to **(1) Acquire concepts, ideas, or mental images related to your Definite Purpose and Definite Ideals; and then (2) Classify these concepts, ideas, or mental images according to a definite, logical, scientific plan, so that you may find them easily and quickly when you need them in the work of Constructive Imagination.** With well-selected materials, in sufficient amount and stored away systematically so that you may "put your hand on them" when needed, you will have progressed very far on the road to the achievement of your Definite Purpose and Definite Ideal by the processes of the Constructive Imagination.

Now then, when you have (1) acquired the concepts, ideas, or mental images related to your Definite Purpose and Definite Ideal; have (2) ascertained and thoroughly apprehended the full meaning of each of these items of material; and have (3) properly classified, indexed, and charted them so that you have them arranged for efficient reference; what have you at your command?

In the first place, you have compiled what may be called a "Thesaurus" of your Image-Ideas. A "Thesaurus" is, "A treasury, or repository: the term often applied to a compre-

hensive reference work, a lexicon, containing lists of words arranged according to the ideas or concepts which they express." A Dictionary contains a list of words, with the definition of each—the statement of the idea or concept which each expresses. A Thesaurus, on the other hand, contains lists of words arranged in groups, each group representing a certain general idea or concept which its several particular words express. When you wish to know the meaning of a word or term, you consult your Dictionary. When you wish to find the several words or terms expressing a certain idea or concept, you consult your Thesaurus; discovering there the term denoting the general class of ideas or concepts which you have in mind, you find arranged opposite it the several particular words or terms employed to express that class of ideas or concepts.

In the Thesaurus of Image-Ideas which you have compiled, you will find the image-ideas related to, or associated with, the general idea or concept which you are employing in your work of Constructive Imagination. The smaller classes are grouped into greater classes, and these into still greater, and so on and so on, until under your Central Image-Idea you will find classified and grouped each and every particular related or associated image-idea. Stop a moment, and consider how valuable such a Thesaurus of Image-Ideas will be to you, or to

any thinker, discoverer, investigator, researcher, or inventor, or business man, in the work of Constructive Imagination! The individual here performs his creative work surrounded by all the materials which he will require—all at hand!

Employing another illustrative figure of speech, we may say that, by following the previously mentioned plan of the collection and classification of the materials of image-ideas, you have built and stocked for yourself a great and valuable Mental Laboratory. You have proceeded upon the same general plan as that employed by scientists in the creation of their experimental laboratories. In these laboratories — their workshops in which these scientists perfor mtheir experimental work—are to be found the various elements which, when combined in certain arrangements and proportions, produce the sought-for synthetic compositions. The scientist in his laboratory, and in his actual work, follows the same general plan which you are to follow in your experimental work along the lines of Constructive Imagination, i.e., he tries first this combination, and then that one, until he reaches the best working combination—the most satisfactory composition.

It is stated that Edison has perfected a similar laboratory, which he employs in his work of creative invention. It is reported that, sev-

eral years ago, he proceeded to test out every conceivable substance which seemed at all possible of being used as a filament for the electric-light bulb; and that, step by step, by experiment after experiment, employing the process of test, trial, elimination, and selection, he finally settled upon the best possible known substance for that special purpose.

Luther Burbank is said to conduct his experimental work in Plant Creation in a similar way: he tests, trys, experiments; combines, separates, eliminates; and finally, selects and preserves the "fittest."

Moreover, Nature, herself, in her creative evolutionary processes, is discovered to proceed along the same general lines; the history of Natural Evolution is but a record of ages-long series of experiments, tests, combinations, adaptations, and "natural selection," ending in the "survival of the fittest" for the particular purpose at each particular stage of the process. The plan is but the taking of a leaf from the Book of Nature—it is based upon the sound, fundamental principles of Natural Creation.

Herbert Spencer once thought out a plan whereby the patterns for fabrics, woven, knitted, or printed, and for wall papers and other decorative material, might be easily and systematically discovered or created by means of the same general plan to which we have referred, and which is followed in laboratory

work. His plan was that of combination and re-combination of certain elemental patterns, figures, and designs according to a definite and systematic plan of test for desirable combinations and conjunctions. He said concerning this plan: "Could there not be a methodical use of components of designs, so that relatively few ideas should, by modes of combination, be made to issue in multitudinous products? And could not this be so done that draughtsmen might produce them with facility, the system serving, as it were, not as a physical kaleidoscope, but as a mental kaleidoscope?"

Elmer Gates, the psychologist-inventor, is stated to have made many of his important discoveries and inventions in precisely the way indicated in our preceding consideration of Effective Constructive Imagination—the method of combining the elements of previously classified concepts and images. In fact, he is said to attribute his success in his inventive work directly to the psychological methods based upon this general principle, which he had previously worked out and systematized.

It is stated that Professor Gates has secured practically all of his many important discoveries and inventions in electricity and accoustics—his special branches of inventive work—in just this way. He is said to have spent several years and much money in acquiring the materials for his list of concept-images which

formed the elements of his constructive work in these branches. He is reported to have worked with a list of about 2,000 simple concept-images in electricity alone, from which he has produced about 15,000 complex idea-images. In acoustics, he is said to have worked with over 3,000 simple concept-images, from which he has evolved nearly 10,000 complex idea-images. Many believe that his methods and ideas, when finally known and adopted, will work a revolution in the world of inventive thought.

The general plan of the Mental Laboratory, or of the Mental Thesaurus, which we have outlined for you in this section of this book, is applicable not only for the inventor, the investigator, the researcher, but for the business man, the clerk, the salesman, the stenographer, or the worker in each and every line of business, trade or profession. The principle is universal and may be applied in every field of human endeavor and industry. In fact, it is not too much to say that some of the elements of this plan have been consciously or unconsciously employed by every individual who has worked his way up from a subordinate position to one of authority and command.

The essence and substance of the general idea is the gathering up and storing away of as many as possible of the facts associated with the work in which you are engaged—the ideas

of the things likely to be needed at some time in that work—so that you may have them within easy mental reach at such times in which you have need for them. The task is two-fold, viz., (1) the task of acquiring the necessary concepts, ideas and mental images in question; and (2) the logical, scientific classification and filing away of these facts, concepts and ideas, so that you may be able to "put your finger on them" easily and quickly when you have need for them. The individual who will saturate himself with these essential facts, and who will classify and store them away for future use, is certain to reap his reward of success, appreciation and achievement in his particular line of work.

Now then, let us proceed in the following section of this book to the consideration of the final steps or stages of the processes of Constructive Imagination: in them is performed the work of combination, adaptation, arrangement and composition of the elements or image-ideas which form the "stock in trade" of your Mental Laboratory.

VI

THE LAWS OF INVENTION

Having accumulated a sufficient store of idea-image materials, selected according to the principle of probable value in your work of Constructive Imagination, with the intent of achieving your Definite Purpose and Definite Ideal; and having classified these materials according to logical order or special relations of use, etc.; you are now ready to proceed to the task of combining, adjusting, adapting and creating these materials into new images, ideas or concepts, according to new plans of association, correlation or coordination.

You should never lose sight of the fact that all work of Constructive Imagination consists of joining together things already known—but in new combinations and orders of arrangement, correlation, or coordination. All great inventions are the result of evolution in recombination. We may trace the history of the evolution of the electric telegraph, the telephone, the electric light, the steam engine, the automobile, etc., through their many stages. Someone invented some simple recombination, but was unable to complete the task. Another added some new recombination; still another

discovered an improvement; and so on, until at the last, some inventor by a bold stroke of Constructive Imagination effected a more complete recombination, adding some new and important combinations, and the invention was perfected. No, not perfected fully; for in after years many other "improvements" were added, and the simple thing grew into greater perfection.

In the Field Museum, in Chicago, at one time were exhibited a series of models showing the evolutionary history of the locomotive. From the simplest and crudest beginning, the invention was traced along the course of its history, each decided improvement being shown. It was almost impossible at first to realize that the crude contrivances, the clumsy machines representing the first attempts, were the actual ancestors of the latest and most improved types of the modern locomotive—but such was the fact. In this connection, it is interesting to note that some of these earlier types were as truly the ancestors of the automobile, as of the locomotive.

The rapid progress in the late stages of the evolution of the modern automobile from the crude "horseless carriage" of a quarter-century further back, is a matter of personal knowledge to the middle-aged man of today. But the automobile had a much earlier history, as you may see by reading the article upon "Automo-

biles" in any good encyclopedia. It may surprise you to learn that as far back as 1802 a steam road-carriage was driven from Cambridge to London, England—a distance of over 90 miles.

It is said that the inflated rubber tire of the bicycle was an important factor in the rapid development of the modern automobile; and that the improvements in the gasoline engines, made possible by the development of the automobile, solved the great difficulty in the case of "flying machines," and thus made possible the modern aeroplane. Here you have typical examples of the "recombination" principle in Constructive Imagination. The history of the evolution of the telephone is also worth study in this connection; look it up in some standard encyclopedia.

Ribot says concerning this fact of the evolution of inventions: "Mechanical and industrial imagination, like esthetic imagination, has its preparatory period, its zenith and decline: the periods of the percursors, of the great inventors, and of mere perfecters. At first a venture is made, effort is wasted with small result,—the man has come too early, or he lacks clear vision. Then a great imaginative mind arises, blossoms; after him, the work passes into the hands of pupils, imitators, or perfecters, who add, abridge, modify. Such is the order."

The history of the application of steam as a power for operating machinery is a long one; its beginnings are found in the Eolipile of Hero of Alexandria, its critical and thrilling period is found in the work of Newcomen and Watt, its period of fruit-bearing lies in the present. The history of time-keeping, or time-measuring, instruments furnishes us with another example of the evolutionary progress of invention. First, came the simple Clepsydra, or water-clock, in which time was measured by the flow of water; then came a water-gauge causing a hand to move around a dial; the two hands, indicating hours and minutes, respectively. Then came a great improvement, i.e., the addition of weights, by means of which the Clepsydra became a true clock; this improved clock was at first cumbersome and massive, but gradually became smaller and lighter. Then, Tycho-Brahe contrived a clock-form capable of measuring seconds of time. Then came another great improvement, i.e., Huygens' invention of the spiral spring replacing the weights; the clock gradually evolved into the crude, large and cumbersome watch. The watch, in turn, by gradual steps evolved into the thin, small, and marvelously accurate modern watch.

Man observed the efficient natural instruments and implements of the lower animals—and began to improve upon them. He employed the models of the sharp cutting teeth of the

rodents as the designs for his evolution of the axe, the chisel, the saw. From the woodpeckers, he borrowed the idea which he gradually worked out in the form of the auger, the gimlet, the wimble. From the tigers and other carnivorous animals, he took his model for his crude knives and other cutting implements. From the beaver, he learned how to make and use the trowel. From the claws of the digging animals, he evolved the idea of the hoe and the rake. From the fish's fin, he secured the rudimentary idea of the oar. From the wing of the bird, he acquired his first idea of the sail. From the spinning insects, he learned the nature and use of the spindle and distaff. From these humble beginnings arose the marvelous array of the highly efficient implements, tools and machinery employed by civilized man today.

