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should be a lull in our efforts. We have still our work before us, and we must not flag in that work. I am very glad to hear of the new plan which has been adopted for conducting our proceedings during the present session. I think the idea of alternating the discussions in the manner proposed is an extremely good one, for sometimes people would be very willing to bring out interesting points in a quiet unreported discussion, when they would not like to do so if they knew that all their observations appeared afterwards in print. I believe that valuable truths may be brought out in such discussions, and may afterwards be embodied by the speakers, in papers which will be very valuable to us—as valuable as any of those which we have already had before us. I now call on Mr. Row to read his paper.

*ON DR. NEWMAN'S ESSAY IN AID OF A GRAMMAR
OF ASSENT.* By the Rev. C. A. Row, M.A., M.V.I.

1. **T**HE name of Dr. Newman will probably suggest to many of my hearers that this Paper will participate largely in a theological character. I will therefore undeceive them at once. The treatise before me claims to be scientific. It is true, that theological questions are touched on in it, but, professedly, in a spirit purely philosophical. My own opinion is, that its philosophy is biassed by the theology of the author; but with his theology I shall have no concern. The author appeals to fact and to reason alone. Its principles extend over the whole range of human thought, and are fundamental to most important questions of philosophy, science, history, criticism, taste, theology, in fact, wherever a conviction about truth is possible. This is a sufficient reason why we should give them a careful consideration. The work consists of 485 pages, and I calculate that nearly 300 of these are purely philosophical. What adds greatly to the interest of Dr. Newman's work is, that he assisted Whately in the composition of his *Elements of Logic*. It may be considered as giving us the measure of the changes in his views on that subject, which forty-five years have made in the mind of the author.

2. The work bears a modest title: it is an *Essay in Aid of a Grammar of Assent*. It is therefore tentative only—a movement in the way of establishing a grammar of assent; but it makes no pretensions to be such a grammar. This is as it should be; for in the present state of our knowledge, all that can be done is to contribute some aid towards its creation. A great point will be gained if we can elaborate principles which may hereafter be erected into a system; or if the elabo-

ration of such a system be an impossibility, if we can succeed in consigning to the world of unrealities some portion of those erroneous methods of treatment which lead to all kinds of crudities in philosophy, science, history, and theology. There are many things in Dr. Newman's work which are worthy of the closest attention of all investigators of truth. They are well calculated to suggest caution in every department of human thought. It would afford me the most sincere pleasure if I could bring these most important points to your notice. The length of the work, however, renders this hopeless. In proportion as I value some portions of this work, I am the more jealous of various positions in it, which seem to me to be of a most questionable character. I must, therefore, devote this Paper to the comparatively unwelcome office of criticising those portions of it from which I dissent, rather than the points in which I cordially concur. My observations, therefore must not be construed into implying an unqualified disapprobation of the whole of Dr. Newman's work. I regret, however, to be obliged to express a deep conviction that its fundamental principles are both unusual and dangerous.

3. The central position taken by Dr. Newman is that, while all inference is conditional, every assent of the mind is absolute, and that assent, from the nature of the case, does not admit of degrees. The second portion of the seventh chapter is entitled "The Indefectibility of Certitude." He considers certitude to be a state of mind following assent; that it is absolute; and that to talk of degrees of certitude is absurd. If I apprehend him rightly, the point which he wishes to maintain is, that the mind can justly arrive at certitudes absolute and unconditional, when the premisses on which these certitudes rest justify a conclusion which is only probable. In one word, I understand him to assert that our beliefs may rise higher than their sources, and that we are entitled to entertain as strong convictions, nay, to embrace as certitudes, propositions which are incapable of being exhibited other than as bare probabilities to the understanding. This position seems to open a most serious question, and that it can only be maintained by confusing together things which differ widely.

4. In considering the nature of these operations of the mind through which we arrive at truth, I must ask your careful attention to the positions laid down in the fourth chapter as to the distinction between notional and real assents. Dr. Newman divides all our conceptions into two great classes, notional and real; and our assents into two corresponding classes, notional and real assents. Our no-

tional conceptions are those which are the pure creations of the mind, and which have no existence outside it; our real ones are those which we give to concrete things, which, however modified by the mind, have an objective existence. The logical intellect deals only with the notional conceptions of the mind; logical proof produces only notional assent. It is incapable of establishing any truth to which we yield a real assent, because the conceptions of the intellect are not capable of adequately measuring external realities. With these positions I agree to a certain extent; but I think that Dr. Newman goes too far when he excludes all real conceptions from the cognisance of the logical intellect. Our real conceptions are not and cannot be adequate measures of external realities, but of those realities as perceived by our own minds. The degree in which those realities correspond to our conceptions of them is a matter of inference only, or of our intuitive or instinctive beliefs. He is also of opinion that the processes of induction cannot be exhibited in any logical formula which is capable of being grasped by the understanding. In adopting this view he has abandoned the position taken by Whately, and, as far as the impossibility of exhibiting inductive reasoning in the form of the syllogism is concerned, I think rightly. But I cannot think that all efforts to evolve formulas which will aid us in detecting the imperfections of our mental processes must be abandoned. When, in the latter chapters of his work, he appears to lay down that the faculty which he designates "the illative sense," is the only means which we have of verifying our inductive processes, he appears to me essentially unsound, and dangerously to approximate to the assertion that to the individual truth is that which he throweth.

5. The examination into the nature of these notional and real assents occupies a very important place in Dr. Newman's system, and I must give it a brief consideration. The following passage will give a clear view of his distinction between things notional and real (p. 9):—"All things in the exterior world are unit and individual, and are nothing else; but the mind not only contemplates these unit realities as they exist, but has the gift, by an act of creation, to bring before it abstractions and generalizations which have no existence, no counterpart out of it." Here Dr. Newman seems to me to overlook the distinction between external things as they exist which are unit and individual, and the modification which they undergo when they become mental conceptions. It should be observed, however, that he admits the

possibility of our notional assents being converted into real ones.

6. Assent to a proposition implies that it must be intelligible. Without understanding what it means there can be no assent. When therefore he lays down that for a genuine assent the subject of a proposition may be utterly unintelligible, and the predicate needs only to be apprehended, he seems to me to lay down a position which is destructive of all rational conviction. When we say, for example, that "man is mortal," we assert the predicate of the subject; and I admit that it implies that we have a clearer apprehension of the predicate than the subject; still, I contend that we must have a comprehension of some kind of the subject. Dr. Newman gives, as his illustration, an assertion put into the mouth of a child, "lucern is medicago sativa." This, he most correctly says, is an assertion no better than the utterance of a parrot; for a child understands neither of these terms. But he adds, "if he is told lucern is food for cattle, and is shown cows grazing in a meadow, then, though he never saw lucern, and knows nothing about it, besides what he has learned from the predicate, he is in a position to make as genuine an assent to the proposition, on the word of his informant, as if he knew ever so much more about lucern." This I utterly deny. I would ask Dr. Newman, whether the act of showing the child the grazing cows does not convert the meaningless lucern into a word with meaning, though it may be an indefinite one. The child immediately associates the word "lucern" with the grass which he sees, and the word is no longer a pure blank. It seems to me that assent is impossible if we can attach no meaning whatever to the subject. I admit that there is no necessity for understanding both terms with equal clearness. The child in assenting to the proposition, "lucern is food for cattle," on the sight of the feeding cows, may not form a distinct conception of lucern, as distinct from grass or clover; but he forms an indefinite notion of it, as analogous to the grass which he sees. He conceives of it as a vegetable substance of some kind. At any rate, he can distinguish between it and a stone, or the letter x. Even when we use symbols we attach meanings to them very different from the utterances of a parrot. But Dr. Newman goes on to say that there are cases in which a child can give "an indirect assent to a proposition without understanding either subject or predicate. He cannot assent to the proposition itself, but he can assent to its truth." He cannot do more, says he, "than assert that lucern is medicago sativa, but he can assent to the proposition that lucern is medicago

sativa is true." I deny that the child assents at all in such a case. He believes in the general truthfulness of his mother, but it is absurd to say that he assents to the truth of the proposition if he comprehends neither of the terms "lucern" or "medicago sativa." To believe that one's mother speaks the truth, and to assent to every proposition which she utters are two things which differ widely. I can hardly think that Dr. Newman would have taken such a position unless he had felt himself compelled to do so by the exigencies of his theological system.

7. Although Dr. Newman lays down that assents do not admit of degree, at p. 40 he distinctly tells us that "there are assents so feeble and superficial that they are little more than assertions." He treats of them under the heads of profession, credence, opinion, presumption, and speculation. Under the first head, he places such cases as when a man calls himself a Tory or a Liberal; when he adopts, as a matter of course, the literary fashions of the day; the popular and reigning notions about poetry, music, novels, costume, or wines. He is not insensible of the difficulty in which the common language of mankind involves him; but he endeavours to evade it by saying that such opinions are assertions and not assents. He gives several instances of them which are very curious, and I subjoin them in a note.* "To say," he adds, "I do not understand a proposition, but I accept it on authority, is not formalism; it is not a direct assent to the proposition; still it is an assent to the authority which enunciates it." This seems to me to be an admission of what I strongly contend for, that such assents are not assents to the proposition itself, but to something else; just like a boy who learns his Euclid by heart, without the smallest comprehension of the proof.

8. Dr. Newman attaches a peculiar meaning to the word presumption. He tells us that it is an assent to first principles; and that first principles are the propositions with which we start in reasoning on any given subject-matter. Among these are all the great truths which are generally assented to by mankind, which he considers to partake in the nature of instincts. The

* "Such words are liberality, progress, light, civilization; such are justification by faith only, vital religion, private judgment, the Bible, and nothing but the Bible. Such again are rationalism, Gallicanism, Jesuitism, ultramontaniam; all of which, in the mouth of conscientious thinkers, have a definite meaning, but are used by the multitude as war-cries; such names and Shibboleths, with scarcely enough of the scantiest grammatical apprehension of them to allow of their being considered more than assertions." As, however, such assertions can be wielded vigorously, they are evidently a species of assent, and as such they overthrow Dr. Newman's theory.

attempt to establish these on higher degrees of certitude must be abandoned, as lying beyond the reach of the human faculties. He observes, our conceptions are only the measures of our own minds, and fail to represent the full realities of things. If this be the case, it is hopeless by any amount of reasoning on, or analysis of, these conceptions, to penetrate the regions of ontology. The infinite God is a real existence external to our minds; but the idea of the infinite is a notional conception, and is incapable of adequately measuring the reality beyond the mind. In a similar manner it is impossible to solve the questions of being and non-being, and the various questions of transcendental metaphysics by the conceptions of the human understanding.

9. Dr. Newman places, and I think rightly, among these first principles our belief in an external world. It is, as he says, an instinct of our nature possessed by man and portions of the brute creation. All attempts to prove its existence, or to get a true notion of it by analysis, beyond what is furnished by our intuitional perception of it, seem to me as complete a failure as the attempt to prove that things which are equal to the same thing are equal to one another. The axiom we perceive to be self-evident intuitively. The other, although we cannot perceive it to be self-evident, yet, do what we will, we cannot help believing it, and after every attempt to dispute its existence, we believe it still. Equally intuitive are our perceptions of the results of our particular acts of reasoning and of memory. Under certain conditions, we cannot help believing in them, and I feel as certain of the truth of my having eaten my dinner yesterday, as I am of the truth of the asses' bridge. This attaches not to the faculties generally, but to the particular acts. The moral nature of man must also be taken for granted as an ultimate principle in our reasonings. We are conscious of its existence. As matter of fact, we feel the distinction between right and wrong, and this reality is quite unaffected by any curious speculations as to the origin of this perception. Whether the feeling of benevolence, for example, can be resolved into some peculiar action of that of self-love, is a mere question devoid of any practical result. The feeling exists in fact. We are directly conscious of its existence; and whatever may have been its origin, that it is opposed to the principle of self-love. Our primary consciousness and our instinctive perception form as firm a foundation for reasoning as those truths which are commonly called axioms. Another similar principle is our belief in causation. On this subject Dr. Newman has a number of most valuable remarks; and amidst much which I

object to in many of his positions, it is satisfactory here to be able heartily to concur with him. The truth is, however much we may bewilder our minds by obscure speculations, we cannot help believing in the idea of causation as distinct from a mere succession of antecedents and consequents. The mistake has originated in representing our idea of causation as a self-evident truth, which it is not. It is an intuition of our consciousness.

