# ESSAYS ON REASONING:

ESSAY

THE APPLICATION OF LOGIC
. TO THE

INVESTIGATION OF SPIRITUALISM.

For Grade Y.
Chapters 1-11

By A. T, CONNOR, (Asst. Sec., B.S.L.U. Education Committee).

Published by
THE BRITISH SPIRITUALISTS' LYCEUM UNION.
——1925.——

#### PREFACE.

These essays originally appeared in The LYCEUM BANNER in 1922, and are here re-published, as a booklet, in response to requests from many Lyceumists for them in a compact and handy form.

As the author says, "These little essays are not intended to take the place of a text-book on Logic, but rather to show that Logic is a subject well worthy of study by every Lyceumist, young or old. . . . . As we all have to think, or use our reasoning powers, we might as well learn to think along proper lines."

The present-day tendency is to absorb what is heard or read. We must learn to weigh before we accept, to judge between true and false arguments, to analyse, criticise and construct, and then be fearless in our sincere and reasoned opinions and findings.

If this little book helps its readers to "test, prove and try all that they deem is truth," whether heard or read, and especially all that in any way bears on our religion of Spiritualism, the author and the Management Committee of the B.S.L.U. will feel amply repaid for their efforts on behalf of education.

The Committee here thanks Mr. Connor for his valuable work, and for the gift of these essays.

# CONTENTS.

					Page
I.	How we Reason	•••	··· ·	•••	5
II.	Seeking for Knowle	dge	•••	•••	7
III.	Terms	•••	•••	•••	10
IV.	Propositions	•••	•••	•••	13
V.	Syllogisms	•••	•••	•••	16
VI.	Rules of the Syllogis	sm	•••	•••	19
VII.	Applying the Rules	•••	•••	•••	20
VIII.	Investigation	•••	•••	•••	24
IX.	Inferences	•••	•••		27
X.	How we Collect and	i Examin	e Eviden	ce	<b>2</b> 9
XI.	Generalisation and	Analogy	•••	•••	32
XII.	Fallacies			•••	35
XIII.	Conclusion				38

### ESSAYS ON REASONING.

I.-How We Reason.

Grade Y.

These little essays are not intended to take the place of a text-book on Logic, but rather to show that Logic is a subject well worthy of study by every Lyceumist, young or old. Some people think that Logic claims to be able to tell us what is right or wrong, but that is not so. Logic is the Science of Reasoning, and only claims to guide us aright when we are thinking. As we all have to think, or use our reasoning powers, we might as well learn to think along proper lines—and we can be absolutely sure of doing this if we study and practise Logic.

Some who have never heard of Logic can reason very clearly, but this does not mean that everybody can, or even that these people would not be able to reason better for having studied the science of clear thinking. That this is so can be proved from our own Spiritualist Movement. Many people are born with the gift of clairvoyance or psychometry well developed, but it does not follow that everybody is a good clairy ovant or psychometrist—although we all know that a course of proper development would make us all fairly good psychometrists or clairvoyants. and would also improve the powers of the "born" psychic. (For the sake of the younger Lyceumists, may I explain that a "psychic" is a person who uses psychic or soul powers, such as clear-seeing (clairvoyance), etc.] In the same way, the study of Logic will develop our thinking powers, and teach us how to reason properly.

There are two kinds of reasoning—Inductive and Deductive. In Inductive Reasoning, we take notice of various things that are happening around us, and try to reason out why they happen, or, as scientists would say, we seek the law of nature which underlies the manifestation. For instance, we attend (say) a hundred Spiritualist meetings, and see varied exhibitions of clairvoyance or psychometry, and we notice that the psychics all go about their work in more or less the same way, and manifest the possession of the same psychic powers. From this we draw the conclusion that these psychic powers may be common to the whole

human race (at least), and we begin to think that we are on the track of a law of nature. Now, a law of nature is not a rule laid down by university professors, or by anybody else. A law of nature is something that is true of many things or individuals—but we are not able to claim that we have found a new law until we have examined more things or more individuals. So we have to examine every thing or individual in the same class that comes under our observation. But in examining more individuals we find more things coming apparently under the same law. We find that some people, although they cannot actually see, can feel the presence of the spirit friends who are visible to the clairvoyant, and can even describe them so accurately that the descriptions are recognised; we find that others, although they cannot actually hear, can yet in some way "get" messages; that others can at once tell the true character of people they have met for the first time, and others again get warnings of "good" or "bad" events that are about to happen. These and other experiences convince us that all these things prove the possession by all these individuals of a power which we call psychic power. And as all human beings are alike in their mental make-up, and in possessing psychic bodies-by analogy (which I shall explain later) we come to the conclusion that all human beings should possess these powers. This is as far as Inductive Reasoning will take us. farther we must employ Deductive Reasoning.

In Deductive Reasoning we infer what will happen be cause of the existence of any law of nature. By inference we suppose that if something is true, something else connected with it should be true. The conclusion arrived at above, by the use of analogy, is an inference. Our next step is to test our inference by further investigation, and if our new evidence contradicts what we have inferred, then our inference is wrong and we must abandon it—and make a new inference that will agree with the new facts, as well as the old ones. As we have already tested what came under our own observation, we must now turn to the discoveries of other investigators; and in reading modern books and journals we find that, at the present day, in practically every country, psychic gifts are being used and studied, with the same conclusions being arrived at. In ancient books also we read of similar manifestations, al-

though the writers differ from us as to the cause. So at last we arrive at the confident conclusion that the possession of psychic powers by human beings is a law of nature.

This is how we reason, if we want to do it properly, and be certain that our conclusions are correct. But we must be careful as to what we infer. Ancient writers inferred that psychic powers were the manifestations of a personal God through instruments chosen for a special purpose. Their mistake was made because they studied only a very few cases, and had not the means of comparing their studies with those of students in other countries. So they thought that their local god had made a local manifestation for local purposes—and even the psychics, not knowing that others had the same powers, thought that they had been specially chosen. We know now that they were wrong—and that the only safe method of finding truth is to make our investigations and experiments world-wide.

We can now see that reasoning properly is much harder than it at first appeared. We must first of all collect and classify our facts: then by induction find a law of nature that will account for them; then by deduction infer what we should be able to find if the law is true; then by investigation and experiment, test the law by the facts at our disposal—and lastly, having taken every care to keep on the straight line of reasoning, and found that we have not inferred more (or less) than our ascertained facts will justify, we can boldly proclaim our new law.

But there are many pitfalls to be avoided and many safeguards of which advantage may be taken—and these must all be considered in later essays.

#### II.—Seeking for Knowledge.

Grade V

We use our reasoning powers to get fresh knowledge from what we already know. Without the exercise of these powers we should never know anything but what actually happens around us; and it is only through using our reason that the science, philosophy and religion of Spiritualism have been built up. Let us take one familiar instance.

