

The Coming Man.

FROM THE "LEICESTER DAILY POST."

LETTERS TO THE EDITOR.

MODERN ASTRONOMY.

SIR.—I was pleased to read in the *Post* of last Friday your sensible remarks on the ambitious pretences of modern astronomy. It is, as you remark, one of the "most fascinating while it is one of the most unsatisfactory of all the sciences;" whilst its professors assume the loftiest tone imaginable, and expect us to receive their mere speculations and fancies as gospel truths. In fact, the teaching of the Bible is entirely ignored in their fascinating speculations, and one is almost scouted in these days for suggesting that possibly the ancients were more correct in their ideas of the universe than are the moderns. If, as you say, "the nebular hypothesis of Laplace really represents the extent of our astronomical knowledge," and this hypothesis should prove an unfounded speculation, how much real knowledge is there in this modern and much-vaunted "science" after all? It would, as the Apostle Paul says, be a "science falsely so-called;" yet many professing Christians, alas! swallow down anything in the name of "science" with open mouths, while the account given by Moses of the creation of the world is ~~pooh-poohed as old-fashioned and out of date.~~

If all matter were originally nebulous, what, I should like to know, caused its condensation into stars, or hot and flaming bodies, as they are again supposed to be, like our sun? Gravitation? But what is gravitation? I have seen a great deal of astronomical conjuring with this word: but what is the thing itself which is called "gravitation?" Has solar attraction ever been proved, or is it only another "hypothesis" or assumption? If the latter, then the whole theory of modern astronomy rests upon two baseless ideas or speculations, rather than upon the well-founded facts of eternal truth. Now I seriously ask for one single fact proving solar or stellar gravitation. How can one star or sun pull another body said to be millions of miles away? What is the rope, or connecting rod, or coupling, by means of which the "pull" is effected? When we travel by train we find that before the engine can pull its load of following carriages each car has to be hooked on to it, but this mysterious kind of matter called gravitation is a sort of elastic web, which is always hooked on, and which is supposed to pull with the greatest tension when the distance between the two objects is the least! This is contrary to our ordinary experience on the earth, is it not? Perhaps some of your more learned readers will explain it for us, namely, solar gravitation, because it appears to me that this hypothesis of Newton is at the base of all the subsequent hypotheses or speculations of his now numerous admirers. If Dr Huggins and the astronomers cannot tell us whether the heat of our sun is now less or more than it was a hundred years ago, they had better stop at home a little more and not wander so far away amongst the stars. Let them secure their base line, and then sally abroad amongst the stars. Your figure about the household fly having the audacity to suppose it could master the secrets of social science is not a bad one to represent the pride of those titled mortals who not only think they can pierce the heavens, but who dare to impugn the teachings of the Creator through his servant Moses whose writings have been endorsed by the Son of the Most High.—I remain sir, yours, &c.,

ZETETES.

150 St Saviour's Road, August 25, 1891.

SIR.—There are still a few old-fashioned persons left who profess to believe that the world is flat and that the stars are mere points of light, situated in the heavens solely to illuminate this earth. Probably your correspondent "Zetetes" is one who entertains these curious ideas. He tries to explode the law of gravitation, than which nothing more certain has been proved to exist. If "Zetetes" had ever carefully studied a handbook on the subject I am inclined to think he would not have written the letter on "Modern Astronomy" which appeared in the *Daily Post* of the 26th inst. Gravitation is no "hypothesis" or assumption. It is an established fact, and its proofs are almost innumerable. Gravitation controls the moon as it revolves around our earth; our earth, as it revolves around its centre of attraction, the sun; our sun as it, in its turn, revolves around some other and greater sun. To attempt to prove that gravitation exists in the limited space at my disposal is unnecessary, since explicit proofs are to be found in every work on astronomy. Again, is the account which Moses gives us of the creation of the world to be taken literally? Are we really to believe that the world was formed in seven days? Might not a "day" in this case be a period of time extending over countless ages? Doubtless it was so. That this globe was millions upon millions of years in its formation, from the time that it was a nebulous mass to the time that God created the first man, is acknowledged by the wisest men of our day, and I fail to see that it is opposed to Bible teaching.

