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Sewing Machine Controversy.

There never was a useful invention of any importance brought before the public to which there was not more than one who laid claim to be the inventor. As it has been, so will it be, for human nature is the same in every age, and every country. In the performance of our duty to inventors and the public, we have endeavored in all controverted patent cases to be impartial in examining the claims of each inventor, and in giving every one his just meed of praise. Such a course is never satisfactory to those who claim too much, but it is the only honest course—the one we humbly endeavor always to pursue. It is but a few years since there was not a single sewing machine in our country—not one—now there are some thousands of them, and their value and importance are becoming better known every day. The first sewing machine brought to our notice, was the one of E. Howe Jr., of Cambridge, Mass.—It was very favorably noticed in the Commissioner of Patents' Report of 1846, but although this sewing machine was noticed in the Scientific American a short time after the patent was issued, we never saw one of them in operation until 1849. The chief merit of Howe's machine consists in being the first which sewed the lock stitch—that is, using two threads, one on a needle and the other on a shuttle. In 1848 the sewing machine of Johnson & Morey, of Boston, was exhibited in this city, but it made only a running stitch and was far inferior to Howe's. Since that time Singer's and Wilson's sewing machines, have become very prominent, all using the lock stitch of Howe, but employing somewhat different devices to make it. The claim for making the lock stitch is the grand subject of controversy, for no sewing machine, excepting one using two needles making a shoemakers' stitch, is of any use without it. The claims set up to overthrow those of Howe, as to the originality of the lock stitch, are those of Walter Hunt, of this city. In a patent trial which took place at Boston, and noticed by us in our last volume, evidence in support of Hunt's claims were presented, but the trial terminated in favor of Howe. There has been a sharp controversy for some time between Singer and Howe, the former using the asserted claims of Hunt to strengthen his position before the public, and as a handle to the dispute, W. Hunt—either for the purpose of frightening or befooling others—presented himself before the public in the following card, which was published in the "New York Tribune" of the 19th inst.:

"TO THE PUBLIC.—I perceive that Elias Howe, Jr., is advertising himself as patentee of the Original Sewing Machine, and claiming that all who use machines having a needle or needles with an eye near the point, are responsible to him. These statements I contradict. Howe was not even the original patentee; John G. Greenough and George R. Corliss, each had a patent on a Sewing Machine before Howe obtained his patent, as the records of the Patent Office show. Howe was not the original and first inventor of the machine on which he obtained his patent. He did not invent the needle with the eye near the point. He was not the original inventor of the combination of the eye-pointed needle and the shuttle, making the interlocked stitch with two threads, now in common use. These things, which form the essential basis of all Sewing Machines, were first invented by me, and were combined in good operative Sewing Machines which were used and extensively exhibited, both in New York and Baltimore, more than ten years before Howe's patent was granted.

By law no other person than myself could, or can, have a valid patent upon the eye-pointed needle and shuttle, or any combination of them. The proof of these facts is abundant and conclusive. I have taken measures as soon as adverse circumstances would permit, to enforce my rights by applying for a patent for my original invention. I am by law entitled to it, and in due course no doubt will get it. In that case, Howe's license will be no protection against my just

claims; and I shall then ask, and insist upon, a just compensation from all who use my invention. All who feel an interest in this subject can, by calling on me, receive the most satisfactory evidence that I was the first and original inventor of the Sewing Machine.

WALTER HUNT."

We publish this card in full, because it presents topics of great importance to patentees.—We take a positive position in opposition to the claims and assumptions set up in this card, and will give our reasons for so doing. Mr. Hunt may have invented what he claims, but at this date, when the value of such machines have been brought into public notice by others, and seven years after Howe obtained his patent, it has rather an ugly appearance to set up ten years' prior claims to the lock stitch and eye-pointed needle. Since the time when it is asserted he invented his machine, he found means to obtain patents, and to induce others to purchase inventions of far less importance and value; how came this one to be neglected? We are opposed to such rusty claims, especially by one so well versed in patents and inventions. The Commissioner of Patents, we believe, will never grant them; he is too good a lawyer to do so. If it can be proven that sewing machines, embracing the lock stitch and the eye-point needle, were on exhibition and in use in 1843 and no patent applied for, and that the inventor suffered Howe's patent to be uncontested for two years, then, as we understand the law, the invention for which he sets up his claims will become public property. This setting up of new claims for 17 year old private unclaimed inventions, is something we condemn heart and soul, especially when those claims are set up by persons who deal in inventions. This is a case wherein the importance of the *scire facias*, as an amendment to our patent law, comes prominently into view; and we hope that it will be added at our next session of Congress. We want to see the means provided by law to settle such controversies with dispatch, in order that the ear of the public may not be used as a kettle drum on which to beat the loudest tones for personal purposes.