More than this: from his original weapons of offense and defense, the battle-axes and clubs, he evolved his tools of work such as the hatchet, the tree-cutting axe, the hammer. The lifting power of the battle-axe, or war-club, empirically discovered, gave him his first idea of the principle of the lever. The use of the rude sail developed the idea of the wind-mill; the rolling log in the water suggested the water-wheel to him—the water-wheel, first employed to grind grain, afterward was used to saw wood, lift heavy materials, move great hammers. From these rude applications of

natural power, he gradually developed the higher and more complex forms now in common use. The use of the horse and the ox to pull trees and logs, itself an adaptation, gradually evolved into the use of these animals to pull chariots and wagons; these in turn were the beginnings of the motor-vehicles of today.

Ribot says: "Every invention, great and small, before becoming a fixed and realized thing, was first an imagined idea, a mere contrivance of the brain, an assembly of new combinations or new relations. In inventions, man has imagined to a great extent. By the very law of the complexity of inventions, all inventions are found to be grafted upon one another. In all the useful arts, improvements have been so slow, and so gradually wrought, that each one of them passed unperceived, without leaving its author the credit for its discovery. The immense majority of inventions are anonymous —some great names alone survive. But, whether individual or collective, Imagination remains Imagination. In order that the plow, at first a single piece of wood hardened by the fire and pushed along by human hand, should become what it is today, through a long series of modifications described in special works, who knows how many imaginations have labored! In the same way, the uncertain flame of a resinous branch, guided vaguely in the night, leads us through a long series of inven-

tions to gas and electric lighting. All objects, even the most ordinary and now common, that now serve in our ordinary, every-day life, are 'condensed Imagination'."

One is impressed by the striking analogy between the processes of Invention, as just described, and the processes of "grafting" in horticulture. Horticultural "grafting" is defined as: "The process of taking a shoot or scion cut from one tree or shrub, and inserting it in a vigorous stock of its own or a closely allied species, so as to cause them to unite, and thus to cause the graft to derive a larger supply of nutritive power than it could otherwise obtain."

By reference to the history of any invention —we have given actual illustrations of several —you will see that the new idea-image always is grafted upon the stock of some older idea-image. The new contrivance is the graft of a new contrivance upon an earlier contrivance either of Nature or of Man. Nature also is seen to proceed in the same way in her processes of Creative Evolution.

Bergson tells us that "Creation" and "Evolution" are but two names for the same universal creative process: all Creation is Evolution and all Evolution is Creation. He says: "A great creative process is in progress, sweeping everything along in its course. The actual present is all existence gathered up in this cre-

ative process. The past is also gathered up into it, exists in it, is carried along in it, as it presses forward toward the future. It is an unceasing becoming, which preserves the past and creates the future. It is Creative Evolution —a process in which Past, Present, and Future are involved."

Psychologists and philosophers alike are in agreement concerning the fundamental fact that even the highest forms of Constructive Imagination are dependent upon the raw materials of reproduced sense-experiences; and that Constructive Imagination can build only with these materials, for it has no others with which to build. But this fact has been over-emphasized—in some cases to even such an extent that the term "creative" has been tacitly denied to even the highest activities of the Constructive Imagination. This particular view is too often presented as "the whole truth," the other half of which must be supplied in order to perfect the whole. We ask you to consider the following statements expressing and illustrating the opposing viewpoints; for we wish you to perceive the truth in both of its aspects, and thus see the thing as it is.

Thought from the first of these two respective viewpoints furnishes the report that even the most efficient Constructive Imagination is "tied to the stake of perception by a cord of

greater or less strength." In this view, the Imagination is held to be entirely dependent for its working materials upon the perceptions arising from sense-experience. Those holding to this view argue that, because of this fact, the Imagination is not truly a "creative" power; that, inasmuch as it does not create its own materials, and must draw its materials from outside of its own realm, it does not truly "create," but merely "puts together," in more or less new combination, the materials which it obtains from without. Say these reasoners, the Imagination is entirely dependent upon outside materials for its constructive work; it is limited to the materials obtained through the experience of its owner, or those of others.

These thinkers point out that the Imagination is like a builder who uses the material of a disorderly pile of bricks in order to build a fine house; or like the watchmaker who puts together the numerous parts of the intricate timekeeper; or like the artisan who, employing masses of metal, makes an engine, a sewing machine, a bicycle. Carrying this idea to its logical conclusion, we may say (as one writer points out) that :"Thus a painting is a mere combination of forms and colors; an oratorio, of sounds; an epic poem, of words or ideas previously existing in the mind. The elements of a poem like 'Paradise Lost'—its streams, flowers, angels and deities—were all in the

mind of the poet before he began to write, and all that Imagination did was to combine them into one harmonious whole." In short, in this view, Imagination is merely the power of **combination**—it does not include the true creative element; its materials are previously existent—all that Imagination does it to put them together.

Thought from the second viewpoint furnishes a somewhat different report—its argument being more or less of the nature of what in legal procedure is known as a "demurrer." A "demurrer" (in plain language) asks the question: "Well, even admitting that what you say is so—**what of it?** The "demurrer" asks judgment on this point: whether the matter alleged by the opposite party, even assuming it to be true, is sufficient in law to sustain the action or the defense, as the case may be.

Say this set of reasoners: We admit that the Imagination does not "create something out of nothing"; and that its creative work is performed by combining, arranging, adapting, or weaving the raw materials furnished by perception, apperception and experience. But is this not true of all other kinds of **creative** work of which the human mind has any knowledge? Does the human mind know of anything having been "made from nothing?" Can it form a conception of any such happening? Is not the term "creative" a statement of the act of

putting-together, combining, manufacturing, making, composing, constituting "something from other things"? If this be so—and it is beyond question true—then the opposing side is merely quibbling over the meaning of a word and are not dealing with facts!

These thinkers say further: The opposite side has told but a half-truth—not the whole truth; that which is withheld is as important as that which has been stated. Every work of art, every process of reasoning, every product of hand, brain, reason, imagination, or their combinations, is a composition, a joining, a fusing, a welding, a putting-together. Sounds are combined in music; words are combined in a poem; colors are combined in a painting; but do sounds, words, and colors alone make these productions works of art? Shakespeare's immortal works are, in this view, but aggregations of letters of the alphabet; but did Shakespeare play no part in the creation—was he not a creator of his works? The omitted portion of the truth is this: It is not alone the materials employed in the construction, but also **the manner in which these materials are combined, arranged, and put together,** that constitutes the creation. As a writer has said: "This power of ideal conception which uses these dead elements to express its living ideals, is the work of the Constructive Imagination!"

Brooks gives us the essence and spirit of this second viewpoint, in the following able statement made many years ago:

"Imagination can combine objects of sense into new forms, but it can do more than this. The objects of sense, in most cases, are merely the materials with which Imagination works. Imagination is a plastic power, moulding the things of sense into new forms to express its ideals; and it is these ideals that constitute the real products of Imagination. The objects of the material world are to it like clay in the hands of the potter; it shapes them into forms according to its own ideals of grace and beauty. **He who sees no more than a mere combination in the great creations of the Imagination, misses the essential element, and elevates into significance that which is merely incidental.**"

You will readily see that here, as in many other cases, the truth of the matter is found only in the reconciliation of the two opposing sides; each side voices a half-truth—the whole truth is found by uniting the two halves. It is true that the Imagination must do its work by employing the materials of perception, apperception, and experience; but there is the marvelous "combining power" required to "put together" these elements, factors, and parts of the material so furnished. A child has the necessary twenty-six letters plainly marked on its alphabet building-blocks; but it might try

for eternity to compose a "Paradise Lost," one of Shakespeare's Plays, a Synthetic Philosophy, an Emerson's Essay, or a work on the Higher Mathematics, by means of an accidental "putting together" of those letters! It needs that "something else" to accomplish the task; and that "something else" is the discriminating, selecting, combining faculties and powers of the efficient Constructive Imagination!

Finally, there is another element usually involved in the higher products of the Constructive Imagination. In the processes of the Constructive Imagination, just as in many of Nature's subtle processes, the work of "creation" is accomplished, not by the mere more or less purposive "setting in place" of separate bits of material, as, for example in the building of a toy-house with the materials of building-blocks, or of a card house with a pack of playing cards; there is often, rather, a "fusing" of material and its subsequent hardening, as, for instance, in the fusing of copper, tin and zinc, into the "new" metal called bronze; or the crystallization of the particles of water into ice. Water is "created" from particles of oxygen and hydrogen, but these two elements become fused by chemical action, and really form a new substance, not merely a "put together" mixture. Thus, things may be put together in such a subtle way as to constitute a new thing differing from either of its constituents.

A thing is often more than "the mere sum of its parts"—to this sum must be added the new element of "mutual relation" or "working relation." This new element figures largely in the **creative** processes of Constructive Imagination. Thus, King Milanda's Chariot, in the ancient Buddhist story, consisted not alone of its several parts, but also of the arrangement, mutual relations, and working unity of those parts—these last-mentioned elements being supplied by the Constructive Imagination of the designer of the chariot. Again, the color, Green, is composed of Yellow and Blue—yet Green is a true color, differing from either of its compositive parts, or from both of them when not united.

Ribot says: "All creation whatever, great and small, shows an organic character; it implies a unifying, synthetic principle." Colozza says: "We know nothing of a complex psychic production that remains simply the sum of its component elements, each preserving its own character, with no modifications. The natures of the components disappear in order to give birth to a novel phenomenon that has its own and particular features. The construction of the imaginative ideal is not a mere grouping of past experiences; in its totality it has its own individual characteristics, among which we no more see the composing lines than we see the components, oxygen and hydrogen, in

water." Wundt says: "In no scientific or artistic production does the whole appear as made up of its parts, like a mosaic." Mill says that imaginative creations are cases of "mental chemistry"; the facts bear him out in the statement.

Neither should it be forgotten that a very high order of mental activity is manifested in every process of true Constructive Imagination. The mental powers of Comparison, Discrimination, Deliberation, Judgment, and Selection are involved in the higher processes of Constructive Imagination. The imaging powers produce and exhibit a great number of images, each of which is a candidate for the office which Constructive Imagination is striving to fill properly and adequately. Here we have another instance of the "struggle for existence," and the "survival of the fittest." Here, "Many are called, but few are chosen." Image after image is produced, examined, tested, and then either rejected or else either tentatively or permanently accepted.

The processes of Comparison, Deliberation, Discrimination, Selection, and Judgment are manifested in Constructive Imagination as truly as in the processes of the Will. Constructive Imagination selects its material quite as truly as does the builder of houses or bridges. Imperfect material is rejected, and doubtful material is subjected to a test or ex-

periment. Constructive Imagination is not at the disposal of every image that appears in its field of mental vision: instead, it exercises its power and prerogative of choice and decision, as truly as do Reason and Will.