Astronomy does not tend to raise man in his own estimation, and make the Creator seem less glorious in the eyes of mankind. The more we learn of this most fascinating science, the more we feel our own insignificance and the stupendous greatness and wisdom of the Most High, who ever rules every body which exists in the infinity of space, yet deigns to care for the poorest and meanest mortal upon this earth.—I remain, yours, &c.,

GERARD WARNE.

SIR.—Your correspondent Gerard Warne has not even attempted to answer my questions. He refers me to handbooks on astronomy for proof of solar gravitation. He thinks I cannot have read one or I should not question the existence of what is called "gravitation." He is mistaken. It is because I have failed to find any proofs there that I appeal to your readers. It is all assumption. Sir John Herschell says: "We shall take for granted, from the outset, the Copernican system of the world;" and if we turn to Copernicus he admits that his theory of the universe is founded upon hypothesis or assumption rather than actual fact. He says: "It is not necessary that hypotheses should be true, or even probable: it is sufficient that they lead to results of calculation which agree with calculation. . . . Neither let anyone, so far as hypotheses are concerned, expect anything certain from astronomy, since that science can afford nothing of the kind. . . . The hypothesis of terrestrial motion was nothing but an hypothesis, valuable only so far as it explained phenomena and not considered with reference to absolute truth or falsehood." Yet your correspondent says, "Gravitation is no hypothesis or assumption." I am afraid I must ask him to take his own advice and study some handbook on the subject. However, if the proofs of solar attraction are, as he says, "almost innumerable," will he kindly give your readers one? One will be sufficient, if a good one; and out of so many there should surely be one suitable for your pages. He says: "Gravitation controls the moon as it revolves around our earth; our earth, as it revolves around its centre of attraction, the sun; our sun as it, in its turn, revolves around some other and greater sun." But why does he stop here? Why not say this "greater sun" revolves around "some other and

greater sun" still: and this around another larger than that, and so on *ad infinitum*. until you get the last sun of the series (pardon my "bull") large enough to fill the universe, and so stick fast.

This would be the logical outcome of this central gravitating theory; but we will, for argument's sake, stop with the first three centres given—moon, earth, and sun. My critic says that gravitation compels the moon to go round the earth, the earth around the sun, and the sun around some sun greater. He does not offer this assertion as proof, but simply sets forth the modern and now popular theory. I ask for proof, not now of the whole system, but of its fundamental and underlying assumption—gravitation. The theory is that every atom of matter in the earth acts on every other atom of matter in the heavenly bodies—sun, moon, planets, and stars. ~~How can I understand how bodies can act at a distance without some connecting medium, and I want to know what the connecting rod, or coupling, is between the sun and the earth for instance, and between atom and atom. How many hands or "bonds" has each atom to enable it to lay hold of and "pull" every other atom in the universe? And how are all these connecting lines or ropes attached? and do they cross and intersect each other? Yet this tangled mass "is an established fact" forsooth, and its proofs "almost innumerable!"~~

But let us briefly view the question from another point presented by our astronomical friend. The moon goes circling around the earth: the earth revolves in a greater orbit around the sun; the sun in a vaster orbit still rushes away with both around some greater, say, Sirius; and Sirius—but no! I have promised to stop here. Well, what, on the above assumption, would be the path of the moon? and how if the moon's path be not exactly known, would it be possible to calculate her exact position months beforehand? Let me use a homely illustration. Suppose a gentleman has a dog circling around him at some distance in play; the owner of the dog is on horseback and galloping at a greater distance around some railway train. ~~Suppose the railway train is rushing along and making a curve round a city; what would be the curvilinear path of the dog? Would it always have to run at the same speed? and would it be possible for anyone to predict when and where the dog might be seen in a straight line with horse and engine and city? I do not say this problem would be impossible of calculation, but I do say that to calculate it would be mere child's play compared with defining the path of the moon according to the theories of modern astronomy. Yet for thousands of years before these theories were believed or formulated by Newton, astrologers could predict eclipses of the moon with nearly as much precision as astronomers can now.~~

