## PSYCHOLOGICAL CURIOSITIES OF SCEPTICISM.

A REPLY TO DR. CARPENTER.

BY ALFRED R. WALLACE, F.R.S.

IN the last number of this periodical, Dr. Carpenter has treated his readers to a collection of what he terms 'Psychological Curiosities of Spiritualism.' Throughout his article he takes Mr. Crookes and myself as typical examples of men suffering under 'an Epidemic Delusion comparable to the Witchcraft Epidemic of the seventeenth century,' and he holds up our names to wonder and scorn because, after many years of inquiry, observation, and experiment, and after duly weighing all the doubts suggested and explanations proposed by Dr. Carpenter and others, we persist in accepting the uniform and consistent testimony of our senses. Are we indeed 'Psychological Curiosities' because we rely upon what philosophers assure us is our sole and ultimate test of truth—perception and reason? And should we be less rare and 'curious' phenomena if, rejecting as worthless all our personally acquired knowledge, we should blindly accept Dr. Carpenter's suggestions of what he thinks must have happened in place of what we know did happen? If such is the judgment of the world, we must for a time submit to the scorn and ridicule which usually fall to the lot of unpopular minorities, but we look forward with confidence to the advent of a higher class of critics than our present antagonist, critics who will not condescend to a style of controversy so devoid of good taste and impartiality as that adopted by Dr. Carpenter.

It is with great reluctance that I continue a discussion so purely personal as this has become, but I have really no choice. If Dr. Carpenter

had contented himself with impugning my sanity or my sense on general grounds, I should not think it worth while to write a word in reply. But when I find my facts distorted and my words perverted, I feel bound to defend myself, not for the sake of my personal character, but in order to put a stop to a mode of discussion which renders all evidence unavailing and sets up unfounded and depreciatory assertions in the place of fair argument.

I now ask my readers to allow me to put before them the other side of this question, and I assure them that if they will read through this article they will acknowledge that the strong language I have used is fully justified by the facts which I shall adduce.

Those who believe in the reality of the abnormal phenomena whose existence is denied by Dr. Carpenter and his followers, have, for the most part, been convinced by what they have seen in private houses and among friends on whose character they can rely. They constitute a not uninfluential body of literary and scientific men, including several Fellows of the Royal Society. The cases of public imposture (real or imaginary) so persistently adduced by Dr. Carpenter, do not affect their belief, which is altogether independent of public exhibitions; and they probably with myself look upon the learned Doctor (who tilts against facts as Don Quixote did against windmills, and with equally prejudicial results to himself) as a curious example of fossilised scepticism. Thus, Serieant Cox, who often quotes Dr. Carpenter and is now quoted by him with approval, speaks of the learned

Doctor (in his recent address to the Psychological Society) as being 'enslaved and blinded' by 'prepossession,' adding:

There is not a more notable instance of this than Dr. Carpenter himself, whose emphatic warnings to beware of it are doubtless the result of self-consciousness. An apter illustration of this human weakness there could not be. The characteristic feature of his mind is prepossession. This weakness is apparent in all his works. It matters not what the subject, if once he has formed on opinion upon it, that opinion so prepossesses his whole mind that nothing adverse to it can find admission there. It affects alike his senses and his judgment.

I propose, therefore, as a companion picture to that of Messrs. Crookes and Wallace the victims of an Epidemic Delusion, to exhibit Dr. Carpenter as an example of what prepossession and blind scepticism can do for a man. I shall show how it makes a scientific man unscientific, a wise man foolish, an honest man unjust. To refuse belief to unsupported rumours of improbable events, is enlightened scepticism; to reject all secondhand or anonymous tales to the injury or depreciation of anyone, is charitable scepticism; to doubt your own prepossessions when opposed to facts observed and reobserved by honest and capable men, is a noble scepticism. But the scepticism of Dr. Carpenter is

none of these. It is a blind, unreasoning, arrogant disbelief, that marches on from youth to age with its eyes shut to all that opposes its own pet theories; that believes its own judgment to be infallible; that never acknowledges its errors. It is a scepticism that clings to its refuted theories, and refuses to accept new truths.

Near the commencement of his article Dr. Carpenter tells us that he recurs to this subject as a duty to the public and to assist in curing a dangerous mental disease; and that he would gladly lay it aside for the scientific investigations which afford him the purest enjoyment. But he also tells us that he honestly believes that be possesses 'unusual power of dealing with this subject;' and as Dr. Carpenter is not one to hide the light of his 'unusual powers' under a bushel, we may infer that it is not pure duty which has caused him, in addition to writing long letters to Nature and announcing a 'full answer' to myself and Mr. Crookes in the forthcoming new edition of his Lectures, to expend his valuable time and energy on an article of fortyeight columns, founded mainly on such a very shaky and un-scientific foundation as American newspaper extracts and the unsupported statements of Mr. Home, the medium;1

