and we trust that their efforts will meet with gratifying success. The thanks of the Association, and, indeed, of all who are interested in the welfare of the feeble-minded, are due to this sub-committee, and especially to its Chairman, who opened the discussion on the Mental Deficiency Bill at the Annual Meeting.

As we anticipated, the Committee on the Medical Inspection of School Children has produced a valuable report, which has been welcomed as meeting a much-felt need. Only those who have been associated with the Chairman of this committee know the extent of his devoted labours in this branch of his work.

The subject of mental deficiency and the proposed legislation thereon are so ably dealt with, in various contributions which we publish in this number, that it would be superfluous to comment on these matters in this note.

The Committee dealing with the status of Assistant Medical Officers and the Position of Psychiatry continue to prosecute their inquiries, and hope to present a report to the next general meeting. We publish a paper by Dr. Rows on this subject in the present number.

We have much pleasure in drawing attention to the fact that several assistant medical officers have recently taken the diploma in psychiatry. We propose to publish lists of successful candidates, and to print the special regulations of the various universities which grant this diploma.

We have already expressed the opinion that much good would result from a dissemination of the knowledge we have acquired regarding the prevention and treatment of mental deficiency, and we are glad to announce that the Association has published, in pamphlet form, selected papers and the proceedings of various committees dealing with this subject.

Part II.—Reviews.

An Answer to the Rev. John Baillie, M.A. By CHARLES MERCIER, M.D., F.R.C.P.

It is satisfactory to have drawn at last one professional logician out into the open, and to have elicited at length a defence of traditional logic. Hitherto, logicians have severely boycotted the New Logic, and have met it with a conspiracy of silence. I happen to know that, by

one journal or another, the professor of logic in nearly every university in the kingdom has been invited to review my book, and that each and every one has refused. Of course, the natural inference, to one who does not know the ins and outs of the matter, is that the book is not of sufficient importance to logicians to be treated by them with anything but silent contempt. This would be all very well if it were not that Dr. Schiller's attack had been similarly boycotted. Even Mind, a periodical which is supposed, by those who do not know it, to open its columns impartially to every shade of opinion, has taken no notice of either book. It is certain, therefore, that the studied ignoring of our attacks on the Logic of Tradition is not due to any failure on our part to bring the books to the notice of logicians; nor is it because they are the works of amateurs, for Dr. Schiller is himself a logician of eminence; and most certainly it is not because the attacks are not sufficiently thoroughgoing and trenchant to demand an answer. My own interpretation of the boycott is that the attacks are unanswered because they are unanswerable, and I am confirmed in this opinion by perusing the lame attempt of Mr. Baillie to defend the untenable position of ancient and modern logic. If this is the best defence that can be made, the position is already won, and the logicians are wise in their generation in sitting tight and ignoring the attack. Unlike Canute, they do not command the waters to retire; they sit with their backs to the sea and pretend that the tide is not rising because they refuse to see it rise; but their feet are already awash, and it will not be long before they are carried bodily away.

As a general rule, it is bad taste and bad policy for a reviewed author to challenge his reviewer; but in this case the future of an important science is at stake, and if I dispute with Mr. Baillie it is from no feeling of soreness; my withers are unwrung; I appreciate his courtesy and shall try to emulate it; and I value his admissions, somewhat grudging though they are.

Mr. Baillie attributes my disagreement with logic to my ignorance. Of course, he does not put it with such brutal plainness, but this is what he means when he says that in my book the terminology of the logicians is frequently misunderstood, and their thought is caricatured by being superficially interpreted; that I am often attacking a man of straw, a doctrine which is taught by no modern logician in the crude and crystallised form in which I state it. Mr. Baillie says this, but he does not adduce one single instance in support of his statement; and I submit that an accusation of such extremely wide and general character ought not to be made without supporting it by specific instances. An accused person is entitled to particulars of his offence. An indictment charging me with the murder of unspecified persons, by unspecified means, at unspecified times and places, would be bad on the face of it; and any grand jury, even if it were entirely composed of logicians, would be compelled by the judge, if not by their consciences, to find "no bill:" A charge of misunderstanding, caricaturing and misinterpreting is equally bad on the face of it, if it is unsupported by the production of particular instances.