~~As I cannot obtain any proof of the theory of solar or stellar gravitation so essential to modern astronomy, I will ask your correspondent to kindly furnish us with some proof that the earth, with all its inhabitants, has the prodigious speed it must have if the popular theory be true? Or to put it more modestly, I will ask him to give us one good proof that the earth has any motion at all. He need not refer me to the text books; they all assume terrestrial motion as well as solar attraction down to our School Board primers. I ask for proof; and as I only ask for one proof my request cannot be considered unreasonable. The Psalmist said, "He hath founded the earth upon her bases, that it should not be removed for ever." And Joshua thought that it was the motion of the sun, not that of the earth, which was the cause of day and night; yet our friend can see no discrepancy between Bible teaching and the theories of the astronomers! I do not expect Mr Warne to say that Joshua was right: but I shall require, at least, something more than assumption before I believe he was wrong. I am old-fashioned enough yet to believe the Bible to be true, and I think I am sufficiently modernised to know the difference between a fact and a hypothesis, between true science and mere sound, between the teachings of Moses and the theories of Laplace. If, as the latter writer supposes, all matter was originally nebulous, how long was it in this state, and what had gravitation been doing to allow it to get into that loose condition? when did the impulse begin to act, and the truant atoms begin to pull all together? And if they are all still pulling each other to a common centre, how is it they are so long in arriving at it? and what has prevented them from~~

forming one vast central globe, leaving neither sun, moon, stars, nor nebulae to be seen in the surrounding heavens? These baseless speculations are leading men into doubt and infidelity, and it behoves all faithful Christians to withhold their assent to them, at least until some decent proof can be offered on their behalf. ZETETES.

August 23th.

Sir,—“Zetetes” makes a quotation from your leader on the above subject—“that the nebular hypothesis of Laplace really represents the extent of our astronomical knowledge.” The correspondent then refers to gravitation, inquiring what is this power that pulls without chains. Your sentence hardly deals fairly with modern astronomy, as hypothesis and theory are not reckoned in the true science of astronomy, which practically acknowledges only those principles that can be mathematically proved. The nebular theory of Laplace pertains rather to the science of cosmogony—treating of the formation of the universe. Laplace gave his idea of how the world or universe was formed. Your correspondent “Zetetes” prefers to believe in the traditions recorded by Moses. In considering these two accounts do not let modern astronomy be blamed if neither can be proved. The most wonderful part of modern astronomy consists in its exactness. The modern astronomer predicts to a second the movements of bodies that the greater portion of mankind have never seen. The art of navigation depends for its very possibility upon astronomical prediction, the survey of extensive regions of country, the accurate determination of time, and the arrangement of the calendar, these and the laws that can be mathematically proved as correct are the feats of modern astronomy. The law of gravitation is one of these laws—that every particle of matter attracts according to its weight, and inversely as the square of its distance. “Zetetes” would find there is practical proof of this law if he fell out of a balloon, and as he neared the earth his speed would increase, till at the earth's surface he would be travelling at the rate of sixteen feet per second. Newton found that this coincided with the fall of the moon towards the earth, her distance being about sixty times the earth's radius; therefore the force would be sixty times less, or sixteen feet in a minute, during which time the moon travels in her orbit 38 miles.

This one instance would not prove the law of gravitation, but the same law was found to rule the planets. Some of the stars have been found to be travelling round each other, evidently affected by the same law, but most wonderful was the discovery of the planet Neptune by his having attracted Uranus slightly out of his known orbit. That gravitation is a fact who can doubt? But, like electricity, we cannot explain how it works. It holds bodies in their orbits by invisible chains, far stronger than were ever forged by man.

As regards the nebular *Hypothesis* it has more evidence in its favour than the tradition handed down by Moses. For instance, if we take up a hot stone we naturally conclude that it has been in or near fire; its outer surface gradually cools. The earth *may* be compared to a hot stone with the crust cooled, and reasoning back we come to a time when the earth was red hot, molten, and gaseous. If we scan the heavens we see bodies in all these stages. There are the nebulae, the sun, and the planet stages. In Saturn we have an example of how nebulae may condense, leaving a ring of meteoric matter still circling round, until this matter may gather into one body and form another satellite to the parent planet. Both Laplace and Newton were good Christians, and to me the beauty and simplicity of the laws by which the Great Creator rules the Universe, impress one that there is a mind working behind the scenes, the greatness of which the mind of man cannot grasp, and that we are, indeed, conceited beings when we assume that all this great Universe has been designed for our special benefit.—Yours, &c., J. M. B.