In fact, the presence of Logical Thought is manifest in the higher processes of Constructive Imagination, the two classes of mental activities being so closely interwoven in many cases that it is quite difficult to distinguish between them. Reason scrutinizes closely the images which present themselves as candidates for admission to the inner chambers of the mind. Many appear, but few are accepted. Only those are admitted which comparison determines to be fitted for the requirements of the purpose occupying the field of attention.

As a writer says: "The inventor never thinks harder than when he is comparing his images with each other, and rejecting the unfit. Thought also enables him to change an image in conformity with a certain plan." Another says: "The predominance of the exact logical processes establishes from the outset the difference between the 'imaginative dreamers' and the 'imaginative thinkers'." Wundt, indeed, goes still further, when he lays down the rule that: "Imagination is, in reality, a thinking in particular sense ideas; as such it is the source of all logical or conceptual thought." And a leading teacher says: "The man who

does not think in images will never be a clear thinker, and those who are compelled to follow him are to be pitied."

Thus, you see, that just as in your Logical Thought you should avail yourself of the powers of Constructive Imagination, so in the processes of Constructive Imagination you should always endeavor to coordinate the powers of Logical Thought with those of the strictly imaginative faculties.

VII

CREATIVE COMPOSITION

The General Rule tells you to: "Weigh the various factors one against the other, taking into consideration the associated and related values of each in the general idea, plan or purpose. Determine in this way which are the primary factors involved; which are the secondary; and which are the lesser values. Concentrate on the prime factors, and make these the central points in your process of Constructive Imagination—the focal centres around which you purpose grouping the associated factors or elements."

The General Rule also tells you then to: "Experiment by tentatively placing the secondary factors in association with and relation to the prime factors, regardless of how improbable and incongruous at first may seem such association and relation. Around the letter "A" build alphabet-block combinations of the letters B, C, D, E, F, G, etc., blocks, to see if they make sense, or if they suggest anything of rational meaning to you. Discard all combinations that seem lacking in utility—but only after actually making the test and experiment. When there are several apparently sat-

isfactory, or fairly promising combinations, weigh these one against the other to determine their comparative values, discarding the lesser values, and retaining the greater, until you have secured the survival of the fittest. Then proceed to test out the lesser factors in the same way, working out all the details of the plan."

In the above-stated principles of the General Rule there is condensed the statement of the general methods employed by Man in all of his inventive processes, from past time to the present—and in fact, the methods seemingly employed by Nature herself. There is, therefore, nothing entirely new in the method. The "newness," however, is there: it consists of the fact that Man has discovered how to apply this method consciously, deliberately, systematically and scientifically, instead of blindly, instinctively, hap-hazardly, and in a hit-or-miss manner. Modern psychology has simply harnessed this mental process, and now drives it under perfect control. Thus, the old method becomes a new one, because applied in a new way.

The old-new method has been given several names. Perhaps the name, "Creative Composition" fits it as well as any, so we shall employ it here. "Composition" means: "The act of composing, putting together, joining together, uniting, associating, correlating."

"Creative Composition," then, means: "The act of recomposing, recombining, readapting, rearranging, or newly putting together the mental image-ideas of Man or of Nature, in the process of Constructive Imagination proceeding toward the achievement of a Definite Purpose and the realization of a Definite Ideal."

In Creative Composition, you begin with the building materials of mental image-ideas which you have gathered together and arranged according to a convenient and efficient classification. For the purpose of a familiar illustration of the scientific principle involved, let us ask you to think of these building materials of mental image-ideas as resembling the familiar building-blocks of childhood.

You have the general idea of your Definite Purpose and Definite Ideal before you. You perceive clearly the obstacle which you wish to overcome; the new means to an old end, or new ends for old means; the bridge which you wish to build over the space separating the two sides of the stream of Ideas. How shall you proceed to accomplish these ends by means of your imaginative building-blocks? The answer is: Simply as the child proceeds when he wishes to build the structure which he has in mind, i. e., by taking up the various building-blocks of various sizes and forms, and experimenting with them. The child puts this

block alongside of that block, and finding that the combination will not answer, he continues to make new and still newer combinations, until at last he discovers the combination that will work.

If you will examine the history of inventions and scientific discoveries, you will find that the great triumphs in these respective fields have been made in just this way. The two terms "Experiment" and "Experience" are closely connected; both have the same origin—both spring from the Latin word "experior," meaning, "to try." Experiment is a trial or test made with the hopes of discovery. Experience is the knowledge gained from experiments. All inventions, all scientific discoveries, all results of Constructive Imagination, proceed along the line of Experiment, trial, tests, "putting this and that together" to "discover how it will work." This is the whole story, told in a few words.

In working toward the achievement of your Definite Purpose and Definite Ideal through the Constructive Imagination, you must "put this and that together," along the lines of experiment, trial and test. You must arrange your imaginative building-blocks, first in this new combination, and then in that one; you must at times even break apart some of the blocks, using portions of them to add to others, and thus to form new combinations. You must

proceed with the idea that: **"Somewhere in these blocks there abides the certainty of a successful combination; and it is 'up to me' to find it."** In your imaginative building-blocks there is hidden the secret of the exact combination for which you are seeking; you can discover this only by experiment; and if you continue to experiment faithfully and intelligently you will surely discover the solution of the problems.

Here is the process reduced to a familiar illustrative formula: You have twenty-six imaginative "alphabet blocks" before you for your experiment, each block having a letter of the alphabet stamped on its face, from "A" to "Z," inclusive. You start by taking the "A" block and and combining it with the "B" block, then the "C" block, and so on until the "Z" block is reached. If the desired combination is not reached in this way, you begin with the "B" block and test it with all the blocks from "C" on to the end of the list. Then try the combination of the "C" block with all the others, in turn, from "D" downward. By continuing this process sufficiently long, you will exhaust the possibilities of the two-letter combinations.

If necessary, you may then proceed to experiment with the three-letter combinations, following the same general rule. Then, if necessary, proceed with the four-letter combinations, in the same way. And so on, if the desired result is not

obtained, until the blocks have been tried and tested in every possible combination or arrangement, order and sequence.

By this process (extended to its utmost limits), you will in turn have formed the combination of every one of the many thousands of words in the largest English Dictionary. Stop to think of it for a moment: Every word in any or all of the great dictionaries is made up and composed of combinations of certain of 26 letters—no more. And a list of new words, exceeding in number the known words, could be composed and made-up in the same way.

But, of course, in the actual practice of Creative Composition, you will not be faced with so formidable and so complicated a task as that above illustrated. Your combinations will be far more simple, owing to the fact that your imaginative image-ideas are classified properly. For instance: if you wish to conjoin your "house" block with your several "building material" blocks, you have but to go to your "building material" compartment, and pick out the following respective "building material" blocks, i. e., "brick," "stone," "wood," "iron,' "steel," "concrete," etc. If you wish to form a combination between the image-idea of some utensil and some undetermined particular kind of metal, you have but to test your "metallic utensil" block with each of the following "metal-class" blocks, i. e., "iron," "copper," "gold," "silver," "nickel," "zinc," "platinum,"

"lead," "tin," "antimony," "manganese," "mercury," "aluminum," "cobalt," "tungsten," etc.

If you wish to associate your image-idea of a textile fabric with that of some particular kind of textile material not yet decided upon, you have but to test out the respective blocks of "cotton," "flax," "hemp," "jute," "linen," "wool," "silk," etc., until the desired combination is discovered. If you wish to employ a geometrical form, you will take out each of the image-idea blocks named in our diagram of Geometrical Figures in a preceding section of this book, until you discover the one best suited for the purpose.

If you wish to invent or to discover some new particular color, you need but to take out the three blocks of the Three Primary Colors, i. e., Red, Blue, and Yellow, and then by experimental combinations, employing shade and tint agencies, you will in time reach any possible tint, shade or hue in the great world of colors. Nature has proceeded in just this way, for she has made a world of almost infinite variety of material things, by the combination and "Creative Composition" of about eighty elements of material substance, these in turn having been created and recombined from still more elementaly material.

As we have said, all inventions and discoveries have been made in just this way, viz., by the process of Creative Composition. The locomotive is a combination of "wagon," certain mechanical agencies and appliances, "stove," "tea-kettle" and

"engine." The automobile is the combination of "wagon," "stove," "gas," "explosion," "engine," and certain mechanical contrivances. The wagon was the primary building block of both locomotive and automobile. The wagon, in turn is but the combination of wheel, axle, and body; the wheel itself being an evolution from the rolling log.

The aeroplane is but a combination of "kite," "engine," and "propeller"—all old ideas formed by Creative Composition into a new one. The steamboat is but the idea of "boat," plus "steam-engine" and "mill-wheels." The primitive boat, itself, was but the combination of "floating log," plus the idea of "hollowing-out." The farm-tractor now employed in plowing, etc., is but the combination of "plow" and "automobile." The plow itself was the combination of the image-idea of "hard sharpened stick," and magnified "spear-head" or "battle-axe."

In short, every contrivance of Man, every tool, every instrument, every utensil, every article designed for use, of each and every kind, will be found to have been evolved from very simple beginnings along the line of experimentation and Creative Composition. Every thing made by Man is "put together," made up of material parts; and the idea of every such thing is "made up" of simpler and more elemental ideas, united and combined in Creative Composition. This is the only way in which Man has ever invented or contrived anything; and this is always the way in

which you must proceed in your work of Constructive Imagination. The truth of the matter is so simple that most persons entirely overlook it: you have possibly never thought of it until you now have it presented to you in this book—and this without any reflection on your intelligence, we assure you.

But here is an important point. While Man has always employed this principle in his inventive and creative work, he has done so almost entirely instinctively and unconsciously—and with an almost entire absence of scientific system and logical order. Now that modern psychology has uncovered the process for us—has taken off the cover so that we may see "how the thing works," and "how the wheels go 'round"—we may hope for much more effective and efficient exercise of the power of the Constructive Imagination in the future. Already a number of great inventors and scientific investigators have taken advantage of the new teaching of psychology concerning this phase of mental operation, and they have thereby attained results far superior to those possible under the old hit-or-miss methods.

Artists and writers, also, employ the same general methods of Creative Composition, though in most cases in a more or less haphazard and instinctive way. The various characters, situations, scenes and comibnations of pictures, stories and plays, are gathered together from a comparatively small list of elements—the great variety of results

arising from the many possible combinations and arrangements of these few elements. If this seems incredible to you, you have but to remember the almost infinite number of possible combinations of the 26 letters of the alphabet—the largest dictionary contains only a small proportion of the possible word-creations by such combinations. Again, from 52 playing cards, are derived all of the numerous combinations of "hands" dealt out in card games—in many games, in fact, a smaller number of cards is used.

That modern writers are turning this principle of Creative Composition to practical account is evident to those who study the advertising columns of magazines devoted to the writing craft. For instance, there is advertised a book for story-writers called "The 36 Dramatic Situations," which is described as follows: "A catalogue of all the possible situations that the many relations of life offer to the writer. The author has read and analyzed thousands of plays and novels, and resolved their basic story material into fundamental categories. A true philosophic consideration, but practical in every respect, that makes available to every writer all the possible material that life offers him." Again, there is advertised a book called "The Fiction Factory," which is described as follows: "A writer who wrote thousands of stories and made thousands of dollars by setting up a story-mill, tells how he did it, and gives a record of his work in this

instructive, stimulating book. * * * It should be in the hands of everyone interested in how authors do their work." You may smile at these advertisements, and shrug your shoulders—but you buy and read the stories so composed.