We go to a friend's house, and there meet with a number of other friends. We turn the lights down to a glimmer, and sit around a wooden table. After a little, the table begins to tilt, or move up and down, and by the use of an agreed code of communication, messages are spelled out, and information received. This much can be seen by everybody present-and, without the aid of our reasoning powers, this is as far as we would ever get. But we begin to wonder what is the cause or the source of the movements and messages, and Reason at once steps in and takes charge. By its aid we arrive at the conclusion that the phenomena were not caused by any of the sitters, but by some unseen person who used the psychic power provided or produced by the circle; from further information received and tested we become convinced that the unseen person is one whom we had known, but who is now "dead"-and finally, we declare our belief in the continuity of conscious individual existence after the death of the physical body. From this, by observation and experiment, and "by putting two and two together" (or, in other words, by using our reasoning powers), we go step by step towards the full acceptance of our Seven Principles.

Thus Reason will conduct us from the observation of the movements of a table to the realisation of a new philosophy of life and death. But between these movements, and the full realisation of their message, there are many steps; and if we want to be certain that the steps we take are all in the right direction, we must study other methods of investigation and discovery, and examine other arguments and opinions, before attempting to form opinions of our own. In this connection we soon come to realise that not only must we know exactly what we mean when we use a word or a name, but we must also make sure of what others mean when they use the same word or the same name. Take the word "Spiritualist" for example. In the Spiritualist Movement (represented by the National Union and the Lyceum Union) a Spiritualist is defined as a person who accepts our Seven Principles. Outside our Movement there are many who call themselves Spiritualists, but yet accept only the first four. some Spiritualists, who believe that Jesus of Nazareth was a remarkable medium and an exalted teacher, claim that his teachings are (or should and must be) the bedrock of Spiritualism—and call themselves Christian Spiritualists. But the same name is claimed by Christians who remain Christians though believing in Spirit return. In these two cases, when we read or hear of Spiritualists or Christian Spiritualists, we must make sure what definition is in the mind of the writer or speaker. If we always assume that other people mean exactly what we mean, when they use a word, or a phrase, or a name, we are likely to fall into serious error, and to take steps that will surely lead us astray.

The surest guide to the inquirer's footsteps is provided in the logical syllogism, when properly understood and used. I shall devote a later essay to the syllogism, so will only say at present that it is the formal method of reasoning, in which are stated at full length phrases and arguments that in ordinary conversation are generally taken for granted, and left unsaid. A man who laughs at the "absurdity" of the syllogism will see nothing ridiculous in saying that "the Lyceum Union is worthy of support, because it is an educational body."

He has a reason for making this claim—something he has taken for granted as a fact (though he hasn't stated it); and we can find out what is in his mind by asking—"Why"?

"Well," he'll say, "all educational bodies deserve to be supported."

He has (in his own mind) constructed a syllogism, which the logician would express thus:—

"All educational bodies are worthy of support.

The Lyceum Union is an educational body;
Therefore, The Lyceum Union is worthy of support."

The real use of the syllogism lies in putting the steps of our reasoning down at full length, so as to avoid mistakes. In the above example, everything is perfectly plain, but there are other cases (to be examined later) where the reasoning is not so straightforward, and where only the careful use of the syllogism will keep us going straight.

As will be observed, each line of our syllogism has been divided into three parts. Each line is called a proposition,

and the first and third parts of each proposition are called the terms (or ends). The word connecting these parts is called the copula (because it "couples" them). In the first proposition, "all educational bodies" and "worthy of support" are the terms, and "are" is the copula. We can now see that there are two terms in each proposition and three propositions in each syllogism; but this does not mean that a syllogism contains six terms—there are only three terms, each used twice.

We are now agreed, I hope, that only by using our reasoning powers, along proper lines, can we obtain reliable knowledge. From a simple phenomenon, like the movement of a table, we can reason up to the Principles of Spiritualism. But we must be careful to use only the generally accepted meanings of words and phrases (not give them meanings that suit us). We must practise the formal method of reasoning—always keeping in mind that Logic does not supply facts, but only enables us to get fresh knowledge from facts already known to us. The formal method is by the syllogism, and we can use it only when we thoroughly understand it, and its divisions into propositions and terms.

#### III.—Terms.

Terms play an important part in the practice of Logic (or correct reasoning), as they are the foundations on which all propositions and syllogisms are built, and as such they require careful consideration. All names of persons, places, things or qualities of things are terms, and a term may consist of one word or of many. "Spiritualist," "Lyceum" and "Union" are all terms, but so also is "The British Spiritualists' Lyceum Union."

Now let us examine these terms. The term "Spiritualist" may be applied to every person who accepts our Principles: a Lyceum is any one of the 280 bodies forming the Lyceum Union; a union may be formed by musicians, students, workers, employers, and dozens of other occupations, trades, etc. But "The British Spiritualists' Lyceum Union" is a name that can be applied to only one body.

Therefore the first three are called general terms (because they can be applied generally to more than one person or thing), and the last is called a singular term (because it stands for one single thing, and one thing only). Of course, a singular term may stand for a person, such as "Secretary of the B.S.L.U. Education Committee."

Terms may be Concrete or Abstract—in the first case when they are the names of actual things, such as snow, sugar, or Lyceum; in the second case when they are the names of qualities of things, such as whiteness, sweetness, or educational—but these can best be studied in a book on Logic.

Then there are what are known as Collective terms. "Lyceum" is a general term, when it is used for the Lyceum as a body; but when it is used as the name for a number of students who have collected to study Spiritualism, it is also a collective term. "Lyceum Union" is a singular term when it stands for the Union as a body; but when it refers to a number of Lyceums which have collected to assist each other in the issue of text-books, and to regulate Lyceum methods of teaching and government, it is also a collective term. Thus a collective term may be either general or singular, and we must take great care not to use a general term in its collective meaning, or a collective term in its general meaning—in all cases we should see that the context makes the exact meaning perfectly clear.

Negative terms can easily be recognised, for they denote the absence of some positive quality, as unfaithful, dishonest, non-Lyceumist. Care must be taken that opposite terms, such as short and tall, high and low, are not treated as positive and negative.

Finally, we must always take into account not merely the name of a thing, but the qualities which the name suggests. For instance, we should never dream of saying that a table was a wardrobe—because "table" suggests qualities which we know a wardrobe does not possess. Or take the term "committee". If we saw half-a-dozen people standing at a street corner, and chatting over the news of the day, we should not call them a committee, because they do not possess the necessary qualities. But

if we put these same people into a room, let them represent some body (such as a Lyceum), and give them power to transact the Lyceum's business—we at once agree that they possess the necessary qualities, and we call them a committee. There are many such bodies carrying on the business of various organisations and the term committee can be applied to each of them. The number of things to which a term can be extended (or applied) is called its extension, and the number of qualities suggested by the term is called its intension. As a rule, when we increase the number of qualities (intension) we decrease the number of things to which the term may be applied (its extension). Take "committee" again. If we increase the intension by adding the term "education," we get a new term, "Education Committee." Now there are many committees which do not meet for educational purposes, so the new term cannot be extended to so many bodies as the original term could be applied to and therefore the extension is decreased. If we add a further new quality by placing "B.S.L.U." before "Education Committee" we decrease the number of bodies to which the term extends to one—for there can be only one B.S.L.U. Education Committee.

All this at first seems very confusing, and of doubtful use, but as students of Logic—or as investigators who want to be sure that we are reasoning along proper lines—we shall find that unless we get a thorough grasp of the use and meanings of terms we shall not be able to build up (or examine and criticise) propositions with any great degree of accuracy or reliability. With constant practice the confusion, which is only apparent and not real, will disappear. We must not forget that, though there are many kinds of terms, yet the words we use are not grouped under their various headings. For instance, the word "library" is a general term, a concrete term, a collective term, and (as it can be applied to thousands of collections of books) its extension is very great.