10. I feel that I am a cause. I am conscious that action originates in myself; nor does my inability to express this belief in the terms of a strict definition enable me to get rid of this perception. I am conscious of myself as the cause of my own actions, in a very different sense from my being a mere antecedent, and the actions the consequent. The conception includes the consciousness of volition. Dr. Newman errs in referring the idea of causation only to experience. "The notion of causation," says he, "is one of the first lessons which a child learns from experience, that experience limiting the conception to agents possessing intelligence and will. It is the notion of power combined with a purpose and an end. Physical phenomena as such are without sense, and experience teaches us nothing about physical phenomena as causes."

11. When we speak of causes in the material world, we transfer an idea of causation derived from consciousness to the phenomena of succession and law. I am ready to admit that this has been attended with very serious errors. Still, however, I cannot think that the modern theory of antecedents and consequents has unravelled the entire mystery, even in matters of material causation. We have definite meanings when we say that want of food is the cause of hunger, or the explosion in the gun is the cause of the impulse of the ball. In such things the mind instinctively recognises something more than a bare succession of antecedents and consequents: it yields assent to the truth that all action must be ultimately referred to the impulse of will.

12. Dr. Newman has some very valuable remarks on the doctrine, that the order of nature cannot be otherwise than it is, and in that sense is necessary, and that this necessity is proved by experience. On the contrary, if proved at all, it is not proved by experience, but by reasoning, and by a reasoning which corrects the inaccuracies of our experience. As he remarks, "few concrete facts precisely repeat themselves." We can only infer their invariableness except on the principle of the existence of an unchanging will.

13. In considering Dr. Newman's position, we must carefully

keep in mind his distinction between notional and real assents; and that he admits that the former, by an act of individual realization, are capable of being converted into the latter. Of the conversion of notional into real assents, he gives the following illustration:—

“When the Duke of Wellington wrote his celebrated letter about the national defences it was received with a notional assent. When the French marshals talked of coming over to England it produced a real assent on the minds of the English people.”

14. Dr. Newman assigns this change to the power of the imagination, which he thinks has much to do in the creation of real assents. This is only a partial statement of the truth. The imagination presents the conception to the intellect. But the cause of the change must be sought in the connection between particular classes of our rational convictions and our moral nature. When these are aroused into activity our notional assents become real ones. The French marshals aroused the fears and the wrath of the English people, and then the original dead faith with which the Duke of Wellington’s warnings were received was converted into a living one, and created a practical influence.

15. I now proceed to examine Dr. Newman’s position that all assent is in its nature unconditional. I give his own words: “Assent is in its nature absolute and unconditional; though it cannot be given except under certain conditions.” He is aware of the difficulty, for he adds, “This is obvious; but what presents some difficulty is this, how is it that a conditional acceptance of a proposition—such as is an act of inference—is able to lead, as it does, to an unconditional acceptance of it, such as is assent; how is it that a proposition which is not, and cannot be demonstrated, which at the highest can only be proved to be truthlike, not true, such as, I shall die, nevertheless, claims and receives an unqualified assent?” To establish the unconditional character of all assents and certitudes is the main point of Dr. Newman’s work, and it requires our most careful consideration. It is, in fact, its great fallacy, and opens before us the bottomless gulf of either credulity or scepticism.

16. First, if human language is to be taken as an indicator of mental facts, assent is not in all cases unqualified and unconditional. Mankind have with considerable unanimity united qualifying terms to those words which denote acts of assent. I am ready to admit that, if we contemplate the theory abstractedly or ideally, there is a sense in which there are no degrees of assent or certitude. It may be said that a thing

cannot be more than certain, and if less than absolutely certain, it is not certain. The same view may be taken of the abstract idea of assent. It is a fact that viewing the question ideally, a proposition can be true only, and cannot be more true or less true. But yet mankind unanimously concur in speaking of degrees of truth. The forms of language imply degrees of assent, and although not to an equal extent, degrees of certainty varying as to the character of the evidence. But Dr. Newman admits, and I entirely concur with him, that it is impossible to construct mental science on mere ideal conception of what ought to be. We must content ourselves with the facts of human nature. If we use correct language, so as to free our notions of assent, truth, and certainty from all conditions, the result will follow that there will be very few things left which we can either assent to, be certain of, or believe to be true. But Dr. Newman has no intention to reduce the number of our assents or certainties to a minimum, but to make a great number of uncertainties assume the aspect of certainties. His position, therefore, appears to me to be inconsistent with his own principles, and although it may have some degree of ideal truth, it is no account of the facts of human nature. It confounds between ideal and relative truth; and the greater portion of our assents and certainties are relative and not ideal ones. The position taken by him is the first step in the ladder whereby he would get us to accept a number of propositions resting on very contingent evidence as unconditionally true; or, in one word, that our faith may be stronger than the foundation on which it rests.

17. Accordingly he proceeds to make a vigorous assault on Locke and others for maintaining the contrary. Dr. Newman seems to me to argue on the principle, that if we dispute the correctness of his views we must assume that actual demonstration is necessary for every form of certitude; and that if the element of probability enters into our premisses we never can get even relative certitude into the conclusion. He quotes Locke at considerable length, where he maintains that our certitudes of truths ought not to rise higher than the evidence which supports them. Unless I misunderstand Dr. Newman, he lays down a position analogous to the admission that although the strength of a chain is no greater than that of its weakest link, it will support a weight equal to that of its strongest.

18. To establish his point, Dr. Newman enters on a minute examination of the distinction between inference and assent. All inferences he asserts to be conditioned on the premisses.

Assent is an act of the mind subsequent to inference; entirely independent of it and unconditioned.

19. Let us test this position. I assent to the truth that the three angles of a triangle are equal to two right angles. This assent, however, is surely dependent on the proof. A child who could not understand the proof would consider the assertion far from evident. I may at present not have the proof before my mind, but I can remember that I once had, and I therefore yield it an unconditional assent; because the premisses and the conclusion were both unconditional. When Dr. Newman asserts that all conclusions are conditional, there is an ambiguity in his language. In one sense of the words, all conclusions are conditioned on the premisses, because the truth of the conclusion is involved in the truth of the premisses. This fact is expressed by the word, therefore. But this is a widely different sense of the word conditioned, from what we mean when we speak of an unconditional assent, because, when premisses are necessary, the conclusions which necessarily follow from them are necessary also. It seems to me to be absurd to speak of the same truth as being conditioned in the conclusion, and unconditional in the assent. When I say, "therefore the three angles of a triangle are equal to two right angles," my assent is involved in the act of enunciating the conclusion, and if the matter is necessary, my assent is absolute.

20. But when I assent to this proposition, without having the proof directly in my mind, I do so on the remembrance that it once was there; and this remembrance rests on the most distinctive act of self-conscious certainty as complete as that two and two make four. Our intuitions of space and quantity afford the firmest grounds of conviction that the mind can attain to. But it is a popular mistake to suppose that we have no certitudes except those which we derive from demonstration or from self-evident intuitions. God has acted towards us with greater liberality. I am quite as sure that I ate my dinner yesterday, or that I am now standing, and not sitting; as I am that the whole is greater than its part; though of the two first we can conceive the contradictory and of the last we cannot. Still, I contend that this does not make the one a greater certitude than the other. The fact, therefore, that in the formal act of reasoning, conclusions are conditioned on the premisses, because they flow from them, is no proof that conclusions in necessary matter are conditional, nor does it help Dr. Newman to elevate a conditional conclusion into an unconditional assent.

21. Dr. Newman thinks that his opponents confound between

assent and inference. We do no such thing. We say that assent is involved in the inference; but while the mind is in the act of drawing the inference, its attention is chiefly concentrated on the word therefore; and when we simply assent, we contemplate the proposition without the therefore. So far, but no further, there is a distinction in the act. I have pointed out how the acts are related, and therefore cannot agree with our author's conclusion, "that either assent is intrinsically distinct from inference, or the sooner we get rid of the word out of our philosophy the better."

22. 2nd. In reasoning on contingent matter, our assents to the conclusions partake in the contingency of the premisses. While I lay down this as a general principle, I fully admit that some kinds of moral evidence commend themselves to our reason as certainties as much as those which we arrive at from demonstrative proof. Of these I will speak hereafter. But when this is not the case, the contingency of the foundation qualifies the absoluteness of the assent. Of this kind are most moral and political propositions. They are true, not absolutely, but for the most part. We yield what we call a general assent to them, but it is one subject to qualifications. To assert that such assents are no assents at all involves a mere verbal question.

23. Dr. Newman's great objection to the possibility of there being degrees of assent is founded on the fact that assents may endure without the presence of the inferential acts on which they are founded. I am quite ready to admit the fact; but I cannot see how it proves that assent does not admit of degrees. The actual inferential acts may have passed away from the mind; but we can recollect that they once were there, and the strength of our assent will vary with the contingency or non-contingency of the conclusion, *e.g.*, I once had the entire evidence on which Müller was convicted for the murder of Mr. Briggs before my mind. My recollection of its various stages is probably now less complete. My present assent to the justice of the sentence is founded on my recollection that it was established on irrefragable evidence that Mr. Briggs had been murdered; and that no other man but Müller could have been the murderer. Therefore he was the murderer. I am quite unable to see how the presence of the word "therefore" makes my assent conditional, or the taking it away involves an unconditional assent.

24. 3rd. He alleges that assent sometimes fails while the reasons and the inferential act are still present. In one sense of these words I doubt the fact, but in another there is no question that a conclusion of the intellect does not neces-

sarily become an assent of the heart. An opposing moral principle may overbear the evidence. Thus the intellect may draw the conclusion that drunkenness is destructive to health; but the fierceness of desire may nullify its force. I cannot see, however, how this affects the question.

25. The third, fourth, and fifth reasons are founded on a similar mistake. I have already conceded that the appetites and passions are sufficiently strong to overbear the conclusions of the intellect. But many of our assents do not originate in the intellect; but in the heart, and from the heart are reflected into the intellect. These vary in intensity according to the strength of our appetites and affections, *e.g.*, I assent to the proposition that cayenne pepper is a desirable article of food exactly in proportion as I like it. If reasoning teaches me that it is injurious to health, my assent will be qualified in proportion to the cogency of the conclusion. If my liking for it is very great, it will affect my assent exactly in proportion as the appetite is stronger than the sense of danger which the reasoning creates. The facts adduced by Dr. Newman totally fail to establish his conclusion.

26. Dr. Newman contends that his argument holds good even in the purely demonstrative regions of mathematics. He is obliged to concede that in demonstrations of moderate length, the facts are against him. He contends, however, that in long and intricate mathematical investigations, inference is not always followed by assent. Of course it is not, because we are all conscious that we are liable to mistakes, and the longer and the more delicate the investigation the greater the probability of error. But when the whole processes have been fully verified, our assent becomes absolute; till then it is contingent, but contingent only as our consciousness of the imperfection of our own powers. Let it be carefully observed, however, that the conclusions of mathematics rarely, if ever, run counter to any principle, good or bad, in our moral nature. If they did, I am quite ready to admit that similar consequences might ensue, as in the case of moral or political propositions. But this does not affect the principle in question.

27. At p. 165 I find the following most curious piece of reasoning. I think that you will want no commentary of mine to point out that the author is confusing himself with the double sense of the word "conditioned." "Inference is always inference; even if demonstrative, it is still conditioned; it establishes an incontrovertible conclusion on the condition of incontrovertible premisses. To the conclusion thus drawn, assent gives its absolute recognition. In the case of all demonstrations, assent, when given, is unconditionally given.

In one class of subjects, then, assent certainly is always unconditional; but if the word stands for an undoubting and unhesitating act of the mind once, why does it not denote the same always?" I should have supposed that a person who has but one-hundredth portion of the logical genius of Dr. Newman would have seen the fallacy of this reasoning. The latter portion is answered by the simple question, If once in unconditioned matter, why should it be always so in conditional matter?

28. But our author rests a considerable portion of his case on the fact that Locke and others admit that there is a kind of contingent proof which approximates to the force of demonstration. Our assents and beliefs, therefore, can assume a more absolute form than the foundations on which they are based. I am quite ready to admit that there are kinds of moral evidence which produce in the mind the feeling of absolute certainty; but this by no means establishes the truth that our assents can be unconditioned when the evidence only justifies a merely probable conclusion.