That I have always understood the terminology of logicians I will not assert. In fact, I explicitly admit and declare that I do not under-

stand some of the utterances of the exponents of modern logic. When Mr. Baillie says that some of my criticisms coincide with those of modern logicians, I recognise the gravity of the accusation, but I am debarred from any defence by the vagueness of the charge. No instance, no particulars, are given. But when he says that my criticisms are less accurately expressed than those of modern logicians, the accusation is absurd on the face of it. To express oneself less accurately than a modern logician would require, in the first place, a natural genius for confusion of expression, and in the second a long and arduous training in obscurity of thought and diction, to neither of which I can lay claim. Lest my readers should imagine that I am unduly modest, I will requote from p. xiii of my book a triumph of obfuscation, the like of which is far beyond my very moderate powers. "The fundamental activity of thought," says a distinguished exponent of modern logic, is to be regarded "as the same throughout and as always consisting in the reproduction by a universal of a real identity presented in a content, of contents distinguishable from the presented content, which are also differences of the same universal." I would not advise anyone to read this sentence more than a score or two of times. The first hundred or so of times that I read it I thought I must be very stupid. At five hundred times I thought I was a born idiot. At two or three thousand, I came to the conclusion that I was going mad. Not till after ten thousand readings did I discover that though it purports to be English, it is really written in some foreign language with which I am unfamiliar. The Scotch of Burns is not easy to an Englishman; Welsh presents difficulties to one born outside the Principality; ancient Irish presents perplexities to the novice; but a mixture of all three, blended with ancient Chaldee and modern Choctaw, on a basis of Chinese, would be simplicity itself compared with the tongue in which modern logic is written.

So much for Mr. Baillie's first charge, that I misunderstand the terminology of the logicians. His second charge is that I continually caricature their thought by interpreting it superficially. If this means, as it appears to mean, that I accept the dicta of logicians in their plain and ordinary sense, and assume that they mean what they say, I plead guilty to the charge. If it means that I put a gloss on their statements, and pretend that they mean something other than the plain meaning of the words, when they have a plain meaning, then I emphatically deny the charge, and demand the production of an instance. Mr. Baillie gives no instance, and in the absence of particulars I am placed at an unfair disadvantage in defending myself. When he charges me with attacking a man of straw, a doctrine which is taught by no modern logician in the crude and crystallised form in which I state it, my reply is that in almost every instance in which I have stated what I understand to be the doctrines now taught, I have been careful to quote the *ipsissima verba* of the most recent text-books that I could procure -books that are, to my certain knowledge, used by students preparing for examination in the universities. It is true that I have not often given the source of the quotation; but as I have scarcely given one that I have not immediately held up to derision and contempt; and as it was the doctrine, and not the teacher of it, that I sought to deride and contemn; I thought, and still think, that it was in better taste not to name the authorities. Anyone familiar with logical teaching will have no difficulty in tracing to their source the quotations, which are, for the most part, distinguished by inverted commas. Apart from this defence, however, the charge of caricaturing the expressions of logicians—I know nothing about their thought apart from its expression—is intrinsically absurd. Most of their doctrines are so manifestly and preposterously wrong that it would not be possible to caricature them. You cannot caricature Baron Munchausen or Gulliver's Travels; you cannot caricature Edward Lear or Gammer Gurton; neither can you caricature the doctrines of logic. They are already caricatures.

But I deny also that I "continually interpret," whether superficially or otherwise, "the thought of logicians." Mr. Baillie gives no instance of my interpretation, whether superficial or deep, and therefore I can only conjecture what he refers to. Does he regard my comment on the inverse as a superficial interpretation and a caricature? Logicians say that from "Every truthful man is trusted" we can draw the valid inference that "Some untruthful men are not trusted." I say that, if this is so, then from "Every truthful man is mortal" we can draw the inference that "Some untruthful men are not mortal," and that this inference will be valid. Is this a caricature? Is this a superficial interpretation? The reader must judge for himself. I say it is neither; and I say, moreover, that most of the doctrines of logic are, like this, so manifestly and absurdly wrong that it is impossible to caricature them.

No doctrine of logic is more fully established, is more universally held, or is of greater antiquity, than the doctrine that it is impossible to reach a valid conclusion from two negative premisses. In my book I give a few examples, and could give hundreds more if it were worth while, in which such a conclusion can be, and is, reached from such premisses. Here is one: "No logician agrees with my doctrines; no logician is infallible: therefore some fallible persons disagree with my doctrines."

Is this a caricature? Is this a superficial interpretation? Let the reader judge. The only way in which a logician can get out of it is by denying that logicians exist. He is welcome to the alternative.

If Mr. Baillie says that these are not the instances he had in his mind, he has only himself to thank. He should have adduced his instances. The Editor of this Journal would not have grudged him the space, I am sure.