Jack London, the popular novelist, in his story of "Martin Eden" (which many regard as being largely autobiographical) pictures his hero as busily engaged in writing "newspaper storiettes" for the syndicates which supply them to the newspapers in all parts of the country. These productions were what are known as "pot boilers," of course—written hastily to meet the popular demand and to gratify the popular taste. Martin had not yet arrived at the place and time where his more finished, more subtle, and more realistic efforts were appreciated by readers and accepted by publishers.

London pictures Martin busily engaged in reading over his rejected storiettes, and thus finding out how not to write such productions, as well as "just how" to write them. He found out what to put in, and what to leave out. In this way he worked out a perfect formula. This formula consisted of three parts, viz., (1) A pair of lovers jarred apart; (2) They are united by some deed or event; (3) Wedding bells. He reached the conclusion that the third part was an unvarying quantity; but that the first and second parts could be varied an infinite number of times.

The application of the formula, in London's own words, was as follows: "Thus, the pair of lovers could be jarred apart by misunderstood motives; by accident or fate; by jealous rivals; by irate parents; by crafty guardians; by scheming relatives; and so on and so forth. They could be reunited by the brave deed of the man-lover; by a similar deed of the woman-lover; by change of heart in one lover or the other; by forced confessions of a crafty guardian, scheming relative, or jealous rival; by voluntary confession of same; by lover storming girl's heart; by lover making long and noble self-sacrifices; and so on, endlessly. It was very fetching to make the girl propose in the course of being united, and Martin discovered, bit by bit, other decidedly piquant and fetching ruses. But marriage bells at the end was the one thing that he could take no liberties with."

The author relates that Martin soon worked out half a dozen stock forms, which he always consulted when constructing storiettes. "These forms," he adds, "were like the cunning tables used by the mathematicians, which may be entered from top, bottom, right, and left, which entrances consist of scores of lines and dozens of columns, and from which may be drawn, without reasoning or thinking, thousands of different conclusions, all unchallengably precise and true. Thus, in the course of half an

hour, with his forms, Martin could frame up a dozen or more storiettes, which he put aside and filled in at his convenience. * * * The real work was in constructing the frames, and that was merely mechanical. * * * He had no doubt whatever of the efficacy of his formula. * * * His machine-made storiettes, though he hated them and derided them, were successful."

We have also read the story of the early life of a great painter of whom it is told that in order to keep the wolf from the door he painted stock pictures for the trade—pictures bearing a fictitious name—which were designed for sale at the popular auction houses of that time. He could paint such pictures in a day or two—sometimes in a few hours, in fact—and, in spite of their hasty preparation, they showed signs of merit and skill (if not of genius), and appealed to the taste of those attending the auction sales; they sold well and served to keep the pot boiling. His main difficulty was that of providing subjects for his pencil and brush; so he set to work to overcome this difficulty. Like Martin Eden, he discovered a formula—he invented a system.

He prepared a series of cardboard disks; upon each disk he wrote the name of some main element or detail of a picture. The four seasons each were thus noted—each suggesting the associated facts of scenery. Mills,

meadows, hills, mountains, the sea, lakes, forests, etc., each were noted down. Thus he had at his disposal several hundred elements or details of a popular picture. He made a great combination wheel of his disks, so arranged that when he gave the wheel a twirl, it would finally come to rest with a number of details appearing directly under the arrow point placed just over the top of the wheel. Thus he would read, for instance: "Autumn," "hill," "lake," "old-mill," etc., etc., and he would then have the general subject of his picture—the details and treatment to be supplied from "fancy," inclination, and the mood of the moment. In this way he avoided too marked monotony, too much repetition, and, above all, too much time and thought expended upon hunting for subjects.

"Sordid"—"mere mechanical construction" —"prostitution of talent"—you may say. Well, perhaps so; yet the plan accomplished the purpose, and overcame the obstacles—in each case it served as a stepping-stone to better things. The real fault was in the cheapness and superficiality of the work—in its absence of animating "spirit"—not in the mechanism of arranging and combining details. For even the greatest artist and writer must have his "mechanism," as well as his "genius" and "inspiration." You would be surprised to learn how laboriously the materials and the combinations of

the great artists, writers and playwrights, are obtained and conjoined. You see only the finished product—you lose sight of the mental mechanism which built it up. Yet that mechanism is always there—it must be there. Art serves to conceal it, but not to dispense with it. The machinery is always present and active—though there be also present "the god in the machine." Even God or Nature employs machinery in Creation!

We shall close our consideration of the methods of Efficient Constructive Imagination by reminding you that the General Rule finally tells you: "Having reached at least a fairly satisfactory working plan, idea, invention, or solution of your problem, you should then carefully detach yourself from it—you should move from your personal point of view, and try to see it as others will see it. Try to imagine the effect it will have on the persons whom you wish to be interested in your finished product; how it will meet with their requirements, satisfy their wants, arouse their desires for it, etc. Your own created conjunction, plan, method, design, or invention naturally will seem to you as the infant does to its mother—no mother is an unprejudiced critic of her own baby. You must see the thing as others see it, in order to arrive at an intelligent idea of the utility of your idea. You must use past experience, reason, judgment, discrimina-

tion and cool decision in this latter testing process.

The above statement speaks for itself, and is sufficiently comprehensive to stand alone. All that we wish to add is these few words: If your detached inspection and survey convinces you that your work will not fill the requirements of those for whom it is intended, then, back to the mental work-shop with it; you will be able to cure the defects, strengthen the weak points, and to reshape the form in accordance with "the heart's desire" of Those-Who-Must-Be-Satisfied, by precisely the same methods already employed. Find out first what is required, then adapt these new factors to the old form by the same old method, and the desired result will be obtained. The principle is universal in its application, and will fit any case to which it is applied. It is as invariable as the Laws of Mathematics; but, like those Laws, it requires skill, patience, work and determination to apply it to difficult problems.

* * * * *

We can close our treatment of the subject of Efficient Constructive Imagination in no better way than by quoting the statement of Herbert Spencer, in which he attributes to Constructive Imagination the rank of "the highest intellectual faculty." His statement follows: "Instead of Constructive Imagination

being, as commonly supposed, an endowment peculiar to the poet and writer of fiction, it is questionable whether the man of science, truly so-called, does not possess even more of it. When Imagination rises into the constructive form, there is an ever-increasing originality which tells at once on the industrial arts, on science, and on literature." Spencer might as truly have added: "and on business, on manufacturing, on selling, on distribution, or service of all kinds wherein wants are met, demands filled, obstacles overcome, and 'thwarted purposes' set aright."

Without the power of Constructive Imagination, man will never be all that there is in him to be; never do all that is in him to do; never reach all that is in him to reach. "It lights up the whole horizon of thought, as the sunrise flashing along the mountain-top lights the world."

VIII

THE ART OF CREATION

Passing on from the consideration of the more familiar forms of the application of Efficient Constructive Imagination, you are now asked to enter into a consideration of a still higher phase of that Creative Power which is a mode of manifestation of your Personal Power. Your Personal Power, in turn, is but a phase of the All-Power—that POWER in which you live and move and have your being, and which is that ALL which is in All-Things, and in which All-Things are. You are now asked to consider the subject of your Creative Power in its higher phases of manifestation.

Creation is an attribute of the highest Power of which you can have any knowledge, or of which you may dream. Whatever else the Supreme Power may be, or may not be, it must be conceived as Creative Power. The fact that the Power behind Creation must be Creative; and the fact that Creation must be the result of Power; must bring to the mind of the true thinker the conviction that in Creative Power is to be found Power in its most essential and elemental aspect. In Creation you participate with the Supreme Power!

To "create" is to "bring into being; to cause, to produce." Man may be said apparently to create in several ways, yet at the last he is found to be able to create in only one essential way; and that one essential way in which he can create is found to be the way in which the Ultimate Creative Power proceeds in its own creative work. It will be well for you to become convinced of the essential and elemental nature of your own Creative Power, in order that you may realize the majesty and dignity of the forces and energies which you call into play and operation in your own creative activities.

First of all, you can create material objects by means of combining other material objects. Thus you bring into being houses, boats, railroads, shoes, and every other class of things which are manufactured or made from material things.

Secondly, you can create material things by changing the arrangement of the constituent parts of other material things, as for instance, you create butter by means of churning cream, or you create ice by freezing water.

Thirdly, you can create things by analysis or separation of the parts of other things, for instance, you create certain chemical substances by separating them from more complex substances of which they have formed a part; or you create a statue by cutting away the

surrounding marble from about the form of the created thing.

The above classification will be found roughly to include practically all the forms and phases of creation with which you are most familiar. But we have omitted from it its most essential element—that element which constitutes the spirit of all of your creative work, namely the element of **Mental Creation.** At the last, all of the above-mentioned forms of creation are discovered to be merely the objectification of the subjective Mental Creation.

In the three forms of creation, above mentioned, you have merely employed the materials at hand, and formed new combinations with them. You brought none of these original materials into being. You merely found them in being and gave new objective forms to them. But how did you arrive at a knowledge of those forms which you afterward objectified? Here we come to the heart of the subject. The answer is: The forms of your creations, each, any, and all of them, existed in your mind before you objectified them. Your creations, then, at the last, are seen to be Mental Creations in the sense that they were mentally designed and deliberately caused by you.

Of course, if you merely threw the materials together without any design, then you cannot be said to have mentally created the

new thing—in that case the latter was created, not by you, but by the forces of Nature. This, also, would be the case in the event that you discovered a chemical process "by accident" and without design, or where you unwittingly set into operation some of Nature's forces, and thereby called into appearance certain new forms, arrangements, separations or combinations. But wherever and whenever you have **deliberately** employed your Creative Power toward definite ends, then your first step and stage has been that of Mental Creation.

Everything that man has ever created, contrived, built, invented or manufactured has first been created in his mind as a Mental Image. The Brooklyn Bridge, the Eiffel Tower, the Pyramids, and also the simplest mechanical construction, each and all existed in the minds of their inventors, architects and builders before they took on objective form. There can be no such thing as constructive or creative work by man without the antecedent mental creation by means of mental images. Therefore, in its essential and elemental nature, all human creation is Mental Creation.

Philosophers have carried this idea up to the realm of metaphysics, and have asserted that we are compelled to think of the Supreme Creative Power as having first formed the mental image of the Universe before the form of the physical world could have come into being.

More than this, they hold that the actual creation of the "materials" of the Universe must have been mental, because the material substance could not have been present until it was called into being by the mental forces—that, at the last, the material world is but a "materialization" of previously existing mental images or forms, and that the very work of the "materialization" was performed by mental powers and energies, for there were no material powers present and existent in the beginning.