We must learn to distinguish between general and particular, general and collective, positive and negative, concrete and abstract terms, and to know why any given word is any given kind of term. When we do this—and we can only do it through constant practice—we shall be able to go forward confidently to the building up (or breaking down) of propositions.

## ERRATA.

Page 13, Line 12, should read :—

".....the most extreme of his old beliefs."

IV.—Propositions.

It is a common saying that "what is true of the individual is true of the class "-but this statement has to be examined very carefully. The class has to be very strictly Take the term "horse." One horse may be white, but that does not mean that all horses are white. What is meant is that in so far as horse-like qualities are concerned, all horses are more or less alike. They have four legs, hoofs, a long head, a tail, etc. Take also the general term "Spiritualist." Ernest Oaten and Rev. W. Wynn are Spiritualists, but whilst Mr. Wynn is a believer in Spirit Return who will not allow his new knowledge to modify in any way even the most extreme of this old beliefs in Orthodox Christianity, Ernest Oaten is a Spiritualist who believes that the teachings of "returned" Spirit Friends reveal an entirely new conception of the relationship between God and Man. We can see, therefore, that when we speak of a class we must carefully define of what the class consists. It is just the same with mediums. medium may be capable of producing physical phenomena, others of healing, automatic writing or trance control; vet they are all mediums. The only thing we can insist on is that all physical mediums, or all trance mediums, should exhibit similar phenomena.

When building up Propositions, we must take care that all the terms we use come strictly under a rigid definition; for if we don't, but use our terms carelessly, we shall find ourselves coming to some very strange conclusions.

A Proposition is a statement in so many words that any given thing contains certain stated qualities, or is contained in a certain class.

For instance, in the proposition-

"The Lyceum Union is an Educational Body,"—we make the claim that the Lyceum Union is included in the class "Educational Bodies." And when we say that

"All educational bodies are worthy of support," we state that all educational bodies possess certain qualities.

But when we say that "No really civilised nation makes preparation for war," we are stating a very different proposition. The former two are positive propositions, the last is a negative proposition. One states that the term is contained in a certain class, the other asserts that it is NOT contained in a certain class.

These are not the only kinds of propositions of which we have to learn. There is the hypothetical proposition, which always (or nearly always) begins with "if," or a word of similar meaning. "If the Lyceum Union is an educational body, it ought to turn out able scholars" (which it is doing through its Education Scheme). "If A.B. is a physical medium, he should be able to produce physical phenomena (given proper conditions)."

If a proposition contains the words "or" or "either," it is called a disjunctive proposition, because it disjoins either of the terms from the stated class. "He is either a physical medium or a mental medium" means that the medium under discussion is excluded (shut out) from one of the two classes named.

Not only must we divide our propositions into the foregoing classes, but we must decide whether we are going to use them in a universal or particular sense. A Universal proposition is one in which the term is distributed, or used with its full meaning—that is, to include everything that comes under the definition. "All Lyceumists are earnest students of Spiritualism "-is a Universal proposition, because it includes all Lyceumists. But "Some Spiritualists are unwilling to study our philosophy "-is a Particular proposition, because it only applies to a particular part of the class "Spiritualist." We must study these two kinds of proposition very carefully, because more mistakes are made by arguing from the particular to the universal than in any other form of reasoning. When a fraudulent medium is exposed (although it is generally by experienced Spiritualists, who are the only people capable of detecting fraud-because they know the genuine article, and therefore can detect the false), unthinking people generally say: "Oh. they're all alike"—which is not only unfair, but very illogical. Out of ten mediums, six might be frauds, but if the other four give genuine phenomena, what they produce should be convincing to every unprejudiced scientific mind. It is very misleading to argue from the particular to the universal, and we must take great care that we don't fall into the error. We must always find out whether the statement is made about all or only part of the class under consideration, and then we will be sure to come to a correct judgment.

Propositions are divided into subject, copula and predicate. The subject is the term of which something is said; the copula is the word or words joining the two terms together (every proposition consists of two and not more than two terms), and the predicate is what is said of the subject. For instance, in the proposition "All Lyceumists are earnest students of Spiritualism," the subject is "All Lyceumists," the copula is "are," and the predicate (or what is said about "all Lyceumists") is "earnest students of Spiritualism." But the three parts are not always so easily found, nor are they always in the same order. In "strong is truth," the predicate comes first and the subject last. Truth is to be found among the things labelled "strong."

The great difficulty at the beginning is to find out which is the predicate and which the subject. This difficulty can be overcome by considering the proposition as a nest of boxes, such as children use for building. We can then imagine the predicate as the larger box, into which the subject should fit. Take—"The Lyceum Union is an educational body." The large box will be "Educational Bodies," and the smaller box that should fit into it will be "Lyceum Union," as shown:

'LYCEUM UNION
EDUCATIONAL BODIES

Once we have mastered propositions, and are able to tell at a glance which are positive, negative, hypothetical or disjunctive, and whether they are used universally or particularly, and when we can readily distinguish the subject from the predicate, we shall be able to tackle syllogisms and find out their logical value.

#### V.—Syllogisms.

The value of a Syllogism depends on the care with which its three propositions are made and examined. propositions are very deceptive in appearance, and the unwary reasoner runs a great risk of being led astray. In Logic, every proposition means just what it says-and nothing more. For instance, take the proposition that "some Spiritualists do not study our philosophy." careless thinker is liable to jump at once to the conclusion that "other Spiritualists do study our philosophy." But the proposition does not say so, and therefore all we can argue logically from its statement is that some do not study, while with regard to the remainder we are unable to state whether they do or don't. This is a most important point, and failure to observe it has been the cause of many students of various subjects being sadly misled. In logical reasoning we must take each state-ment as all that can be said (as far as each syllogism is concerned), and refuse to allow anything to be added, whether from our own or other people's knowledge. For we must ever remember that we only use formal logic in building up our own arguments, or in examining those of an opponent or an advocate of some particular case. ordinary writing, the strict logical form is seldom or never used. Let us put the foregoing proposition into a syllogism, as follows:-

"The study of our philosophy is necessary for the proper understanding of Spiritualism; some Spiritualists do not study our philosophy; therefore some Spiritualists are not capable of attaining to a proper understanding of Spiritualism."

This form, although perfectly clear, is long and cumbersome; so, in an ordinary essay, the statement would appear somewhat as follows:—

"Some Spiritualists, having neglected the study of our philosophy, are incapable of understanding all that Spiritualism stands for."

Here we find only two propositions stated; the third—that the study of our philosophy is necessary to a proper understanding—being present in the writer's mind, as a

conviction; but not being stated because it seemed so obvious that statement was not needed.

When examining an argument, we must always try to find out what the missing (that is—the not stated) proposition is—for by so doing we prepare ourselves for taking another necessary precaution; to determine from our knowledge of the writer's conviction, whether the withheld proposition is true as a matter of fact.