29. To all practical purposes $1 + \frac{1}{2} + \frac{1}{4} + \&c. \text{ ad infinitum} = 2$, although I admit that to elaborate the strict metaphysics of this is very difficult. In the same manner certain kinds of moral evidence are calculated to produce, in the conclusion which results from them, all the force of demonstration. Dr. Newman admits that we must give up theories and make a simple appeal to facts. For the rationale of this, I answer, the mind is so formed as to see that it is so. Evidence much less than *ad infinitum*, even only where four or five independent lines of proof meet in a common centre, is of equal force as demonstration, and proves the impossibility of the contradictory being true. One or two links of such evidence do not produce this result, but the whole series do; and the possibility of error is sufficiently eliminated, when a sufficient number of the terms converge in a common centre. The evidence does not consist of a mere balance of probabilities, and it is to such alone that the idea of contingent is properly applicable.

30. Let us take an example. A single indication of apparent contrivance, skill, or design, is not sufficient to prove that the thing in which it exists had an intelligent author, though it may make it highly probable; still less would one or two instances prove that the universe was the creation of a divine mind. But the more we increase the number of such instances, the higher is the certainty of the conclusion; but when they are indefinitely multiplied, and all converge in a common centre, the possibility of this being the result of

chance is destroyed. It combines the effect of the summation of an infinite series, with the proof of the impossibility of the contradictory; *i.e.*, our minds are so formed that they cannot help yielding to the evidence as absolutely conclusive. If we could exhibit the cumulative force of the reasoning mathematically, the array of figures would be so great that they would be beyond the grasp of a finite mind. Locke may have been incorrect in saying that this evidence amounts to demonstration; but it has equal force as demonstration, and certainly does not help Dr. Newman to metamorphose a very conditional conclusion into an unconditional assent.

31. But an inferior degree of such evidence is sufficient for all practical purposes. Dr. Newman has ably commented on the judge's directions to the jury in the trial of Müller. The effect which the entire evidence produces on the mind is as firm a conviction that Müller murdered Mr. Briggs, as would have resulted from the evidence which is called demonstrative. I only speak of the fact. How it does so is another question. I believe that it could not help producing a similar result on any mind which is capable of reasoning, when it is surveyed in its totality. There may be minds which are incapable of surveying a chain of evidence of this kind; but this no more affects the question than the unquestionable fact that there are minds who are incapable of following the steps of a demonstration in Euclid. Nor was its conclusiveness affected by the fact that numbers of letters were published in the papers by ingenious persons who attempted to pick holes in it. An ingenious man, if he were so minded, could do the same with no small number of mathematical demonstrations. The reason why such persons rarely make the attempt, is not the impossibility, but the want of inducement to do so. But in Müller's case no infinite series of facts dovetailing into one another was required. Five or six links exactly fitting into each other were sufficient. They did not directly prove that Müller was the murderer; but what is equally conclusive on mathematical principles, that none other but Müller could have been the murderer. I cannot see, therefore, how evidence of this character will help Dr. Newman in arriving at a conclusion that all assents from their very nature must be absolute and unconditioned; or that such assents can be given when the evidence only justifies a probable conclusion. Doubtless many hold assents and convictions really stronger than are warranted by the premisses; but the ground of this is in our moral nature, not in our intellect. An apt illustration of this may be found in multitudes of assents given in the spirit of party.

32. I fully admit with Dr. Newman that the number of principles to which the mind is formed to assent independently of reasoning processes is large. They all partake in the nature of intuitions. Those which are not self-evident, or rest on the testimony of consciousness, for want of a better word, may be designated instinctive. To constitute them such, it is not necessary that they should be felt by all men; it will be sufficient that they should be entertained by a large majority of mankind. The numerous attempts which have been made to resolve these principles into higher ones have ended in no satisfactory result. In all reasonings they must be assumed as ultimate facts in human nature. Such assents are all absolute. Let it be observed, however, that multitudes mistake conditional for absolute truth, and the unconditional nature of their assents is owing to this mistake. We must also carefully discriminate between the assents which I have mentioned, and those which we make at the mere bidding of our moral nature. It seems to me that some of the most serious errors in Dr. Newman's work have originated in not attending to this distinction. He also further observes that we give assent to things which lie quite beyond the limits of formal logic. I think that this is correct as far as the purely deductive processes of the intellect are concerned. But it is deeply to be regretted, although he frequently alludes to the principles of induction; that he has given us no analysis of them. If he means that it is impossible to exhibit the principle of induction in forms of thought such as, although they will not secure us from error, will greatly diminish our danger of falling into it, he is doing much to subvert all our principles of certainty. He appears largely to identify it with the "illative faculty," mentioned at the conclusion of his work.

33. On the same principle on which Dr. Newman asserts that all assents must be absolute, he denies that certitude admits of degrees. Ideally he is right; but in a practical view of human nature we have nothing to do with ideal certitude or ideal truth. We have to deal with the feeling of certitude as it exists in individual men. As a practical fact we habitually speak of being more or less certain, and say that a thing is more or less true. If we confine our use of the words assent, truth, and certitude to those cases only where our assents are absolute, the truth indefectible, and the certitude perfect, our assents, truths, and certitudes will be reduced to the narrowest limits. The mode in which Dr. Newman puts the whole question seems to me to give us no refuge between unhesitating submission to authority or scepticism.

34. I must adhere to the general principle, that all our convictions are absolute or contingent according to the foundation on which they are erected, and that our beliefs ought not to be stronger than the basis which support them. Certitude, in the ordinary sense of that word, means a conviction resting on what the individual mind feels to be a very strong foundation.

35. I cannot help thinking that there is a good deal of confusion in Dr. Newman's analysis of certitude. It may be worth while briefly to examine what we mean when we say that we are certain of a thing. Certitude differs in some degree from assent, belief, or conviction. It involves each of these states of mind, and something more in addition. This alone is a sufficient proof that assent cannot be absolute. Now, I have already admitted that certitude in its ideal sense does not admit of degrees. Truth, as Dr. Newman says, is truth, and cannot be otherwise. But this is to do what he again and again protests against as unphilosophical, viz., to take refuge in abstractions. Such certitude is not human certitude, because, as every man knows, or rather ought to know, that man has not the gift of infallibility. I object, therefore, to Dr. Newman's expression, "the indefectibility of certitude," as confusing between an abstract conception and a concrete thing. We mean by certitude, a conviction about which no reasonable doubt exists. I contend that all these mental phenomena, as they are actual things and not ideal conceptions, admit of degrees.

36. But there is another class of propositions frequently alluded to by Dr. Newman as supporting his views, of which we are absolutely certain, yet the evidence of them is contingent. "Ireland," says he, "is an island. We are absolutely certain of it; yet the proof of it is contingent. We have never sailed round it, or perhaps seen one who has." This at once brings us to the question as to how far various lines of evidence, each of which may be contingent separately, when they meet in a common centre lead to an absolute conclusion. Why do I believe the assertion that Ireland is an island, and disbelieve that of Lemuel Gulliver, that there is a flying one called Laputa? I reply that there is a principle in the mind which cannot help recognising the impossibility of error as the result of a certain amount of evidence, which converges in a common centre. I am not concerned with the question whether this conviction is the result of a primary principle, or rests on an acquired habit of the mind. It is sufficient that it exists, and is calculated to produce as strong a feeling of certainty as demonstration. The conclusion legi-

timately follows from the premisses. But with respect to Laputa, the testimony is valueless. If it be said that our rejection of the story, prior to all inquiry, is founded on our disbelief in the possibility of the miraculous, I deny it.

37. Another case of certitude is adduced by Dr. Newman, which he considers to rise higher than the evidence on which it is based. Every one of us, says he, feels certain that we shall die, although we admit that there are two cases in the history of man where death has not taken place. I cannot see that these two cases at all affect the general character of the proposition; but they help to prove what I maintain, that all our highest certitudes admit of qualification. The certitude in question is, after all, a conditional one. It is based on an hypothetical syllogism. We must die if God will not work a miracle to prevent it. But He will not. Therefore we shall die. I admit that we all feel certain that we shall die; but I maintain that the certitude is conditional, and not absolute, and therefore that this example of his own choosing is destruction of Dr. Newman's general position. But how, independently of the hypothetical syllogism, do we arrive at the certitude itself? Does it rest on merely probable evidence? I answer that it rests on several lines of evidence, which converge in a common focus, one of which involves the whole principle of inductive inference.

38. Dr. Newman maintains what seems very like a paradox. Although a man may have been in error a hundred times respecting the reality of his certitudes, this does not hinder him from attaining an absolute certitude on the one hundred and first time. This involves a confusion of thought between absolute and concrete certitude. I do not deny that many minds exist on whom all the lessons of experience are wholly thrown away, and that many are certain on most insufficient grounds. But if a man feels that he has been always wrong in what he has taken to be certitudes, and yet feels absolute and unqualified trust in the certitude of his last convictions, his certitude has a moral rather than an intellectual basis. It may be owing to imperfections in his reason; but I should rather attribute it to a deficiency in the grace of humility.

39. There is much which is extremely valuable in Dr. Newman's chapters on inference. But the opening paragraph is misleading on grounds which I have already pointed out. "Inference," says he, "is the conditional acceptance of a proposition; assent is the unconditional. The object of assent is truth; the object of inference is the truth-like, or a mere verisimilitude. The problem which I have undertaken is that of ascertaining

how it comes to pass that a conditional act leads to an unconditional." Let it be observed that conditional and unconditional are here used in two different senses.

40. With respect to formal inference or deduction, I agree with Dr. Newman that the mind generally proceeds from premise to conclusion without a direct consciousness of the connecting link. It reasons, not *secundum artem*, but intuitively. Artificial systems, such as formal logic, are intended not to increase our mental powers, which are given us by nature, and are perfected by practice, but to guard us against the mistakes to which we are liable. After having established a proposition by a course of reasoning, the knowledge of formal logic enables us to ascertain if we have fallen into error, and when, where, and how the error has been committed.

41. Dr. Newman points out with great force the various dangers to which deductive reasoning is liable. But these are not so much in the process itself as in its accessories. But when he infers that the conclusion, at best, can be only probable, I am unable to discover how this follows from his premisses. Surely the conclusions of geometry are characterized by certainty. As long as our reasonings embrace a simple conception only, as space or quantity, we use the same term unmodified in meaning in our principles, premisses, and conclusions. But in all other subjects of thought, a number of conceptions, some of them indefinite, enter into the terms. Hence the danger, in long courses of reason, of confusing the terms in the premisses and the conclusion. Against this the only thing which avails is the gift of a clear head. When reasoning confines itself to the use of symbols, its conclusions are free from some of this liability to error; but the process is useless unless we can translate the symbols into notional or real conceptions. Dr. Newman maintains that for the purpose of avoiding error reasoners are obliged to contract their conceptions, so as to render them more and more inadequate to represent external realities; and consequently that we can only arrive at probable truth by a process of deductive reasoning. I cannot admit this in the unqualified manner in which Dr. Newman puts it. If I saw a triangular piece of ground, I should be quite sure that two of its sides were longer than the third. I dispute not that our processes of reasoning are liable to many imperfections, our judgments are imperfect; actual things have a vast complexity compared with our conceptions of them. No doubt it would be very desirable if our faculties were more perfect. But still, if we use all the aid which scientific processes afford against the intrusion of error, and test them again and again, our de-

ductive reasonings will conduct us to something more than to conclusions which are merely probable, and we need not manufacture a new process, called "assent," to give them certainty.

42. Dr. Newman also heavily complains of deductive reasonings, because they furnish no means of dealing with first principles, and first principles are variously assumed by men of different minds. It is a mere truism to say that we must start with assumptions. The unknown must be referred to the known; the uncertain to the certain. But the necessity which we are under of starting with assumptions prior to calling into exercise our deductive intellects, has no tendency to make our conclusions simple probabilities. The danger arises from men often assuming as first principles what have no right to be viewed as such, from their prejudices, or the dictates of their affections or their passions. When considerable numbers of the wisest and the best question our first principles, it is a reason for thinking that they may originate in our idiosyncrasies rather than be actual measures of thought, and for subjecting them to a rigid scrutiny. But this does not convert all reasoning into a question of mere probability.

43. For the purpose of illustrating the unsatisfactoriness of verbal reasoning, Dr. Newman adduces the difficulty of ascertaining the true readings of Shakespeare, and endeavours to show that such processes involve higher acts of the mind, which formal inference cannot touch. "It is obvious," says he, "that a verbal argumentation on 20,000 corrections is impossible." No doubt it is, and many other processes besides verbal reasonings, are necessary for ascertaining truth. But this by no means proves that all formal logic is useless to the critic. To determine the value of various readings requires a practised judgment, and many other faculties which cannot, with our ordinary knowledge, be reduced to logical formula. But when one who possesses such faculties wishes to enforce his judgments on others, he must either reason, or find out some means of convincing them that he is entitled authoritatively to decide. But how are others to know that he is so? We have no intuitive faculty to enable us to perceive this. If, therefore, others are to admit such an authority, it must be enforced by sufficient reasons, of which the logical intellect must judge, or be derived from inspiration.