Mr. Home has always been treated by Dr. Carpenter as an impostor: yet now he quotes him as an authority, although Mr. Home's accusations against other mediums are never authenticated in any way, and appear to be in many cases pure imagination. Dr. Carpenter will no doubt now disclaim any imputation against Mr. Home, and pretend to consider him only as the victim of delusion. But this is absurd. For does he not maintain that Mr. Home was nover 'levitated,' although in several cases the fact was proved by his name being found written in pencil on the ceiling, where it remained? This must have been imposture if the levitation were not, as claimed, a reality. Do not the hands, other than those of any persons present, which have often appeared at Mr. Home's seances and have been visible and even tangible to all present, prove (in Dr. Carpenter's opinion) imposture? Do not the red-hot coals carried about the room in his hands prove chemical preparation, and therefore imposture? Is not the increase or decrease of the weight of a table, as ascertained by a spring-balance, which I have myself witnessed in Mr. Home's presence, a trick, according to Dr. Carpenter? Is not the playing of the accordion in one hand, or when both Mr. Home's hands are on the table, a clever imposture in Dr. Carpenter's opinion? But if any one of these things is admitted to be, not an imposture, but a reality, then the whole foundation of the learned but most illogical Doctor's scepticism is undermined, and he practically admits himself a convert to the facts of modern spiritualism. But he does not admit this; and as Mr. Home has carried on these alleged

while it is full of personal animosity and the most unmeaning ridicule. With extreme bad taste he compares a gentleman, who, as a scholar, a thinker, and a writer, is Dr. Carpenter's equal, to Moses and Son's kept poet; while with a pitiable inappropriateness he parodies the fine though hackneyed saying, 'See how these Christians love one another,' in order to apply it satirically to the case of a rather severe, but not unfair, review of Mr. Home's book in a Spiritual periodical.

I will now proceed to show, not only that my accusations in the Quarterly Journal of Science for July last—which in Dr. Carpenter's opinion amount to a charge of 'wilful and repeated suppressio veri'—are proved, but that a blind reliance on Mr. Home and on 'excerpts from American newspapers' have led him to make deliberate statements which are totally unfounded.

I will first take a case which will illustrate Dr. Carpenter's wonderful power of mis-statement as regards myself.

I. In a letter to the Daily News written immediately after the delivery of Dr. Carpenter's first Lecture on Mesmerism at the London Institution a year ago, I adduced a case of mesmerism at a distance recorded by the late Professor Gregory. The lady mesmerised was a relation of the Professor and was staying in his own house. The

mesmeriser was a Mr. Lewis. The sole authority for the facts referred to by me was Professor Gregory himself.

2. While criticising this Mr. Lewis in his Lectures (page 24) Dr. Carpenter says, referring to my Daily News letter, 'His (Mr. Lewis's) utter failure to produce either result, however, under the scrutiny of sceptical inquirers, obviously discredits all his previous statements; except to such as (like Mr. A. R. Wallace, who has recently expressed his full faith in Mr. Lewis's self-asserted powers) are ready to accept without question the slenderest evidence of the greatest marvels.' (The italics are my own.)

3. In my 'Review' of Dr. Carpenter's book (Quarterly Journal of Science, July 1877, page 394) I use strong (but, I submit, appropriate) language as to this injurious and unfounded statement. For Dr. Carpenter's readers must have understood, and must have been intended to understand, that, in sole reliance on this Mr. Lewis's own statements, I placed full faith in them without any corroboration, and had also publicly announced this faith; in which case his readers would have been justified in thinking me a credulous fool not worth listening to.

4. Writing again on this subject (in last month's issue of this Magazine, p. 545) Dr. Carpenter does not apologise for the gross and in-

impostures during his whole life, and has imbued thousands of persons with a belief in their genuineness, Dr. Carpenter must inevitably believe Mr. Home to be the vilest of impostors and utterly untrustworthy. Yet he quotes him as an authority, accepts as true all the malicious stories retailed by this alleged impostor against rival impostors, and believes every vague and entirely unsupported statement to a like effect in Mr. Home's last book! This from an ex-Professor of Medical Jurisprudence, who ought to have some rudimentary notions of the value of evidence, is truly surprising. It may be said that, although Dr. Carpenter thinks Home'an impostor, we believe in him, and therefore ought to accept his evidence against other mediums. But this is a fallacy. We believe that he is a medium, that is, a machine or organisation through whom certain abnormal and marvellous phenomena occur; but this implies no belief in his integrity or in his judgment, any more than the extraordinary phenomenon of double individuality exhibited in the case of the French sergeant (which formed the subject of such an interesting article by Professor Huxley some time ago) implies that the sergeant was a man of high moral character and superior judgment.

jurious misrepresentation of what from it: 'And in this last case we I really said, neither does he justify it by reference to anything else I may have written; but he covers his retreat with a fresh suggestio jalsi, and ridicules me for using such strong language (which he quotes) merely (he says) because be bad reflected on my 'too ready acceptance of the slenderest evidence of the greatest marvels'—a phrase of Dr. Carpenter's which I never objected to at all because it was a mere expression of opinion, while what I did object to was a mis-statement of a matter of fact. This is Dr. Carpenter's idea of the way to carry on that 'calm discussion with other men of science' to the absence of which he imputes all my errors. (Note A, p. 705.)