Mr. Baillie says that my doctrine, that a proposition expresses a relation, accounts for many strange things. I agree. It accounts for, and explains, many things so strange that they have puzzled logicians from the time of Aristotle down to this present day. Mr. Baillie seems to imply that this is a demerit in my doctrine; and doubtless, if the object of logic is to set up artificial puzzles in order to bewail their insolubility, my doctrine is distressful; but if the aim of logic is, as I understand it is, to explain and expound the true course of thought, then the fact that my doctrine explains many strange things is not a demerit, but a praiseworthy quality.

"Dr. Mercier's distinctions (between verbal and real propositions) are

entirely dependent on his apparent unfamiliarity with the accepted definitions of these terms. When this is realised, all Dr. Mercier's criticisms fall away?" In the first place, there are no "accepted definitions" of these terms in the sense that the same definitions are to be found in all, or in the great majority of text-books. In the second place, I gave, totidem verbis, three definitions out of authoritative text-books, and placed the definitions in quotation marks to show that they were quoted. In the third place, if we take, instead of these definitions, that which Mr. Baillie says is accepted, the most important of my criticisms still hold good, and in place of those that do not then hold

good, others equally destructive may be made.

"We are, at every point, left with distinctions in which no serious student could rest. Externality is distinguished from reality, and the matter is left there." So it is; but it seems to me better to make the distinction and leave it there than not to make the distinction at all, and to confuse externality with reality, as modern logicians do. "The distinction between validity and truth is allowed to remain quite unrelieved." Perhaps it is, and I must confess that I do not know how to relieve a distinction, nor what the difference is between a relieved distinction and an unrelieved distinction. At any rate, the distinction is insisted on, is defined, is made clear, is brought into prominence, with greater emphasis and at greater length than in any previous book on logic.

It is interesting to find that Mr. Baillie agrees with other logicians with respect to the laws of thought. Some logicians hold that these are natural laws that we must observe, and from which our minds can no more escape than our bodies can escape the law of gravitation. Others hold that these are laws in the civil sense—mandates that we ought to obey, but that we can disregard if we choose to take the consequences, just as we can disregard the law for licking stamps once a week. Most logicians, among whom it seems that Mr. Baillie is to be reckoned, maintain that the laws of thought are of both kinds at once, so that we are powerless to escape from them, but can disregard them if we choose. This is the position that I find it difficult to accept, and that Mr. Baillie thinks I am so superficial in rejecting. He finds it easy to accept it, but then he is a professional logician, and no professional logician would reject a doctrine on the mere ground that it is self-contradictory. That is wherein they have such an enormous advantage over us benighted creatures who have not enjoyed the advantages of a logical training.

Mr. Baillie says, quite correctly, that I complain that logicians have always been possessed by a passion to exclude from the realm of logic as much as they possibly could; and he goes on to say that I do not see why they have done this. I beg his pardon, but I do see it, or think I see it, and have given in my book the reason. It is because this method is so miserably inefficient that there is only an insignificant remnant of reasonings to which it can be made to apply. "Logic in fact forestalled the methods of Christian Science. When it came upon an inconvenient fact that it knew not how to account for or to deal with, logic adopted the simple course of ignoring that fact, and pretending that it did not exist." Mr. Baillie says that the reason tradi-

tional logic ignores the "many forms of proposition and of argument, many classifications, distinctions, etc.," that I include in my system, is that these are of no scientific interest. By scientific interest I suppose he means interest to logicians of the old and now exploded school, for that they are of interest to men engaged in scientific work of various kinds, I have the best reason for knowing. The new forms are, he says, such as can be very easily made, and as one has very little interest in making. Well, if the distinctions are so easily made, how is it that logicians have always hitherto confounded the corporate individual with the collective class, both with the aggregate individual, and all three with the uniform individual? Biologists have puzzled for generations over the proper concept of an individual, and are not agreed about it yet. It was the duty of logicians to provide them with such a concept, but logicians, living as they have always done, in the moon, considered, I suppose, that the concept was very easily made, and such as they had no interest in making, so they left it alone. The forms of proposition, argument, etc., that are ignored by logic, but are included in my system, are not only very easily made and of very little interest, but they are also, says Mr. Baillie, of very inferior importance as far as the theory of logic is concerned. They may be all this, but I should doubt whether they are more easily made, less interesting, or less important than the argument that if Socrates is a man and all men are mortal, then Socrates is mortal. Any argument more easily made, less interesting, or less important than this, it would be difficult indeed to devise.