Sir,—As books on astronomy have failed to convince your correspondent, “Zetetes,” that gravitation exists and that the earth annually describes a circle round the sun, I am afraid that my writing will be of little avail. How does “Zetetes” explain the phenomena of day and night, and how does he

account for the seasons? How is it that we do not see the same constellations in the heavens all the year round? The fact that we do not is a sure proof of the earth's motion. Does "Zetetes" believe that the heavens are always moving and that we are stationary? There is nothing stationary in the universe. All the *other* planets describe circles around our sun; this is known. Then why should *this* earth alone be fixed and immovable! Again, "Zetetes," questions the law of gravity, yet professes to believe that the earth is a stationary body, supported in space by nothing! How is this? What mystic force prevents it from falling away into space, or being drawn into the sun? The centrifugal and centripetal forces being adjusted the earth retains its place, and ever will while the law of gravitation governs the universe. "Zetetes" will say, this is all conjecture. Perhaps, then, he will tell us what he considers to be the truth of the matter.

GERARD WARNE.

SIR,—As our first friend, Mr Warne, has failed to give us a single proof either of the earth's supposed motion or the theory of solar attraction, the two underlying assumptions of modern astronomy, another writer, J. M. B., has come to the rescue. I have no objection to this; and will try briefly to notice both. J. M. B. seems to admit that Moses and Laplace are at variance; while J. W. seemed to think that the teachings of the Bible and those of astronomy are harmonious. Both positions cannot be correct. The latter writer evidently has some respect for the Word of God, though holding teachings which make the Word of none effect; while J. M. B. boldly impugns the Bible account of creation as a "tradition handed down by Moses," and thinks that the "nebular hypothesis has more evidence in its favour." I would not complain if this larger amount of evidence were forthcoming and reliable; but what is it? Fact or assumption again? Let us see. He says: "The earth may be compared to a hot stone with the crust cooled, and reasoning back we come to a time when the earth was red hot, molten, and gaseous." Good. I suppose this is a specimen of what he calls "reasoning back." My friend, you may compare the earth to a hot stone, or to a large elephant, if you like; but will your comparison make it into one? If the earth ever was in the condition of a hot stone I will own it must at some time have "been in or near fire." But has it been in that condition? and into what "fire" was it placed to make it so hot? Was the order "red hot, molten, and gaseous," or gaseous, molten, and red hot? And if the latter, how is it that such large mixed bodies contract under heat instead of expanding. Have we to reason "backwards" again? I suppose that there would be no sea on the "globe" while it was red hot; and no life of any kind when the crust was in a molten state? Whence came, then, all the unfathomable waters of the ocean, and all the varied forms of life now existing on the earth? Evolution? Another kindred hypothesis. How did the first forms of life appear, and non-living inorganic matter change into living and wonderful organisms? Evolution, sir, evolution! And so we go on piling hypothesis upon hypothesis until we deny the Creator of the Bible, and admit that our forefathers were apes or baboons!

But J. M. B. thinks that modern astronomy is free from the charge of being based on assumption, and that it appeals only to the principles of undeniable mathematics. I have already quoted the admissions of two eminent astronomers, which show that their system of the universe is based upon assumption, and Copernicus further says that if any man "should adopt for truth things feigned for another purpose, he may leave his science more foolish than he came to it;" so your correspondent had better be careful. Mathematics can be applied to any theory, whether that theory be true or false; and in respect of the world, if the relative proportions, distances, and sizes of the heavenly bodies be maintained, the resultant calculations would come out the same whatever those distances might be supposed to be. But we are told that "the most wonderful part of modern astronomy consists in its exactness." Oh! when I went to school I was taught that the distance of the sun from the earth was ninety-five millions of miles: subsequently I have been gravely informed by an astronomer that this is

an error, and that it was only some ninety-two odd millions of miles. Perhaps a difference of two or three millions of miles is a mere nothing in the vast speculations of our astronomical stargazers. But what about Kepler's calculations? Did he not measure the sun's distance at 12 millions. Ricciola 27 millions, Newton 28 millions, Martin 81 millions, and Mayer 104 millions? All doubtless worked out with "mathematical exactness!" It is, indeed, "wonderful"! Dr B. Rowbotham, of London, by plain triangulation, made out the sun to be a comparatively small body, and something under three thousand miles distant. But then he was only a medical man, not a well paid astronomer.

