used in their manufacture is peculiar;" and "in the center then, that fanaticism and bigotry were laid aside and comof the board we have occasionally seen a disk, having the appearance of German silver, but whether for use or ornament we are not informed." Some experiments I witnessed on the 4th will show that no peculiarity of wood is required, and that the disk of metal was, as you conjectured, for ornament.

The Planchette was made by my brother, of fine wood, the board of heart shape, and in size about 7x7 inches by 1 inch thick. The supports were a piece of lead pencil and two round, fine legs, about the diameter of a pencil, and 21 inches long, rounded and smooth at the base. Such a one can be easily made by any one who can handle a jack-knife. And as they are so easily made, it might be well to know whether

One surprising feature in its operations is the smoothness with which it moves. There is no perceptible jerking or tremor about it, while a person compelling it to make figures finds it difficult to make circles or curves without having

From the time the hands were first applied it was about fifteen minutes before it moved, after which I noticed that at times all hands were withdrawn for a second, but when two hands (it would not move with but one hand) were applied, it would again instantly move off, as though it were charged with a power which only required certain connections to put it in motion.

Another fact which seems to indicate that the will has but little control over its operations was, that when all desired it to write it persisted in wild scribbling. It must, however be acknowledged a good writer when it does attempt it.

H. ANDERSON.

Peekskill, N. Y., July 6, 1868.

Origin of Planchette.

MESSRS. EDITORS:-- I observe an article in your paper entitled "What is Planchette?" It will cost you very little trouble to ascertain the birthplace and origin of Planchette and you may even put your finger on the author of its being I would send you the documents and the exact dat s if I had access at present to my library; but you can easily verify my statements. The fact is, Planchette was originally a purely imaginary affair and a mere literary creation, made entirely, wood, wheels, and pencil, by the author's own pen (not his hands), out of his own head. In one of the back numbers of Every Saturday you will find an article, copied from an English magazine, written after the manner of Swift's Gulliver or De Foe's Robinson Crusoe, giving the very first true and original account of Planchette. The author of that article created Planchette, and baptised her, and invented all her remarkable qualities. He begins his essay with a pretended dialogue, in which an American gentleman asks his English friend to come and see Planchette, which he explains to be a little instrument in extensive use, as a sort of oracle, in New York, Philadelphia, and elsewhere in the United States. Then follows a description of the instrument and a drawing, with an elaborate account of the wonders it performed. Remember, Messrs. Editors, that when this article was written no such thing as Planchette, neither the name nor the instrument, had ever been used or heard of anywhere in America. This is a key to the article which was merely intended as an imaginative essay, or, to say the worst, a hoax on the English public. I am certain the writer would be indignant if any one should accuse him of having intended to state facts, when he was so obviously producing an ingenious work of fiction. I said, at the time the article appeared here, that some simple-minded people, especially those whose native simplicity took a spiritual turn, would not see the point of the hoax, and we should soon have Planchettes in abundance. A tew months afterward, an enterprising gentleman in New York-a stationer, I thinkadvertised the first Planchettes ever seen in America. The literary gentleman who, with the view of writing a sensation magazine article, imagined Planchette and all her wonders, must be surprised to find her in actual existence, for sale at all stationers' in England and America, for he never dreamed that we, who could detect at once the fallacy of his opening statement, could possibly be taken in and hoaxed on this side of the water. He had placed the birthplace of Prenchette in America, where it had never been heard of, merely to gull the English public. Here you have the beginning of Planchette-a mere hoax or literary invention; and it may help you to prophesy the end, or at least to guess "What is Planchette?" and who are her "reliable" disci-M. W.

The Mysteries of Planchette.

MESSRS. EDITORS:—Your article entitled "Planchette has attracted my attention by its candor and evident fairness of intention-qualities rarely exhibited by the press when referring to this or cognate subjects.