The reason, says Mr. Baillie, that logic does not make use of all the differences of modality "is of course that modal propositions are so vague that, however practically useful they may be, they can be of little theoretic interest." He must pardon me, but that depends on the scope of the theory. If the theory is as poor, as limited, as narrow, as inept, as that of traditional logic, and extends only to apodeictic or assertoric certainty, then, of course, modal propositions are of little theoretic interest—to those theorists. But if the theory covers, as mine does, every degree of certainty and doubt, then modal propositions have as much theoretic interest as apodeictic propositions, and more.

Mr. Baillie finds fault with my analysis of the proposition. I say that the proposition expresses a mental relation, and that every relation must contain three elements—two related terms, and the link that relates them. "It is surely evident," says he, "to the slightest reflection that the relation does not contain the two terms and also the relating link. The link is nothing apart from or outside the terms, and is nothing that can be reckoned alongside of them as a third thing. The disastrous effect of this erroneous start," etc. To this I can but reply that it is surely evident on the slightest reflection that a relation does consist of three elements, and I have demonstrated in my Logic, p. 142, that if any of the three elements is taken away, the relation ipso facto ceases to exist. Of course, if by a thing Mr. Baillie means a tangible thing, then the relation is not necessarily a thing; but then neither are the terms. If the proposition is "This law is less just than that," a relation (of inequality in justice) is established in my mind

between this law and that law. I cannot touch the relation, it is true, neither can I touch the laws. If the proposition is "This rod is longer than that," it is true that I can touch the rods and I cannot touch the relation of inequality of length; but the inequality is not less "a thing," in the sense that I attach to a "thing," that is to say, of being contemplatible by the mind, than are the rods. It is true in one sense that the relation is not apart from the terms, since, of course, there can be no relation except between related things; but in another sense the the relation is apart from or independent of the terms, for the relation of inequality may be transferred from the rods to the laws, and from the laws to numbers, and to many other things; so that, although the relation is nothing apart from or outside of some terms, yet it is quite apart from and outside of any specific pair of terms, and may exist independent of them. Moreover a similar reasoning may be applied to terms themselves. Mr. Baillie asserts by implication that terms are things, and may exist apart from the relation between them. Granted; but still the terms can no more exist apart from some relation than the relation can exist apart from some terms. To deny this is to deny the relativity of knowledge. If by a "thing" we mean, as I mean in this context, that which is contemplatible by the mind, not in complete separation from other things, for such complete separation is incompatible with the relativity of knowledge, but with such comparative prominence as amounts for practical purposes to separation, then the relating link is as much a thing, and as separate a thing, apart from and outside the terms, as the terms are separate, apart from, and outside, the link between them.

The true logical structure of the proposition is, as Mr. Baillie rightly perceives, one of the cardinal and fundamental points on which I differ from the current doctrines of logic; and it is therefore worth while to pursue a little further his examination of my position. In the proposition "A is unequal to B" "only one thing," says Mr. Baillie, "is said about the subject A, viz., that it is 'unequal to B.' 'Unequal to B' is therefore [my italics] an indivisible expression for logical purposes. The only natural division is into the subject and what is said about it." I don't know whether Mr. Baillie would claim that this argument is a syllogism, but, syllogism or not, it is a very good sample of the mode of argument adopted by logicians. Would anyone on reading this passage suppose that I had discussed at length this mode of dividing the proposition, and had given reasons for holding it a bad and unnatural mode of division? Mr. Baillie meets my reasons and arguments by the simple assertion that the mode I have examined and found faulty is the right mode. He does not argue the matter, or explain why it is right, or meet my objections. No. Sic volo, sic jubeo; stet pro ratione voluntas. This living instance of the method of traditional logic will go far, I think, to justify in the minds of my readers my attack on the system. If this is the mode of argument taught by traditional logic, it is surely high time traditional logic was abandoned.

"When we say 'Tom is like Harry,' we do not attribute Harry to Tom in a certain relation" [No, we don't, and who outside of Bedlam would say that we do?], "but we attribute 'likeness to Harry' to Tom." Of course if attribution is the only relation that can be conceived by minds

