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Patent Office, and Reform of the Patent Laws.

In the article published by us last week, taken from the Washington Union, strong objections are made to the Bill now before the Senate for reforming the Patent Laws, especially that clause which provides, "that all rules, orders and by-laws of the Patent Office, be entered in a book for that purpose, which shall be kept open for inspection to all persons transacting business at the office, and such rules, &c. shall be general in their application in all cases." In advancing reasons against such amendment to the Patent Laws, it is stated that the Office has no by-laws; that its rules, orders and modes of doing business, are printed and public; that nothing has been done secretly, but openly, honestly and impartially, and "the rules never changed for favoritism." It also repels the charge of partiality and corruption, which the late Commissioner was constantly beset with. All this may be true; but surely this affords no good reason against the above amendment to the Patent Laws. To object to such an amendment, rather affords grounds for suspicion. We believe that our public men are too often accused of bribery and we cannot lay our finger upon any act of the Patent Office which could be classed under such a charge. But for all this, we do not believe that it is perfect—rather the reverse. It needs reforming in some shape sadly, and we hope Congress will call the attention of the Committee on Patents to the subject, empowering the members to examine witnesses in relation to the matter. There is abundant evidence to prove the Patent Office guilty of injustice, recklessness and partiality. The business of the Patent Office, as it respects decisions upon applications, is conducted upon a system of erratics. Applications are granted or rejected, according to the *state of mind* the examiners may be in. There are four chief examiners in the Patent Office, each a feudal baron on his own domain. Their decisions, therefore, sometimes resemble boys shooting marbles along the four sides of a rectangle. One has acquired for himself the glorious title of "the guillotine." He knows every thing that was, is, and is not, and never will be. It certainly looks singular to see men making decisions, which resemble a dance of crooked sticks. Decisions are sometimes made in the Patent Office, which amount in substance to boxing the bones and throwing the compass overboard.

It is time that there were some uniform rules and regulations for all cases in the Office. One applicant will be rejected this week upon some shallow plea, when lo and behold another will receive a patent next week for something which has far less claims to patent protection. The Office is great upon granting patents for fly-traps, and such portentous engines of war, even to the placing of a looking-glass in one claim on our list this week. We suppose that this one for variation must be a wonderful *rat* trap. Some applicants are exceedingly fortunate beside others. A few years ago, an application was made for a new manufacture of hats, a peculiar kind of willow bark being used for that purpose, and a kind which never had been used to our knowledge, and we know all the outs and ins about the business. It was rejected, upon the plea that various kinds of bark had been used for that purpose, and it did not constitute the *legal* subject of a patent. The assignee of the inventor solicited the advice of Mr. Elliot in Washington, who advised him not to prosecute his claims, and we being an acquaintance of some twelve years standing with Mr. Hamilton, we told him to take Mr. Elliot's advice, as being in our judgment the most prudent, to follow. The matter was dropped then, and he went to Charleston, S. C. Next summer we met him in New York, when he pulled a Scientific American out of his pocket, and pointing with his finger to a claim granted for "a new manufacture of nails made of muntz metal, (brass), exclaimed, "So much for the impartiality of our Patent Office." We could pile up a number of such cases.

The decisions of the Patent Office are sometimes so unjust, that poor inventors are deprived of protection for good improvements, and thus the Patent Office becomes the biggest pirate of inventions in the Union. A working journeyman tinsmith in this city invented a new chimney cap three years ago, and applied for a patent. It was rejected upon the plea that there were plenty like it in New York, and it was described in "Reid on Ventilation." No chimney like it, either in appearance or quality, had ever been seen in New York, and the one in the work referred to, was as like it as cheese is to chalk. The Patent Office was then reasoned with on the subject, and in a letter sent to Washington, there was an affidavit in respect to its qualities, from a gentleman in this city, Mr. P. Naylor, who knows more about such things, practically, than the whole corps in the Office. But no matter, the Patent Office informed the inventor, (Mr. S. Bull,) that they did not take such evidence to be their guide, but if he would come on and show the superiority of his cap, they might grant him a patent. At that time Mr. Bull had not the funds to go to such an expense, and for want of protection to his invention, the Patent Office has allowed him to be plundered of his just rights.