Edward Carpenter illustrates this idea in the following statement contained in one of his books: "There is now a disposition to posit the mental world as nearer the basis of existence than is the material world, and to look upon material phenomena rather as the outcome and expression of the mental. In observing our own thoughts and actions and bodily forms coming into existence, we seem to come upon something which we may call a law of Nature, just as much as gravitation or any other law —the law, namely, that within ourselves there is a continued movement outwards, from feeling toward thought, and then to action; from the inner to the outer, from the vague to the definite; from the emotional to the practical; from the world of dreams to the world of actual things and what we call reality.

"We may fairly conclude that the same progress may be witnessed both in our waking thoughts and in our dreams—namely, a continual ebullition and birth going on within us, and an evolution out of the Mind-stuff of forms which are the expression and images of underlying feeling; that these forms, at first vague and undetermined in outline, rapidly gather definition and clearness and materiality, and press forward toward expression in the outer world. And we may fairly ask whether we are not here within our own minds witnessing what is really taking place everywhere and at all times—in other persons as well as in ourselves, and in the great Life which underlies and is the visible universe.

"You may say that there is no evidence that man ever produces a particle of Matter out of himself; and I will admit that this is so. But there is plenty of evidence that he produces shapes and forms; and if he produces shapes and forms that is all we need. For, what Matter is in the abstract no one has the least experience and knowledge. All that we know is that the things we see are shapes and forms of what we call Matter. And if (as is possible and indeed probable) Matter is of the same stuff as Mind—only seen and invisaged from the opposite side—then the shapes and forms of the actual world are the shapes and forms of

Mind, thus projected for us mutually to witness and to understand."

But we do not need to fall back upon metaphysical speculations in order to support our general contention that there is Mental Image back of every phase and form of Physical Creation. Throughout all Nature we may find striking instances and illustrations of the general principles that there is an "idea," or "mental image or form," present in all of Nature's creative processes, from the formation of a crystal to the development of the forms of living creatures. The formation of a crystal; the development of the plant or tree from the seed; the evolution of the living form from the egg-cells; all of these reveal to us the fact that "idea" or "mental form" is immanent and involved in every process of birth and growth in Nature. This being perceived, we are justified in claiming that "All Creation is Mental Creation"—the materialization of a mental form, image, or idea.

Throughout all Nature we may perceive the presence of an Inner Image or Form which serves as the framework or pattern upon which Nature materializes her objective forms. These ideal forms have attracted the attention of the philosophers, and they have sought to account for their presence. From the time of Plato down to the present, philosophers have speculated concerning the nature and evident pres-

ence of these ideal forms upon which Nature builds her material shapes and structures. In the above quotation from Carpenter you will note the reference to "the evolution out of Mind-stuff of forms which are the expressions and images of underlying feeling; these forms, at first vague and undetermined in outline, rapidly gather definition, and clearness, and materiality, and press forward toward expression in the outer world."

Paul Carus, a modern philosopher, also says: "All science consists in describing forms, and tracing their changes. All differences that we can scientifically comprehend are the forms of matter or energy. All that we can do or try to do is by molding and remolding things. Forms are the types of possible entities, and do not exist as such in the shape of material realities, but we cannot say that they are non-existent, nor that they are nought. They are 'may-bes' or potentialities, and according to the law of their combination the things of the material world are molded. They are the factors which determine material reality; and in this sense pure forms are more important than are material and actual things. They are super-real, and their super-reality contains the norms of all existence. Pure Form looks like non-entity, and yet the laws of Pure Form are the factors that determine existence in all of its

details. Pure Form conditions the Cosmic Order and governs the universe."

The "Pure Form" of the philosophers is undoubtedly immaterial in its nature; it clearly must be Mental Form. In other words, Nature is seen to proceed just as does man in his work of creation. She builds the material universe upon mental patterns, or upon mental frameworks. Just how or why this is so the human mind is unable to grasp, but all investigation reveals the fact that the creative processes proceed in just this way. In this correspondence between human creative activity, and that of the Cosmos, we have a striking illustration of the principle embodied in the ancient Hermetic axiom: "As above, so below; as within, so without." The Macrocosm and the Microcosm evidently work under the same laws, and manifest according to the same general principles.

Beginning with the particles of which the atoms are composed, and with the atoms of which all forms of matter are composed, we see the creation of material forms apparently proceeding in accordance with some pre-existing pattern, ideal form, type or idea. Atoms group themselves in certain combinations, forming certain elements of matter, all of which forms are true to general types, and are as nearly identical as the bits of metal which are cut out by the same die or else produced from the same mold. This uniformity and adherence to type

certainly is explainable only upon the hypothesis that before the material form is produced there must exist some pattern, type, idea or mental form which governs the materialization. There is no hit-or-miss, or higgledly-piggledy arrangement of the atoms—they group themselves according to typical forms, and these forms must exist ideally before the material form can be produced.

That whch we call the "inner nature" of anything is really a combination of certain inherent "mental forms" which are constantly striving to express themselves in action and objective appearance. The "inner nature" of the atom is clearly represented in and by its activities—the "inner nature" of the animal is likewise so represented by its action and its physical form. The voluntary, self-moved, spontaneous actions of any particular thing clearly represent the "inner nature" of that particular thing. The differences between classes of things result from the difference in the "inner natures," and the "inner natures" are merely the ideal forms or types, the mental images, which constitute the elemental and essential basis of the character of those things.

The operation and manifestation of these "inner natures," or creative ideal forms, has a striking illustration in the case of the crystallization of the minerals or chemical elements. These crystals are formed in the "mother

liquor" according to well-known and clearly defined shape, form and order. Each species of crystal has its own particular form and arrangement—some have a range of several of such forms, each, however, being true to type and pattern. Each species of crystal obeys its own order and rule concerning its form. Crytals grow just as do plants, according to a certain pattern and type-form. These forms and orders of arrangement are not caused by outside forces or energies—they result from the "in forces" of the mineral or chemical substance—from the operation of internal, inherent energy, and in response to some inner idea, form or pattern which constitutes the "inner nature" of the mineral or chemical compound.

In the same way, we find that in the material form of the germ of the acorn there dwells an "inner nature" composed of these ideal forms or mental images, these inner patterns. These inner forces determine the material form which the sprout, root, leaves, and the complete tree shall assume. The deviations from the ideal forms result from the influence of external forces serving to modify and deflect, to cramp and to hinder, the expression of the inner form—but the inner pattern is always there doing the best it can to represent itself truly in material appearance. In every acorn there abides the design, pattern, form, and idea

of the future oak—and the acorn never evolves and unfolds anything not according to that pattern, design or idea. In the same way, the seed or germ or every plant, animal, or human being contains within itself its "inner nature" composed of ideal form and pattern, type or mold.

It is this "inner nature" or ideal form that causes the acorn to develop into the oak, instead of into the pine-tree. It causes the egg of the chicken to develop into a chick, and not into a baby hawk. It causes the creature to develop from seed-germ into completed adult form, always true to type and ideal pattern. Scientists who have witnessed the unfoldment of living forms from the reproductive cells, or egg-body, have testified in glowing words of wonder and admiration to the evident presence of "something like a directive mind" at work in the processes under way in the tiny speck of protaplasm which we call the reproductive cell or egg of the animal.

Huxley, describing the development of the tiny egg of a newt (small aquatic salamander) said: "The plastic matter undergoes changes so rapid, and so purpose-like in their succession, that one can only compare them to those operated by a skilled modeler upon a formless lump of clay. As with an invisible trowel, the mass is divided and subdivided. Then, it is as if a delicate finger traced out the lines to be

occupied by the spinal column, and molded the contour of the body; pinching up the head at one end, the tail at the other, and fashioning flank and limb into due salamanderine proportions, in so artistic a way, that, after watching the process hour by hour, one is almost involuntarily possessed by the notion that some more subtle aid to the vision than the achromatic lens would show the hidden artist, with his plan before him, striving with skilful manipulation to perfect his work."

The same great scientist, speaking of the continued life of the newt, says: "As life advances, and the young amphibian ranges the waters, the terror of his insect contemporaries, not only the nutritious particles supplied by its prey (by the addition of which to its frame, growth takes place) are laid down, each in its proper spot, and in due proportion to the rest, so as to reproduce the parent stock; but even the wonderful powers of reproducing lost parts, which are possessed by these animals, are controlled by the same governing tendency. Cut off the legs, the tail, the jaws, separately or all together, and these parts not only grow again, but the new limb is formed on the same type as those which were lost. The new jaw, or leg, is a newt's, and never by an accident more like that of a frog."

In the above graphic word-picture of Huxley, we catch a glimpse of the subtle, silent

manifestations of this materialization of mental images in Nature; for the same kind of processes are under way on all sides of us, on all planes of Nature's activities, and in all of her phases of life-processes. There is constantly under way a process of growth, production, reproduction, building, repairing, replacing and general creative construction; and in each and all such forms and phases we may see the presence of a given pattern, form, type or mold —an ideal design or scheme upon which the materialization is effected. The "governing tendency" referred to by Huxley is seen to be none other than the operation of that principle of Creative Mental Form upon which all materialization depends.

Moreover, we may see the operation of the same principle in the direction of the variation of form, faculty and function in the life forms —indeed, this principle constitutes the directing force of Evolution. Lamarck and other scientists have shown us that Evolution proceeds not only by Natural Selection, but also by the Unfoldment of Ideal Forms, or Mental Images. Thus, the new needs and requirements of the evolving life-forms are first manifested as ideal forms, or mental images, patterns, molds, or types, in the subconscious mentality of the creature; these then moving toward representation, expression and manifestation on the objective, material plane. Thus

the "inner nature" gradually becomes modified by environment, and the "outer form" gradually responds to these changes.

Illustrating this principle, we call your attention to the fact that certain schools of scientific thought hold that the long legs and long neck of the giraffe were evolved in response to the Creative Idea working through many generations of its ancestors. The ancestors found it difficult to reach the tender, juicy branches of certain trees, which were needed as food. This need and this difficulty were recognized by the subconscious mentality of the animal, and the Creative Idea began to shape and fashion the ideal form or mental image of the long legs and long neck which afterwards manifested in physical form in the descendants of the animal. In the same way were evolved and perfected the long legs and long bills of the wading, fish-catching birds. Again, thus were evolved the cruel beaks and talons of the hawks, eagles and other carnivorous, prey-capturing birds; and the claws and fangs of the carnivorous animals.

In short, many thoughtful scientists recognize the existence and activity in Nature of a principle which tends to manifest in objective, material form that which has previously existed as a mental form or ideal image in the subconscious mentality of living creatures; the mental form or ideal image having arisen in

response to a strong need, want, lack or desire of the creature—as in the illustrative cases above cited. The advance guard of the new psychology carries this principle to its logical conclusion when it asserts that the human being is able to set into operation great natural forces tending to produce similar objective results when he deliberately creates strong ideals, and then passes the same down to his subconscious mentality. Here is a hint at a mighty principle.