Electrotyping.

This art, as applied to the deposition of metals in forming metal plates of type and figures for printing, presents a striking example of the advancement of science and art, and their application to new and useful purposes. The stereotype is an art which has long been in use; the publishers of books usually send their composed types to the stereotypers, where a cast of each page is taken in plaster of Paris, thus forming a negative mould, into which type metal is run and moulded into thin metal plates of positive type, fac similes of the original as set up by the compositor; this art saves the re-setting of type for re-prints, as these plates can be laid away and kept ready for printing future editions. This art, it appears, is destined to be superseded by the electrotype. It has been demonstrated that electrotyping of pages of type and engravings on wood can be done quicker and in a very superior manner to stereotyping. By the electrotype process an impression is first taken in wax, and the mould thus formed is dusted with finely powdered plumbago. It is then set in a vessel containing a solution of the sulphate of copper, and placed in the circuit of a galvanic battery for about twelve hours, when, on being taken from the same, it is found that the galvanism has deposited a positive type plate of pure solid copper from the solution, on the wax mould, from which innumerable impressions may be taken. As applied to the duplication of wood engravings, we have lately had an evidence of its power and usefulness in the beautiful title page which adorned the last number of Vol. 8, "Scientific American;" it was printed from an electrotype copy of a wood original.—So perfect is the lightning in copying original engravings, that under the most powerful microscope, it is impossible to detect the least variation between the original and its duplicate. This engraving was electrotyped by Messrs. Filmer & Co., whose establishment is in the same building with ourselves. Electrotype plates print much better than common type; the ink comes off clean every impression, and there is no filling up of the lines. This is certainly a

very great recommendation to it, besides that of its great hardness, whereby it is enabled to print several million impressions. Electricity is now performing wonders in many of the arts, and to no one is it more successfully and usefully applied than in producing solid metal type plates for printing; and as these are so much superior to stereotype plates, and can be produced as cheap, it appears to us that they must soon supersede them entirely.

Explosive Fluids—A Warning.

On the evening of Saturday, the 17th inst., while two young women were employed in putting up what is termed "extract of orange," in small bottles, in the drug store of Alcott, McKisson & Robbins, No 127 Maiden Lane, this city; one of them, named Elizabeth Nevin, was so severely burned by an explosion, that she died next morning in great agony; the other young woman named Eliza Toll, was severely but not dangerously burned. The Coroner's Jury in their verdict, censured the firm mentioned above for not informing their employees of the dangerous qualities of the fluid. The extract of orange named above was mostly composed of alcohol, and the young women were not informed of its explosive qualities, so that they innocently were emptying a can of it, one of them holding a lamp when the vapor took fire and caused the heart-rending accident. The firm that employed these young women for the purpose spoken of, without warning them of its dangers, deserve more than censure, they are culpable; but then they are no worse than many heads of families in our land who have alcohol, and volatile hydro-carbon burning fluids in their houses, where there are many children. Alcohol and all fluids which are composed in a great measure of hydrogen, are very dangerous, from liability to explosion—not that alcohol is explosive in itself, but it becomes so when mixed with eight volumes of the atmosphere, and the alcohol in the extract of orange no doubt evaporated while being poured from the can in the above case, and mixing with the atmosphere until it was saturated with oxygen, it ignited at once like gunpowder, when the flame of the lamp was brought in contact with it. These remarks we trust will be the means of warning many against the dangerous explosive properties of alcohol when mixed to saturation with the oxygen of the atmosphere.

Colonial Patents.