A syllogism consists of three (and only three) propositions. The first two are called the Premises—because they are something sent out (or set down) before—and the third. the Conclusion. The conclusion must always follow from the two premises; and if either of the two premises is wrong, the conclusion also is wrong. The Materialist. when attacking Spiritualism, argues that there is no life apart from matter, and that when the physical body dies the life dies with it. This is the major proposition in all his arguments; therefore, as we know that there is life apart from matter (as defined by him), we determine that all his conclusions are wrong. The Agnostic claims that the phenomena and philosophy of Spiritualism lie outside the recognised limits of provable truths. In this claim there are two errors. In the first place, the Agnostic has fixed his own idea of the limits-which no really scientifically-minded man would do; and in the second place, it has been proved over and over again that cur phenomena are actual occurrences, and that our philosophy is founded on the study of well proven facts.

So we can see how necessary it is that the statements in our premises should be absolutely accurate, if our conclusions from these premises are to be in any way reliable.

Premises are of two kinds—the Major premise and the Minor premise We already know that the syllogism has three (and only three) terms—each used twice. These are called the Major, Middle and Minor terms—and the major premise is the one that contains the major term, while the minor premise contains the minor term.

Let us examine a syllogism, and then put the propositions (or premises) into our nest of boxes. (We shall need three this time).

"All educational bodies are worthy of support;
The Lyceum Union is an educational body;
The Lyceum Union is worthy of support."

We see that the three terms—"educational body," "Lyceum Union," and "worthy of support"—are each used twice. Let us now use our boxes. The largest box would be the "worthy of support" box; next would come the "educational bodies" box, and lastly the "Lyceum Union" box—as thus:

LYCEUM UNION
EDUCATIONAL BODIES
WORTHY OF SUPPORT

"Worthy of support" (in the largest box) is the major term; "educational bodies" (in the middle box) is the middle term, and "Lyceum Union" is the minor term. We notice at once that the middle term is only used to build up the argument, and is not used at all in the conclusion; while the major term is used in the first (or major) premise; the minor term is used in the second (or minor) premise—and both are used in the conclusion: the minor term being the subject, and the major term being the predicate, of the inal proposition. And even if we altered the order of the syllogism, and said that "the Lyceum Union is an educational body; and all educational bodies . . . . etc.,"—the major premise would still be that containing the major term—the largest box.

The above is an affirmative syllogism, because all the propositions are affirmative (positive). In a negative syllogism the only difference would be that the smallest box would not be contained in the second largest. For instance if we said that "the Lyceum Union is NOT an educational body," it would follow that (under the conditions of the syllogism which we are considering) it would not be "worthy of support," and therefore the small box would be outside of the other two.

When examining arguments for or against Spiritualism it would help considerably if all students turned the arguments into syllogisms and used the "nest of boxes" test.

#### VI.—Rales of the Syllogism.

To aid us in building up or examining syllogisms, we are guided by a number of rules—but there is no space to allow of dealing with them here. Those who are taking up a thorough study of Logic will find these rules in the text-books, and those who only want to get a general grasp of the subject will be content with a few of the most important.

The first rule we have already considered, that a syllogism must contain three, and not more than three, terms. The purpose of a syllogism is to show that the middle term is contained in the major term; that the minor term is contained in the middle term, and that, therefore, the minor term must be contained in the major term. By claiming that "the Lyceum Union" is included in "educational bodies," and that "educational bodies" are included in bodies "worthy of support"—we pave the way to our final claim that "the Lyceum Union is worthy of support." If we used four terms, there would be no middle term with which to compare the other two, for we are allowed only three propositions, as laid down in the second rule—that a syllogism must contain three, and not more than three, propositions.

Now, if we had said that "some (instead of all) educational bodies are worthy of support "-we should have suggested that some might not be worthy, and it would have been open to question whether the Lyceum Union was included in the worthy or unworthy bodies. So, in order to be able to decide definitely about the character of the Lyceum Union, we must say something that is true (or claimed to be true) about all educational bodies. Then what is true of them will also be true of the Lyceum Union as an educational body (only). This explains the next two rules, which lay down that the middle term of a syllogism must be distributed (used universally, or in its full meaning) at least once in the premises—and that no term can be distributed in the conclusion, unless it is distributed in the premises. It would be incorrect, for instance, to say that the Lyceum Movement is not an educational movement, simply because some Lyceumists do not study.

Again, if our two premises are negative, and merely tell us that certain classes of people or things are not included in other classes, we cannot draw any conclusion. We are only told that they are not included in certain stated classes, but of what classes they may be included in we know nothing.

If only one of the premises is negative, we are sometimes able to draw a conclusion—but it also will be negative. In the syllogism—"All Spiritualists believe in personal responsibility; NO Orthodox Christian believes in personal responsibility; therefore NO Orthodox Christian can be a Spiritualist"—we see that only a negative conclusion can be reached. To use our nest of boxes—the box labelled "all Spiritualists" would fit into the box labelled "Believers in personal responsibility," but the box labelled "Orthodox Christianity" would not. Therefore we can not compare them.

The foregoing are the principal rules of the syllogism, and if we only take the trouble to understand and use them we shall not go far wrong when we start reasoning out problems for ourselves; neither will we be easily deceived or misled when we examine the arguments of others. long as we refuse to allow more than three terms or three propositions to be considered at any one time; so long as we make sure that all that is meant by our middle box is included in our largest box: so long as we remember that two negatives cannot make a positive (in Logic)any more than two blacks can make a white; so long as we remember that things which are not included in the class (such as "Believers in Personal Responsibility") cannot agree with each other—as far as that classification is concerned—we may feel reasonably confident that we are on the right road to reliable knowledge. And unless we use these rules, we shall be very liable to fall into one or other of the many pitfalls that lie along the investigator's path.

#### VII.—Applying the Rules.

There is not much to be gained by knowing rules, if we do not apply them in our reasoning. In previous chap-

ters we have used various syllogisms to illustrate the steps taken. We must now examine whether these syllogisms will stand the test of the rules we have just been considering. Space will not allow us to examine more than one together, but each student can examine the others at lessure.

Take the latest syllogism used—"All Spiritualists believe in Personal Responsibility; no Orthodox Christian believes in Personal Responsibility; therefore, no Orthodox Christian can be a Spiritualist." There are three terms, and only three; there are three propositions, and no more—so far we are correct. But we must also see that the middle term has been used in its full meaning (distributed) at least once. The middle term (which does not appear in the conclusion) is "Personal Responsibility," and this of itself is a singular term, and cannot be used in a partial, or "particular" sense. So we are safe here. The two terms in the conclusion are "no Orthodox Chris. "an" and "a Spiritualist," both used universally, and, re, distributed—but they are also distributed in the One of the premises, "no Orthodox Christian, and the conclusion is negative. Therenone of the rules, and can safely say

one of the rules, and can salely say our conclusion is justified by our conclusion is justifi

But we are examining the parents' contention from the point of view of a logical syllogism, so it lies with us to test it by our rules, and find where and how these rules are broken. The terms and propositions are correct in number; and having one negative premise we have a negative conclusion—which is according to rule, as is also the fact that we have used the middle term, "secular education," at least once in its full meaning. Where, then, lies distributed. Our first premise (above) is affirmative, and means nothing more than that secular (that is, ordinary) education is contained in the things necessary for success in life—without telling us what other things are also necessary.