Many persons are disposed to regard as more or less unreal and unsubstantial anything that is purely ideal and mental in its nature. To such we would cite the celebrated rule of Spinoza, viz.: "A thing has only so much reality as it possesses power." Applying this rule to the ideal forms or mental images underlying material forms, you will discover that such possess a very high degree of reality and substantiality. Ideal forms and creative mental images are not merely such stuff as dreams are made of, but in reality are strong, powerful forces. In fact, many manifestations of natural forces are really efforts toward the expression of the Creative Idea. The inner form striving to manifest in the outer form often exercises a tremendous force. The inner form of a growing plant has been known to crack a heavy concrete block; and the power of growing roots, arising from the inner urge of the

ideal form, has been known to tear asunder heavy foundation stones.

John Burroughs, the great naturalist, says concerning this force of the inner form striving for outward expression: "We know that the roots of trees insert themselves into seams in the rocks, and force the rocks asunder. This force is measurable, and often is very great. Its seat seems to be in the soft milky substance called the cambium layer under the bark. These minute cells, when their force is combined, may become regular rock-splitters. One of the most remarkable exhibitions of plant force I ever saw was in a Western city where I observed a species of wild sunflower forcing its way up through the asphalt pavement. The folded and compressed leaves of the plant, like a man's fist, had pushed against the hard but flexible concrete until it had bulged up and then split, and let the irrepressible plant through. The force exerted must have been many pounds. I think it doubtful if the strongest man could have pushed his fist through such a resisting medium. If it was not Life which exerted this force, what was it?"

In the same way, the great giants of the forest have pushed their way up toward the skies, counteracting the pull of gravitation, and lifting weights which it would have required mighty machinery to move. The mental pattern in the giant redwood trees proceeds to the

materialization of the gigantic outer form of the tree, and the "inner urge" of the ideal form calls to its aid the mighty latent forces of Nature in order to materialize that which is contained in the ideal form or mental image of the living organism of the tree. Nature seems ready to furnish such power to the inner urge, provided that such is sufficiently needed, insistently desired, and persistently demanded, and provided that it is called for in the right way. If man ever obtains the inner secret of this demand, he will have the creative powers and forces of Nature in his hands. Already he has acquired a portion of this secret, and is able to perform mighty creative work by directing his mental powers toward the physical plane. In this instruction we seek to disclose the principles of this process to you.

The attention of certain philosophers has been attracted by this manifestation in Nature's activities of a process closely resembling Constructive Imagination. They venture the hypothesis that the creative powers and processes of the human mind have an equivalent in Nature's processes of growth in living forms, vegetable and animal. A little-known, though worthy, metaphysician has gone so far as to elevate to the rank of the Ultimate World Principle that which we know as the Constructive Imagination. He asserts that there is a Cosmic Constructive Imagination working

in Nature, producing the myriad forms and varieties of vegetable and animal forms. He holds, further, that the same principle, in the form of the human Constructive Imagination, enables man to become a Creator on his own plane of life.

This metaphysician holds that Constructive Imagination is the essential characteristic attribute of the Ultimate Principle of the Cosmos. He holds that this essential attribute is inherent in the very essence of all things, and in the world as a whole. He postulates its existence in the All-Thing as an immanent principle, just as in the kernel of the plant-seed there exists an immanent principle which will give to the evolving plant its form and its type of organism. This Cosmic principle, he asserts, has manifested the myriads of vegetable and animal forms which have existed, or now exist; and will so manifest those forms which shall in the future exist in the world. He holds that the first creations were quite simple, but that little by little the Cosmic Constructive Imagination increased its energy and manifested in more complex forms. He cites Darwin as testimony that in Nature there has been a slow evolution of organized forms, proceeding from the simple to the more complex, and so on.

We are not here concerned with philosophical hypotheses, nor with metaphysical spec-

ulations, but, at the same time, we feel it proper to direct your attention to the fact that there is manifest in all Nature the operation of a powerful principle which proceeds from the inner form to the outer manifestation—from the ideal image to its materialization in objective form. We have given you in the foregoing pages certain typical illustrations of the operation of this natural principle or process. By looking around you at the world of living and growing things, you will be able to perceive countless instances of the operation of the same power, once your attention has been called to it.

Likewise, we wish to call to your attention the fact that many earnest thinkers hold that that which is called the Constructive Imagination in the mind of man is but a special form of the same great natural principle; and that man himself, like Nature as a whole, has within himself the power of Creation by means of the materialization of his Ideal Forms. Your experience has taught you that the men who have accomplished the great creative achievements in art, literature, mechanics, invention, building and business construction, have created the outer manifestation in accordance with the inner ideal or mental picture—the latter serving as the model, type, mold or pattern of the former. But the principle operates over

a much wider area, and extends to a much deeper level of being, than you have realized.

It is a fact acknowledged by many very careful observers and reasoners that the man of strong ideals—he whose mind contains strong, clear mental pictures of that which he hopes to accomplish—actually sets into operation the forces, powers and energies of his entire mental and physical being. These, in turn, draw upon the common source of Nature for their nourishment and subsistence, and all the power so generated tends toward manifestation and expression in the material form which is being built upon the mental framework or pattern of the Creative Idea. Just as the oak is able to draw upon Nature for power with which it may lift itself far above the surface of the earth, and to send forth mighty limbs and branches; just as the growing plant is able to secure from Nature sufficient force to enable it to push aside, or break through the obstacles in the path of its progress—even through concrete blocks as we have seen; so may the Creative Idea of the "man who knows" be able to draw upon Nature for the still more subtle forces of her laboratory needed to materialize his ideal forms—to make his ideals become real.

Not only this, but there is a rapidly growing body of human thinkers who hold that man, in such cases, is not necessarily limited to the

mechanism of his own organism in the expression of his inner urge by means of the forces which he has attracted to him. They hold that he even may (and often really does) throw out mental or spiritual filaments which contact the things of the outside world, thereby attracting to himself the external forces and things requisite for the successful materialization of his inner ideal, his mental forms, his Creative Idea.

In this book we have sought to present to you the essential principles of this great subject of Creative Power—of the materialization and actualization of your Creative Ideas. In doing so, however, we first asked you to become far better acquainted with an existing field of mental activity which you have previously undervalued and grossly misunderstood —your Power of Constructive Imagination. This mental stone, heretofore rejected by the builders of the Temple of Mental Power, is now being recognized by advanced thinkers as quite worthy of being given the place of honor as the cornerstone of the great structure. We are fast approaching the place in which we shall see the inner meaning of the ancient philosophers who asserted that in Will and Imagination—combined and harmonized—are to be found the Secret of Power.

IX

DYNAMIC IDEALIZATION

In the instruction contained in the several books of the series of which the present volume is a part, there is frequent reference made to "The Master Formula of Attainment," which is as follows:

I. Definite Ideals;
II. Insistent Desire;
III. Confident Expectation;
IV. Persistent Determination;
V. Balanced Compensation.

The spirit of the Master Formula is expressed in popular phrasing as follows: **"You may have anything you want, provided that you (1) know exactly what you want; (2) want it hard enough; (3) confidently expect to obtain it; (4) persistently determine to obtain it; and (5) are willing to pay the price of its attainment."**

In other books of the series these several elements of the Master Formula are considered in detail, are fully explained, and methods for their effective application are indicated. In this concluding section of the present book, however, we ask you to consider the first element (i.e., that of "Definite Ideals") from an

angle somewhat different from that adopted in the other books of the series.

In these other considerations of the subject of "Definite Ideals," that important element of the Master Formula generally has been treated as practically synonymous with the idea of "Definite Purpose." But Definite Purpose really is but one of the several phases or forms of Definite Ideals—the particular phase or form which is involved in the manifestation of Will Power; to some extent, in that of Desire Power; and in that of Logical Power. In Faith Power, however, there is manifest a somewhat higher form of Definite Ideals. Likewise, in some of the higher mental and spiritual activities there is found present and active a transcendental phase or form of Definite Ideals. Thus, you see, the term "Definite Ideals" represents a general concept or idea which has several lesser elements; it includes the concept of Definite Purpose and also several other important secondary concepts.

In our present consideration of the subject, we shall confine our attention to that aspect of Definite Ideals which may be called "Creative Ideals." The term is appropriate, for the essential nature and characteristic activities of such Ideals are primarily **creative.** Creative Ideals call into operation the strongest and most intense activities of Desire Power; the most earnest and inspiring Faith Power; the most

persistent and determined Will Power; the most capable and efficient Subconscious Power. In fact, it acts upon and through the most potent energies of all of the mental, emotional, and volitional elements of the mind, soul, or spirit of man. More than that, it reaches out into the great world beyond the personal limits of the individual, and operating through some of Nature's subtle but potent forces, it sets into motion and activity many things, persons, events, causes and processes over which (in the ordinary view) the individual apparently has no direct control.

Perhaps it will be as well to begin by arriving at a clear and definite understanding of the term, "Ideal," as employed in this instruction. It has well been said that, "There is a mighty magic in words, rightly understood." The old Chaldean Oracle announced this ancient thought in these lines:

"There are Names in every nation, God-given,
Of unexplained power in the Mysteries."

First of all, we find that our term has its origin in the term, "Idea," which evolved from an old Greek word meaning "to see." Idea is defined as: "(1) A mental image of any visible object, object of sense, or spiritual object; (2) a general notion, or a conception formed by generalization; hence (3) any object apprehended, conceived, or thought of, by the mind; also, (4) a belief, opinion, doctrine, or prin-

ciple; and, (5) a plan or purpose of action." Underlying all of these meanings is found the essential notion of **"existing in the mind."** An "idea" is always mental; never material.

The term, **Ideal** (as an adjective) means: (1) Existing in idea or thought; (2) existing in imagination only; and (3) reaching an imaginary standard of excellence, efficiency, beauty, utility, etc. As a noun, the term is defined as: "A mental conception regarded as a standard of perfection; a model of excellence, beauty, efficiency, utility, etc." Here we have the blending of the two essential attributes, viz., (1) existing in thought or imagination; and (2) a standard of excellence. "Excellence" is synonymous with "superiority, worth, goodness, greatness."

So, in the end, we have a concept of an **Ideal,** defined as: **"A mental image of something of superior worth, goodness and value, serving as a standard of excellence, beauty, efficiency, utility, etc."** As we always desire, hope for, and strive to attain things of "superior worth, goodness and value" (the degree of "worth, goodness and value" being determined by the comparative resemblence of such things to the accepted "standard of excellence, beauty, efficiency, utility, etc.,") it follows that Desire, Faith, and Will are always (consciously or unconsciously) striving to reach, achieve, or attain an Ideal. To the end of such achieve-

ment or attainment, the forces of Creative Power, Desire Power, Faith Power, and Will Power are set into activity.

