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Bills for Reforming the Patent Laws.

We presume that a brief synopsis of the bills now before the Senate, for reforming the Patent Laws, will be of great interest to a majority of our readers. We will therefore endeavor to present a clear outline of their features. We distinguish the Bill introduced into the Senate during last Session, and the Amendment proposed by Senator Davis, and call them "Bills," for they are totally distinct. The first is nearly the same as the one adopted by the Convention of inventors assembled at Baltimore. It is an amendment to the present Patent Code, and enacts that the Commissioner shall be more specific in giving his reasons for the rejection of patents, and that all correspondence be kept on file in the Patent Office, and all objections made by other parties to the issuing of patents be kept on file, and that certified copies of the said objections, correspondence, decisions, &c., be considered *prima facie* evidence in all cases. It provides pointedly against granting reissues of patents claiming more than what was embraced in the original specification. It provides that no inadvertence or mistake, when remedied, shall have a retrospective effect. It provides for the writ of *scire facias*, exactly as we stated last week. We believe that the writ of *scire facias* will be a benefit to inventors, only the bill should be amended so as to read that "all such cases must be tried in a summary manner." The dilly-dallying of our Courts, the delays, &c., are anything but creditable to our business character as a nation. The great fault which we find to the *scire facias* is, that it authorizes the grant of such a writ in every case. This should not be—there ought to be some limit to it, and in no case would we allow it to be granted until one trial at equity had shown that there was some defect or fault in the patent. This section should be modified. The sixth section provides that any one of the interested parties shall have a right to appeal to the Supreme Court of the United States, in any suit on a patent, in which the validity or construction of a patent is in dispute, and also in any proceeding by *scire facias*. This last clause should be stricken out. We don't want too much of the *scire facias*. The eighth section provides than any patent, extended by Congress through fraud and false representation, be declared void; this section will bear reforming—it should provide the way to prove the fraud. But we would take away the whole practice of Congress extending patents, and adopt some better plan.

These are the main features of the bill, which show any difference to the present code, excepting the 11th section, which allows foreign patents to be adduced as evidence. We dilated somewhat on this last week, and hope our remarks will meet with approval.

The amendment (Bill) proposed by Senator Davis, in the very first section, provides to confer more powers on the Patent Office. Inventors, what do you think it is? Why, it confers on the Commissioner supreme authority, (we will use the very words), he "may refuse to grant letters patent whenever it may appear that the applicant has abandoned his invention." This looks like a cunning touch coming from the Patent Office, to injure the rights of inventors who may see fit to give some public account of their inventions before applying for patents. This never can become a law. The second section provides that those filing caveats should make oath to their inventions. This is all right. The third section provides that, upon complaint and oath of patentees, or their heirs and assignees, of their belief that some person is using their invention secretly, persons may be appointed to examine the premises of the alleged infringer to see if the patent is infringed, but shall be sworn by the judge not to divulge what they may see in the examination, which does not, in their judgment, infringe the patent. "If admission for examination is refused, the

refusal is to be deemed *prima facie* evidence that the person so charged is infringing the patent." We have no comments to make on this clause, because we don't know very well what to think about it just now. The fourth section provides that the fees for additional improvement shall be the same as for the original patent—a rise from \$15 to \$30; also that only one-third of all fees be returned instead of two-thirds, as is now the case. This shows the origin of the Bill;—this is what was recommended by the Commissioner. Is the Patent Office getting poor? If it pays its own expenses, as it now does, and a little more, is it not sheer injustice to raise the fees? It is. The fifth section provides that for every time a patent is questioned in validity, by trial, after the first trial, and decision given for plaintiff, treble costs will be allowed for this second trial, four-fold damages for the third, and so on; and if a patent be decided invalid the same number of times, damages in the same ratio to be allowed for defendant, excepting in some cases where the patent has been affirmed and in others *dis-affirmed*, when the damages are to be adjusted accordingly by the Court. This is a splendid section of confounded confusion. What a fund of trouble it would cost if it were to become a law. The sixth section is a good one; it provides that a jury be instructed to enquire if the defendant has knowingly and willingly infringed the patent; when, if such be proven, he shall forfeit all his machinery or articles which infringe the patent, and this irrespective of damages. There is a provisional clause in this section, which we cannot quote to make sense out of it—it is obscure in its meaning. The seventh section provides that, with the consent of both parties, three experts may be chosen by them to decide a question of infringement, like a jury—the verdict of two to be treated like that of a jury. This is not an objectionable feature, but it is a very inconclusive one. The eighth section provides that no hearing will be granted to parties to contest the priority of invention, before the Commissioner, three years after the grant of a patent. This is right. The ninth section is nearly a duplicate of our present law for designs and ornamental work. The tenth section is but little more than a duplicate of section five of the law of 1842—only fifty dollars for every case is to go to the Patent Fund. The eleventh and twelfth sections are not important, but the twelfth provides that the Commissioner cause to be prepared a general analytical and descriptive index of American inventions and discoveries, and continue the same from year to year, to accompany the annual Report of the Patent Office. This practice is now pursued by Mr. Ewbank; it is commendable in every sense. Section fourteen provides that one compiling clerk be employed at a salary of \$2,000 per annum, and an assistant with a salary of \$1,200. Section fifteen provides that the sum of \$6,000 per annum be appropriated to carry this act into effect, to be paid out of the patent fund. Section sixteen is of no moment, but section seventeen provides for the repeal of the act of 1832, relating to designs, for which sections nine, ten, and eleven are to be substitutes; they are not very important.