We like impartiality, system and fair dealing in every respect. We don't like to see one applicant refused a patent upon grounds which are held to be no objection to the granting of a patent to another. We care not who the applicant is, let him be Jew or Gentile, when he applies for a patent, let his application be treated without moodiness and with impartiality. The Patent Office was mighty patriotic in the case of Mr. Bain, but recently, as if to make amends for past sins, it has granted a patent to a foreigner for a *peculiar curve* of a bucket for a propeller wheel, and rejected the application of an American citizen for a bucket of a *peculiar form*, which has been tested satisfactorily on a large steamboat. He is soon to receive his patent from England—that protection from a foreign government, which has as yet been denied at home.

It is a well known fact, that many applications for patents are rejected at first, and then after a long correspondence, or a visit of some well paid person to the Patent Office, who knows how to manage the case, or else a visit at great expense by the inventor, (but the latter is not generally successful,) a patent is granted, perhaps with the alteration of one word to suit the whim of an examiner, and thus the rejected applicant at last gets a patent, and a patent that will be supported at law too. We dare say a hundred such cases happen every year.

The present Commissioner thinks the whole fee of rejected applicants should be retained, instead of \$20 being returned as is now the case. Why? because the correspondence is generally so lengthy and expensive to the Patent Office. But whose fault is this? That of the Office. If the reasons of the rejection are good, then the controversy will be short. We never trouble the Office with a scrap, if the reasons of rejection are good, and we never will do it. There is one reform which we would like to see carried out in respect to the Patent Office; and that is, "The first letter of rejection to be *special*, and to contain the heads of defence, in order that the applicant may examine and appeal to the Judge, paying down \$25 on the notice of his appeal, and if defeated to lose it; but if successful, to be paid back his money and other \$25 by the Patent Office. This is the rule working both ways, and is nothing more than justice." Another reform is the return of models to those who are rejected. Some models cost four and five hundred dollars, and it is rank injustice to retain them after refusing patents.

We have pointed out some of the *impartialities* of the Patent Office, and could produce plenty more facts to back up all we have set forth. Does this not show that something ought to be done with this peculiar *Department* of the government? The principles of our government are correct and sound, but it is in the Departments, where there are so many *departures* from positive good to comparative worse.

Paine's Electric Light.

There is no subject I believe which has been brought so prominently before the public, within the past year, and with so little satisfaction, as the Electric Light of Mr. Paine. He has written a number of letters on the subject himself, which have appeared in the Scientific American, and during the past few months I have read various long communications by others, in different papers. The discovery of Mr. Paine is stated to be an entirely new property belonging to magnetism, or mechanical electricity, (the public not being fully enlightened on this point, which is kept secret,) whereby water is resolved entirely into oxygen, or entirely into hydrogen, according as it is combined with positive or negative electricity; and furthermore he asserts that he has discovered electricity to be a ponderous substance. Speaking for myself, and I have no doubt others have the same feelings, I have been greatly disappointed in respect to this alleged discovery. Expecting every week to hear something of its principle, as Mr. Paine promised in 1848, I have in vain looked for the development of what every one would have rejoiced to know, as a grand addition to scientific discovery. I read in a Boston paper, the "Transcript," last week, that persons in New York and Boston had bought Mr. Paine's interest in the discovery for \$5,000,000, half a million down. I for one do not believe this. I know something about the sale of inventions, and will venture to assert, that the names of the persons said to have bought this invention, cannot be produced. Another account which I have read, states that Sir George Cayley, a very scientific English gentleman, wrote to Mr. Paine, saying he was charmed with the discovery, and would consider it a favor to introduce it to the British Scientific Association. Another account states that Sir C. D. Archibald, a member of the Royal Society and an officer of the royal household, has been on a visit to Worcester to see the Light, and has been perfectly astonished; and he too solicits from Mr. Paine the high honor of introducing the Light to the British public. Behind and beyond these noble names and numerous paragraphs, there is something perfectly inexplicable. What can it be?

Having conducted many experiments in electricity, and having heard numberless lectures on the subject, by some of the most eminent men, I will present a few facts in connexion with this subject, which, although not new to some, will be new to many.