In many cases the Ideal manifests in the form of "**purpose or plan of action**" (one of the above definitions of Idea, you will remember); but in other cases it manifests rather as "**a mental or spiritual germ, striving to express and manifest itself in objective, material form; drawing to itself, and reaching out after, that which promises to contribute to or aid in such objective and material expression and manifestation.**"

Here, then, we have the concept of the Ideal seeking to express and manifest itself in objective and material expression and manifestation, and, by reason of this inner urge, drawing to itself and reaching out after that which promises to contribute or aid in such expression and manifestation. But, you may ask, "Why and how is this Ideal entitled to be termed **'Creative'**?" Let us answer this question, in the first place, by asking you another question: "Thinking over the subject discussed in the preceding section of this book, of what does this concept of the striving, seeking, acting 'mental or spiritual germ' remind you?" We think that the following several paragraphs will represent the essence and spirit of your answer.

You will be reminded, first of all, of the fact that in all man's material creations there has been, and necessarily must have been, a preceding "mental image or form"—an Ideal, in fact—of which the later material, objective form of the created thing was merely a copy; that there must always be the "mental pattern, map, design, or mold" which is reproduced in the material creation. There must always be the Inner Form, before there can be the Outer Form! "But," you may object, "here the Ideal is merely the pattern, model, or mold, which the Imagination and Will employ in their creative work; the Ideal, in itself, is not 'creative'." This is true, at least to a certain extent; we need not here argue the fine distinctions, however, for we have a clear case presented in Nature's activities, to the consideration of which we shall now proceed.

Letting your mind dwell upon the subject considered in the preceding section of this book, you will remember that in all material creations of form—in all purposive groupings, arrangements, conformations, configurations—there is found to be present an inner Ideal Form, composed of the aggregate of mental forms, striving to express itself in action and objective manifestation. You will remember that we found this inner Ideal Form operative in the cases of the grouping of the atoms (and of the smaller particles composing the atoms);

in all chemical processes; in the processes of crystalization; in the life-processes and the growth of plants; in the sprouting of seeds; of the development and evolution of the germ in the egg. You will remember the interesting description of the development of the newt's egg given by Huxley. You will remember the instances of great power exerted by growing roots, plants, and sprouting seeds. You will remember what was said concerning the evolution of needed physical instruments manifested by the lower animals—the explanation of the long legs of the wading-birds, the claws and beaks of the birds-of-prey, the long neck and legs of the giraffe.

Finally, you will remember the logical conclusion arrived at by those observing these and similar instances of this wonderful working of Nature's Forces, viz., **"That there exists, and is manifest in all Nature, the operation of a mighty principle which proceeds from the inner form to the outer manifestation—from the ideal image to its materialization in objective form."** You will find yourself compelled to think that in all of Nature's activities and processes, in which is performed the work of "creation" of form, combination, composition, or coordination, there certainly exists an Ideal Form serving as a pattern, plan, mold, map, chart or design, upon which and by means of which, Nature builds and creates.

More than this: when you carefully reason concerning this matter, you will find yourself becoming impressed by the idea and conviction that the essence and spirit of such manifestations and expressions abide in the germ Ideal Form itself and that instead of being a mere inert pattern, model or mold, the Ideal Form is a living, acting, creative Force, drawing to itself the materials needed for its outward, objective expression and manifestation —such expression and manifestation being the essential desire, need, and energizing principle of its being. Thus the Ideal Form is seen to be not only an Inner Form, but also a Something or Somewhat which may be described as "a Power with the Desire to act, or a Desire with the Power to act"—a definition which has also been applied to Will, it may be noted. Here, once more, is seen the close relation of Imagination to Will; a resemblance which by many philosophers (and by all occultists) is regarded as of the deepest significance.

That there is a dynamic force in the Ideal Forms which are found to be present in Nature's creative processes, cannot be doubted. Everything points to this conclusion. On all sides proofs supporting this contention may be found. In Nature, it is seen that there is a Creative Ideal Form as the nucleus of every creative process. Forms, combinations, coordinated activities,—arrangements of parts,

elements and factors of composition—are found to group themselves around the nucleus furnished by the Creative Ideal.

Just as the germ in the seed or egg gathers to itself the material that it needs for growth; just as the seed or egg freely employs the natural forces at its disposal (and they are always at its disposal, you should note) in order to manifest and express itself in creative growth; so in every Creative Ideal Form there is found to be present that power to employ natural forces for its purposes; the instinctive knowledge how and when to employ those forces efficiently; and the desire, will and ability to draw to itself the material needed for its growth, development, expression and objective manifestation.

Proceeding from the Macrocosm to the Microcosm—from Nature to Man—and applying the ancient Hermetic axiom, "As above, so below," we would consider it logically certain that in Man, the individual, we should find a corresponding condition of things, i.e., the presence and power of the Creative Ideal Form; the action of the latter in the direction of drawing to itself the material required for its objective expression and manifestation; and the capacity for employing natural forces for the purpose of accomplishing its ends. We should expect to find that, in Man as in Nature, the Creative Ideal Form not only seeks to ex-

press and manifest itself in objective form and action, but also actually does so express and manifest itself, and also is able to press into its service the subtle forces of Nature—provided, always, that the Creative Ideal Form be (1) sufficiently strong and active, and (2) sufficiently clear and definite; the spirit of the requirements being that of **Concentrated Power.** discover that we have not been deceived nor Conducting the above-mentioned inquiry, we mocked; we find that the axiom, "As above, so below," holds good in this as in many another case. We find that the men and women who have accomplished great things have always possessed these Dynamic Creative Ideals; and that those who have so possessed them have found operating within themselves a mighty power of Nature, and have been conscious of the effects of these activities manifesting in the world outside of themselves.

The individuals of great attainments sooner or later have become aware of this correspondence between the inner Dynamic Creative Ideal, and the events and happenings of the outside world which are correlated to the inner purpose. The individual with the Dynamic Creative Ideal has established within himself a great focal centre of Energy and Power—and to that centre are being attracted and drawn things, persons, circumstances, thoughts, ideas, powers, and other things which are needed for

the objective expression and manifestation of the Inner Ideal Form.

Even in the lesser activities of man, in the more mechanical forms of work, he is able to perform better work, and to perform his work more efficiently, if he maintains a sufficiently clear and strong Creative Ideal Form of that which he wishes to materialize in objective form. Psychologists have told us that the best workmen are those who visualize the whole of what they propose to do, before they take a tool in their hands; this being equally true of strategists, artists of all kinds, physicists who contrive new experiments, and all others who do not follow mere routine. They have told us, for instance, that no man can be a good plumber unless he uses his Imagination—the Ideal and its mental image must precede the actual laying of the pipe. Likewise, that the blacksmith is efficient only in the degree in which he employs his Imagination; every time he strikes the red-hot iron, he makes it approximate the ideal image in his mind.

Kay says: "A clear and accurate idea of what we wish to do, and how it is to be effected, is of the utmost value and importance in all of the affairs of life. A man's conduct naturally shapes itself according to the ideas in his mind, and nothing contributes more to success in life than having clear, strong Ideals, and keeping them continually in view. Numerous unex-

pected circumstances will be found to conspire to bring it about, and even what seems at first hostile may be converted into means for its furtherance; while by having the Ideal constantly before the mind, one will be ever ready to take advantage of any favoring circumstances that may present themselves."

Bain says: "By aiming at a new construction, we must clearly conceive what is aimed at. Where we have a very distinct and intelligible model before us, we are in a fair way to succeed; in proportion as the Ideal is dim and wavering, we stagger and miscarry." John Burroughs says: "No one ever found a walking fern who did not have the walking-fern in his mind. A person whose mind is full of Indian relics picks them up in every field through which he walks. They are found and quickly recognized, because the eye has been commissioned to find them."

In the great field of activities comprising the realm of Desire, we find that the energizing force of Desire is called forth in proportion to the degree of clearness, definiteness and distinctness of the Ideal presented to it. Desire always is called into action by the presence and power of Ideas and Ideals. Desire is always the "want" of this thing, or the "want to do" that thing; it cannot "want" or "want to" unless an Idea or Ideal is present in sufficient force and definiteness to call forth its activities.

In fact, a strong Ideal often arouses and attracts to itself such a degree and amount of Desire that the Ideal itself seems to be but a focal point of Desire, or the Desire seems to be the very soul of the Ideal. In Desire Power, the dominant "want" or "want to" is the Definite **Purpose**; the idea of the achievement or attainment of the end of the "want" or "want to" is the Definite **Ideal.**

Likewise, in the activities of Faith Power there is always found present a Definite Ideal. Faith must always have its object—the more definite and certain its object, the greater and more stable is the Faith. Faith is one of the great elemental spiritual powers. In its form of Confident Expectation and Expectant Attention it powerfully moves the Will. But, Faith Power is but latent and static unless it be aroused into dynamic power by the presentation to it of an appropriate Idea or Ideal.

Finally, the activities of Will Power are called forth only in response to the Idea or Ideal which has, in the first place, aroused the Desire which rises into Will; and which, in the second place, has served as a standard of measurement of Will-values; and, which in the third place, now serves as a beacon, standard, or mark placed far ahead on the Path of Attainment, serving to point out the way to be traveled and the direction to be followed.

It is an axiom of psychology that **"the Will goes out in action only toward an Idea or Ideal presented to it."** It might be added that **"the Will is held to its path only by the perception of the Idea or Ideal which marks its course and indicates its direction."** Certain philosophers and psychologists have noted that it is almost impossible to distinguish between concentrated Will and a highly developed, definite, concentrated Idea or Ideal—the two seem to have been combined and blended into one mental power. This correspondence between Imagination and Will frequently has been noted in the present work.

But, in pursuance of the rule of the Unity of the Mind, we find that just as truly as Desire, Faith, Imagination and Will may be, and are, called into action, power, and strength by the presentation of an Idea or Ideal, so is it true that the Creative Ideal may be strengthened, energized, and given definite form by the application of the respective powers of Desire, Faith, Imagination and Will.

There is always action, reaction, and interaction in the realm of the mind; its powers are correlated and coordinated—each is bound up with the others, and each aids and helps the others when needed. We may concentrate our attention upon any one of the great powers of the mind, and that particular power will seem to be the dominant one. When, however, we

proceed to contemplate and to study the others, we find that each, in turn, seems to be the dominant power. The truth is that no one of these great powers can operate effectively unless the other powers co-operate with it, and proceed with it in coordinated action.

The Creative Ideal, in order to be effective—indeed, in order to be truly creative—must be (1) Strong, and (2) Definite. Its strength is increased by the energizing power of Desire, the inspiring power of Faith, and the determining power of Will. Moreover, by means of Imagination presenting to it mental pictures of itself as actually expressed and manifested in objective, material form, the Creative Ideal is further aroused into action, in response to that essential urge, instinct, or appetency of its nature which causes it to strive ever to manifest itself in outward action and form. In strengthening an Ideal Form which you wish to raise to the rank and power of a Dynamic Creative Ideal, you should bring to bear upon it the combined powers of your Desire, Faith, Imagination, and Will.

The Creative Ideal, in order to be effective and truly creative, must be **clear, positive, and definite.** Here the Ideal calls upon those mighty twin elements of the spirit—the ideative and volitional faculties—namely, Imagination and Will. Imagination supplies the definite pattern, model, or design which the Ideal

wishes to manifest; while Will proceeds to cut away the encumbering marble or granite which hides the definite form of the Ideal as represented by the artist's pattern, design, or mold.