Were this the proper place, it might be pointed out that the parents have taken rather a narrow view of "life" (which stretches far beyond this sphere) and of "success in life" (which  $do \in sn$ 't lie entirely in social advancement).

There is another pitfall (already mentioned) which we must all try to avoid-we must never argue from the particular to the general. If the two premises are particular propositions, we are unable to draw a conclusion that is of any value. Supposing we claim (as we may) that "some Lyceumists have studied Spiritualism," and that "some who have studied Spiritualism are good speakers" -it does not by any means follow (from the two premises) that "some Lycermists are good speakers." As far as we can learn from the premises, some Lyceumists are students (leaving a number about whom we cannot say whether they are students or not); and some students are good speakers. But whether the Lyceumists who are students are included in the students who are good speakers, we are not told—and we can only form our conclusion from what the premises tell us. The students who are good speakers may not be Lyceumists-or they may. But we don't know—and we must never make assumptions.

We must conclude our consideration of the syllogism and its rules by a brief reference to the hypothetical syllogism. In this, the first premise starts with if—"If A.B. is a clairvoyant, he can see spirit forms"—"if A.B. is a clairvoyant" being called the antecedent (because it goes before), and "he can see spirit forms" the consequent (because it follows as a result); the second premise either affirms the antecedent or denies the consequent—and the conclusion is drawn accordingly. To complete the syllogism "but A.B. cannot see spirit forms: therefore he is not a clairvoyant." Great care must be taken that we do not deny the antecedent or affirm the consequent, as by so doing we break rules of the syllogism. But unnecessary risks need not be 1 un, as the hypothetical proposition can easily be turned into an ordinary affirmative proposition.

with the same meaning. When we say—"if A.B. is a clairvoyant, he can see spirit forms"—we are really claiming that "all clairvoyants can see spirit forms," and if we make this our major premise, the minor premise and conclusion will be just the same, and we shall have one pitfall the less.

The syllogism is used by scientists for inductive and deductive reasoning (see Essay I.), and if we will only learn to apply its rules we can always safeguard ourselves against falling into error in considering arguments that otherwise might mislead us; and we can also fit ourselves for scientific and philosophical investigation.

#### VIII.—Investigation.

Grade V.

So far we have confined ourselves to the methods of obtaining fresh knowledge from knowledge already in our possession. We must now consider how we are to discover the facts from which to build up our syllogisms. If either of the premises of a syllogism is wrong, the conclusion also is wrong; so we must make sure that our premises are correct. As has often been stated, the philosophy of Spiritualism is founded on facts discovered through investigation; and therefore, if we make any mistakes in our investigations, it follows that the premises from which we argue are incorrect, and our philosophy (the conclusions deduced from our premises) is wrong.

Spiritualism claims that its philosophy is founded on "The proven facts of communion between departed human spirits and mortals." How are we to prove these facts? The answer is not nearly so easy as some might be inclined to think. An investigator may attend a Spiritualist meeting or a seance, and there get described to him someone whom he had known in former years, but who is now "dead." The description may be perfect, as regards form, features and personal characteristics, and even as regards intimate historical facts—BUT if the investigator takes this as conclusive proof of Spirit Return, he is assuming far more than is justified by the facts. All that has been proved is that the medium concerned is able to give him an accurate description of his "dead" friend. Much more than that is demanded by the wise investigator.

The first thing he will do will be to make full inquiry about the description which could have been given from personal knowledge or from inspection of a photograph, or might have been only the result of clever mind-reading (a phase of psychometry). It would be possible that the clairvoyant might know the investigator and might have known his dead friend. Again, the clairvoyant might have had an opportunity of seeing a photograph; and the historical facts might have been learned in some other way than that claimed by the medium—that his dead friend was present and speaking. All these questionings have to be answered, and even after the investigator has satisfied himself that the clairvoyant either did not know him or had not known his friend; after proving beyond reasonable doubt that she could not have seen a photograph; after having become convinced that only he and his friend knew of the intimate personal facts mentioned by the medium -even after all this, Spirit Return has not been proved, although the investigator has gone a long way towards proof. There still remains as an explanation the acknowledged fact of mind-reading-that the medium may only have been describing a mental picture; and this is an explanation that must not be lightly brushed aside, for the fact of psychometry is too well established.

The next step for our investigator is to compare notes with other investigators, when he will find that, although there are many cases where mind-reading might easily be accepted as a reasonable explanation, there are many other cases where mind-reading could not explain what took place. He will hear of cases where the person described was not known by the person to whom the description and other particulars were given, and where inquiries had to be made in distant parts of the country—parts not known to the medium; he will hear of cases where the medium could not possibly have known the meaning of the cryptic message delivered, but which was perfectly plain to the person who received it. He will perhaps attend at materialisation seances, where the form of his friend will "build up" before him: he will perhaps sit with a photographic medium, and find the photograph of his friend beside his own; he will perhaps attend at a trumpet seance, and hear the voice of his friend addressing him in the old familiar and well-remembered manner—or he will hear or read of similar experiences that have befallen competent and reliable witnesses, and he will reason within himself that all these things cannot be due to chance, or coincidence, or mind-reading. He will first of all satisfy himself that the phenomena are not caused by the medium or the circle; he will next satisfy himself that there is in operation a human intelligence apart from that of the medium—and finally he will admit that the independent human intelligence is that of his friend. And as his friend is "dead," and as his friend's body is lying in the grave, the only conclusion he can possibly come to is that it was only the physical part of his friend that died; the real friend—the intelligence, the individuality—is still alive. He will have become convinced of Spirit Return.

There is one thing that the honest investigator will always keep in mind, and that is, that he is not investigating in order to find proofs of some opinion (whether for or against Spiritualism), at which he has already arrived —but to find out what is true, no matter what that may be, and to accept that truth, no matter whether it confirms or contradicts his previous opinions. The investigator must always remember that our phenomena form the basis of our philosophy, and that we are restricted in our philosophy to conclusions that have been logically deduced from scientifically proved premises. Every proposition that we use in our syllogisms must be capable of scientific proof. and every term we use in our propositions must bear a meaning that is understood and accepted in the common use of the English language. It must never be forgotten that such terms as spirit, soul, mind, ego, etc., have an accepted meaning to "the man in the street," and that, if we use these terms with special meanings coined by ourselves, "the man in the street" will misunderstand us -and be inclined to scoff.

The true object of investigation is to find out whatever can be discovered, and to draw from our discoveries all the opinions, or all the theories, that they justify And the investigator will do well to bear in mind the rule laid down by Professor T. H. Huxley, that in looking for the cause of phenomena we must prove (1) that the supposed cause of the phenomena exists in neture, (2) that this cause is capable of producing the plenomena observed, and (3) that no other cause could produce the phenomena. With these conditions to guide him, and with the rules of

the syllogism to keep him straight in his reasoning from the phenomena which he has observed, the investigator will always know that he is on safe ground, and that his conclusions are reliable guides to further investigation.

#### IX.-Inferences.

Grade Y.