Wonderful as are the phenomena termed spirit manifesta tions, no one, nor all of them, have seemed to me so strange as does the course of our scientific and religious people in re lation to this matter. If they do occur, as claimed, they are outside of, and beyond the present known laws of nature, and I think, demand the most careful scruting of that class which claim preëminence in knowledge. It they do not occur---if thousands ut on thousands of otherwise intelligent people are the dupes of cunning imposters or the victims of wild ballucinations, it surely is the imperative duty of those to whom the religious culture of the people is confided to seek to discover the source of this delusion, and thus rescue these misguided ones from the effects of their folly.

Neither ridicule on the one hand nor denunciation on the other has checked the manifestations nor lessened the number of believers in their spiritual origin. Is it not time,

mon sense employed in the consideration of this subject?

If Planchette does move without voluntary action by the persons whose hands may be upon it; if, in thus moving, it writes words or sentences which are appropriate answers to mental questions; if questions resting in the minds of a spectator, unspoken, are correctly responded to through the instrumentality of this little toy; if, as recently occurred in Baltimore, the sudden death of a gentleman in a distant city is announced through Planchette in the evening and confirmed by telegraph next morning, then no question can be raised of guess-work or the law of chances; but at once the reflective mind asks, Whence comes the intelligence controlling Planchette?

If intelligence floated loosely about through the atmos phere, we might fairly suppose, in accordance with the theories of some of our scientific friends, that electricity would, occasionally, catch up a word that would be apropos, and transmit it to the wonder-seeking admiters of this little instrument; but even our most protound scientists have not yet claimed to have discovered that property of the mind known as intelligence in a state of independent detachment. It is always the emanation of some organized form. The only question that remains is, whether the intelligence thus manifested comes from some mind clothed in the physical form or from some disembodied spirit. Some man or woman who, having passed from the external world, still lives in the interior or invisible spheres, and has discovered the action of a law of nature, through which he or she can control the nervous or muschlar system of the operator and write through Planchette.

It man does live in a world unseen by mortal eyes, after his pilgrimage on earth is ended, is it not rational to suppose that he preserves his identity; that he is, indeed, the same man, minus his external covering of flesh; that he possesses the same intellectual faculties and the same desire to exercise them that he did when in the physical form? Would Berjamin Franklin, for instance, be content in any description of heaven where bis great powers of thought were repressed; where he could no longer make research into the laws and agencies by which God manifests himself in nature? Would Franklin be satisfied with an eternity of any form of praise to the Almighty which would preclude him from following up that initial experiment when the kite and the key were the only instruments he required to bring God's lightnings from the heavens? If Franklin is now living in the interior, or world of causes, is it rational to suppose that he has been surpassed in electrical science by his pupils who still dwell in the world of effects? Can we doubt, while Morse has been teaching men to make the electric fluid eloquent with messages of love and wisdom, as it traverses the material wires of our earth, that Franklin also has been experimenting with those subtler and more etherial forms of matter pertaining to the invisible spheres? If Morse has taught men to play upon the telegraphic machine, and thus communicate with his fellow-man on the other side of the globe, is it irrational to suppose that Franklin, Morse's gifted master, with his superior advantages, has been able to teach the spirits of men to seize the electric currents and play upon that more delicate instrument, the human brain?

If the physically embodied or mortal man is compelled to throw his thought upon the fibers of the brain to be transmitted thence along the nervous chords to the organs of speech before it can find oral expression, or to the extremities of his fingers in order that it may be transcribed upon paper, is it unreasonable to suppose that disembodied men, or spirits, should seek to acquire knowledge of the law by which thought is thus transmitted, and take pleasure in its exercise?

I have been unable to perceive what there is in such an hypothesis to excite ridicule or justify denunciation. If it is correct, what a glorious field of discovery does it not open to the progressive human mind? If it is erroneous, still is it not worthy of the careful consideration of the most exalted

I had intended referring, in this article, to one or two incidents which have occurred in my presence, demonstrating the theory here presented, but fear to become too much extended for your columns. WASH, A. DANSKIN.