Dr. Carpenter is so prepossessed with the dominant idea of putting down Spiritualism, that it seems impossible for him to state the simplest fact in regard to it without introducing some purely imaginary fact of his own to make it fit his Thus, in his article on theory. 'The Fallacies of Testimony' (Contemporary Review, 1876, p. 286) he says: 'A whole party of believers will affirm that they saw Mr. Home float out of one window and in at another, whilst a single honest sceptic declares that Mr. Home was sitting in his chair all the time.' Now there is only one case on record of Mr. Home having 'floated out of one window and in at another.' Two of the persons present on the occasion-Lord Adare and Lord Lindsay-have made public their account of it, and the third has never declared that Mr. Home was 'sitting in his chair all the time,' but has privately confirmed, to the extent his position enabled him to do so, the testimony of the other two. Is this another case of Dr. Carpenter 'cerebrating' his facts to suit his theory, or will he say it is a purely hypothetical case? Yet this can hardly be, for he goes on to argue

have an example of a fact, of which &c. &c.' I ask Dr. Carpenter to name the 'honest sceptic' of this quotation and to give us his precise statement; or, failing this, to acknowledge that he has imagined a piece of evidence to suit his hypothesis. (Note B, p. 706.)

It is only fair that he should do this because, in another of his numerous raids upon the poor deluded spiritualists, he has made a direct and, as it seems to me, completely unsupported charge against Lord Lindsay. In his article on 'Spiritualism and its recent Converts' (Quarterly Review, 1871, pp. 335, 336) Dr. Carpenter quotes Lord Lindsay's account of an experiment with Mr. Home, in which Lord Lindsay placed a powerful magnet in one corner of a totally dark room, and then brought in the medium, who after a few moments said he saw a sort of light on the floor; and to prove it led Lord Lindsay straight to the spot and placed his hand upon the magnet. The experiment was not very remarkable, but still, so far as it went, it confirmed the observations of Reichenbach and others. This Dr. Carpenter cannot bear; so he not only proceeds to point out Lord Lindsay's complete ignorance of the whole subject but makes him morally culpable for not having used Dr. Carpenter's pet test of an electro-magnet; and he concludes thus: 'If, then, Lord Lindsay cannot be trusted as a "faithful" witness in "that which is least," how can we feel assured that he is "faithful also in much"?' By what mental jugglery Dr. Carpenter can have convinced himself that he had shown that Lord Lindsay 'cannot be trusted as a faithful witness,' I am at a loss to understand. But the animus against the friend of and believer in Mr. Home, is palpable. Now that Lord Lindsay has achieved a scientific reputation, we presume

there must be two Lord Lindsays as well as two Mr. Crookes': one the enthusiastic astronomer and careful observer, the other the deluded spiritualist and 'psychological curiosity.' As these double people increase it will become rather puzzling, and we shall have to adopt Mr. Crookes' prefixes of 'Ortho' and 'Pseudo' to know which we are talking about. It will be well also to note the Scriptural language employed by Dr. Carpenter in making this solemn and ridiculously unfounded charge. It reminds one of the 'I speak advisedly' (in the celebrated Quarterly Review article now acknowledged by Dr. Carpenter) which Mr. Crookes has shown to be in every case the prefix of a wholly incorrect statement.3

Dr. Carpenter heads a section of his article in last month's issue of this periodical, 'What Mr. Wallace means by Demonstration; and endeavours to show that I have misapplied the term when I stated that in certain cases flowers had appeared at séances 'demonstrably not brought by the medium.' His long quotations from Mr. Home, giving purely imaginary and burlesque accounts of such séances, totally unauthenticated by names or dates, may be set aside as not only irrelevant but as insulting to the readers who are asked to accept them as evidence. Dr. Carpenter begins by confounding the proof of a fact and that of a proposition, and, against the view of the best modern philosophers, maintains that the latter alone can be truly said to be 'demonstrated.' But this is a complete fallacy. The direct testimony of the educated senses guided by reason, is of higher validity than any complex result of reason alone. If I am sitting with two friends and a servant brings me a letter, I

am justified in saying that that letter was demonstrably not brought Or if a by one of my friends.' bullet comes through the window and strikes the wall behind me, I am justified in saying that one of my two friends sitting at the table 'demonstrably did not fire the pistol; '-always supposing that I am proved to be in the full possession of my ordinary senses by the general agreement of my friends with me as to what happened. Of course if I am in a state of delusion or insanity, and my senses and reasoning powers do not record events in agreement with others who witness them, neither shall I be able to perceive the force of a mathematical demonstration. my senses play me false, squares may seem to me triangles and circles ellipses, and no geometrical reasoning will be possible. Dr. Carpenter next asserts that I 'complain' of his 'not accepting the flowers and fruits produced in my own drawing-room and those which made their appearance in the house of Mr. T. A. Trollope at Florence.' This is simply not the case. I never asked him to accept them or complained of his not accepting them; but I pointed out that he did accept the evidence of a prejudiced witness to support a theory of imposture which was entirely negatived in the two cases I referred to.4 I implied, that he should either leave the subject alone or deal with the best evidence of the alleged facts. To do otherwise was not 'scientific,' and to put anonymous and unsupported evidence before the public as conclusive of the whole question was both unscientific and disingenuous. Now that he does attempt to deal with these cases, he makes them explicable on his own theory of imposture

<sup>\*</sup> See Nature, Nov. 1, 1877, p. 8.

<sup>2</sup> Quarterly Journal of Science, January 1872: 'A Reply to the Quarterly Review.'

only by leaving out the most essential facts.