These are the principal features of the two bills. Let our Senators be careful and cautious about reforming the patent laws. We will suggest an improvement—a material one—next week. Laws should not be made in too great a hurry, and above all patent laws.

Bain's Telegraph in France.

By the last news from Europe, we learn that Dr. Lardner recently gave a grand soiree at his splendid apartment in the Rue de Lille, to exhibit the new telegraph machines made by order of the government on Mr. Bain's models. It is intended to put them on the Calais line, but it is out of repair, and, therefore, one of the machines has been sent to Tours, to try the experiments on Bain's system on that line. No definitive arrangement has yet been come to for the purchase of the patent by the government; but there is reason to believe that for once the confidence of inventors will not be abused.

The Inventor of the Power Loom.

The Worcester Palladium, of January 1st, publishes a paper from a manuscript left by Mr. Samuel Rugg, of Lancaster, Mass., where in he claims to be the inventor of the power loom. The document is a singular one, we therefore publish it entire:—

"Having read Rev. Henry A. Miles's history of Lowell, I find he ascribes the invention of the power-loom to Francis Cabot Lowell and Patrick T. Jackson, in the winter of 1812 and '13. In 1811 and '12, I heard they were buying information, at Waltham, respecting weaving; and at that very time I was making cloth at Lancaster, Mass., by turning a crank which moved a band. I also learned that 25 patents were taken out of the patent office. My model and description of a loom, by which I wove cloth, was deposited in the patent office before 1813. I sent it to the office at Washington by the representative from our district, Hon. Abijah Bigelow, of Leominster. In two years after that I heard they were weaving in Waltham by water—it resembled mine very nearly. I had waited two years to find a method to carry the web up as fast as the cloth was made. When there were so much going to the office for patents, they must of course have seen my model and explanation. Why did not Messrs. Lowell and Jackson obtain letters patent, unless because mine was in the office before them? The incentive which led me to the undertaking was being a warm patriot, and the sight of some torries. My wife was a weaver from a youth, and had broken her stomach down. She said I was as crazy a man as she ever saw, for if such a thing could be done, it would have been done somewhere in the world before that time. I persevered, with my head sometimes between my knees, till I thought of turning the lathe topsy-turvy, and then with a shaft underneath, with figures or cams fixed on it, I contrived to spread the warp, throw the shuttle, and beat up the thread. But I had to let it off every two inches, or there would be a gall in the cloth. I had been exposed, and thought best to send my invention to Washington: and by that means sent it into the world."

[No doubt honest old Samuel Rugg was sincere in his opinion that he was the first inventor of the power loom; in all likelihood he never saw one before he made his own; but Vancausin had suggested one long before our Revolution, and Dr. Cartwright received a patent for one in 1747; and in 1790 a power loom factory was established in Doncaster, England, which was driven by a steam engine; this was at least twenty-three years before honest Samuel Rugg claimed his invention.

Passages of the Atlantic Mail Steamships from Liverpool to New York, from Sept. 21, 1850, to Jan. 1, 1851.

The Pacific (American) arrived in New York on Saturday evening, 21st Sept., 1850, after a passage of 10 days 4½ hours. This was the shortest passage ever made between the two ports.

The Niagara (British) arrived at New York on Friday the 27th Sept., after a passage of 12 days 20 hours.