Baltimore, Md.

Editorial Summary.

A RACE ANTERIOR TO OUR OWN-The late Sir David Brews ter, in his very interesting work entitled "More Worlds than One," in discussing the geological condition of the earth, inquires, "But who can tell what sleeps beyond? If we have followed the omnipotent arm into the infinity of space, may we not trace it under our feet in remoter times, and in deeper cemeteries? Another creation may lie beneath the earth's granite pavements-more glorious creatures may be entombed there. The mortal coils of beings more lovely, more pure, more divine, than man, may yet read to us the humbling lesson that we have not been the first, and may not be the last of an intellectual race."

THE Underground Railroad in London is set down as a suc-The cost of construction, including the purchase of property, amounted to \$2,500,000 per mile. First and second class cars are run every four minutes. The locomotives con sume their own smoke, and it is estimated that 200,000 people pass daily through the line. The work is being extended and before many months tunnels will be completed under the Thames, so as to connect the two sections of the city. It is reported that the frequent passing of heavy trains jars the buildings, and fears are being entertained for their safety-

This is very likely. The promoters of the proposed underground railroad of New York must necessarily show a good deal of pluck and endurance before they can complete their work.

SMALL-ARMS FACTORY, ENFIELD.—The accounts for the financial year 1866-67 show that there were fabricated that year at Enfield, and sent into store, 17,996 cavalry carbines, Richards' patent breech-loading; 8,160 muskets, smooth bore, with bayonets; 2,480 fusils ditto; 85,033 musket rifles, pattern 53, converted to breech-loaders on Snider's system; 10,012 short rifles, also converted, and 4,998 naval rifles ditto. The value or cost of the small arms and implements for small arms sent into store from Enfield in the year is estimated according to several modes of computation; by the lowest it is £187,921, and by the highest £206,420.

NORTON'S STAMP ERASER.—The Troy Times denies the story that Marcus P. Norton, of that city, has been awarded the sum of \$250,000 for the use of his Post Office stamp. It says that not a single dollar has been voted by Congress for that purpose, and that it is not probable any appropriation ever will be made for it. We thought the story was false, and so stated in our last number.

POTH'S PATENT WHEEL HUB.—In the description of this device on page 40, current volume, we omitted to state that the threads on the two, different portions of the sleeve are of different pitch, making what is known among mechanics as the "differential screw," an application of which may be found on page 2, Vol. XV., SCIENTIFIC AMNRICAN. The device is one of the strongest grips between two opposing surfaces vet discovered in mechanics.

It is stated that on the morning of July 15, at 2 o'clock, Prof. Retus, of Litchfield Observatory, Hamilton College, Clinton, N. Y., discovered another asteroid, which makes 100 now discovered. It had the appearance of a star of the 11th magaitude, and its position was 21 hours, 9 minutes, and 10 seconds in the right ascension of 16 deg, and 4 min. south declination, with retrograde southern daily motion of about 36 seconds of time and 6 minutes in arc respectively.

WE regret to announce the sudden death of Joseph T. Bodley, of the well-known firm of Lane & Bodley, iron founders and engine builders, Cincinnatı, Ohio.

THE VALUE OF A CAVEAT.

The following decision of Judge Fisher will be read with interest, as showing that a properly prepared caveat may at any time be adduced as evidence of priority of invention:

any time be adduced as evidence of priority of invention:

Supersize Court of the District of Columbia. Before Justice George P.

Fisher. In the matter of the interference between the applications of A.

Barbarin and of Schartt, Lyman, and Hudson for patent for improved mode of lighting gas. On appeal of Schartt & Alfrom the decision of the Commissioner of Patents.