He first says that 'in Mr. Wallace's own case no precautions whatever had been employed!' and he introduces this with the remark, 'Now it will scarcely be believed, to which I will add that it must not be believed, because it is untrue. I have never published a detailed account of this séance, but I have stated the main facts with sufficient care<sup>5</sup> to show that the phenomenon itself was a test surpassing anything that could have been prearranged. The general precautions used by me were as follows: Five personal friends were present besides myself and the medium, among them a medical man, a barrister, and an acute colonial man of business. The sitting was in my own back drawingroom. No cloth was on the table. The adjoining room and passage were fully lighted. We sat an hour in the darkened room before the flowers appeared, but there was always light enough to see the outlines of those present. We sat a little away from the table, the medium sitting by me. The flowers appeared on the polished table dimly visible as a something, before we lighted the gas. When we did so the whole surface of the four-feet circular table was covered with fresh flowers and ferns, a sight so beautiful and marvellous, that in the course of a not uneventful life I can hardly recall anything that has more strongly impressed me. I begged that nothing might be touched till we had carefully examined them. The first thing that struck us all was their extreme freshness and beauty. The next, that they were all covered, especially the ferns, with a delicate dew; not with coarse drops of water as I have since seen when the phenomenon was less perfect, but with a veritable fine dew,

covering the whole surface of the ferns especially. Counting the separate sprigs we found them to be forty-eight in number, consisting of four yellow and red tulips, eight large anemones of various colours, six large flowers of Primula japonica, eighteen chrysanthemums mostly vellow and white, six fronds of Lomaria a foot long, and two of a Nephrodium about a foot long and six inches wide. Not a pinnule of these ferns was rumpled, but they lay on the table as perfect as if freshly brought from a conserva-The anemones, primroses, and tulips had none of them lost a petal. They were found spread over the whole surface of the table, while we had been for some time intently gazing on the sheen of its surface and could have instantly detected a hand and arm moving over it. But that is not so important as the condition of these flowers and their dewiness; and—Dr. Carpenter notwithstanding-I still maintain they were (to us) 'demonstrably not brought by the medium.' have preserved the flowers and have them now before me, with the attestation of all present as to their appearance and condition; and I have also my original notes made at the time. How simple is Dr. Carpenter's notion that I tell this story, after ten years, from memory! How ingenious is his suggestion of the lining of a cloak as their place of concealment for four hours-a suggestion taken from a second-hand story by Mr. Home about a paid medium, and therefore not the lady whose powers are now under discussion! How utterly beside the question his subsequent remarks about conjurors, and hats, and the mango-trees produced by Indian jugglers!

In the case certified by Mr. T.A. Trollope the medium's person (not her dress only, as Dr. Carpenter

Miracles and Modern Spiritualism, p. 164.

says) was carefully searched before sitting down; but now it is objected that 'an experienced female searcher' would have been more satisfactory, and the fact is ignored that phenomena occurred which precluded the necessity of any search. For while the medium's hands were both held a large quantity of jonquils fell on the table, 'filling the whole room with their odour.' If Dr. Carpenter can get over the 'sudden falling on the table ' of the flowers while the medium's hands were held, how does he explain the withholding of the powerful odour 'filling the whole room' till the moment of their appearance? Mr. Trollope says that this is, 'on any common theory of physics, unaccountable,' and I say that this large quantity of powerfully smelling jonquils was 'demonstrably not brought by the 411.) We may therefore dismiss medium.' I have notes of other the 'exposure' as, to say the least, cases equally well attested. In one of these at a friend's house to which I myself took Miss Nicholl, eighty separate stalks of flowers and ferns fell on the table while the medium's hands were both held. All were perfectly fresh and damp, and some large sprays of maiden-hair fern were quite perfect. On another occasion I was present when twenty different kinds of fruits were asked for, and every person had their chosen kind placed before them on the table or put at once into their hands by some invisible agency. These cases might be multiplied indefinitely, and many are recorded which are still more completely beyond the power of imposture to explain. But all such are passed over by Dr. Carpenter in silence. He asks for better evidence of certain facts, and when we adduce it he says we are the victims of a 'diluted insanity.'6 In the supposed Belfast exposure by means of potassium ferrocyanide, I objected that the only evidence was

that of a prejudiced witness with a strong animus against the medium. Dr. Carpenter now prints this young man's letter (of which he had in his lecture given the substance) and thinks that he has transformed his one witness into two by means of an anonymous 'friend' therein mentioned. He talks of the 'immediate detection of the salt by one witness and the subsequent confirmatory testimony of the other'—this 'other' being the anonymous friend of the 'one witness' letter! Unfortunately this 'friend' wrote a letter to the papers in which he brought an additional accusation, which I have proved, by the testimony of an unimpeachable witness, to be utterly unfounded. (See Quarterly Journal of Science, July 1877, p. not proven.

Dr. Carpenter heads one of his sections, 'What Messrs. Wallace and Crookes regard as "Trustworthy Testimony"; and before I remark on its contents, I wish to point out the literary impropriety of which Dr. Carpenter is guilty, in thus making Mr. Crookes responsible for the whole contents of my article in the Quarterly Journal of Science because he happens to be the editor of that periodical. might with equal justice charge upon the editor of Fraser all the mis-statements and injurious personal imputations which Dr. Carpenter has introduced into an article, accepted, doubtless, without question on the strength of his high scientific standing.