The investigator who wishes to progress beyond the mere facts of spirit communication, and to obtain a fairly comprehensive grasp of the true message of Spiritualism, will soon begin to arrange his verified facts and to make inferences. When we make an inference we argue that if something (of which we know) has been proved to be true, something else connected with it (about which we don't actually know) is also true. But, if we want to be certain that our inferences are correct, we must make sure that they follow from our facts, and also, if possible, verify them by further investigation. There are some inferences that can easily be verified (such as Spirit Communion) and some that cannot be verified (such as Immortality of the Soul), but which seem very reasonable in the light of our present knowledge.

Let us consider these two inferences, and see where they lead us. Spirit Communion (NOT spirit communication) is an inference that follows from our newly acquired knowledge of man's spiritual nature. Man is a Spirit, with a spirit body, and, by means of this body is able to get into direct touch with other Spirits (whether incarnate or discarnate—with or without a physical body) of a similar nature and with similar ideals and desires. This is proved by telepathy, and borne out by the fact that men and women of different political and religious opinions, or of different social positions, will come together to form a literary club, or a musical society, or some other body formed for the purpose of carrying out the aim or purpose or ideal that draws them together. Further, psychometry has proved that mind can communicate with mind; and we argue that, in the same way, minds in the Spirit world can get into touch with minds in this physical world, "and provide, in sweet communion, joys which Earth can-not afford." This is our inference—the proof that it is correct comes from the Spirit side. We have been informed by our Spirit visitors that when we "open our hearts" and with pure minds ask for blessing and assistance, we put ourselves into connection with spiritual forces, and the thoughts and inspiration of exalted minds flow into ours. Therefore we know, beyond all doubt, that Spirit Communion is a glorious fact.

The Immortality of the Soul is quite a different matter. We have proved the continuity of conscious individuality after the death of the physical body; we have accepted the teaching of personal responsibility with compensation and retribution; we have been informed by our Spirit Friends that we shall have opportunities of making good mistakes and ignorances of which we are guilty in Earth life and be able to progress higher and higher in Spirit life-and that even advanced Spirits retain their individuality. And it is easy to infer that no matter how much we may progress, our individuality, and the personal characteristics of the soul, may alter but will always be retained. But we cannot prove our inference, for, although it seems very reasonable, only eternity can prove whether it is correct. Personally, I am of the opinion that the immortality of the soul is a fact in nature—but it is only an opinion, with plenty of facts that appear to justify it, but none to prove it. And we must always remember that inferences are only opinions. If we can prove them by further investigation, they cease to be inferences and become accepted scientific facts; if we cannot prove them they remain inferences (or opinions or theories) and we are unable to argue from them. It will easily be seen how unreliable would be the conclusion, if one of the premises stated that "A.B. may be...." The only logical conclusion would be that "Therefore, Y.Z. may be . . . ."—but then it may not be!

In all investigation we must use inferences, so it is most important that that we should use them properly and carefully. We must be very careful that what we infer is in every respect justified by known facts—and all the facts within the scope of our knowledge must be taken into account. For instance, a clairvoyant at a meeting may give amazingly accurate descriptions, all fully recognised. At another meeting nothing whatever may be recognised. It would be unwise to infer that at the first meeting the

clairvoyant had been making lucky guesses, or using privately obtained information. We must take into account the difference in the size and general "atmosphere" (or "conditions") of the meeting-places; the difference in the size and quality of the audiences—as regards mental and spiritual development, and the power of remembering; and possible differences in the mental and physical condition of the clarryoyant. With all these differences in mind. we should suspend judgment and await further evidence. So we can see that, if we disregard even one fact, the inference we draw must be wrong-and as only a very foolish person would deliberately lead himself astray, and as no Lyceumist is a very foolish person, it follows (as an inference) that no Lyceumist would be so foolish or so careless as to form an opinion without taking all the known facts into account.

There is one rule that the intelligent investigator will always keep in mind (or, better still, write on the first page of his note-book), and that is—Never take anything for granted; always examine, test and prove. The course to be followed is—(1) investigate (or study reliable accounts of the investigation of) every possible phase of phenomena at every possible opportunity; (2) arrange and tabulate all the verified facts; (3) make inferences based on these facts; (4) investigate further to see if the inferences are correct; (5) if they are not correct, make new inferences justified by the new facts—if correct, make further inferences; (6) continue investigation—and so on, never accepting anything that cannot be proved beyond question. If we do this, using our intelligence (and the care that we would use in buying a new bicycle) we shall be reasonably certain that the knowledge we obtain will be reliable, and also of use to others.

Orade Y

#### X.—How We Collect and Examine Evidence.

There are two methods of conducting an investigation—by observation or by experiment. Most of us follow the former method—that is to say, we content curselves with attending our circles and meetings and taking note of what happens there. From what we see, and from our knowledge of the medium's honesty and genuineness, we

form opinions of the phenomena produced. But others, such as Sir William Crookes, or Dr. Crawford, have tried experiments. They have laid down certain test conditions, and then have noted what occurred under these conditions.

It will easily be seen that the experimental method is the better of the two, because the observer at an ordinary circle or meeting can only see what occurs, but has no knowledge of how, or under what conditions, the phenomena were produced. On the other hand, Dr. Crawford, in his investigation of the phenomena produced at the Goligher circle, was able to make arrangements for testing what the Spirit operators could do under various fixed sets of conditions (See "The Reality of Psychic Phenomena"). He had formed certain ideas (or theories), and he experimented to see whether his ideas were correct. And we should all try, in this way, to check our opinions. As soon as we have observed and read enough to enable us to form opinions, we should seek an opportunity of putting these opinions to the test.

For instance, we are brought into touch with psychic photography. We hear of mediums and sittings, and are shown various photographs. We are told of the conditions under which the photographs were taken, and after weighing up the evidence obtained by (what might be called) observation, we come to the conclusion that the psychic "extra" was put on the plate by either (1) the medium, (2) the sitter, or (3) some other person or influence independent of both. If we are satisfied with the honesty of the sitter, and of his fitness to prevent fraud on the part of the medium, we can come to the conclusion that the third alternative is the correct one, and that some supernormal power has caused the production of the "extra." But, if we are not satisfied, or if we are in a position to find out for ourselves, we start experimenting. We make an engagement with a photographic medium; we buy our own plates; we mark them with our own private mark; we place them in the slide; we place the slide in the camera—and we may get a friend to make the exposure. We develop the plates ourselves, and see our own private mark appear-and, besides our own photograph, we get a portrait of some person who has not been (physically) in the room, or who, to our knowledge, has "passed on."

We know that we haven't "faked" the plates; we know that the medium couldn't have "faked" them—and yet the "extra" is there. So, as a result of our experiment, we become convinced that some supernormal power is at work

When experimenting we must take careful note of the exact circumstances under which phenomena happen. In our photographic experiment we need a camera (though in some cases a camera is not used), plates, a medium and at least one sitter. These are necessary for the success of the experiment, but there is another necessary factor—what we somewhat loosely call "conditions." Should the "conditions" be bad, there will be no results. It is the task of the investigator to see that no factor is missing. All the foregoing will combine in being the "cause" of the phenomena. Although not mentioning the Spirit friends I have not overlooked them—but it is not yet known exactly what part the Spirits play in the production of the psychic "extra."