On the 1sh day of January A. D. 1888, Barbarin filed in the Patent Office a cave at sitting form the Osign and purpose of his improvement in lighting gas at sitting form the Osign and purpose of his improvement in lighting gas at sitting form the Osign and purpose of his improvement in lighting gas at sitting form the Osign and purpose of his improvement in lighting gas at sitting form the Osign and purpose of his provisions. This caveat gas protection of his rights till be oliging mature his invention. This caveat described the same invention for which a patent was prayed by Scharit & Co. in their application filed in the Patent Office on the Sist day of March, 1866; and under the provis one of the section above mentioner, notice therefor was riven to Barbarin on the 10th of July, and action of the application of Scharit & Co. was suspended. Barbarin did not fle his description, specifications, drawings, and movel within the time prescribed in said twelfth section, to enable him to "aval himself of the benefit of his cyeat "the time to office of a cavear; but he still file his application in the role of a cavear; but he still file his application, the Commissioner of Patent declared an interference, as he would bave had be right to do, and as, indeed, it would have been his duty to do even if no cavear had been filed by Barbarin, and even if, also, a patent had been issued to Scharit & Co. The indicated an interference, as he would bave had the right to do, and as, indeed, it would have been his duty to do even if no cavear had been filed by Barbarin and even if, also, a patent had been issue do Scharit & Co. There is no o'jection on their part, an

rom that decision an appeal is taken to me. The reasons of appeal are as

From that decision an appeal is taken to me. The reasons of appeal are as follows:

1st, Fhat said Commissioner of Patents held that the caveat filed by Arthur Barbirin could be received and considered as evidence of invention at the time of its filing, without other proof; whereas the said caves to having failed to perfect his invention and file his application within the time hintee by law, after receiving notice pursuant to the stands to do so, had hist and fortested his right to use said caveat as evidence of invention, and he muss, as other parties in interference, rely upon evidence allunde for proving priority of invention.

21. Because priority of invention.

21. Because priority of invention was awarded to said Barbarin contrary to law and the proofs.

These reasons of appeal raise two questions for my consideration, viz.: 1st, Was the caveat admissible in evidence for the purpose of proving Barbarin to have been the prior inventor.

2d, Was it overbalances by countervaling testimony admitting it to be proper evidence of priority.

It is argued as an objection to the admissibility of the caveat itself, that the rules of the patent Officer, quire that when a "a party relies upon a caveat to establish the date of his invention, a certified copy thereof must be filed in evidence with size notice with the members to the patence of proving he filed in evidence with size notice with the members to the patence of proving he filed in evidence, with size notice to the admissibility of the caveat itself, that

It is argued as an objection to the admissibility of the caveat itself, that the rules of the patent Officer quire that when a "a party relies upon a caveat to establish the date of bis invention, a certified copy thereof must be filed in evidence, with due notice to the opposite party, as no notice will be taken by the Office of a caveat filed in its secret archives." Now the object of this rule is expressed on the face of it. It means to say that because a caveat is in the secret archives, where the law requires it to be "preserved in secrecy," and the Commissioner cannot, of his own motion, remove the vail of secrety so as to acquaint the adverse party of that which is within its seals, therefore, if the caveator when placed in interference shall desire to use what is shown as evidence for his claim, he shall himself break open the scal and let his opponents know what he relies upon within it. This may be as well, if not better accomplished, by opening the original and filing it as vidence in the case. The object of the rule is simply to give the other side an opportunity to inspect the evidence, and to prevent his being taken by surprise by naving it suddenly sprung upon him, as his is supposed to know nothing of its contents. Until its secrecy was invailed it was a confidential record of the Office; but as soon as its seal was broken by the caveator, it became a public record which the appellants were entitled to inspect, and they could not be surprised by its production in evidence any more than if they had been served with a copy. The rule is substantially complied with, whether the caveat be opened and filed as a nublic record on the adversement of the second and head as a nublic record or marer copy of it be filed. The rule does not require the copy to be served on the adversement of the second and head as a nublic record or marer copy of the filed of the second and filed as a nublic record or the rule is ended and the accomplished.

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