Under the above heading Dr. Carpenter attempts to show that Colonel Olcott (whose investigation into the character of Mrs. White and her false declaration that she had, on certain occasions, personated 'Katie King,' I quoted in my re-

Dr. Carpenter's Mental Physiology, 2nd edit. p. 362.

view) is an untrustworthy witness; and his sole proof consists in a quotation from a published letter of the Colonel's about bringing an 'African sorcerer' to America. This letter may or may not be injudicious or foolish; that is matter of opinion. But how it in any way 'blackens' Colonel Olcott's character or proves him to be 'untrustworthy' as a witness to matters of fact, it must puzzle everyone but a Carpenter or a Home to understand.

The next example I shall give of Dr. Carpenter's 'unusual power of dealing with this subject,' is a most injurious mis-statement referring to my friend Mr. Crookes. Dr. Carpenter heads a section of more than eight columns, 'Mr. Crookes and his Scientific Tests, and devotes it to an account of Eva Fay's performances, of Mr. Crookes' 'inconsiderate endorsement of one of the grossest impostures ever practised,' and of the alleged exposure of the fraud by Mr. W. Irvine Bishop. The following quotation contains the essence of the charge, and I invite particular attention to its wording:

... her London audiences diminishing away, Eva Fay returned to the United States, carrying with her a letter from Mr. Crookes, which set forth that since doubts had been thrown on the spiritualistic nature of her 'manifestations,' and since he, in common with other Fellows of the Royal Society, had satisfied themselves of their genuineness by 'scientific tests,' he willingly gave her the benefit of his attestation. This letter was published in facsimils in American newspapers.

I can scarcely expect my readers at once to credit what I now have to state; that, notwithstanding the above precise setting forth of its contents, by a man who professes to write under a sense of duty, and as one called upon to rehabilitate the injured dignity of British Science, such a letter as that above minutely described never existed at

all! A private letter from Mr. Crookes has indeed, without his consent, been published in facsimile in American newspapers; but this letter was never in the possession of Eva Fay; it was not written till months after she had left England, and then not to her, but in answer to inquiries by a perfect stranger; moreover it contains not a word in any way resembling the passages above given! Sad to say, Dr. Carpenter's kind Boston friends do not appear to have sent him a copy of the paper containing the fac-simile letter, or he would have seen that Mr. Crookes says nothing of 'the spiritualistic nature of her manifestations;' he does not mention other Fellows of the Royal Society;' he does not say he was 'satisfied of the genuineness of the scientific tests,' but especially guards himself by saying that the published account of the experiments made at his own house are the best evidence of his belief in her powers. He does not 'give her the benefit of his attestation,' but simply says that no one has any authority to use his name to injure

The number of the New York Daily Graphic for April 12, 1876, containing the letter in fac-simile is now before me. An exact copy of it is given below, and I ask my readers to peruse it carefully, to compare it with Dr. Carpenter's precise summary given as if from actual inspection, and then decide by whose instrumentality the honoured distinction of F.R.S. is being 'trailed through the dirt,' and who best upholds his own reputation and that of British Science. Is it the man who writes a straightforward letter in order to prevent his name being used to injure another, and who states only facts within his own personal knowledge; or is it he who, for the express purpose of depreciating 7 the wellearned reputation of a fellow man of science, publishes without a word of caution or hesitation a purely imaginary account of it?

ME. CROOKES' 'FAC-SIMILE' LETTER.

Nov. 8, 1875.

To R. Cooper, Esq. c/o C. Maynard, Esq. 223 Washington Street, Boston, Mass. U.S.A.

DEAR SIR,

In reply to your avour of Oct. 25, which I have received this morning, I beg to state that no one has any authority from me to state that I have any doubts of Mrs. Fay's mediumship. The published accounts of the test séances which took place at my house are the best evidence which I can give of my belief in Mrs. Fay's powers. I should be sorry to find that any such rumours as you mention should injure Mrs. Fay, whom I have always found most ready to submit to any conditions I thought fit to propose. Believe me, very truly yours,

WILLIAM CROOKES.

Notwithstanding this attack, all the evidence Dr. Carpenter can adduce as to the alleged exposure of Eva Fay has really no bearing whatever on Mr. Crookes' position. Long and wordy letters are given verbatim which only amount to this: that the writers saw a clever conjuror do what they thought was an exact imitation of Eva Fay's performances and of those of mediums generally. But a most essential point is omitted. Neither of the three writers say they ever saw Eva Fay's performance. Still less do they say they ever saw

her in private and tested her themselves; and without this their evidence is absolutely worthless. Mr. Crookes has said nothing, good or bad, about her public performances; but she came alone to his own house, and there, aided by scientific friends, in his own laboratory, he tested her by placing her in an electrical circuit from which she could not possibly escape or even attempt to escape without instant discovery. Yet when in this position books were taken from the bookcase twelve feet away and handed out to the observers. The beautiful arrangements by which these tests were carried out are detailed by Mr. Crookes in the Spiritualist newspaper of March 12, 1875, and should be read by everyone who wishes to understand the real difference between the procedure of Mr. methods of Crookes and Dr. Carpenter. Not one word is said, either by Dr. Carpenter's correspondents or by the Daily Graphic, as to this test having been applied to Mr. Bishop by an electrical engineer or other expert, and till this is done how can Mr. Crookes' position be in any way affected? A public performance in Boston, parodying that of Miss Fay, but without one particle of proof that the conditions of the two performances were really identical, is to Dr. Carpenter's logical and sceptical mind a satisfactory proof that one of the first experi-

"In the United States more especially... the names of the "eminent British scientists," Messrs. Crookes and Wallace, are a "tower of strength." And it consequently becomes necessary for me to undermine that tower by showing that in their investigation of this subject they have followed methods that are thoroughly unscientific, and have been led, by their "prepossession," to accept with implicit faith a number of statements which ought to be rejected as completely untrustworthy."—Frazer's Magazine, November 1877, p. 543.