44. I agree with Dr. Newman in thinking that the mind constantly infers without leaving a distinct trace of the inferential process in the consciousness. Some of our acts of inference are also extremely complicated. These, by which we estimate

the force of a mass of concurrent evidence, are partly conscious and partly unconscious. He gives as an example the fact that we instantly reject Father Harduin's theory that large portions of the classics were forged by the monks of the middle ages. A person who is acquainted with the classics will not only reject this particular theory, but, by an act of the mind almost instantaneous, he will reject the idea of such wholesale forgery as the greatest of impossibilities. This inference is made up of a vast number of subordinate judgments and reasonings, many of which pass through the mind without leaving a distinct trace in our consciousness, and it might be very difficult to develop into the formal intellect the whole of the grounds of such judgments. But we do so when we attempt to justify them, and it is a necessary condition of influencing the opinions of others.

45. Let us take another instance of far higher importance. After taking a mental survey of the entire question, I arrive at the most certain conclusion that the four Gospels cannot possibly owe their origin to the artificial placing together of a number of independent myths. This general judgment is the result of a considerable number of subordinate judgments formed in the course of the investigation. Each of them of itself is insufficient for producing certainty, but it is produced by their concurring in a common centre. Some of these convictions, it is true, are the result of judgment rendered more perfect by practice, and so far are incapable of a formal exhibition. But the more important ones admit of formal exhibition, and it is only as far as they are capable of this that they can be brought to bear on other minds. The mode in which the mind arrived at them may not have been a formal one, but it tests them by formal methods, and it never rests until it has developed them into the forms of the understanding. It is only when it has done so that a strong feeling of certainty is produced. Because formal methods cannot render us infallible, it is no proof that they are useless.

46. In further proof that an absolute certainty can be arrived at from contingent premisses, Dr. Newman adduces our inferences respecting style, and the full assurance with which we hold that a composition is not the work of a particular author. All judgments respecting style require delicate skill and large practical judgment. The course of reasoning is unquestionably very difficult to elaborate formally. Such judgments are largely matters of individual perception, like taste and similar mental powers, and bear a strong analogy to the perceptions of the senses. These latter also vary in acuteness in individuals. It is no proof of the uselessness of our rational

processes that they require the aid of other powers, such as a delicacy of perception and of judgment. The illustration from style seems to me ill chosen, because many of its conclusions are founded on perceptions rather than on inferences, and few of them amount to certainties. When they do, it is always the result of many independent lines of evidence converging in a common focus. A man possessing a moderate acquaintance with the subject would be justified in feeling positively certain, if the *Rambler* had been discovered during the present year, and published as a work of Lord Macaulay's, that it was not his. It may be replied that a rustic would not feel this certainty. Granted; but such a mind would be unable to appreciate a long proof in Euclid. In all cases where we arrive at certainty respecting style, although the judgments are intuitional, like all those which are the results of formed habits, the grounds of them admit of formal statement.

47. It is important that it should be carefully observed that a large portion of the beliefs of mankind rests on a moral far more than an intellectual basis. Under the influence of education, aided also by an original difference in our mental structure, we become as it were set in a certain mould of thought. This mould of thought is the result chiefly of the combined action of our conscience, affections and our passions. This has been greatly overlooked by Dr. Newman. A large proportion of those cases in which he contends that certain convictions can be erected on a mere basis of probability are of this character. It forms the basis of our assents, convictions, and certainties on subjects, the strength of the one being dependent on the intensity of the other. When this is the case, the chief use which we make of our intellects is to discover a support of some kind for our foregone conclusions. Hence the truth of the adage, "The man who is persuaded against his will is of the same opinion still!" This is it which creates what we call our general line of thought, or, if I may be allowed to use an old Scriptural expression, "the light or the darkness within a man." When a proposition which agrees with this line of thought is presented to the great mass of mankind, they adopt it without more inquiry; when it is contrary to it, they reject it. Such propositions rest on a moral basis.

48. Dr. Newman adduces another example, and contends that when we feel certain that Dr. Johnson wrote the prose of Johnson, and Pope the poetry of Pope, we assume a certainty, when our premisses only justify a probable conclusion. I again reply that the certainty which we feel is the result of a number of convergent lines of evidence. It involves the logic of the

whole question of our belief in testimony. Viewing the matter, not ideally, but as a fact, our convictions vary in proportion to the evidence; and, in the case before us, the evidence is such as to exclude the possibility of error.

49. Dr. Newman's work contains a chapter on natural inference which is extremely interesting. By this term he means inferences carried on without the aid of intermediate steps. Still it wholly fails to prove that beliefs can be really stronger than the foundations which support them. It is true that particular persons, either by genius, or habituation, or by the exclusive concentration of their mental powers on one subject, arrive at truths with a rapidity which is incomprehensible to ordinary men. I apprehend that their certainties are intuitions. At any rate it by no means follows that they are based on mere probabilities. What to us rests on merely probable evidence may be the result of an intuitional perception to them. As we do not know the *modus operandi* of such minds, it is impossible to reason on them. I quite agree with our author that our most natural mode of reasoning is not from propositions to propositions, but from things to things, from wholes to wholes. We only reason from proposition to proposition when we desire to verify the conclusions. "As true poetry," says he, "is a spontaneous outburst of thought, and therefore belongs to rude as well as to gifted minds, whereas no one becomes a poet merely by the canons of criticism; so unscientific reasoning, being sometimes a natural uncultivated faculty, sometimes approaching to a gift, sometimes an acquired habit and second nature, has a higher source than logical rule." I doubt whether the analogy between the poet and the reasoner is sufficiently perfect to admit of reasoning from one to the other. The attempt on the part of the poet to reduce his inspirations to the rules of art, would probably destroy his poetic fire. Such is certainly not the case with the gifted reasoner. But by whatever mode the specially gifted man may arrive at truth, the moment he attempts to justify it to himself, or enforce it on others, he is compelled to adopt a common process, which admits of a formal exhibition.

50. Dr. Newman adduces the cases of a weatherwise peasant, an eminent physician, a clever Old Bailey lawyer, and the whole class of experts and detectives, as aiding him to prove his point. He says, and says truly, that these can only imperfectly state the grounds of their judgments, and that frequently, if they were to attempt to give them, they would give the wrong ones. This is often the case with judgments which are formed in cases where we have

attained a high degree of practical experience. But what does it prove? Simply that there are classes of minds which are able to discern by intuition what others can only discern through media. If such a power was general with respect to a man's mental faculties instead of being partial only, those possessing it would form a higher order of beings than the human race; but it does not follow that they could arrive at certainties out of pure contingencies. No doubt men of high mathematical powers see many truths by simple intuitional acts, which others less gifted arrive at through very painful processes. Such a faculty was possessed by Napoleon I., Sir Isaac Newton, and by those calculating boys so strongly dwelt on by Dr. Newman. Any person who has ever attended to the operation of his own mind, is aware that it often happens that after one has exhausted oneself in fruitless efforts to solve a point, a thought rushes unbidden into the mind which unravels the whole difficulty. Such is the case with respect to many practical judgments. Thucydides tells us that Themistocles was the best to form an accurate judgment of what the occasion required on the fewest possible data. This was the result of natural genius combined with experience. It is a vain attempt for those of us who have not this gift to penetrate its arcana; and, for the same reason, it is impossible to base any general theories like those of Dr. Newman on cases of this kind. We are unable to reduce them to the forms of logic; but this proves nothing either way.

51. To one important remark of Dr. Newman I must draw attention. We are too much in the habit of assuming that our reason is a simple faculty which acts with equal power on all kinds of subject matter. In the following remark of Dr. Newman there is a substratum of truth, but the mode in which it is put is certainly inaccurate.

"The rational faculty may be called departmental. It is not so much one faculty, as a collection of similar or analogous faculties under one name; there being really as many faculties as there are distinct subject matters."

52. In proof of this, he observes that the hard-headed mathematician frequently fails in historic evidence, successful experimentalists in pleading, shrewd men of business in philosophical questions, &c. "Priestley," says he, "was great on electricity and chemistry, but was weak in ecclesiastical history; Newton, strong in the Principia, reasoned badly on the Apocalypse. It is notorious how ridiculous a clever man may make himself, who ventures to argue with professed theologians,

critics, or geologists. The defect is not only in the ignorance of the facts, but in their inability to handle the facts suitably."

53. If Dr. Newman, instead of assuming that there are so many rational faculties as there are subject matters (which is a most questionable position), had spoken of our rational powers acting on different subjects, his remarks would have been worthy of deep attention at the present time. It is undeniable that the tendency is very great on the part of eminent men to speak with authority on points quite remote from their special departments of study.

54. Equally important are our author's remarks about memory. Popular opinion represents it as a single faculty; but it by no means follows because a man has a retentive memory on one thing that he must have it on another. Dr. Newman tells us of a person who could enumerate in exact order the names on all the shops from Hyde Park Corner to the Bank; and of another who could stand an examination in the academical history of any M.A. taken at random in the Kalendar. It by no means follows that such persons could remember a consecutive course of reasoning. I once knew a man who could remember the side of a page in which a thing was to be found, but who could tell you little else about it.

55. Chapter IX. is divided into three portions, and forms the conclusion of the directly scientific portion of Dr. Newman's work. It treats of what he calls "the illative sense." I think that some of its positions are both questionable and dangerous. I am compelled to make a rather long extract:—

"Certitude (p. 337) is a mental state; certainty is a property of propositions. Those propositions I call certain which are such that I am certain of them. Certitude is not a passive impression made on the mind from without by argumentative compulsion; but in all concrete questions (nay, even on abstract, for though the reasoning is abstract, the mind which judges of it is concrete) it is an active recognition of propositions as true, such as it is the duty of each individual to exercise for himself; and when reason forbids, to withhold. And reason never tells us to be certain except on absolute proof, and such a proof can never be furnished to us by the logic of words; for as certitude is of the mind, so is the act of inference which leads to it. Every one who reasons is his own centre, and no expedient for obtaining a common measure of mind can reverse this truth; but then the question follows, is there any criterion for an act of inference, such as may be our warrant that certitude is rightly decided in favor of the proposition inferred, since our warrant cannot be as I have said scientific? I have already said that the sole and final judgment on the reality of an inference in concrete matter is committed to a mental faculty, which I have called the illative sense, and I own I do not see any way to go further than this in answer to the question. . . .

If I may not assume that I exist, and in a particular way, *i.e.*, with a particular mental constitution, I have nothing to speculate on, and I had better let speculation alone. Such as I am, it is my all; this is my essential standpoint, and must be taken for granted; otherwise thought is but an idle amusement, not worth the trouble. . . . I am what I am, or I am nothing. I cannot think, reflect, or judge, without starting from the very point which I aim at concluding. My ideas are all assumptions, and I am ever moving in a circle. I cannot avoid being sufficient for myself, for I cannot make myself anything else, and to change me is to destroy me," &c.

56. Several sentences in this remarkable passage are worthy of our deepest attention; but taking it as a whole, I cannot but consider the position as one which is extremely dangerous and unsound. It seems to me to leave us little alternative between taking refuge in authority, or assuming that truth for man is that which each man troweth. Dr. Newman expressly states that in all concrete matter the sole and final judgment on the validity of an inference is committed to what he designates "the illative sense."

57. In the remaining chapters in which he treats of its nature and character, he expressly affirms that there is no scientific method whereby the goodness or the badness of its judgments can be tested, or even held in check. "I am what I am," says he, "or I am nothing. I cannot, think, reflect, or judge, without starting from the very point which I aim at concluding. My ideas are all assumptions, and I am ever moving in a circle." I am far from denying the existence of partial truth in the passages which I have quoted; but in the sense in which they are here used, they seem to me to lead to the conclusion, that we are destitute of all other criteria of truth or means of eliminating error except those supplied by the illative sense of each individual. If it be said that Dr. Newman expressly limits these assertions to concrete questions, I reply that the passage which is inclosed in a parenthesis asserts that it is no less true in abstract reasonings; for, says he, "although the reasoning is abstract, the mind which judges of it is concrete." This resolves abstract reasonings into concrete ones, of the validity or invalidity of which the sole judge is the illative sense of each individual.

