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Sewing Machine Troubles.

The loud notes of an approaching conflict between Walter Hunt, of this city, and the owners of several patents on "sewing machines," after having been sounded for a number of months in the shape of advertisements through our daily papers, are now heard re-echoing from the halls of the Patent Office.—As stated in his card published by us on page 21, Hunt has applied for a patent and an interference has been declared by the Commissioner, between him and fifteen others, eight of whom have obtained patents on sewing machines, in order to arrive at some definite conclusion respecting the following points, namely, "who is the inventor of the eye-pointed needle, and who is entitled to a patent for it; also who is the inventor and entitled to the patent for sewing seams with a lock stitch formed with two threads, by a shuttle and a needle."

The eye-pointed needle, we believe, is public property. Who invented it we cannot tell, but it has been in public use—unclaimed, for at least seven years. It is not distinctly embraced—as a device—in the claim of any patent yet granted. E. Howe, Jr., obtained a patent on a sewing machine in 1846, in which the manner of forming seams by shuttle and needle is claimed as a combination, but not the eye pointed needle as a *specific device*. As this needle has not been claimed in any patent as a distinct device, it is certainly public property by the general equity principle of *abandonment*. A case bearing on this very point was decided by Judge Kane, of Philadelphia, Sept. 10, 1851; it was Battin vs. Taggart, respecting the use of a Coal Breaker. His opinion was as follows.

"Neither section 13, Act 1836, nor section 7, 1837, authorizes a change in the character of the claim—the substitution of a different patentable subject. Were the law otherwise, it would be a perilous thing to admit of improvements into the machinery and processes of our workshops. There would be no knowing what was patented and what was public; an inventor would only have to amplify his description, and illustrate it well by drawings and models, postponing his claim to some part or other of it, until it had passed into public use, to be secure of perfectly legitimate rights of action for discussion afterwards in the courts, or more *profitable* adjustment by compromise." This was a decision upon *part* of a machine which had been described in a patent granted in 1843, but not claimed; it was afterwards surrendered, and a new patent obtained with a new claim, in 1849, embracing that specific *part* unclaimed before. The decision therefore was to the effect that the new claim was null and void, and that the *part* claimed was public property on the principle of *abandonment*. It had been in use for six years—one year less than the period since Howe's patent was granted. If this is law and practice in the case of a device which was described in a patent, it is certainly good law and practice against the claim of Hunt, who never obtained a patent, and whose sewing machine was invented no less than seventeen years ago—ten years before Howe obtained his patent. If such a principle of action as that which Hunt claims, were allowed in patent cases, it would destroy the very spirit and intent of our whole patent code, for instead of encouraging inventions it would retard their progress. Such a principle would hang like the sword of Damocles over every inventors' neck; it would make inventors afraid of introducing any useful improvement into public use, lest after they had developed its advantages and made it a public benefit, some speculator in models should disentomb some rusty, ricketty machine from some old dusty dormitory, claim the new invention as his own property, obtain a patent, and sue for damages.

It appears *more than curious* to us, that the great value and importance of the eye-pointed needle was not discovered by him who claims to be its inventor, until its importance, as well as that of sewing machines themselves, had been developed and rendered a public benefit by others. It does not look well, after seventeen years have passed away, to come forward now and claim this device, especially after others have expended thousands of dollars in improving and introducing sewing machines into public use. Thousands of these machines under patent seals have been sold to parties and individuals in different parts of our country, Hunt having neither invented nor constructed a single pin or wheel belonging to one of them, yet he comes forward, *very modestly*, and says when he gets his patent, he shall insist on obtaining compensation from all who are using such machines. We confess there is now a fine field for speculating on such honest purchasers in obtaining compensation, but the people have rights as well as speculators in inventions, and we tell them that the rights which they have purchased with their sewing machines, cannot be disturbed now with new claims for the eye-pointed needle. Hunt has stated that *adverse circumstances* prevented him from obtaining a patent on his sewing machine at an earlier date; we regret to hear of any inventor being buffetted by misfortunes, but it is very strange that such *adverse circumstances* did not prevent him from obtaining five patents since the time he claims to have invented his sewing machine, and this is the more strange because these were but trifling affairs in comparison with this seventeen year old invention. The Commissioner of Patents is a good lawyer, and we have no fears of his judgment in such a case as this. He will no doubt consider the principle of *abandonment*, respecting the eye-pointed needle and decide accordingly.