The account in the New York Daily Graphic almost proves that they were not. For the clever woodcuts showing Mr. Bishop during his performances indicate an amount of stretching of the cord which certainly could be at once detected on after examination, especially if the knots had been sealed or bound with court-plaster. Yet more; according to these illustrations, it would be impossible for Mr. Bishop to imitate Eva Fay in 'tying a strip of cloth round her neck' and 'putting a ring into her ear,' both of which are specially mentioned as having been done by her. It may well be supposed that the andience, delighted at an 'exposure,' would not be quite so severely critical as they are

to those who claim to possess abnormal powers.

menters of the day was imposed on in his own laboratory, when assisted by trained experts, and when applying the most absolute tests that science can supply.<sup>9</sup> (Note C, p. 706.)

I have now shown to the readers of Fraser (as I had previously shown in the Quarterly Journal of Science) that whatever Dr. Carpenter writes on this subject, whether opinion, argument, quotation, or fact, is so distorted by prejudice as to be untrustworthy. It is therefore unnecessary here to reply in detail to the mass of innuendo and assumption that everywhere pervades his article; neither am I called upon to notice all the alleged 'exposures' which he delights in placing before his readers. expose' malingerers and cases of feigned illness does not disprove the existence of disease; and if, as I believe has been demonstrated, the phenomena here discussed are marvellous realities, it is to be expected that there will be impostors to imitate them, and no lack of credulous persons to be duped by those impostors. But it is not the part of an honest searcher after truth to put forward these detected impostures while ignoring the actual phenomena which the impostors try When we have Dr. to imitate. Carpenter's final word in the promised new edition of his Lectures, I shall be prepared to show that tests far more severe than such as have resulted in the detection of imposture have been over and over again applied to the genuine phenomena with no other result than to confirm their genuineness.

This is not the place to discuss the reality of the phenomena which Dr. Carpenter rejects with so much misplaced indignation, and endeavours to put down by such questionable means. The careful observations of such men as Professor Barrett of Dublin, and the elaborate series of test experiments carried out in his own laboratory by Mr. Crookes, 10 are sufficient to satisfy any unprejudiced person that the phenomena are genuine; and if so, whatever theory we may adopt concerning them, they must greatly influence all our fundamental ideas in science and philosophy. attempt to excite prejudice against all who have become convinced that these things are real, by vague accusations, and by quoting all the trash that can be picked out of the literature of the subject, is utterly unworthy of the men of science who adopt it. For nearly thirty years this plan has been unsparingly pursued, and its failure has been complete. Belief in the genuineness of the phenomena has grown steadily year by year; and at this day there are, to my personal knowledge, a larger number of welleducated and intelligent and even of scientific men who profess their belief, than at any former period. There is no greater mistake than to suppose that this body of inquirers have obtained their present convictions by what they have seen at public séances only. In almost every case those convictions are the result of a long series of experiments in private houses; and it would amaze Dr. Carpenter to

As hardly any of my readers will have seen the full account of these tests, and as the whole is too long for insertion here, I give a pretty full abstract of all the essential portions of it in an Appendix to this paper. This is rendered necessary because Dr. Carpenter declares that he is going to give, in the new edition of his Lectures, 'the whole explanation' of the 'dodge' by which these 'scientific tests' could be evaded—'a dodge so simple that Mr. Crookes' highly-trained scientific acumen could not detect it.' These are Dr. Carpenter's own words in his article last month (p. 553), and it is necessary that he should be called on to make them good by really explaining Mr. Crookes' actual experiments, and not some other experiments which 'American newspapers' may substitute for them.

<sup>10</sup> Quarterly Journal of Science, Oct. 1871 and Jan. 1874.

learn the number of families in every class of society in which even the more marvellous and indisputable of these phenomena occur. The course taken by Dr. Carpenter of discrediting evidence, depreciating character, and retailing scandal, only confirms these people in their belief that men of science are powerless in face of this great subject; and I feel sure that all he has written has never converted a

single earnest investigator. It is well worthy of notice, as correlating this inquiry with other branches of science, that there is no royal road to acquiring a competent knowledge of these phenomena, and this is the reason why so many scientific men fail to obtain evidence of anything important. They think that a few hours should enable them to decide the whole thing; as if a problem which has been ever before the world, and which for the last quarter of a century has attracted the attention of thousands, only required their piercing glance to probe it to the bottom. But those who have devoted most time and study to the subject, though they become ever more convinced of the reality, the importance, and the endless phases of the phenomena, find themselves less able to dogmatise as to their exact nature or theoretical interpretation. Of one thing, however, they feel convinced; that all further discussion on the inner nature of man and his relation to the universe is a mere beating of the air so long as these marvellous phenomena, opening up as they do a whole world of new interactions between mind and matter, are disregarded and ignored.