58. Again, says Dr. Newman, "Reason never bids us be certain except on absolute proof." I reply, "Reason bids us to accept as certain self-evident intuitions, the testimony of our consciousness, the primary instincts of our nature; and accepts things as certain on much other evidence, which, unless I greatly misunderstand the former portions of this work, Dr. Newman would not allow to admit of absolute proof. If the sole judge of

truth is the illative faculty of each individual, what becomes of absolute proof? The very idea of it implies that there must be some common measure of minds. But he then adds, that "such certitude can never be furnished to us by the logic of words, for as certitude is of the mind, so is the inferential act which leads to it." I ask, does not the logic of words assist us in testing the validity of our reasonings, and consequently aid us in arriving at our certitudes? Will not systematic analysis of the forms of thought aid us in discriminating where error may have been introduced into our processes? Doubtless all systems require the presence in the mind of judgment, clear perception, and a multitude of other mental powers. But is this a reason why we should throw all logical forms and processes to the winds, scorn the use of accurate language, and trust exclusively to our illative sense? But more astonishing still is what follows: "Every one," says Dr. Newman, "that reasons is his own centre, and no expedient for attaining a common measure of minds can reverse this truth." Doubtless there is a sense in which every man that reasons is his own centre. It is true abstractedly, that I am what I am, or I am nothing. But how does it follow that expedients for attaining a common measure of minds are not eminently useful to aid us in ascertaining whether our conclusions are true or false? If my illative sense tells me one thing, and those of ten thousand others the direct contradictory, although I admit that there is no reason for assuming at once that they are right and that I am wrong, yet it forms a sufficient ground for my subjecting the conclusions of my illative sense to a very rigid scrutiny. "Our warrant," says Dr. Newman, "cannot be scientific." I fully admit that various mental powers are necessary to aid us in the discovery of truth, as for example—the perceptions of our senses, our judgments, our reasoning powers, our imagination, our powers of insight, even what Dr. Newman calls our illative sense. For although I do not think that the term sense is a correct designation of such a power, I am far from denying the existence of an illative faculty. But as all these are liable to error, their processes require verification. Logical formularies may not enable us to discover new truths; but they are indispensable as tests to be applied to our various mental operations, to enable us to ascertain when we may have arrived at unsound conclusions. The whole of Dr. Newman's observations are based on a confusion of thought, which we should have hardly imagined possible in such a man. Throughout the whole of these chapters he overlooks the distinction between logical formulæ as an instrument for the discovery

of truth, and their ~~value~~ to aid us in the elimination of error. Dr. Newman is led into this by the necessity which he feels himself under of maintaining the unconditional character of our assents and certitudes. To do so is essential to the mental position which he occupies. This foregone conclusion has led him not only deliberately to depreciate the rational faculty, but to propound a theory which leaves us only two alternatives, viz., either submission to absolute authority, or that truth is to every man the unassisted conclusion of his own illative sense.

59. "I have already said," observes Dr. Newman, "that the sole and final judgment on the validity of an inference is committed to a faculty, which I have called the illative sense, and I own I do not see any way to go further than this in answer to the question." This assertion is hardly correct, for while I own that Dr. Newman cannot "see his way," yet the remaining chapters attempt to make a considerable advance; and, although they do not assert that authority is our final refuge, yet their obvious drift is to imply that it is so. In gifted persons Dr. Newman seems to think that the illative sense acts in a manner somewhat analogous to an inspiration from Heaven. On the man of genius it confers the power of intuitive insight. On him who has devoted himself to a special department of study, it confers the power of discerning truth where to other men there is nothing but darkness or twilight. It enables the man of moral discernment (answering to the Greek *φρονιμος*) who has perfected his power by practice, to discern instinctively the true course of moral action. The same principle exerts a similar power through the entire course of human knowledge. But what is the most serious matter of all is, that Dr. Newman has not only erected a court which possesses this extensive and summary jurisdiction, but he denies us the right of appealing from its decisions.

60. I by no means deny the existence of these higher faculties of the mind, and their important influence on the discovery of truth. But between this and the summary assertion that all formal logic is worthless, the interval is wide. The truth is, that high genius, however necessary for enabling us to penetrate into the inner recesses of the temple of truth, does not confer infallibility. The most perfect practical judgments do sometimes fall into the most palpable errors. The acutest observers are guilty of hasty generalizations. The clearest intellects are subject to bias, and are warped by prejudice. The most practised reasoners at times commit errors in their reasoning. As often as the possessors of these high faculties require to vindicate their own positions even to themselves, they are compelled to fall back on the formal processes of the

understanding. While we attach due weight to the higher orders of mind as authorities in their special departments, still we know that they are liable to error. It is therefore necessary that we should possess ourselves of a balance in which we can weigh even their most authoritative utterances. But if this is the case with such men, what shall we say with respect to those of inferior endowments? Shall we assume that the illative sense of each, unchecked and unhindered by any scientific process or formal system, is the only ultimate test of truth? If Dr. Newman is right, it must be so, unless we are to accept as our authoritative guides those to whom Heaven has communicated special faculties for penetrating into truth. But how shall we ascertain who have special faculties? Dr. Newman has no doubt a reply ready there which is satisfactory to his own illative sense, but I am afraid that it will not be equally so to ours. If such a person must be chosen, the choice is one which will require the highest exercise of our reason; and, knowing it to be fallible, we must endeavour to check its action by all the aids which philosophic investigation and logical formulæ can afford us. But there is another side to this question. If we are told that there is no court of appeal in which the contradictory decisions of the illative sense of each can be reviewed, we must come to the conclusion that that is true to each what the illative sense of each individual determines to be so; and as this sense as it exists in different persons frequently takes contradictory views of what is true, the conclusion is inevitable that truth is apparent only, not real. This state of mind is separated by a mere hair's breadth from the ocean of universal doubt.

61. I conclude with a quotation from Dr. Newman :—

“Certainly, however we account for it—whether we say that one man is below the level of nature, and another above it, so it is, that men taken at random differ widely from each other in their perception of the first elements of religion, duty, philosophy, the science of life, and taste, not to speak here of the difference in the quality and vigour of the illative sense itself, comparing man with man. Every one, in the ultimate resolution of his intellectual faculties, stands by himself, whatever he may have in common with others; and one only is his ultimate judge. Not as if there were not an objective standard of truth; but that individuals, whether by their own fault or not, variously apprehend it. Thus one man deduces from his moral sense the presence of a moral governor, and another does not; in each case there may be an exercise, and a sound exercise, of the illative sense. . . . The illative sense of the one is employed upon and informed by the emotions of hope and fear, and a sense of sin; whereas the other discerns the distinctions of right and wrong in no other way than he distinguishes light from darkness, or beauty from deformity.”

I think it needless to comment on this passage : its tendency is obvious.

62. I have carefully abstained from bringing to your notice either the theological illustrations, or the two chapters in this work which form an application of his scientific principles to certain questions of the day. I have endeavoured to keep myself strictly within the regions of science. If Dr. Newman is scientifically right let us accept the consequences, be they what they may ; if not, let us fearlessly reject his philosophy. I now therefore add my final opinion that, however much I admire some detached portions of his work, its fundamental principles are thoroughly unsound, and present us only with the alternative of credulity or scepticism.

63. When I composed this paper I was not aware that Dr. Newman had reprinted his *Essays on Miracles* with notes, a short time after the publication of the *Grammar of Assent*. I have recently read these *Essays*, and in one of the notes, the *Essay* in aid of a *Grammar of Assent* is directly referred to. I think, therefore, that I am justified in arriving at the conclusion that these two works are intended by their author to be closely related one to the other, and that the *Essay* in aid of a *Grammar of Assent* is designed to supply something like a scientific basis on which to rest the two *Essays on Miracles*. Had I been aware of the republication of these latter in such close connection with "the *Grammar*," I should certainly have subjected those portions of it directly bearing on the subject-matter of the two *Essays* to a most rigid scrutiny. The first *Essay on Miracles* is a weak defence of those in the Bible, and was written at an early period of Dr. Newman's career. The second, which is of a much later date, is a laboured effort to exalt the so-called Ecclesiastical Miracles, and to give them the appearance of credibility. While there is a kind of acknowledgment of an indefinite kind of superiority in the miracles of the Bible, the author has done his utmost to adduce every argument which has a tendency to exhibit them on the same level as the ecclesiastical ones. If I wished to attack the biblical miracles, I think that my most effective means of doing so would be to employ much of the line of argument made use of in this *Essay*. I am satisfied that it can only exercise one result on minds who use their reason as a guide to truth. Instead of inducing them to accept the ecclesiastical miracles, it will throw great difficulties in the way of their accepting the biblical ones. Many writers of Dr. Newman's school make free use of the kill-or-cure remedy. They seem utterly unconscious that killing is the rule, and curing the rare exception. In the mean time, the hard-

headed unbelieving world look on and smile. I have added these observations for the purpose of showing that the strongest things which I have said of this Essay are not too strong. While I fully admit that there are many things in it which are attractive, and even instructive, yet we must be careful in reading this work to keep in mind that, however fair is the building, its foundations are completely rotten. On first perusing it, I was much struck with its apparent liberality of thought. A more minute investigation speedily convinced me that it was apparent only. Within a twelvemonth this work has now reached a third edition. Many have innocently mistaken it for an important contribution to Christian philosophy. It is impossible for me to express any other opinion of it than that, despite of its many beauties, its tendencies are highly sceptical.

The CHAIRMAN.—I am sure we all return our best thanks to Mr. Row for his very interesting and able paper. It is extremely valuable to us because it does an important portion of our work. Our business is not only to combat sceptical arguments, but also to clear away those which are unsound on our own side. That I think Mr. Row's paper tends to do for us, and for this reason more especially is he entitled to the thanks of this meeting. (Hear, hear.) I shall now be glad to hear any observations which any present may have to make upon the paper.

Rev. J. H. TITCOMB.—I am in the unfortunate position of agreeing in part with Mr. Row and in part with Dr. Newman. (Hear, hear.) There seem to be three stages in the discussion—first, “inference”; then, “assent”; and lastly, “certitude”; and this seems the natural and the direct order in which they ought to stand and in which they do stand according to both authorities. I take it that, with reference to what has been said upon inference, there is no difference of opinion between Dr. Newman and Mr. Row. Both concur in allowing that inferences must be conditioned—that they rest upon certain premises and are conditional. Then, when we come to assent, I fully agree with Mr. Row.

Rev. C. A. Row.—I maintain that Dr. Newman in his Essay uses the term “conditioned” in two senses, and that is the great cause of the fallacy of which he is guilty. He speaks of a conclusion as being conditional when it is only conditioned by being the conclusion of an argument.

Mr. TITCOMB.—Then, with reference to “assent,” the position which Dr. Newman takes up is that it has no degrees. Mr. Row opposes this view—I think, rightly; for, using “assent” in its common-sense acceptation, it is sometimes absolute and sometimes conditional. Take this example: The world is a globe. I assent to that proposition from a series of inferences. In the first place, it has been sailed round. In the next place, when an eclipse of the moon occurs, the shadow of the earth is always circular. In the

third place, when I stand on the seashore and view the distant ships coming towards me, their masts appear first, and then their hulls. These are simple, practical, common-sense facts which enable me to draw a series of inferences that the proposition is true, and I give to those inferences an assent which is perfectly absolute, and which then passes into the next stage, that of certitude. But when I am told that the earth is not only a globe, but an oblate spheroid,—flattened, that is to say, at the poles,—because the vibration of a pendulum in countries near the equator is slower than in those countries which are nearer to the poles, from which the inference is drawn that the equatorial regions are at a greater distance from the centre of gravity than the polar regions; and also that the world is an oblate spheroid, because, supposing it to have been fluid in its first formation when sent with its centrifugal motion on its own axis round the sun, it would, on scientific principles, assume that shape; these inferences lead me to assent to that proposition. But that “assent” is not so absolute; it does not, to my mind, assume that character of “certitude” which the first proposition does. I may say that I have no doubt about it; but there is not such a practical common-sense appeal to my understanding in the one case as in the other. I merely bring this forward to show that I think certain assents to propositions may be absolute, and others not so absolute, and therefore, in that view of the case, I conceive that Mr. Row has more or less established his position. I now come to “certitudes”; and I must confess that when Dr. Newman says that there are no degrees in certitudes, he has the best of the argument. I freely grant that certitudes may be illusive, but while they last they must, from the very nature of the case, be absolute. The subject has no degrees and no conditions whatever. Take an unreal or illusive certitude, such as the mirage in the desert. The traveller going through the desert declares, beyond all possibility of mistake, that he sees water, though the guides assure him to the contrary. There you have an absolute certitude in a man’s mind, though it is only an illusive one. In the 38th section of his paper Mr. Row says :—

“But if a man feels that he has been always wrong in what he has taken to be certitudes, and yet feels absolute and unqualified trust in the certitude of his last convictions, his certitude has a moral rather than an intellectual basis.”