Will, however, does not **create** the Ideal—the Ideal is self-created, or else is originally created by that "I AM I" which is the centre and focal point present in the mental kingdom. But Will serves a necessary purpose and an essential task when it proceeds to chip away, to chisel away, to hammer away, all the great mass of mental granite or marble which hides the beautiful Inner Form of the Ideal—its Pure Form. The Ideal Form is actually existent—never forget that; but, before it may be perceived and employed as a model, standard and guide, it must be released from that which encumbers its Pure Form and hides it from view.

In the Master Formula of Attainment, the first element is that of **"Definite Ideals"**—not merely **Ideals**, but particularly **Definite** Ideals. In all of the principal books of this series, this element of **Definite** Ideals is dwelt upon at considerable length, in one form or another. In the preceding sections of the present book, you will find it presented under the form of **"Definite Purpose."**

The factor of **definiteness** is emphasized in all such presentations; for upon such definiteness depends much of the power of the Ideal Standard, or Purpose. It must "stand out" in

attention, perception, and thought. It must represent the "just what" of the want, ambition, faith, effort, or thought. It denotes "just what" you like, desire, believe in, adopt as a standard of values, use as your guide on the road of attainment, and strive to manifest and express in thought, word, and deed.

An Ideal, Standard, or Purpose is **"definite"** in the degree in which it is "certain, clear, plain, distinct, specific, exact, precise, fixed in understanding and meaning"; its mental form must be "distinct, clear, sharp, clear-cut, sharp-cut." Indistinctness, indefiniteness, ambiguity; uncertainty, vagueness, and obscurity of understanding and meaning, are to be avoided in your Ideals—that is, if you wish to have them **creative** and **dynamic.**

Strong and Definite Creative Ideals are properly called **"Dynamic Ideals,"** for they manifest all the qualities and powers which are indicated by the term, **"dynamic."** Dynamic means: **"Powerful; filled with energy; capable of manifesting force, energy, power, motion and action."** The **dynamic aspect or phase of** anything is that in which the thing manifests motion, action, activity; its **static aspect or phase** is that in which it exists in a state of rest and inaction.

Your Dynamic Ideals are those Ideals existing in your mind which are (1) sufficiently powerful to move into action, and to manifest

their inherent force and energy; and (2) sufficiently definite to concentrate those forces and energies into a "one pointed" focus of Idea and Will. Only a Dynamic Ideal can be a Creative Ideal; and all Dynamic Ideals are, and must be, Creative Ideals, by reason of their very nature. The Dynamic Ideal must create, for creative activity is its essential nature. Creation, as you know, consists of compounding, composing, building, putting-together, making, manufacturing new forms from the materials at hand.

The Dynamic Ideal tends to express and manifest itself in creating a new environment for its possessor, in building a new set of conditions for him—such environment and conditions, however, being in harmony and agreement with the spirit of the Ideal. In short, the Dynamic Ideal tends toward "making the Ideal become Real"—in building up a material world of experience corresponding to its inner mental world of experience. It "experiments" in order to build up the "experience." It tears down, re-builds, builds anew, just as the mind of the inventor, the artist, the writer, proceeds in creating its particular form of expression.

The Dynamic Creative Ideal, in fact, is composed of two associated elements, namely (a) the element of definite and concentrated Idea, and (b) the element of definite and concentrated Will. The Idea plans, invents, and

points out the direction of the action; the Will executes the action according to the plan thus furnished it.

This brings us back once more to the teachings of the ancient occultists, who held that, at the last, there are but two fundamental mental or spiritual forces—and these really are but twin-aspects of Spirit. These two fundamental forces, or aspects, are (1) **Imagination**, which was held to involve all thinking, reasoning, and mental imaging of any sort; and (2) **Will**, which was held to involve all feelings and desires, all voluntary action, all determination, judgment, decision, and volition. All other mental faculties or powers were held to be but (a) phases or derivative forms of Imagination or Will; or (b) combinations and compositions of Imagination and Will, in which the elements of each are blended.

In that book of this series entitled "Personal Power," we have shown you that the Twin-Giants of Personal Power are Ideation-Volition, or, in other words, Idea-Will. The more you ponder over this teaching, the stronger will grow your conviction of the underlying identity of Ideation and Volition; that Imagination and Will are Twin-Giants, inseperable, always operating in conjunction with each other. This being so, you will begin to understand how and why a strong, vigorous Definite Ideal may become a Dynamic Creative Ideal

by means of calling into operation and effect its twin-aspect of Dynamic Will. For the purposes of easy thought on the subject and the manifestation of this principle, you may think of the Dynamic Creative Ideal as having the soul of Idea and the bodily strength of Will.

You may render your Ideals dynamic and creative by means of the employment of Desire, Faith, Imagination and Will. Applying the principle of the Master Formula, you (1) must know exactly what you want that Creative Ideal to be; (2) you must desire insistently that it be such; (3) you must confidently expect that it will be such; (4) you must persistently determine that it will be such and (5) you must pay the price of work, service, application, concentration, and of the relinquishment of opposing ideas and ideals, desires and feelings. By means of Insistent Desire, Confident Expectation, and Persistent Determination, the Creative Ideal may be raised to the rank and power of Dynamic Idealization.

Keep your Creative Ideals always before you; think of them, dream of them, make them a part of your very soul. Encourage them by visualizations of their realization in objective form; "brace them with affirmations"; give to them the force of habit by endeavoring to act upon their principles as often and so far as is possible. Think, feel, and act in their terms. Assimilate them to such an extent that your

personal mental and physical instruments of expression may become their outward machinery. Let even your personal being become as the willing instrument of the manifestation into objective form of these Dynamic Creative Ideals. Live for the purpose of making your Ideals become Real.

What will be the result of the creation and maintenance of such Dynamic Creative Ideals? you may ask. Here is the answer of those wise and illumined members of the race who established the esoteric schools of ancient philosophy—and of the equally wise and illumined members of the race of today, who are striving to sow the seeds of the Inner Teachings in the minds of those who are prepared to receive them, nourish them, and allow them to develop, grow, and bear blossom and fruit. Here is the answer of such great souls:

"You are the creator of your own world of experience. Consciously or unconsciously, you are molding your world of experience, and determining your own destiny. In ignorance or in wisdom, for good or for evil, you are creating, building, constructing the scenery of that world in which you live, and move, and have your being. For weal or for woe, you are thus building. For better or for worse you are thus constructing. Your personal world of experience is largely what you, yourself, have made it. Your Ideals ever tend to become

Real. You are always realizing your Ideals. What you have been doing unconsciously, you may now proceed to do consciously. By creating and controlling your Ideals, you create and control your world of experience. You may become an active master of Creation, instead of a passive slave."

The strong, definite Dynamic Creative Ideal will call forth the full powers of your body, of your mind, and of your spirit. Reason, Imagination, Invention, will perform their best work under its influence; Desire will energize more intensely, and Will will determine more persistently, under its influence. The wonderful storehouse of the Subconscious will open wide its doors when the Creative Ideal gives "the right knock." The still higher realm of the Superconscious will superimpose its wisdom and knowledge upon the conscious mind, when this be demanded by the Dynamic Ideal. All things will work together for good for him in whom the Dynamic Creative Ideal is manifesting its power. "I call them all forth; and forth come they in answer to my call," says the Spirit of the Ideal in the old allegory of the Orient, "and chief of all, and the first to come forth, is my twin-brother WILL!" concludes that Ideal Spirit.

Definite Ideal and Concentrated Will—these are the Twin-Giants of your Creative Power. Cultivate and develop both of them, and to an

equal extent. Do not let your Definite Ideals suffer by reason of the lack of pulling and pushing power of your Concentrated Will. Neither let your Concentrated Will become static and inert, by reason of the lack of the directing and guiding power of your Definite Ideals. Grasp the hands of the Twin-Giants, one on the right of you, one on your left; and then let the "I AM I" give the command, "Forward; March!" Naught can oppose the phalanx composed of your Definite Ideals, your Real Self, your Concentrated Will. Rightly may such a combination shout its battle-cry: **"I Can, I Will; I Dare, I Do!"**

The "Will that Can" is the "Will that Knows." The ancient Buddhists had an old aphorism which ran something like this: "To Know rightly, is to Think rightly; to Think rightly, is to Will rightly; to Will rightly, is to Act rightly: the root of Action is Knowledge; the fruit of Knowledge is Action." The ancient Chaldeans had a similar proverb: "He who Knows, is able to Will effectively; he who Wills effectively, Creates his World!" All through the Secret Doctrines runs this song of "Ideal-Will"—of Knowing and Doing; and the most practical thinkers of our own times and lands echo the ancient reports.

Perhaps the highest phases of philosophical and metaphysical thought are those which hold that the only adequate explanation of the Uni-

verse is to be had in that hypothesis which postulates the existence of an Eternal, Infinite Spiritual Principle, the essence of which is Life, Will, and Ideative Consciousness—the essential Powers of which are Animation, Ideation, and Volition, respectively. In this view, Universal Creation (Creative Evolution) is accomplished by means of the Power of the Living Will, taking the forms and configurations patterned by the Living Idealizing Power.

Daring thinkers have likened the Universe to a Cosmic Dramatization of the Ideas and Ideals evolved by the Infinite Consciousness of SPIRIT, the machinery of Creation being operated by the Infinite Will of SPIRIT. Be this as it may, every careful and honest thinker has been compelled (at least at times) to admit that there is no escape from the conviction that the Universe shows the progressive working-out and manifestation of a Cosmic Purpose, Intention, End, Aim; in short, that the Universe is the Materialization of a pre-existing Cosmic IDEA or IDEAL!

The processes of Cause and Effect show the presence and operation of something like Pure Deductive Logic in the activities of the Universe. Many poets, writers, and dramatists have pointed out that in the processes of the Universe there is manifested the presence and action of something that might be called "The Author"; a Something or Somewhat that de-

velops a Cosmic Plot of Creation, and then logically, consistently, and artistically proceeds to perform the work of material Evolutionary Creation upon the lines of that ideal Plot. They point out that the characters, circumstances, actions and events of the Universe always "hang together"—always manifesting that Unity, Coherence and Balance which distinguish the literary compositions of the best writers.

This lofty conception may be but the fanciful expression of the perception by competent observers of that "something at work in the Universe" which bears a close resemblance to the "something at work" in their own minds; or, again, it may be the result of a deep intuition of Truth. Whatever it may be at the last, it certainly expresses a conviction that has come to many deep thinkers in all ages and all lands, many of whom had never heard the like expression of others of their kind.

Whatever may be the Ultimate Truth, it is certain that Man has at his disposal a mighty Creative Power, which in its more familiar phases is called "Constructive Imagination"; and which in its less familiar, esoteric, transcendental phase is called—What? Man, in his own realm is a Creator—and the limits of his realm are determined by himself, by his Imagination, by his Will!

FINIS