## APPENDIX.

Abstract of Mr. Crookes' Experiments above referred to.

The apparatus used consisted of an electrical circuit with a reflecting galvanometer showing the slightest variations

in the current, designed and arranged by one of the most eminent practical electricians. This instrument was fixed in Mr. Crookes' laboratory, from which two stout wires passed through the wall into the library adjoining, and there terminated in two brass handles fixed at a considerable distance apart, and having only an inch or two of play. These handles are covered with linen soaked in salt and water, and when the person to be experimented on holds these handles in the hands (also first soaked in salt and water) the current of electricity passes through his or her body, and the exact 'electrical resistance' cun be measured; while the reflecting galvanometer renders visible to all the spectators the slightest variation in the resistance. This instrument is so delicate that the mere loosening of the grasp of one or both hands or the lifting of a finger from the handle would be shown at once, because by altering the amount of surface in contact the 'electrical resistance' would be instantly changed. Two experienced physicists, both Fellows of the Royal Society. made experiments with this instrument for more than an hour before the tests began, and satisfied themselves that, even with an exact knowledge of what was required and with any amount of preparation, they could not substitute anything connecting the two handles and having the same exact resistance as the human body without a long course of trial and failure, and without a person in the other room to tell them if more or less resistance were required. during which time the index spot of light of the galvanometer was flying wildly about. Comparative steadiness of the index could only be secured by a steady and continuous grasp of the two handles.

Having thus described the apparatus, let us now consider how the test was carried out. The gentlemen invited to witness it were three Fellows of the Royal Society, all of special eminence, and three other gentlemen. They examined the library; fastened up the door to the passage as well as the window with strips of paper sealed with their private seals : they examined all the cupboards and desks; they noted the position of various articles, and measured their distances as well as that of the bookcase from the handles to be held by the medium. The library was connected with the laboratory by a door close to where the medium sat, and this door was wide open, but the aperture was closed by means of a curtain. Everything having been thus arranged. Eva Fay was invited to enter the library. having up to this time been in the drawingroom upstairs, and having come to the house alone. She then seated herself in a

chair placed for the purpose, and having moistened her hands as directed took hold of the two handles. The exact 'electrical resistance' of her body was then noted, as well as the deflection shown by the galvanometer: and the gas in the library having been turned down low, the gentlemen took their places in the laboratory, leaving Eva Fay alone.

In one minute a hand-bell was rung in the library. In two minutes a hand came out at the side of the door farthest from the medium. During the succeeding five minutes four separate books were handed out to their respective authors, a voice from the library calling them by name. These books had been taken from the bookcase twelve feet from Eva Fay: they had been found in the dark, and one of them had no lettering on the back. Mr. Crookes declares that although he, of course, knew the general position of the books in his own library, he could not have found these books in the dark. Then a box of cigars was thrown out to a gentleman very fond of smoking, and finally an ornamental clock which had been standing on the chimney-piece was handed out. Then the circuit was suddenly broken, and on instantly entering the library Eva Fay was found lying back in the chair senseless, a condition in which she remained for half an hour. All the above phenomena occurred during the space of ten minutes, and the reflecting galvanometer was steady the whole time, showing only those small variations which would occur while a person continued to hold the handles.

On two other occasions Mr. Crookes carried out similar tests with the same medium and always with the same result. On one occasion several musical instruments were played on at the same time and a musical box was wound up while the luminous index of the galvanometer continued quite steady, and many articles were handed or thrown out into the laboratory. On the other occasion similar things happened, after all possible precautions had been taken; and in addition Mr. Crookes' desk, which was carefully locked before the stance, was found unlocked and open at its conclusion.

Everyone must look forward with great interest to Dr. Carpenter's promised 'explanation' of how all these scientific tests were evaded by an unscientific impostor.

Note A.—Since this article was in the printer's hands a proof-sheet of the new edition of Dr. Carpenter's Lectures has been forwarded to me at the author's request, in order that I may see what further explanations he has to give of the above case. Dr. Carpenter now attempts to justify his assertion that I had 'recently expressed my full faith in Mr. Lowis' self-asserted powers,' by a statement of what Dr. Simpson told him several years ago, a statement which appears to have been never yet made public, and which, therefore, could not possibly have been taken into account by me, even had it any real bearing on the question at issue. It is to the effect that Mr. Lewis might have received information of the exact hour at which the lady he had promised to try to mesmerise at a distance, fell asleep in Professor Gregory's house, and that he might have afterwards given a false statement of the hour at which he attempted to mesmerise her. Dr. Carpenter is excessively indignant when any doubt is thrown by me on the truthfulness or impartiality of any of his informants, but it seems the most natural thing in the world for him to charge falsehood or fraud against all who testify to facts which he thinks incredible. But even admitting that Dr. Carpenter's memory of what was told him many years ago is absolutely perfect, and admitting that Mr. Lewis (against whose moral character nothing whatever is adduced) would have told a direct falsehood in order to magnify his own powers, how does this account for the fact that the lady was overcome by the mesmeric sleep at all, when her mind and body were both actively engaged at the piano early in the afternoon? And how does it account for the headache which had troubled her the whole day suddenly ceasing? It is not attempted to be shown that Mr. Lewis' statement-that he returned home at the hour named and at once proceeded to try and mesmerise the lady—is not true; so that, except for the supposed incredibility of the whole thing in Dr. Carpenter's opinion, there would be no reason to doubt the exact correctness of the statements made. But even if the reader adopts the view that Mr. Lewis was really an impostor, that does not make Dr. Carpenter's original assertion—that I had 'expressed' my full faith in his 'self-asserted powers'—one whit more accurate. If Dr. Carpenter had then in his memory this means of throwing doubt on the facts, why did he not mention it in his Lectures or in his article, instead of first charging me with the 'expression' of a faith which I never expressed or held, and then attempting to change the issue by substituting other words for those which I really complained of?