The question of "abandonment" in inventions, is one which deeply concerns all those who purchase, sell, and use machinery. The public welfare, the advancement of science and art; the mechanic, the inventor, and the capitalist; the merchant who sells, and the citizen who buys, demand that a clear and definite line should be drawn between that which is public property and that which is not. Viewing the "sewing machine controversey" in the light of reason, justice, and sound policy, and after a faithful, and as we believe an impartial examination of legal claims, it is our opinion that the great disturber of the peace—the eye pointed needle—is public property.

Patent Office Report for 1852---No. 7

Examiner F. S. Smith's Report.—This examiner has charge of those classes of inventions formerly under the charge of Mr. Fitzgerald—whose decisions were so often caviled at by inventors. These inventions are divided into three classes, namely, hydraulics and pneumatics; machines for manufacturing lumber, and machines for manufacturing all kinds of fibrous and textile fabrics. It requires a great amount of knowledge and skill to examine and decide correctly upon such inventions; the charge of them, therefore, is a very onerous one. The number of applications passed at this desk during the year 1852, was 134; the number rejected 293. Some of the patents granted, it is said, "display great ingenuity and mechanical skill, showing the inventors to be well acquainted with the principles and mode of action, as well as the defects of existing machines. In many cases, defects have been entirely remedied, and more perfect and simple machines produced."

Fifteen patents were granted for pneumatic and hydraulic machines. Three patents were for water wheel improvements; one for a turbine consisted in having adjustable orifices of discharge, which, under different heads of water, can be changed without altering the curvature of the buckets. Five patents were granted for pumps, one of which, consisted in having a spiral flange wound round the spindle of a rotary pump in place of the buckets generally used. A spring valve passing through the eduction ports in one of the heads of the casing, divides the pump chamber and cuts off communication betwen the two parts. The spiral flange appears to us to be something like a reproduction of the *screw* pump or spiral bucket wheel. An elastic bucket for a chain pump was also patented; but leather is an elastic substance, and such kinds of buckets are very old; still this bucket has peculiarities belonging to itself. It consists of a hollow spheroid of vulcanized india rubber, with a curved plate of metal attached, in which is the thread of a screw; a spindle passes through the bucket, fitting into this screw, by turning which the bucket is made to expand or contract,—a very excellent device indeed.

Six patents were granted for improvements in saw mills. One was for a new method of feeding the log by the rake and forward motion of the saw. The *ways* in which the saw gate runs are hinged at their top ends; the lower end is turned at right angles, and passes through fender posts; to this part of the *way* some adjustable devices are attached and connected together, so that by varying the angle of one, all are changed at the same time. A system of levers acted upon by the saw gate feed in the log. The fulcrum of one of the levers is movable and connected with the *ways*, so that in changing the inclination of the *ways*, the feed motion is proportionably varied. The patent of Parker for driving saws by a new system of banding, which was illustrated on page 256, Vol. 8, "Scientific American," is favorably noticed. The patent plan of A. M. George, for driving a circular saw without a spindle, illustrated on page 185, same volume, is also noticed.

Four patents were granted for improvements in machinery for making barrels; two were plans for dressing the staves, the third was for cutting the bilge of staves, the fourth for cutting barrel heads, and the fifth for driving the hoops on casks.

Five patents were granted for boring, mortising, and tenoning machines, and one for an expanding *bit*. In one mortising machine the novelty consisted in regulating the length of the vibration of the chisel by a sliding wrist, attached to the chisel and a lever beam. The sliding of this wrist to and from the centre of motion varies the length of stroke.

Five patents were granted for improvements in fences—cast-iron and wire fences; the one illustrated on page 233, Vol. 7, "Sci. Am." is favorably alluded to.

Five patents were granted for various modifications in shingle machines, the main object of all, and a good one, being to make the shingles equal to those formerly made by riving and the hand shaving knife.