or expressed in propositions, as Mr. Baillie, in common with all other logicians, asserts, then in asserting "Tom is like Harry," logicians do attribute "likeness to Harry" to Tom; but as I have so often warned them in my book, they must not seek to impose on reasonable men the restrictions and limitations with which they choose to fetter themselves. No one on this earth, except a logician, would or could so interpret the proposition "Tom is like Harry." What everyone but a logician would see in the proposition is the assertion of a relation of likeness between Tom and Harry. If Mr. Baillie would look, not to what text-books of logic assert that he ought to see in the proposition, but to what the mind contemplates in constructing the thought which the proposition expresses, he would find that the mental operation is the comparison of Tom and Harry, and the discernment that they are alike. The thought is founded on Tom and Harry, and subsequently brings in the relation of likeness. The mind does not separately contemplate "Tom" and "likeness to Harry" and then attribute the one to the other. Until Tom and Harry are compared, there can be no "likeness to Harry" to attribute to Tom. "And so the relation of attribution" does not "naturally cover all the other relations mentioned by Dr. Mercier." It is on this analysis of the nature and course of the mental operation that I found my doctrine, that the true structure of the proposition is not "Tom-is-like Harry," but "Tom-is like-Harry." Each term is, I say, contemplated separately and alternately; the ratio between them, of likeness, is a third thing different from either of the terms, and from both of them taken together; and the two terms, linked together by this element of the ratio, together constitute a relation; and thus, I say, are all relations constituted. "If," says Mr. Baillie, "the copula is merely a sign that we are saying something about something else, surely it is general enough to include all relations." Who would suppose, on reading this sentence, that I had entered into a long and elaborate argument to show that the copula does not and cannot include all relations; that, in fact, it expresses but very few; and that even such a simple relation as "Brutus killed Cæsar" cannot be expressed by means of it?

One of the main grievances that I have against logicians is that they cannot, or do not, argue. They don't appear to recognise any difference between argument and assertion. When I have occupied many pages with a laborious and exhaustive argument to show that a certain logical position is wrong, they complacently assert that it is right, and seem to think that this assertion disposes of my arguments. Their method is the method of the little maid in "We are Seven." I laboriously argue, and prove by every method of induction and deduction and analogy, by mediate and immediate inference, and by verification of hypotheses, that two and two make four; and when I have done, and display my arguments to the logician, he says, "No, you are quite wrong; two and two make seven. Aristotle said so, and you, in disputing it, caricature his thought by interpreting it superficially. You are attacking a man of straw, a doctrine that is held by no modern logician in the crude and crystallised form in which you state it." How is one to meet such an argument as this?

Mr. Baillie's criticism of my distinction between induction and deduction is another good example of the mode of reasoning followed

by the traditional school, though whether or not it is syllogistic I cannot say. Arguing from hypotheses, which I call deduction, he calls induction, and then he says the distinction between them is exactly the reverse of what I say it is. Why, of course it is, if you reverse the names.

Although, however, the distinction between deduction and induction is exactly the reverse (that is, exactly the same if you change the names back again) of what I say it is, yet ultimately both induction and deduction are the same; and my distinctions, with which it appears that Mr. Baillie thoroughly agrees (after the names are changed), "leave us in chaos." This seems to me to be the familiar doctrine that nothing is new, and nothing is true, and it doesn't matter.

For one criticism of Mr. Baillie's, however, I am heartily grateful, and none the less so that he does not seem to appreciate that it gives his whole show away. My book is often, he says, a fair enough account of how ordinary men think. That is precisely what it purports to be. That is what it was written for. That is the whole and sole purpose of the book. I never intended-I should not presume-to give an account of the way in which logicians and other extraordinary men think. Their method is so amazing, and the results to which it leads are so astounding, that it is far beyond my powers of description; and no doubt it was his realisation of my limited powers in this direction that led Mr. Baillie to admit, sorrowfully, as it seems to me, that "Dr. Mercier's distinctions leave us in chaos." By "us" Mr. Baillie means, of course, himself and his fellow logicians. It is but too true. I found them in chaos, and I leave them in chaos. They are the children of darkness and eternal night. They refuse to hear the voice of the charmer, charm he never so wisely. I find them groping with their syllogistic muck-rake at Socrates and his mortality, and I bid them lift up their eyes and view the glorious crown of the New Logic; but like their prototype, they stick to their muck-rake, and prefer to go on groping in the muck.

Note in Answer to the Foregoing Reply.

The Editors have very kindly allowed me to read the MS. of Dr. Mercier's reply to my review, and have placed at my disposal as much space as I might wish to occupy in answering its charges. But I have no inclination to enter into a discussion with Dr. Mercier, my purpose having been simply to express my opinion on the value of his work. Dr. Mercier's tirade, clever as its invective undoubtedly is, is hardly of the sort that could be taken seriously in the scientific world. I am afraid he thinks more of brilliance of style than of consequence of thought. Moreover, he does not appear to have yet benefited by the rebuke administered, with such generous mildness, by Sir Thomas Clouston in a recent number of this Journal; and as no reasonable person combats incivility with argument, I should in any case have been limited in my reply to certain parts only of what Dr. Mercier has written. Dr. Mercier may call this "a conspiracy of silence"; in reality it is merely a recognition of the fact that certain things need no condemnation because they condemn themselves.