Now I think that reasoning is wrong. Dr. Newman maintains, as Mr. Row points out in the beginning of the paragraph, that a man may have been in error several times over in his certitudes—say three times wrong as to the reality of his certitudes,—but yet that does not prevent him from having an absolute certitude on the fourth occasion.

Mr. Row.—Dr. Newman says “a hundred times wrong.” He has purposely put the figures very high.

Mr. TITCOMB.—For my purpose I prefer the smaller figure. Now the mirage which appears to the inexperienced traveller is a matter of certi-

tude to him, and it may continue to be so, even on the second and third occasions of his seeing it. But on the fourth occasion he may say, "Though I did think it was water before, my experience has now proved to me that that idea was a mistake;" and if you tell me that that is a moral rather than an intellectual matter, I join issue at once. He may say of the mirage, "I am now absolutely certain that it is not water; I was illusively convinced before." That surely is a case in which a man, after having been four or five times in error before, has a right to reap the advantage of his previous mistakes, and to have an absolute conviction which is not illusory. I think Dr. Newman would be right in saying that a man might be in error three or four times, and yet the very next time have an absolute certitude. There is much in this page of Mr. Row's paper with which I cannot agree, especially where he speaks of death. I think Dr. Newman and Mr. Row are equally wrong, when they state that if a man says "I shall die" he expresses a certitude: the only difference between them is that Dr. Newman does not allow it to be conditional, while Mr. Row asserts that it is, that it will happen if there is no miracle to prevent it. Now I maintain that no man has a right to say "I shall die;" it is not a fair example—it is not a case of certitude at all. Who shall say that the world may not end in our lifetime? and yet that would not be a special miracle. The illustration is an unfortunate one both for Dr. Newman to have originated, and for Mr. Row to have adopted, because I do not think it involves a case of certitude at all. There is one other question which I must touch upon, and that is as to whether a certitude may rise higher than the evidence upon which it is based? That is a very important question, and I confess that my mind is not thoroughly made up upon it. I should say that in ninety-nine cases out of a hundred the certitude would not rise higher than the evidence. I could not say, for instance, that Mr. Row is a clever man unless I expressed a conviction on a level with the evidence on which it is based, and we have in this paper quite sufficient grounds for such a conviction. (Hear, hear.) In ninety-nine cases out of a hundred that principle would remain true; but take another case, that of the existence of God. The atheist maintains that when you use the argument of design to prove the awful and insuperably grand conception that there is a Supreme Creator, Eternal and Omnipotent, you have there a conviction expressed which is higher than the evidence upon which it is based. I mean to say that the skill and design, which we see in creation, great as they are, do not afford to the atheistic mind a sufficient base for the certitude of the existence of God. To my mind they do afford it; but how far it can be thoroughly established that the evidence is exactly equal to the conviction arrived at is what I am in doubt about, and I should like to hear some other opinions expressed upon it. I can quite conceive that form of reasoning to meet Paley's argument from the watch, arguing the existence of a maker from its skill and contrivance—I can quite conceive that form of reasoning which alleges that the conviction arrived at in the case of the universe is higher than the evidence on which it rests. At the same time I go with

Paley's argument in the form of a parallel or ratio :—as the certitude of the existence of a maker and contriver from the design of the watch, so the certitude of the existence of a Creator from the vast mechanism and the grand contrivances, moral and material, which are found throughout creation ; and if, therefore, the one conclusion is sound the other must be also by a parallel form of reasoning. I think it is a debateable question, whether abstract certitudes may or may not rise higher than the grounds upon which they rest. If we can prove it scientifically, so much the better for us ; but it should be thoroughly well considered, and not taken too much for granted. (Cheers.)

Rev. Dr. Rigg.—Although I have not heard the whole of the paper, I take the liberty of rising, for the reason that I have very carefully examined Dr. Newman's Essay from the first page to the last, and I have analyzed it, and formed a very careful judgment upon its general scheme and foundations ; and although I have not heard the whole of Mr. Row's paper to-night, I have examined it, and found it to be a very valuable one ; and I will take the liberty of saying, in the first place, what the character of the Newman philosophy in this essay appears to me to be. I take it that the Newman philosophy, as such, is clearly a sceptical philosophy—essentially and profoundly sceptical,—and that scepticism is the philosophical basis of the whole of the essay. His is a philosophy which teaches that there is no such thing as absolute truth to be discovered by any objective demonstration whatever. It is, in fact, the philosophy of Hume. I grant that it is not the religion of Hume, but it is his philosophy ; and I am sure the more it is analyzed the more clearly it will be seen that it is closely allied to the philosophy of Hume and also to the philosophy of Mill. I am sorry that I have to speak less from book than I desire to do, but the fact is that I came here in great haste, or otherwise I should have brought Dr. Newman's Essay with me, so that I might have referred to some passages in it. One remarkable thing which Dr. Newman tells us is, that a straight line is a mere notion ; and the more that statement is studied the more I think it will be seen that nothing but scepticism of a very peculiar character could lead to such a statement as that a straight line is a mere abstract notion. Such being the case, the whole of Dr. Newman's Essay, though consistent in its general scope, is inconsistent, as all essays not begun in truth must be, in many of its particular statements. I think Mr. Titcomb has missed the distinction which Dr. Newman carefully lays down between certitude and certainty—that distinction is vital. We must all admit that there are many cases of illusive certitudes in which conviction, as we feel it, far transcends the evidence on which it rests. There can be no doubt of that. But what Dr. Newman teaches us is that there is no such thing as certainty which is absolutely attainable. Certitude, he maintains, may be felt, but certainty cannot be attained. I confess that I should not agree with Mr. Row in saying that certitude, as such, is liable to variation and to degrees. I have not the least objection to take Dr. Newman's

definition as it appears in his essay, that certitude, by which he means a personal assent, is not capable of variation or of degrees. But whether it is capable of variation or not is scarcely worth contending about. What Dr. Newman says is, that I may feel quite sure of a certain thing and have no sort of doubt whatever upon the matter, and that is my certitude; but he is careful to tell us that it does not follow that there is any certainty in it. There may be no certainty at all in the matter. Then Mr. Row does not take notice of this—that Dr. Newman lays it down that these certitudes are not only without any doubt or degrees, but are absolutely indefectible; and he does not mean that they are so because they represent in any measure a truth, for he says distinctly, so far as I can understand him, that a prejudice native to the soul of a man is as indefectible in its nature as any truth intuitively apprehended. He shows us, by interesting explanations, how, by a combination of intuitive impressions and unconscious inferences, the assent of the mind is given to a conclusion as if it were intuitively certain, and axiomatically true, though it may really be a mere prejudice. Such conclusions, true or false, abide. A man may seem to change his fundamental convictions, but in reality there is very little change at all: there is only a falling off of many inconsistent ideas, while the radical truths and prejudices in the mind live there still, and their development leads to a man being supposed by others to be inconsistent, though in reality he is not inconsistent, but is only changing in the sense of developing. There are some very interesting expositions of this kind in Dr. Newman's essay, in which he shows that men holding such principles do not at first know all their inconsistencies, but by degrees those inconsistencies fall off, and the men themselves remain the same men, holding the same certitudes as they held at the beginning, while the things which are inconsistent gradually fall away, leaving the radical principles of their faith behind, coming out finally into full form and development. Then there is another part of Dr. Newman's remarkable views on this subject. We may feel sure, and our assurance may have no doubt whatever about it, but that does not imply that there is any sort of objective reality or truth whatever in it. Dr. Newman goes on to ask, How is a man to feel sure on debateable points? He lays it down that there are only two ways in which a man can get to be assured of anything. One is in virtue of a conviction that has taken hold of his being, and that is not likely to be dethroned; but Dr. Newman admits that there are many things which we are expected to believe, but which we have not intelligence or apprehension enough to understand, and he then consistently teaches in effect thus: "If I cannot get certitude on my own account, I must take it by proxy—I must go to authority. I must go to some man whom I know to be very wise and very good, and knowing that I am but poor and ignorant compared with him, I take his certitude and make it my own. So, as to spiritual truths, I give up my own will and mind to the 'certitude' which the Church teaches, as I have not any of my own. I do not understand what it is that is taught, but the Church teaches me

so-and-so, and I adopt and embrace the 'certitude' which belongs to the Church, that being, as it were, God Himself, and that certitude becomes my 'certitude' by an act of faith and of adoption." Thus he teaches us that we either have our certitudes at first hand from our own personal assurance, and from the embrace and assent of our own minds and understanding, or else we adopt them on the authority of another in whom we confide, and that they relate sometimes, it may be, to a proposition which we understand, but often, as he elaborately explains, to a proposition which we do not understand at all, but which he declares we accept in virtue of the authority of some one who commends it to us. Then there is another consequence which follows from all this. He teaches us that the man who embraces religion on the ground of reason gives one sort of acceptance, while the man who takes it from faith gives quite another; and Dr. Newman says that these are two different and mutually exclusive modes of acceptance, and that the man who takes his religion from reason is in so far not a believer, while he who takes it from faith is in so far not a man of reason. The divine blending of faith and reason into the one blessed assurance of truth, Dr. Newman distinctly rejects in the philosophy of his book. Then as to assent: Mr. Row has illustrated the points on this subject very ably, but it does appear to me that nothing can be more unreasonable than Dr. Newman's doctrine on this subject. He teaches us that by some means or other, when we accept a proposition, the assent which we give to it is voluntary, distinct, absolute, and our own act, and he tells us very emphatically that it is a voluntary act. Now I do not hold that assent is a voluntary act; in the majority of cases I do not believe that it is a matter which is affected by the will; but that is what Dr. Newman teaches; and he tells us that when once we accept a conclusion, and make it our own by an act of complete assent, we may then cast down whatever ladder we may have used in order to climb up to and grasp that conclusion or proposition,—that we may cast down the ladder and have nothing more to do with it on the mere strength of a strong, wilful faith, and be, as it were, suspended in mid-air without any sort of basis on which to rest. Dr. Newman goes on to try to prove that position by a variety of illustrations, one of which seems curiously weak. He asks, is it not a fact that persons retain their assents without the slightest memory of the reasons for them? and does not that prove that assent is independent of the reason? It is just as true that we retain our probable conclusions after we have forgotten all the reasons for them. Dr. Newman draws a distinction between assents and probable conclusions, and he says that "assent" stands by itself, and is independent of the reasons which generated it; but it is just as true that we retain our probable conclusions after we have forgotten all the reasons on which we assented to them, as it is that we hold to our absolute assents after we have forgotten all the reasons on which they were based. If, therefore, there is any force in the argument at all, it goes to prove that probabilities are as independent as assents, and have as little to do with the reasons on which they rest—that

the acceptance of a probability is just as much a matter of strong will and of the resolute determination of the mind, as is the acceptance of an assent. Dr. Newman says a great deal about the "illative faculty." It is easy to call the whole power and exercise of the mind by which we reason an illative faculty, and no doubt there is one grand department of the mind by which we are able to apprehend and infer, and to connect premises with conclusions, and to go, often instinctively, through the processes of induction. But if it is to be supposed that in speaking of an "illative faculty" a discovery has been made, I confess I cannot understand it, as it was always known that we had these various powers, and it was open to any one to call them by this name at any time. As to calling all this an "illative faculty" in any special sense, I think that that sort of language has misled even Dr. Newman himself, as well as some of those who have read his essay. I cannot help thinking that Dr. Newman has come to this conclusion: that induction and all that belongs to inductive reason is entirely separate from intuitive certainty,—that there is no basis of intuitive certainty on which inductive processes themselves repose,—that there are no intuitive principles of the mind which can be recognized, defined, and analyzed,—and that what we call induction, so to speak, is a mere rule of thumb. Here again Dr. Newman agrees precisely with Hume and with Mill. I remember that Dr. Chalmers fought this out long ago with Hume. The question was whether the uniformity of nature was in any sense whatever an intuition of the mind,—whether the law of cause and effect was in any sense an intuition of the mind,—or whether all that we believe as to causation and the uniformity of the laws of nature was a mere matter of inference by us from the fact that those laws have operated in such a manner so many times, and they probably will so operate again. They actually tell us that all our certainty is a mere matter of calculation from probabilities, not resting on any foundation of intuitive principle whatever. It is clear to me that all that is of a piece with this essay, and Dr. Newman does not allow that there is any sort of assurance in our conclusions, only that we come to such conclusions because of our experience. All that we can get at is a persuasion in our own minds, but to the bottom of that persuasion we can never get. There is one point on which I do not agree with Mr. Row. In his 50th section, he has referred to the question involved in those peculiar powers of mind possessed by some people, such as weather-wise peasants, eminent physicians, clever Old Bailey lawyers, and other experts, which powers have been commented on in a very interesting illustration by Dr. Newman. Mr. Row intimates that probably persons with these wonderful faculties have certain intuitive powers which others do not possess; but I must quarrel with that view, for I do not believe that there is any set of men who possess intuitive powers different from those of other men. I think there is a fallacy in the use of the word "intuitive." Everything we do is in a sense intuitive—all our processes of reasoning in a sense are intuitive, and even if we put a syllogism it is a matter of intuition. All the processes are intuitive, and the question is how to weave them together safely and wisely so as to bring us to

a conclusion. If the proposition is that some men have the power of over-leaping intermediate data, and can see into wonderful conclusions of arithmetic, geometry, or anything else without the essential data which would warrant them in coming to such a conclusion, I do not think such a proposition will bear examination at all. There are principles which are self-evident to all highly and truly cultivated people, and no doubt some people see more rapidly the connection which exists between different truths than others do. How they do it is a mystery which we cannot solve. But when we speak of intuitive discernment, it simply means that certain minds have a more rapid power of passing from one thing to another, and of combining ideas, than others have, and I feel so strongly on this point—the distinction drawn by Mr. Row between the intuitional and the inferential processes, which themselves mainly consist of unconscious inferences intuitively drawn,—that I should be very glad if Mr. Row would be able by some supplement to his paper to correct what I consider a great flaw in an exceedingly able essay. And now I have only to repeat that I should not have occupied so much of your time if it had not been for the fact that I have very carefully examined and analyzed the essay on which this paper is written. (Cheers.)