Five patents were passed for turning lathes, one being for turning mouldings. The several pieces on which the mouldings are to be turned, are clamped between two heads like the staves of a barrel. These heads are made to rotate on a stationary mandril. A cutter for turning the interior and forming one side of the moulding is suspended from this mandril, and this receives a motion corresponding to the pattern to be turned. In another of these lathes a series of cutters of the form of the pattern to be turned, are secured to a rotating mandrel, and the article to be turned is held in a sliding carriage in such a manner that its axis is parallel to the mandrel, and can be turned and present any number of sides to the action of the cutters. A prismatic figure of any number of sides can be produced in this lathe, the pattern varying longitudinally with the cutters.

No less than twenty patents were granted for planing machines, thus showing that no small amount of ingenuity was excited to supersede a machine—and an excellent one it is—we allude to the Woodworth patent, which has been held with a despotic grasp, and managed, with much indiscretion. Two of these machines were illustrated in our last volume,—that of Norcross, on page 12, and that of Wilder, on page 216. Our readers will find these machines well illustrated and fully described on the pages referred to. A patent was also granted to B. Holly, of Seneca Falls, N. Y., for the improved iron hand plane, illustrated on page 241, Vol. 7. One patent was issued for a machine for manufacturing blinds, which appears to be a good one; the different parts for several blinds are placed in the machine, and after being properly adjusted, the several operations of boring the stiles for receiving the tenons of the slats, the rods and slats pricked for the wires, and the tenons turned on both ends of the slats, are performed repeatedly and simultaneously.

Sixty-three patents were granted for fibrous and textile manufactures and machinery. Four patents were granted for improvements in machinery for making felt hat bats, and for felting. In one machine the bat is hardened on the exhausted cone without being removed; this is effected by placing around the cone a series of conical rollers, to which a shaking and rotary motion is given in order to partially felt the fibres as they are blown upon the "former" cone. In another of these machines, the bat is hardened by placing a cone lined, with vulcanized india rubber over the bat on the "former," and admitting steam or hot water between the outside cone and the bat; a vibratory motion is then given to the cone, which hardens the hat body.

Two patents were obtained for breaking and hackling hemp. Four cordage machines were patented; one was for an improvement in the cans for holding the strands; these are corrugated and punctured with holes for the purpose of preventing the strands from rising by the *cord draught*, and to allow the air to pass out while the can is being packed.

Three patents for carding machinery were obtained—one for colored rovings, whereby a doffer mixes different colored slivers, and forms a variegated roving.

Of three patents issued for paper making machinery, one was for a method of drying the paper by passing it between a series of perforated trunks, through which warm air is blown and comes in contact with both sides of the sheet, thus lifting the moisture and carrying it away,—a good improvement, although not new in principle.

No less than seven patents were granted for sewing machines in 1852. These are important machines, and excite much attention at present; but we must leave a further consideration of this Report until next week.

Our Paper.

Our readers should not forget that in three weeks more we shall distribute between four and five hundred dollars in prizes to the lucky parties, whoever they may be, that have obtained the largest lists of subscribers to the "Scientific American." There will be some then that will be sorry they did not try a little harder, and thus secure one hundred dollars for their own use and profit.

We find that very few indeed, who are induced to subscribe for our paper, are willing to dispense with it afterwards, so that we have good reason from this to believe that it gives almost universal satisfaction. The mechanic, especially, cannot afford to be without it. We were told, a few days since, by one of our subscribers that a short article which appeared in our paper not long since, was worth more than *twenty thousand dollars* to him! Hundreds of our patrons will testify that the information they have received from the "Scientific American" is worth to them enough to pay for twenty copies of the paper for their whole lives. We are every day receiving testimony of this kind.

Those who labor to increase our subscription list can also have the satisfaction of knowing that they will thereby increase the value of their own paper, for we shall constantly, as our subscription increases, expend larger sums of money in adding to its appearance and value.

The clipper ship Shooting Star, Captain Kingman, made the passage from San Francisco to Honolula in 11 days. Upon the arrival the Polynesian issued an extra, headed, "Thirty-seven days from New York, fifty from London," &c., containing the latest news.