Note B.—In the new edition of Dr. Carpenter's Lectures (the proof of part of which has been sent me) he supports his statement that—'there are at the present time numbers of educated men and women who have so completely surrendered their "common sense" to a dominant prepossession, as to maintain that any such monstrous fiction (as of a person being carried through the air in an hour from Edinburgh to London) ought to be believed, even upon the evidence of a single witness, if that witness be one upon whose testimony we should rely in the ordinary affairs of life,'—by saying that—'the moonlight sail of Mr. Home is extensively believed on the testimony of a single witness.' Even if it were the fact that this particular thing is believed by some persons on the testimony of a single witness, that would not justify Dr. Carpenter's statement that there are numbers of educated men and women who maintain as a principle that any such thing, however monstrous, ought to be so believed. As, however, there are, as above shown, three witnesses in this case, and at least ten in the case of Mrs. Guppy, also referred to, it appears that Dr. Carpenter first makes depreciatory general statements, and when these are challenged, supports them by a mis-statement of facts. Such a course of procedure renders further discussion impossible.

Note C.—A letter of Dr. Carpenter's has also 'at his own request' been forwarded to, me, in which he attempts to justify the conduct narrated above. In Nature for November 15 Mr. Crookes printed the letter which was given in fac-simile in American newspapers, with remarks of a somewhat similar character to those I have here made. Dr. Carpenter, writing three days afterwards (November 18), wishes it to be stated in Fraser as his 'own correction,' that this letter was not carried away from England by Eva Fay; adding—'What was carried away by Eva Fay was a much stronger attestation, publicly given in full detail by Mr. Crookes in a communication to the Spiritualist;'—of which communication I give an abstract in an appendix to this article. This obliges me to add a few further particulars.

In Nature, October 25, in a note to a letter about the Radiometer, Dr. Carpenter says: "On the strength of a private letter from Mr. Crookes, which has been published in fac-simile in the American newspapers, a certain Mrs. or Miss Eva Fay announced her "spiritualistic" performances as endorsed by Prof. Crookes and other Fellows of the Royal Society." This supposed letter was 'set forth' in detail in last month's Fraser

as above stated.

In Nature, November 8, Dr. Carpenter says, 'And the now notorious impostor, Eva Fay, has been able to appeal to the "endorsement" given to her by the "scientific tests" applied to her by "Professor Crookes and other Fellows of the Royal Society," which had been published (I now find) by Mr. Crookes himself in the Spiritualist in

March, 1875.'

From the above it follows, that it was between October 25 and November 8 that Dr. Carpenter first became acquainted with Mr. Crookes' account of his experiments with Eva Fay; and finding (from Mr. Crookes' publication of it) that his own detailed account of the contents of the fac-simile letter was totally incorrect, he now makes a fresh assertion—that Eva Fay 'carried away with her' a copy of the Spiritualist containing Mr. Crookes' experiments. This is highly probable, but we venture to doubt if Dr. Carpenter has any authority to state it as a fact; while even if she did, that article does not, any more than the fac-simile letter, justify Dr. Carpenter's allegations. It contains not one word about the 'Spiritualistic nature of her manifestations,'—it does not state that he 'in common with other Fellows of the Royal Society had satisfied himself of their genuineness'—it does not say that he 'willingly gave her the benefit of his attestation.' It is a detailed account of a beautiful scientific experiment, and nothing more. Yet Dr. Carpenter still maintains (in his letter now before me) that his statements are correct, 'except on the one point—one of form not of substance—that of the address of the letter in which Mr. Crookes attested the genuineness of the mediumship of Eva Fay!'

It thus appears that, when he wrote the article in last month's Frascr, and the letter in Nature of October 25, Dr. Carpenter had not seen either the fac-simile letter or the account in the Spiritualist, and there is nothing to show that he even knew of the existence of the latter article; yet on the strength of mere rumour, newspaper cuttings, or imagination, he gives the supposed contents of a letter from Mr. Crookes, emphasising such obnoxious words as 'Spiritualistic' and 'manifestations,' which Mr. Crookes never once employed, and giving a totally false impression of what Mr. Crookes had really done. So enamoured is he of this accusation, that he drags it into a purely scientific discussion on the Radiometer, and now, in his very latest communication, makes no apology or retractation, but maintains all his statements as correct 'in substance.' and declares that he 'cannot see that he has anywhere passed beyond the tone of

gentlemanly discussion.