Now we start to compare our psychic photograph with an ordinary photograph, and to try to find out where the two agree and where they differ. In both, the camera, the plates, the sitter and the photographer—and, of course, a good light-are necessary. The two main points of difference are:-(1) on the ordinary photograph only the sitter will appear, whilst on the psychic photograph another face: a written message (which would have taken minutes to write—and the plate has been exposed for only a few seconds); a design or some other "extra" will be found; (2) in psychic photography, the photographic medium will in some way (under supervision) impregnate the plate with his (or her) psychic power, whereas the ordinary photographer does nothing but make the exposure. So the direct cause of the "extra" is the medium's psychic power, and the presence of an unknown influence. And as the influence could not have made an impression under ordinary photographic conditions, we may put the medium's psychic power as the prime cause of the "extra."

In this way we collect our evidence, and form our opinions, not only of psychic photography but of all phases of phenomena. We are limited in our choice of experiments by our ignorance of the laws governing the production of psychic effects—but there is always something we

can do to satisfy ourselves of the genuineness of any phenomena. In circles we can try a re-arrangement of the positions of the sitters, or the latter can take turns at remaining outside the circle (but in the room)—and all variations in phenomena should be carefully noted. It is noteworthy that on some occasions, when one of the regular sitters has been absent, and only a chair placed in the member's usual position, the phenomena have been produced just as if the member had been present.

Having collected our evidence, we must examine it very carefully, trying in all cases to find the cause as well as observe the effect. And when we have formed opinions (or theories, which are really opinions founded on facts). we must go on to further experiments, using the facts we have already discovered as our new starting point. But we must first of all prove that the causes which we have observed (the "causes" here being the persons, things or "conditions" necessary for the production of the phenomena) will always give the same effect. If they don't, there is a further cause (or condition) which we have overlooked, and this must be discovered and taken into account. Then, when we have established a sequence of causes and effects, we can begin to look for the law of nature which governs the phenomena. And as a first step to this we begin to generalise—to draw up a general rule which all the phenomena seem to obey, and to infer that all similar phenomena will obey the same rule. But the consideration of this must be left for another essay.

## XI.—Generalisation and Analogy.

Grade V

Investigation, to be reliable, should always follow a settled order—observation, experiment, the search for the "causes" (the necessary conditions), the discovery of agreements with and differences from other similar things known to us, observation of how the phenomena vary with varying conditions, and lastly the attempt to draw up a general rule.

In Spiritualism it is very difficult, and very dangerous, to attempt to generalise. When a chemist tries an experiment, he combines various substances in fixed quanti-

ties and under fixed states of temperature. As he is dealing with physical nature, he can be sure that every time he wishes to try the experiment he can have exactly the same quantities, of exactly the same substances, at exactly the same temperature—so he is certain of always getting exactly the same result. But when we begin to combine human beings into a circle for phenomena, we are tackling a very different situation. We may have the same people, always sitting on the same chairs in the same position in the same room; we may be able to control the lighting and heating so that they are always practically the same but there is one factor which can never be relied on as remaining constant, and that is the mental and psychic state of the medium and the other sitters. It may safely be assumed that the mental vibrations of the sitters combine, just as their magnetic vibrations combine, and this combination we may call the "mental sum" of the circle. But the mind of man is very imperfectly understood, even by psychologists, and it is impossible to calculate how the mental sum of any circle will vary from sitting to sit-Hence we get the 'to some' puzzling fact that at one sitting of a circle splendid phenomena may be produced, and at another sitting nothing of any importance may occur—although the sitters and (apparently) the conditions are the same. There are some circles where the same class of phenomena can always be relied on-but there are far more where the members never know what to expect. And until we are wise enough to be able to detect and account for mental and psychic variations, this state of affairs will remain to puzzle novices and provide arguments for opponents.

So it is impossible to generalise on circles. One circle of (say) eight members will get "table phenomena"; another with a similar membership will get psychic protography; another will get materialisation; another, beautiful perfumes—etc., etc. We say that the differences in the phenomena are due to differences in the psychic powers of the respective mediums—but this doesn't help us out of our difficulty, for we don't know what these psychic powers are, or where they lie.

If we do generalise on our phenomena, we must confine ourselves to the few points where we know we are safe. A circle should consist of members of both sexes (or positives and negatives—a man may be negative and a woman positive—though that is not the general rule); it should meet regularly and always sit for the same length of time; it should contain a medium—on these points we are secure, and we can state them as a general rule, and infer that with these conditions fulfilled we should get some phase of phenomena. But it is only a general rule, and when applying it we must also keep in mind every single exception.

Thus when a number of things resemble each other in two or three points, we reason about them by generalisa-When a number of things resemble each other in a good many ways we reason about them by analogy-and infer that, as they are alike in so many points, they will most likely resemble each other in more points. But we find, if anything, a greater difficulty in finding analogies than we did in finding generalisations. The psychic and mental factors upset all attempts at comparing our phenomena and facts with similar physical phenomena and The only case in which we can use analogy with any safety is in comparing Spirit life with Earth life. are told that the personal character of a man is not altered by physical death; that the Spirit friends live in communities; that they form societies for various purposes; that they have chosen leaders whose authority is acknowledged; that they meet and discuss questions at issue and many other details and particulars which agree with similar conditions here. So we can reason by analogy that life in the Spirit spheres (especially in those nearest the earth) is pretty much the same as that with which we are But even here analogy is full of risk, for there are many differences, imposed by the difference between physical and spirit conditions of living.

Although ordinary and psychic photography appear to have many points in common, they disagree on so many vital points that it is impossible to use analogy. Mr. Ernest Vickers informs me that the predominant colour in the aura of Mrs. Buxton (of the Crewe circle) is violet, and that psychic "extras" obtained when she is absent are not so clear as those obtained when she is present. But although we know that the ordinary photographic

plate is affected by the violet rays of the sun, there is not sufficient to justify analogy, for, strictly speaking, the "extras" are not photographs—they only appear on photographs—and in several cases have appeared without the plate having been exposed.

Analogy is unconsciously (and wrongly) used by some speakers when claiming the LYCEUM MANUAL as "the Bible of the Lyceum Movement." At first sight there does not seem much reason to doubt the correctness of the analogy, for both books are alike in containing many moral lessons; in teaching many exalted spiritual truths; in urging purity in this life as a preparation for the life to come; and in being the text-book of a body of religious opinion. there are just as great differences. All the Manual teachings are based on well-verified facts, while many of the Bible teachings are based on alleged supernatural happenings whose actual occurrence is very doubtful. there is a vital difference in the way in which the books are regarded. To Lyceumists the Manual is only a textbook, liable to alteration as increasing knowledge may dictate; but to the average Christian the Bible is a holy book full of inspired writings whose teaching must be accepted without question. So we see that there is really no analogy between the two books.

We are now agreed. I think, that generalisation and analogy, while being useful staffs to aid us in our journey along the path of knowledge, must not be used as sign-posts for our guidance. They should be used very sparingly and with great care. We may reason by them, but seldom or never reason from them—because, in logical reasoning, we reason from facts, and reason by methods.

#### XII.—Fallacies.

In Logic, a fallacy is not a falsehood, nor even a wrong opinion. It is a wrong method of reasoning, which is sure to lead to wrong conclusions. So the investigator needs to be very careful in the arrangement of his syllogisms, and in reasoning from his premises, that he does not reach a conclusion that the premises will not justify.