Mr. REDDIE.—As it is now late, and Mr. Row ought to have some time to reply, I shall not occupy your attention for long. I must join in offering my tribute to the able paper before us, but cannot help saying that it is not quite clear in some parts, and perhaps this has arisen from the author's over-conscientiousness in following Dr. Newman's lead too closely, indeed so completely, that the paper seems to want a focus, which, however, I am glad to find that the remarks both of Mr. Titcomb and of Dr. Rigg have given to it. It seems to me that a great part of the misunderstanding and difference of opinion between Dr. Newman and Mr. Row arises from their employing words in different senses, instead of using definitions on which they are agreed. Even Dr. Rigg has used words in a sense in which Dr. Newman scarcely employs them. We have the word "assent," which ordinarily means to agree to a thing.* And I thought that Mr. Titcomb while giving us an instance on the opposite side, was really demonstrating Dr. Newman's view. He said he gave his complete "assent" to the proposition that the world was round, but he was not quite sure that it was an oblate spheroid, and therefore he only gave a qualified assent to the proposition. Now, from the arguments he used in proof of both propositions, it struck me that he did give his complete assent to both of them.

Mr. TITCOMB.—What I meant was that there was a difference of degree in the assent.

Mr. REDDIE.—Mr. Titcomb either accepts the proposition or he does not,—he must necessarily do the one or the other,—and I think that in this matter of assent, Dr. Newman is quite right in saying that an assent must

* Dr. Newman gives an entirely new meaning to the word.

be either a decided "yes" or "no." I hold that Mr. Titcomb does assent to the proposition that the world is an oblate spheroid. He does not mention the argument as to its being a prolate spheroid, and I do not suppose he thought that argument worthy of consideration. Then I most thoroughly agree with one remark which fell from Dr. Rigg, as to Dr. Newman having put out the view with reference to an "illative sense" as though it were some new discovery. If the phrase "illative sense" is used in its ordinary signification, as that sense or faculty (for I hold to the distinction which Mr. Row draws) by which we can infer, then some of Dr. Newman's statements appear like mere truisms. The illative sense being the sense by which we infer (and if that is not its meaning I do not know what is), of course, any conclusion that we draw is the work of that sense or of our reason, but the confusion of thought and difference of opinion upon many points between Dr. Newman and Mr. Row is traceable to this same want of definition. The "illative sense" is the only means we have of verifying inductive processes and although this view may appear to Mr. Row to be essentially unsound, yet I think he will find Dr. Johnson defines "illation" as merely "inference," and, if that be so, I do not see what other sense you could use to draw an inference with, except the sense which draws inferences. (Hear, and laughter.) Some of Dr. Newman's most high-sounding phrases resolve themselves into very little indeed, if you employ a common signification for them. Mr. Row commends Dr. Newman's book for its modesty, as it only professes to be an essay *in aid* of a grammar of assent, and not a grammar itself, and he seems to think that a great point would be gained if we could elaborate principles from which we could get a complete system; but, ever since man existed, we have had these things, and these inferences have been arrived at. What is grammar? Merely the custom of language, and a grammar of assent would be only an examination of the processes of the mind by which we assent to things. But those processes have existed as long as human beings have, and if we do not understand them I am not surprised at it, if we are to use language as Dr. Newman has done, and to treat the subject in such a fashion. Take the instance which he gives of lucern being *medicago sativa*. There is nothing in teaching a child that lucern is food for cattle any more than in teaching it a language. It is all the same whether you call lucern by its Latin or English name; any child who is taught a new word accepts it simply because it is taught it, and if you always apply that word to one particular thing it becomes a mere representative of the reality; and therefore there is nothing in that famous instance of Dr. Newman's which is worth a moment's consideration. (Hear.) There are several arguments in Mr. Row's paper with which I cannot agree, although I do not differ from his conclusions; and there are others that I must notice, because they appear as things which are put out without comment as self-evident. For instance, there is the statement in the 9th section, that benevolence is opposed to the principle of self-love. Now, I do not think that is true. Benevolence means good-will to your neighbour—to love your neighbour as yourself. That

is its ultimate principle, and it has the high warrant of Scripture, so that you are not to hate yourself in order to be benevolent, but to love your neighbour as yourself. If a man did hate himself he would be regardless of salvation, and of doing what is right. All piety and probity are maintained in self-love. Then there is a passage from Dr. Newman, in which he says that "experience teaches us nothing about physical phenomena, as causes," unless we first consider that we are our causes, and interpret what we see through the reflection that we can by our will do certain things; but rational beings, and even intelligent animals, have all the sense of phenomena as causes without that reflection. If a stone falls on a man he feels it without considering anything analogous in himself forcing one thing against another. He is compelled to know of something outside, and therefore I cannot accept Dr. Newman's view. Then in one or two places where Mr. Row draws a distinction between ideal assent, or certitude and concrete assent, or actual assent, or certitude in the individual, I think he is scarcely so right as Dr. Newman, and I should be content to yield to Dr. Newman's proposition, that assent must be absolute, without agreeing with him in many of his other principles. In other parts of his paper Mr. Row is inconsistent in his arguments, and he will have an opportunity of clearing up the point if I am wrong. In his 19th section he says:—

"In one sense of the words, all conclusions are conditioned on the premises, because the truth of the conclusion is involved in the truth of the premises. This fact is expressed by the word 'therefore!'"

But in reviewing his recollection of the trial of Müller for the murder of Mr. Briggs, he says, in his 23rd section:—

"Therefore he was the murderer. I am quite unable to see how the presence of the word 'therefore' makes my assent conditional, or the taking it away involves an unconditional assent."

And Mr. Row says this, notwithstanding having previously declared that the fact of condition is expressed by the word "therefore!" I do not see how these two arguments can be reconciled. Then there is another point. In the 29th section Mr. Row says:—

"For all practical purposes, $1 + \frac{1}{2} + \frac{1}{4} + \text{\&c.}$, *ad infinitum*, is equal to 2, although I admit that to elaborate the strict metaphysics of this is very difficult."

For all practical purposes we may know that this is so, but without finding any metaphysics in the matter, I deny that $1 + \frac{1}{2} + \frac{1}{4}$, and so on to infinity, is equal to 2; and the arithmetic of it is not difficult, for any person understanding anything of numbers knows that it is not absolutely true. Mr. Row is aware of this, as is evident from his expression, "for all practical purposes." This is not a question of metaphysics, but of simple arithmetic, and you can-

not state the proposition without having a clear apprehension as to its meaning. Though in an equation you might as well put 2, still, as rational beings, we know that it never could be equal to 2. Again, I differ from Mr. Row in the 31st section of the paper, where he says that you can pick holes in circumstantial evidence, such as that on which Müller was fairly convicted, but that any ingenious man could do the same with no small number of mathematical demonstrations. Now, I maintain that if they are absolute demonstrations, no one can pick holes in them. If they are only approximate ones, such as that $1 + \frac{1}{2} + \frac{1}{4}, \&c., = 2$, then, of course, it may be done, and it may be shown that the conclusion is not demonstrated, but it is a mistake to say that all mathematical demonstrations may be pulled to pieces in the same way as the circumstantial evidence of a murder. Then he says in the 34th section :—

“I must adhere to the general principle, that all our convictions are absolute or contingent, according to the foundation on which they are erected.”

Dr. Newman himself would admit that, for he maintains that all our convictions are not absolute, and that therefore all our convictions are not assents. Then in the next paragraph :—

“Such certitude is not human certitude, because, as every man knows, or rather ought to know, man has not the gift of infallibility.”

Now, I do not see that there is any connection or antithesis between certitude and infallibility. A man may be quite certain, although he is not infallible. In that very passage, Mr. Row has got the definition which Dr. Rigg was not quite certain about, as to the indefectibility of certitude. Mr. Row thinks there is a confusion between an abstract conception and a concrete thing. The one great fault of a paper reasoning from such a conscientious following of another essay is, that it detracts from its clearness. As to the expression of the certitude which Mr. Row says he admits—that we all feel certain that we shall die—I can only say that it is precisely and categorically in the teeth of St. Paul’s statement, that we shall not all die. Again I differ from what he says in his 41st section :—

“When reasoning confines itself to the use of symbols, its conclusions are free from some of this liability to error.”

Now Professor Whewell, in his *Philosophy of the Inductive Sciences*, and Berkeley, in his *Principles of Human Knowledge*, have both pointed out the special liability of the reasoning powers to err when using symbols. But I quite agree with the concluding portion of his sentence :—

“ . . . but the process is useless unless we can translate the symbols into notional or real conceptions.”

That no doubt is true, and yet it curiously goes with the other passage as if

they were not inconsistent. I think they are directly contradictory the one to the other. Again, in the 46th section :—

“A man possessing a moderate acquaintance with the subject, would be justified in feeling positively certain, if the *Rambler* had been discovered during the present year, and published as a work of Lord Macaulay’s, that it was not his.”

Now, I do not think any literary man could speak of his conclusions as being positive certainties in such a case. It would be just possible, that Lord Macaulay might have written the *Rambler*, and if it were a fact, people would only say that it was another instance of his great versatility of style. We know that his *Lays of Ancient Rome* are very different from his staid history, or from his “Critical Essays,” and I am sure that if any one will bear in mind the differences of opinion as to the authorship of the “Letters of Junius,” he will admit that it is dangerous to speak positively as to an author’s style. Of course, there may be very high probability; but, even in our own day, we have had the theory started that Lord Bacon was the author of Shakspeare’s plays. Mr. Row also tells us, that a man “*persuaded* against his will is of the same opinion still.” Now, here is a confusion of thought from using words in a wrong sense.

“A man *convinced* against his will
Is of the same opinion still.”*

Persuasion is one thing, conviction another. I would put it in this way, that a man who is convinced, but not persuaded, is of the same opinion still. If you persuade a man you take his will with you. The old-fashioned word is “convinced,” and I am quite sure, that it is more accurate than persuaded. Persuasion means bringing over the will to a certain extent only. I have only one other point, in confirmation of what fell from Dr. Rigg, that what is an intuitive conclusion of the mind is a certain mental process, although it may be so rapid that we are unable to trace its operation. In the 50th section, Mr. Row says :—

“Any person who has ever attended to the operation of his own mind, is aware, that it often happens that after one has exhausted one’s self in fruitless effort to solve a point, a thought rushes unbidden into the mind which unravels the whole difficulty.”

Now, here I have had considerable experience, and do not believe that thoughts ever rush unbidden into the mind. My impression is, that they come by a purely rational process—that when the mind is quietly balanced, not eager after the point it was driving at and which it hoped to reach,—

* “He that complies against his will
Is of the same opinion still.”