But your correspondent J. M. B. thinks I should have proof of the law of gravitation if I were to fall out of a balloon. I asked for proof of the Newtonian assumption of solar attraction, and he refers me to the fact that heavy bodies fall to the earth. If a body fall downwards, by its own weight, to the earth, I am asked to believe that the sun can pull a large body upwards by some mysterious force in itself called solar gravitation! I reply that there is no necessary connection between the premisses and the conclusion. The sun has never been proved, by experiments, to have any attractive force whatever upon earthly bodies; nor, on the other hand, has the earth ever been shown to have any central power of "pulling" at the heavenly bodies. It is all pure conjecture. Why does not the earth "pull" down the balloon while it is suspended in the air inflated with gas? Or, if the gas escape, why not pull every particle or atom of it down to the earth? How is it that a little atom of hydrogen can mount upwards in spite of the combined "pull" of all the atoms of which the world is composed? But we are informed that Newton "found" that the moon "fell towards the earth," "at the rate of sixteen feet per second." Well, all I have time now to say is, that we had better look out; there must be a great crash somewhere soon. And if there be mountains in the moon, as they say there are, let us hope that some kindly valley will, at least, fall over Leicester. I was going to ask you, sir, if you could supply me with the "exact" distance of the moon, ~~to divide that distance by sixteen~~ so as to get the "exact" number of seconds when the crash would come; but I will not alarm your readers, and I hope there may yet be time for our friend J. M. B. "to explain" the matter so as to ward off the "fall." Perhaps the sun will come to our rescue and give the moon a jerk the other way! But a word in conclusion for my first critic. He cannot see how the phenomena of the seasons can be explained apart from the popular theory. I think I can. But suppose that neither of us could; is our ignorance to be taken as proof of the popular theory? It ought not to be, surely. Let us first see the baseless character of these modern assumptions; and then we shall be in a position to inquire what evidence there is in support of the Bible doctrine that the earth is an "out stretched" and motionless plain, resting upon the fathomless waters of the mighty deep. ZETETES.

September 1st.

SIR,—Your correspondents appear to assume that what they call the nebular theory is antagonistic to the Bible. What is the meaning of the following:—1st chapter of Genesis? Will "Zetetes" explain? "And the earth was (that is, existed) without form and void, and darkness was . . . and the spirit moved . . . and God said, Let there be light." But "Zetetes" wants everything explained. Will he explain all the movements of a spinning top—the motions of procession, of gyration, and of revolution? If he will do so, fully and satisfactorily, your correspondents may be better able to make the other problems clear to his mind.—Yours, W. T.

SIR—Your correspondent "Zetetes," who states that I have "failed to give a single proof either of the earth's supposed motion, or the theory of gravitation," also denies that the earth may be reasonably compared to a "hot stone with the crust cooled." Yet this is evidently its present condition, or from whence comes the fiery matter which our great volcanoes have been ejecting for centuries past? Stromboli has been in a

state of constant activity for more than 2,000 years, and still keeps casting out burning rocks and scoria from the bowels of the earth. At the remote period when "the earth was without form and void," it was doubtless in the same condition as is the planet Jupiter now. Owing to the great size of Jupiter as contrasted with our earth, it is evident that ages must elapse before it cools down to a temperature in which life could exist. The moon, owing to its smallness, has long been cold and dead. Our earth, therefore, is in a medium state; the interior a glowing mass, with a few miles of solid crust upon the surface.

"Zetetes" wants to know "what fire the earth has been in to make it so hot." Laplace believes that the sun, having a revolution on its axis, was surrounded by an atmosphere which extended far beyond the orbits of the planets, which, as yet, were not formed. As the temperature of the sun decreased the rotation increased, and the centrifugal force of the atmosphere overcoming the centripetal, a ring of vapour was separated, which, breaking into pieces, united together and revolved around the sun; as the cooling process continued they ejected other zones, a series of vaporous planets, and they, in turn, threw off minor satellites. This, surely, is a plausible explanation of the present heat of the interior of the earth. How else can we account for it?

If gravitation does not exist, "Zetetes," why do we not fall into space? What holds us to this earth? We are exactly opposite to our friends in the Antipodes. Yet we both remain secure. It is to the law of gravitation that we owe our safety, day by day.

If "Zetetes" believes that the earth is flat (which has been disproved in hundreds of different ways, and by none better than through observing the circular shadow cast upon the moon during an eclipse) he certainly cannot refer us to the Bible as a proof that it is so, for nowhere in the Bible are we so told—a sure proof, I think, that the Scriptures are inspired.—I remain, yours truly,
G. WARNE.