There are many ways of arguing wrongly, and one of them is the use of words with ambiguous meanings (that is, words which might be used with two or more meanings). Take the word "clairvoyance." In Psychical Research, clairvoyance is understood as a power of the human mind, which enables the clairvoyant to foresee the future or look back into the past. In Spiritualism, a clairvoyant is one who can see and describe Spirit forms with such clearness and accuracy that the descriptions are recognised. So a Psychical Research student and a Spiritualist might discuss clairvoyance—and each have a different idea of what the discussion was about. It is necessary, then, that we should have a clear definition of every term we use—and let everyone else understand exactly what we mean.

Fallacies will also arise from breaking the Rules of Syllogism (See Essay VI)—by using four terms (a word used with a double meaning is really two words); by drawing a conclusion from two negative premises; by failing to distribute the middle term, etc. The careful student will not be deceived by these fallacies, but it is well to keep a strict watch against them, especially when we are doing independent reasoning from our own discoveries.

Again, we must not confuse the collective and general meanings of terms. The Lyceum Union, as a collection of bodies of students, is a great institution; but if we consider it in its general meaning, as a body with a membership of 280 Lyceums and 16,000 Lyceumists, it is not by any means great—when compared with the membership of other Unions. The student will think of many other instances. But if we confuse the collective meaning of Lyceum Union with its general meaning, and argue that because the Union is great therefore every Lyceum and every Lyceumist is also great, we shall be guilty of a fallacy that may make us look ridiculous. (Of course, it is the aim of every Lyceum, and Lyceumist, to become great—for the sake of the Lyceum Movement.)

Then there is the fallacy of begging the question—which means taking for granted what we have set out to prove. For instance, if we set out to prove spirit return, and start off by assuming the genuineness of spirit control, we are really begging the question, for if there were

no "return" there could be no "control," and the phenomena produced would have to be put down to some other cause. We are also begging the question if we explain the differences in the phenomena produced at circles (See Essay XI.) by saying that they are due to differences in the psychic powers of the mediums—we are really stating the same fact in two different ways.

In Essay XI, we found how unreliable were generalisation and analogy; yet we find many investigators arguing from general rules and very questionable analogies. A general rule always has exceptions, otherwise it would be a law; and if we judge one particular instance from the general rule, we are more than likely to go wrong. Platform workers who give phenomena generally confine themselves to clairvoyance and psychometry; but we must not argue from that that any particular medium falls in with the general rule. Some do healing, and one at least has produced beautiful perfumes. And it would also be a fallacy to argue that because one medium could produce perfumes, others should be able to do the same. "What man has done, that man can do "-really means only that man by doing it has proved that it can be done, but not necessarily by everybody.

The only reliable method of searching for knowledge is to proceed from observation of natural facts by inductive and deductive reasoning, verifying each step as it is taken and before attempting to take the next step. The rules of the syllogism must be strictly followed, and any conclusion that does not follow without question from the premises (which should always be verified facts or deductions) should be rejected as worthless. In reasoning by means of the syllogism (for the syllogism is only a means or method of reasoning, and not the reasoning itself), we must take extreme care not to use terms imperfectly understood, either by ourselves or others; we must not attempt to make a general rule out of one particular case or to judge a particular case from a general rule; we must not argue from one particular case to another particular case; we must not attempt to use analogies unless we are absolutely certain that the analogies exist; we must not accept popular beliefs as scientific facts-in short, we must not argue from anything about which we are not perfectly

sure, and we must observe all the rules of correct reasoning. If we do this, we shall be able to make many discoveries, all of them useful, all of them verifiable, and all of them calculated to add glory to the Spiritualist Cause.

#### XIII.—Conclusion.

As was said at the beginning, these essays have not been intended to take the place of a book on Logic. As a matter of fact, the essays are mostly outlines which can only be filled in by further study. The aim has been to show to all Lyceumists who cared to look, that the study of Logic is not only interesting, but is an essential condition of progressive discovery in Spiritualism, and of getting the correct message from what we discover. It has been shown how many pitfalls lie in the path of the investigator; how these pitfalls may be recognised, and how they may be escaped. I am only too well aware how incomplete the essays are. In most cases I have been compelled to confine to a brief paragraph what in a book on Logic would have been given a chapter or several pages. On some points I have not been able even to touch. It has been a labour of love, undertaken in the hope of aiding our Movement to be able to take full advantage of its mighty opportunities, and to present to the world a philosophy founded on facts, and reasoned from these facts by a method which is above all challenge—and if my essays have induced some of my readers to take up a thorough study of Logic, I shall feel that my labour has not been in vain.





ters we have used various syllogisms to illustrate the steps taken. We must now examine whether these syllogisms will stand the test of the rules we have just been considering. Space will not allow us to examine more than one together, but each student can examine the others at leasure.

Take the latest syllogism used—"All Spiritualists believe in Personal Responsibility; no Orthodox Christian believes in Personal Responsibility; therefore, no Orthodox Christian can be a Spiritualist." There are three terms, and only three; there are three propositions, and no more—so far we are correct. But we must also see that the middle term has been used in its full meaning (distributed) at least once. The middle term (which does not appear in the conclusion) is "Personal Responsibility," and this of itself is a singular term, and cannot be used in a partial, or "particular" sense. So we are safe here. The two terms in the conclusion are "no Orthodox Christian" and "a Spiritualist," both used universally, and, therefore, distributed—but they are also distributed in the premises. One of the premises, "no Orthodox Christian. etc.," is negative, and the conclusion is negative. Therefore, we have broken none of the rules, and can safely say that, beyond all question, our conclusion is justified by our premises—and that therefore no Orthodox Christian can at the same time be a Spiritualist. It may be urged that some Orthodox Christians call themselves Spiritual-This may be so, but if a black horse called itself a white horse it would deceive nobody-and we must not allow ourselves to be misled by the claims of others. Some time ago there was published a photograph of "leading Spiritualists," in which not one of our national leaders appeared. The photograph did not prove that those who sat before the camera were national leaders, although the letterpress at the bottom of the picture claimed that they were. In the same way, and in all cases, merely making a claim does not prove anything. We must have proofs to back up everything that we claim. And if our claims, and the arguments with which we attempt to prove them, will not stand the test of logical investigation, the claims are worth nothing.

Many sincere but mistaken Spiritualist parents do not urge (and in some cases, even, do not allow) their children

But we are examining the parents' contention from the point of view of a logical syllogism, so it lies with us to test it by our rules, and find where and how these rules are broken. The terms and propositions are correct in number; and having one negative premise we have a negative conclusion-which is according to rule, as is also the fact that we have used the middle term, "secular educa-tion," at least once in its full meaning. Where, then, lies the error? It lies in having overlooked the rule that no term can be used in its full meaning in the conclusion, unless it has been distributed in the premises. In our friends' conclusion, "necessary for success in life" has been used in its fullest meaning-otherwise they could not have claimed that the Union's Education Scheme was not one of the things necessary. But in the major premise, "necessary for success in life" has not been distributed; and, one of its rules having been broken, the syllogism is not valid, and the conclusion is not correct. In considering such syllogisms it will be helpful to remember that in an affirmative proposition the predicate is not distributed. whereas in a negative proposition the predicate is always