The Hydro-electric Light of Mr. Paine is stated to be formed of water decomposed by electricity. Water is composed of oxygen and hydrogen, and these two gases when burned on a piece of calcium, produce what has long been known as the Drummond Light. Water was decomposed by electricity many years ago by Dr. Wallaston, and by the voltaic battery by Sir Humphrey Davy. The decomposition of the water is not therefore new. Mr. Paine has asserted that all the water in a vessel can be resolved into hydrogen. If this is true, then he can resolve oxygen into water. I should like to see it done, and until I see it fairly done, will not believe it. The ponderability, as Mr. Paine would call it, but rather what I term the mechanical power of electricity, has been long known; and Mr. Paine, although he thinks he did, did not make the first discovery of breaking a vessel, by what he would perhaps term *compression*. Beccaria succeeded some years since in fracturing to atoms a ball of glass, two inches in diameter, by means of an electric spark passing through a drop of water contained in a small cavity within the centre of the ball. Stones, wood, and other brittle imperfect conductors, are rent in pieces by an electric discharge between wires placed within them.

The lighting of streets and buildings by voltaic electricity, has occupied the minds of many eminent men during the past thirty years, but in an economical point of view, every attempt has failed; although, for experimental purposes, as the splendid voltaic light of Archereau in Paris is an evidence, no artificial light can exceed it in splendor. Mr. Paine states that he can produce his brilliant hydro-electric light at little or no expense at all. If this is perfectly correct, I may say that better times have

dawned upon the world. It is my opinion, however, that he has made some great mistake—overlooked something in conducting his experiments.

Although Mr. Paine has made some extraordinary statements himself, it may be that he is indebted more to the imprudence of his friends, like Mr. Porter, for highly colored descriptions of his discovery. So far as the opinion of men of science is concerned, they cannot be satisfied with the mere exhibition of the hydro light—that is nothing to them; it is the new manner of producing it. Until this is done by Mr. Paine, in a public lecture, or description, the reported discovery will be viewed as something suspicious. Every good discovery should meet with its reward, and this one will, if it is worthy. R.

[In an article which formed a leader in the Tribune of Thursday, 13th, the whole subject is reviewed, and Prof. Henry's objections to the philosophy of Mr. Paine's discovery, attempted to be overthrown. In it is stated, to the objection of Prof. Penry, that "Mr. Paine does not separate the gases of water, but produces them contemporaneously from two separate bodies of water"—thus intimating that the effect produced, produces a far greater amount of power, than it required to produce the effect—the secondary being greater than the first cause. Instead of this obviating Prof. Henry's objection, it is no answer to it at all; for the water must change its condition, and what is that but the same thing as saying, a separation of the gases. In a change of condition, there is always a change of property, like ice absorbing coloric and becoming water, and by increasing the amount, becoming steam; and to do this artificially, requires expense or equivalents of force to produce like equivalents. This is the philosophy of that part of the subject. In the same article we are told that the water is decomposed by ordinary magnets set in motion by clockwork, except that into the helices he has introduced a substance never before employed for that purpose, and this he keeps secret." Are we to understand by this, that he employs "electro magnets"? They are not common magnets. It is also stated, that Mr. Paine is going to introduce his apparatus into the Astor House, arrangements now being made for that purpose, the pipes and burners now used being perfectly adapted to burn Mr. Paine's carbonized hydrogen.

What is the meaning of *carbonized hydrogen*? How is Mr. Paine to get his carbonic gas out of his water? We are also told, that the experiment is to be made to satisfy a number of highly respectable, responsible parties, "who propose to buy the patent right in case of success." Mr. Paine has no patent, and he has asserted that he would have none, the glory of the discovery was all he wanted. But we believe he is now right to get as much for it as possible. A man should be paid well for every good discovery. "The value of the patent," says the Tribune, (what "patent?") "is fixed at ten millions of dollars for the United States, and the parties spoken of are to put up \$100,000 as a guarantee for the purchase of it, if Mr. Paine will light the Astor House for six nights at the nominal expense of five cents for a thousand feet of gas. Mr. Pedrick of Boston, is the gentleman who has made the bargain for himself and Mr. Paine." We shall see how all this will end; but we are afraid that it will take some time, as the development appears to be slow work.—E.D.

Steamship Viceroy.

The Steamship Viceroy from Galway, Ireland, arrived at this port last Saturday. She was to be the first of an Irish Line, but although she made a good passage, she failed to compete with the Cunard's. In all likelihood the project will be abandoned, for some time at least.

Steamship Atlantic.

This fine American Mail Steamship, sailed for Liverpool on last Saturday at 12 M. She unloaded, loaded and was off in five days.—She will no doubt make a good passage.

Persons writing to this office for information, and charging us with the postage without enclosing a fee, cannot receive any attention.