Sir,—After your editorial warning I will only ask you to allow me to make a few concluding remarks in connection with the position assumed by Dr Huggins. The language in his address is much more cautious than that of some of his admirers. He does not affirm that the nebulous theory of Laplace is true: but says that from certain "considerations Kant and Laplace formulated the nebular hypothesis, resting it on gravitation alone." He owns it is only a "supposition"; and a supposition encumbered with the fact that we have still "nebulae" existing "in a relatively younger state." He, like a true astronomer, hesitating to affirm, suggests the idea that dark suns may have "collided" to make them into hot and bright suns; but he candidly owns that "there is no record of such an event" having taken place. So it is clear, to an unprejudiced mind, that the whole theory of a multiplicity of worlds moving about space, and dragged about by some power called attraction or gravitation, is purely conjectural: or what may be called scientific guesswork. I think therefore that the criticisms of the editor of the *Daily Post* were justifiable, and that Dr Huggins, in his late address, did speak "in the tone of a man who feels that, after all, he is launched on a vast sea of uncertainty." And I for one, decline to give up the ancient cosmogony of Moses, endorsed as his writings were by the great Teacher who came from God, for these modern and baseless speculations. One of your correspondents asks for proof that they are at variance. Allow me to give him one fact. Laplace and

modern astronomers require millions and millions of years for the evolution of their universe, while Moses taught that the world, earth, sea, sun, moon, and stars were all made in six days.

Each of my letters has been diverted chiefly against this "nebular hypothesis," and that which Dr Huggins allows was its underlying assumption, namely, "gravitation alone." Newton himself never pretended that the theory of celestial gravitation was founded upon fact; and some of his friends opposed it as a theory. Yet the hypothesis of Laplace is based upon what one writer says "is but one guess amongst many." Dr Woodhouse, professor of astronomy at Cambridge, about fifty years ago, was candid enough to acknowledge the weak and artificial nature of the Newtonian speculations. He says: "When we consider that the advocates of the earth's stationary and central position can account for and explain the celestial phenomena as accurately, to their own thinking, as we can ours, in addition to which they have the evidence of their senses, and Scripture, and facts in their favour, which we have not; it is not without some show of reason that they maintain the superiority of their system. . . . However perfect our theory may appear in our estimation, and however simply and satisfactorily the Newtonian hypothesis may seem to us to account for all the celestial phenomena, yet we are here compelled to admit the astounding truth that, if our premises be disputed and our facts challenged, the whole range of astronomy does not contain the proofs of its own accuracy." Sir, if the writer of the above extract had been editor of a daily paper or only a private individual and investigator like your humble correspondent, he would have had the critics down upon him; but he was an astronomer, and a little more candid than some. Another writer, the Rev. W. Jones, nearly a hundred years earlier than the above, says: "The attraction of gravity is devoid of all geometrical evidence." Again the Catholic Church has always rejected these modern theories as "absurd, philosophically false, and formally heretical." A writer in a work entitled "Solar Fictions" asks: "When will men learn to know a fact from a fiction?" Sir Richard Phillips boldly writes:—"It would be

much wiser at once to pull down the whole than to continue the system of patchwork of which the Newtonian theory consists. For I am convinced that such a mass of deformity must, in due time, offend the common sense of mankind, however admired and cherished it may be." And a writer in Chambers' Encyclopedia for the People, in view of certain unanswerable objections to the theory, says: "Such being the state of the case, the reader will consider whether, when Copernicus wrote, he held the doctrine of the earth's motion as a mere hypothesis, and as absolutely in facts true," p. 119.

But I must conclude. One writer asks me the silly question: "If gravitation does not exist why do we not fall into space?" His own theory would supply the answer, because on that theory we are already in "space," and there would be no "gravitation" to pull us anywhere else. But what is "space"? a vacuum? a plenum? or an assumption? If he can tell me I may answer him further. Another writer refers me to the spinning of a top. The case is not a parallel one. The top rests, while it spins, supported on something, while the earth with all its mountains, rivers, and oceans is said to be gyrating unsupported in "space," with half its population standing at the Antipodes head downward! Let my friend spin his top unsupported in mid-air and it will be true enough for him to boast of his analogy. But I must conclude, sir, by thanking you for your impartiality, and hope to remain, yours truly,
ZETETES.

September 3rd.