On more than one occasion we have spoken of the great oversight in the new Patent Law of England, which contains no provision for the citizens and natives of other countries than Great Britain obtaining patents in the Colonies. We hope our Canadian neighbors will bestir themselves during the next session of the British Parliament, and get a bill passed to remedy the legal defect to which we have alluded.—Every Province having a Parliament should have the power of granting patents for new inventions and discoveries, to the citizens of all countries. Our friends on the other side of the St. Lawrence should not rest satisfied until this object is attained. It would be well to reduce the fees for Canadian patents to the same standard as that of the United States; we certainly have no objections to the reduction of our fees to Canadians upon the same principle. In the present state of things, it is an act of great injustice to American inventors, to exclude them entirely from obtaining patents in Canada and other Provinces of Britain, while any subject of England can obtain a patent in the United States. A valuable improvement may be invented by an American, for which it would be of some benefit to obtain a patent in Canada, but he cannot, and his invention may therefore be pirated with impunity by any person across the northern line.

Reaping Machines before the Royal Society.

By our foreign exchanges we learn that at the trial which took place this year before the Royal Agricultural Society, at Pusey, in England, Bells' Reaper obtained the Society's premium by the unanimous vote of the Judges. There were two of McCormick's Reapers, two of Obed Husseys, and one of Bell's tried—Mr. Hussey being there and working his own machine. The Bell Reaper was invented in 1829, the inventor being then a student for the ministry.

A model of it has been in the Highland Society's Museum since 1830. The Scotch papers, in noticing the triumph of this old reaper, indignantly rebuke the contemptible want of spirit and good sense in the leading agriculturists of Britain, for neglecting to use it, until their attention was directed to the importance of such machines by the American reapers, which were tried during the World's Fair, in 1851. Well may our foreign cotemporaries rebuke the "let-well-enough-alone" spirit which characterizes the majority of British agriculturists in respect to labor-saving machines. There is no people in the world that exhibit so much good sense respecting the value of such machines as the American. This is one reason why our country has attained to such an elevation in power, wealth, and greatness in the short career of its independent history.

The Steamship Golden Age—The Ignorance of Journalists.

The fine steamship Golden Age, built in this city, made her trial trip down the Bay on the 19th inst. Her engines are strong over-head American beam engines, like many of our California steamers. In respect to the Golden Age, one of our daily papers made the following remarks:—

"It is the first attempt to work so large an ocean vessel by the American beam engine.—Theorists, from Dr. Lardner down, have denied the practicability of carrying such a weight of machinery so far above the keel of the ship as is made necessary by the construction of the walking beam engines, hence they have invented and put into every British steamer the side lever engine, which is far more complex, heavier of course, occupies more room, requires more power to drive it, and more fuel to get the power, and in case of accident is far less accessible for repairs. The success of the California steamers, and more lately of the yacht North Star, have convinced many of our builders that the American beam engine may yet become the marine engine of the world. If this experiment does not prove a failure, British builders will revise their philosophy touching these matters, and give their theories another overhauling."

[Why did not the editor who penned the above, call Messrs. Stillman & Allen, Charles Copeland, and the deceased able engineer, John Faron, "theorists," for putting side lever engines into the successful Collins' line. The side lever engine was used in British steamers long before Dr. Lardner knew the difference between an over-head and an under-beam (side-lever) engine. The above editor does not appear to have ever heard of such a kind of engine as the oscillating one, which is used on many British steamships, and he is profoundly ignorant of the fact that neither the steamships City of Glasgow, Manchester, nor the Glasgow (the latter running between this city and Glasgow) which are furnished with British engines, have side levers, but overhead beams. The engines, however, are not the same as the American long stroke beam engine. Those who are ignorant of such things should be cautious about making comments; they make our own and foreign engineers laugh at the engineering erudition of some of our daily press. We wish the Golden Age all success, but the yacht North Star has afforded no proofs of commercial success yet, that is in comparison with steamships having side lever engines. It is only by comparing the working expenses of large steamships for a number of years, that we can arrive at a proper estimate of the one that is the most economical. One steamship may run with a few tons of coal less on a voyage than another, but may cost ten times more for repairs.

Fine Writing.

We have received from T. B. McDowell, of Bolivar, Tenn., two cards, on one of which is written the Lord's Prayer in a circle one-fourth of an inch in diameter, and on the other is written the Ten Commandments, in an annular ring one-half an inch in diameter and one-eighth of an inch wide. By the aid of a microscope we have read them, and find them distinctly written. This beats all the fine writing we have ever seen or heard of. We shall place them on exhibition in the Crystal Palace.

The yacht "North Star" arrived at this port on the 22nd inst.