Butler’s Hudibras.

the reasons come and arrange themselves properly, and so you arrive at a conclusion. One who occupies himself with intricate questions must feel this, and it is as much a rational process as any in which the mind may be engaged. Let me make another remark in confirmation of Dr. Rigg. I do not believe that some human beings are endowed with an intuition which others have not, and the illustrations which Mr. Row gives on the subject of memory where he agrees with Dr. Newman, form one of those cases in which I disagree with both. In his 54th section, he says :—

“Dr. Newman tells us of a person who could enumerate in exact order the names on all the shops from Hyde Park Corner to the Bank.”

Now, if that were true, the man must have devoted his attention to learning it by rote. I am sorry to have taken up so much time, but this is a paper of considerable importance, and I have been compelled to pass over many points in order to bring my remarks within even these limits. (Cheers.)

The CHAIRMAN.—My duty as Chairman compels me to trouble you with a few remarks on what has already been said. I will leave Mr. Row to fight his own battle with Mr. Reddie, whose able criticisms must be met by the author of the paper himself, but I do want to make one or two observations on what has fallen from Dr. Rigg, and on the correct way he has hit the difficulty which we find in understanding and appreciating Dr. Newman. Dr. Newman, as has already been pointed out, carefully avoids defining terms ; and the non-definition of terms is an element in which the sceptical monster very much delights. He delights in wallowing in the mud of undefined terms. As to the point about lucern being *medicago sativa*, that is not, strictly speaking, a proposition at all ; it is a name meaning this, that in one language lucern is known as *medicago sativa*. There is no reason why it should not be *bellis perennis*, except that it seemed good to Linnaeus, when he wanted to specify it, to use the sound *medicago sativa*, instead of calling it “lucern.” But that is very different from saying it is *medicago sativa*. Then, as to the words “certainty,” “certitude,” and “assent.” “Certitude” and “certainty” are words in respect to which some difficulty has arisen, as has been alluded to by those who have spoken. Now, I remember when I began to learn logic, I was taught that there were two kinds of certitude, *alia rei, alia personae*—one of the thing, another of the person ; of the thing when it is absolutely true, of the person when he is sure it is true. Now these are very different things ; for the person may be sure it is true, and it may not be, or the reverse. People suppose that you cannot be sure of a probable proposition, but you can be certain of it as a probable proposition. Thus, the proposition A is likely to be B, is a probable proposition, and, so far as your mind goes, it is as good a certainty as that the earth turns round the sun, or any other certainty of your own existence. We may find in Dr. Newman’s own work a sort of hint at a solution of the difficulty about “assent” and “certitude.” I speak at a disadvantage, for I have not read,—

I have only perused,—the *Essay in Aid of a Grammar of Assent*, but I have collected one thing from it—the entirely sceptical character of Dr. Newman's philosophy. Mr. Row says that “the whole of Dr. Newman's observations are based on a confusion of thought which we should have hardly imagined possible in such a man.” So far from imagining it hardly possible, I think it extremely possible and probable. His object is to involve us in this difficulty: either you must have an infallible external authority, or you can have nothing at all. What is all this to bring us to, as a grammar of assent? Is it to the decrees and catechism of the Council of Trent, or to the *Homo Apostolicus* of Liguori? Dr. Newman draws a distinction at the outset between assent to a proposition as a proposition, and as being true. There is a difference between assenting, intelligently, to the proposition that all A is some B, and merely accepting the proposition A is B. You may assent to the proposition that A is B, without understanding it at all; you may put it in Chinese, if you accept it as true, and assent to it. Now Dr. Newman tries to confuse the mind between these two kinds of assent—the intellectual and understanding assent, and the blind accordance of those who give their assent to an infallible authority without understanding the terms in which the proposition is couched. You need not accept the terms as absolutely true—you may accept them as probably true,—but in either case you accept the proposition on authority, and not necessarily because you understand it. That is the result which Dr. Newman wishes to arrive at, but he has merged into one the two kinds of assent,—the theoretical and the practical. We take up in science a theoretical certainty—we take up an unconditional proposition as being demonstrated. But since most of the propositions with which we have to deal have reference to our action here, we assent, in non-scientific matter, to a proposition not theoretically but practically, and arrive not at a theoretical, but at a moral conclusion, which is enough to act upon. We take the proposition that A is B. Some A is probably some B, and we say to ourselves, that though it is not absolutely true that all A is some B, yet for the purposes of our action we may act as if it were absolutely true, although we know the real fact is that some A is probably or possibly some B. We accept an inferior kind of truth as sufficient to act upon, and get, not theoretical, but moral certainty. If we draw this distinction between theoretical assent and practical assent and moral certainty, we shall be in no danger of falling into the conclusion into which Dr. Newman would have us glide, that there is no resting-place between utter scepticism on the one side, or that infallible external authority to which he wishes to bring us on the other. (Cheers.)

Mr. Row.—I have two strong allies outside this room. One is the *Edinburgh Review*, in which an essay on this subject has appeared. I had written my paper before I saw it, but I find that that essay and my paper are substantially agreed upon all first principles; the other is the *London Quarterly*, which has also appeared since my paper was written, and there again I find that we are substantially agreed upon all first principles. We cannot mistake the first

principles of Dr. Newman's book which I have brought before you ; and I am certain that they contain the inherent principles of scepticism. When you consider that Dr. Newman's book contains 300 pages of scientific matter, you will readily understand that it is very difficult to represent it properly within the short compass of thirty pages. I could have written several papers on the book far more easily than I have written this one. But there is another thing which has had some influence in making my paper more obscure, and that is, my determination not to touch upon the immense number of theological illustrations with which Dr. Newman's book is full. Take one of them—connected with notional and real belief. He tells us that Spain—and I think Italy—and two or three of the most degraded nations of Europe, give a real assent to these truths, whereas I cannot give anything but a notional assent. It is unspeakably impudent to say that the more degraded the people of a Roman Catholic country, the more real is the assent given to religious truth, while the more a man is enlightened the less real is his assent. However, I do not think it fair to look at Dr. Newman's book theologically ; but I own that any one reading it for a first time will be rather caught by it, because there is a speciousness in it until you analyse it, and then the mischief comes out. The more you analyse it the more you will be dissatisfied with its principles, philosophical and religious. I am happy to observe that none of the arguments which have been used in this discussion touch any material point in my paper. First, as to the point dwelt upon by Mr. Titcomb with regard to a man being certain a hundred times. He mistakes the question. The essence of the point is, that however many times a man may have been in error, even up to a hundred times, and however often error is proved against him, he has as good a right to his hundred and first conviction as if he had never made a mistake before. Now, I say that the man who does that is wanting in the grace of humility. If I had been in error a hundred times, and were as confident as ever on the hundred-and-first occasion, I think I should be very wanting in modesty. It is not a case of a man being one, or two, or even three times wrong, as Mr. Titcomb supposes : but even then a man ought to have his confidence in the certainty of his conclusion somewhat abated. Let me go once more into the philosophy of this question. The essence of Dr. Newman's book is founded on the absolute character of assent, and, as he infers also, the absolute character of certitudes. The position which I have taken is, that assents are not absolutely given, and I differ from Dr. Rigg in thinking that we have absolute certitudes, in the sense in which I understand the word "absolute." Taking the abstract idea of certitude, I hold that it cannot admit of degrees ; but in the ordinary language of mankind, we speak of being more or less certain. In fact, all my certitudes are relative to the evidence on which they rest ; but Dr. Newman wishes to separate between certitude and rational connection, and connection and the evidence on which it rests ; in fact, his object is to enable us to arrive at a certitude with no other evidence than that of having authority to support it. But he even

goes further, and says that our reasonings and conclusions in the most necessary matters do not amount to certainties, but are merely probabilities, and that the conclusion of a proposition in Euclid is after all a mere verisimilitude. Now, I hold, that Dr. Newman has confounded between two senses of the word "conditioned." I readily admit that the conclusion of a proposition in Euclid is conditioned on the premises from which it flows; *i.e.*, that—a fact which is expressed by the word "therefore"—the conclusion is contained in the premises. But as these are in necessary matter, the conclusion viewed in itself is not conditioned but absolute; or, in other words, is as necessary as the premises. It is simply conditional *quâ* the word "therefore"; but this is quite another thing from saying that the three angles of a triangle are equal to two right angles,—a proposition to which I in any sense yield a conditional assent. But Dr. Newman says, that all conclusions are conditional *quâ* conclusions; and then he invents a new process of the mind by which we give an absolute assent to them. I need scarcely point out that this is done to supply a standing-point for his theological leanings. Thus by a kind of legerdemain, an unconditional assent may be given to propositions for which the evidence is worthless, or nearly so. I regret to say, that it seems to me to be the great object of this treatise to invent something which will constitute an apparent stand-point for this most sophistical conclusion. Now, I hold that our certitudes are in some degree relative also; and that all I am certain of is relative to all the other powers of my mind, and to the evidence on which it rests, and although I may forget that evidence, yet I can remember the nature of it. Now, Mr. Titcomb seemed to think that a certainty can rise higher than the evidence on which it is based, and he took several instances of the works of design as proving the being of a God. Now, in my paper, I have insisted on the value of what I should call the convergence of evidence into one common focus. Such evidence is not a mere balance of probabilities. The nature of it is this, that we have a number of separate lines of absolutely distinct evidence which converge in a common centre; and when that is the case, there is some principle in the mind—I do not know what it is—which accepts that proof as absolutely valid, and the evidence is quite as suited to produce belief as what we call demonstration. Now, as to my admission that there are certain powers of mind possessed by individual persons which may be said to be intuitions. When I wrote that, I intended to express no opinion of my own, I merely took what Dr. Newman said upon it, and my point was that even if that were true, it did not in the least prove his argument. I am far from being satisfied as to what is the correct view of the matter. He has alluded to Napoleon's special power of looking at an army through a glass, and at once forming a correct judgment as to their numbers and positions. Cases like that, at any rate, strike us ordinary people as strange, and whether they be the result of intuitions, or of very rapid judgments, I do not know; but in using the phrase "intuitive," I did not mean to imply an absolute intuition, but simply the wider sense of the word as it is used by Dr. Newman, and as it is often applied. I have no doubt I have simply fallen

into the use of the word because I found it in that part of Dr. Newman's essay to which I was referring. It seems to me, however, to be one of the characteristics of great men, that they are able to form judgments on data which would suggest little or nothing to ordinary minds. Of this there are many recorded instances. How this is done is a mystery which we cannot penetrate. We know, however, that absolute mastery of a subject enables us in some degree to approximate towards it. If we call it a power of profound insight, it explains little. Probably mental processes take place which leave no trace in the memory. There is no doubt that great conversance with a subject enables one to pass through a succession of judgments and to draw conclusions which to others seem incomprehensible.

Rev. G. HENSLOW.—Amongst the writers who have dealt with that point are Robertson, of Brighton, and the author of *Ecce Homo*.

Mr. REDDIE.—I hardly think such authorities can carry great weight with us. They are both sceptics. Robertson gave several hints for the *Essays and Reviews*, and the character of *Ecce Homo* is well known.

Mr. HENSLOW.—It is only a question of fact.

Mr. ROW.—But these are mere subordinate matters, about which I did not care one way or the other. With regard to those points, upon which I may say our religious and philosophical certainties rest, if Dr. Newman is right in his main principles, we have little to do but to turn sceptics. I am very sorry to be obliged to come to that conclusion. There is one remark of Mr. Reddie's with which I wholly disagree—as to the judgment of style. In the case I mentioned I should be positively sure that Lord Macaulay did not write the *Rambler*; but perhaps Mr. Reddie has not studied critically the evidence which style furnishes to diversity or identity of authorship. It is a difficult question to know how we form that judgment; but there are diversities of style which make you feel sure that one book could not have been written by a certain author. What do you think on the point, Dr. Thornton?

The CHAIRMAN.—No doubt there are certain differences of style which are easily detected. For instance, one would not think that the *Facetiæ* of Hierocles was written by Thucydides.

Mr. ROW.—No; of course not. The *Rambler* is full of Latinisms, whereas Macaulay's writings contain a great amount of Saxon, and there are few styles which are more widely different. Mr. Reddie seemed to argue that there were no metaphysical difficulties in the summation of an infinite series. When I wrote that, I had in my eye many other mathematical operations, and I maintain that the square root of a minus quantity does include certain metaphysical difficulties. I do not say that all mathematical questions involve this difficulty, but some do. Take the differential and the integral calculus; there are metaphysical difficulties there, as also in many other cases. But I will not further occupy your time.

Dr. RICE.—If Mr. Reddie would favour us with a paper upon Dr. Newman's work, but deprived of such mathematical matters, I think he would do good service.

The Meeting was then adjourned.