The Atlantic (Am.) arrived at New York on Wednesday, 9th Oct., at 10 A. M. She left Liverpool on the 25th Sept., at noon—passage 13 days and 22 hours.

The Europa (Br.) arrived on the 11th Oct., at 8 A. M. She left Liverpool on the 28th Sept., at 2 P. M., thus making the passage from port to port in 12 days and 18 hours. She anchored, however, outside the Hook at half-past 9 P. M., on the 10th.

The Asia (Br.) arrived on Thursday, Oct. 24, at 11 A. M., after a passage of 10 days and 23 hours.

The Pacific (Am.) arrived on the 26th Oct., at 12½ P. M., after a passage of 11 days 2½ hours. She left Liverpool at 10 A. M.

The Africa (Br.) arrived on Friday the 8th Nov., at 8 A. M., after a passage of 12 days and 20 hours—her first passage.

The Atlantic (Am.) arrived on Tuesday the 12th Nov., at 1 P. M., after a passage of 12 days 22 hours.

The Niagara (Br.) arrived on the 22nd Nov.,

at 9 A. M., after a passage of 12 days 21 hours.

The Arctic (Am.) arrived on Wednesday the 5th Dec., at 8 P. M., after a passage of 14 days 8½ hours.

The Asia (Br.) arrived on Saturday Dec. 7, at 10½ A. M., after a passage of 13 days 22 hours.

The Africa arrived on Saturday evening, 21st Dec., at 12 P. M., after a passage of 14 days 12 hours.

The Baltic arrived at New York on the 1st January, 1850, after a passage of 18 days from port to port, but she arrived at Provincetown, Mass., on Sunday, to take in a supply of coal, and thus was detained more than three days.

[We intend to keep a quarterly record of the passages made from Liverpool to New York, the same as the above, which we know will be of great interest to many of our readers.

Compound Gases—Oxygen and Hydrogen.

It has generally been allowed that water is a compound of two simple substances, oxygen and hydrogen. The late discoveries alleged to have been made by Mr. Paine, go to prove that water is not composed of these two gases; or, as asserted by Mr. Paine, oxygen is composed of one gas and positive electricity, and the same gas is hydrogen when combined with negative electricity. So far as the catalyzing of the hydrogen is concerned, to enable it to produce a white light, by simply passing through turpentine, the communication on another page, from Dr. Foster, confirms all that has been said about it, as being perfectly correct. Mr. Nasmyth, at a meeting of the British Association, stated that he believed carbon to be a metal, but we have never heard a single hint relative to hydrogen being one.

Nitrogen is called one of the simple bodies, but Davy believed that it was a compound. Oxygen is held to be a simple gas, but Mr. Nelson, in 1848, in a series of articles, entitled "New Chemical Law," published in Vol. 4, Sci. Am., uses the following language—"Oxygen must be a chemical compound; some future attempt at its decomposition may prove effectual; it is at least worthy of a trial, for it plays an important part in nature; a true knowledge of its composition is therefore much to be desired." He also held fluorine to be a chemical compound. We wish to call attention to these things because we conceive that there is much in the articles of which we speak that is worthy of attention. The article from which we take the above extract will be found on page 112, Vol. 4, Sci. Am.

Veto of the Gas Contract.

Mayor Woodhull vetoed the contract passed by vote of our Common Council with the City Gas Companies, which was to last for eighteen years, as mentioned by us last week. The Mayor has received the heartfelt thanks of our whole city for his veto. The contract was an outrage upon the principles of honesty and decency. By the veto message we learn that the companies receive for each gas lamp from \$11 to \$12 each, the same as for oil lamps. By the new contract the companies were to receive \$15 per year for each public burner—being \$3 more than they now receive, or \$26,985 dollars per annum. Fifteen dollars for each burner—this is going it with a rush. In some of the cities of Great Britain, where such contracts have been left to public competition, one burner costs no more than \$3 per annum. In our country, where monopolies should not be allowed to fatten on the public, we see that it is just the land for them—especially New York Gas Monopolies. The most iniquitous feature of the new contract was the annulling of the old one, of \$12 for each lamp, and the contract for \$15 for each to come into operation on the 1st January, 1851, while the old contract did not expire until 1853—thus a bonus of more than \$12,000 was to be paid to the companies for being so kind as to receive a new contract for eighteen years of the future history of New York City. We dislike this legislation for succeeding Municipal Governments.

We are indebted to Senator Benton for a copy of his speech upon the highway to the Pacific. It contains interesting information.