

gate amount, or time of action. In short it punishes the offender fully, for each offence whenever it can catch him. The jury have nothing to do with the penalty, but only to say "guilty," or "not guilty." The improvement which is proposed, reduces the fine to \$5, gives the offender the choice of clearing his skirts for the sum of \$2,000 cash, no matter how many times he has violated the law, or lets him off scot-free if he can manage to keep the subject hushed up for twenty-four months.

SEC. 24. *And be it further enacted*, That the Commissioner of Patents is hereby authorized to cause the drawings of all patents issued during the present and each succeeding year, or so much thereof as will show the exact point of invention in each case, to be suitably engraved, so that plates thereof may be prepared in season to accompany his annual report for the year on which such patent was issued: *Provided*, Such engraved plates shall not exceed in cost the sum of five dollars for each drawing so engraved, the expense to be paid out of the patent fund.

SEC. 25. *And be it further enacted*, That the circuit courts of the United States, in their respective districts, shall have jurisdiction in equity upon the application of any party holding letters patent of the United States for any new and useful art, machine, manufacture or composition of matter, or any assignee or licensee of any interest therein, to issue injunctions, both temporary and final, to restrain and prevent the importation and sale of any article or articles the product of the same or substantially the same art, machine, manufacture or process of compounding matter, made in any foreign territory adjoining or near to the United States, in which the citizens of the United States are not permitted to obtain patents on as favorable terms and conditions as citizens of such foreign territory, and introduced into the United States for the purpose of traffic: *Provided*, That before any such injunction shall be granted the complainant shall establish by evidence satisfactory to the court that such article or articles was or were made by an art, machine, or process of manufacture or of compounding matter, which, if used or exercised within the United States, would be in contemplation of law an infringement of the letters patent under which he claims. And upon a proper bill filed for the purpose aforesaid, the said courts shall proceed in all respects according to the rules and principles which govern the said courts in granting injunctions to restrain and prevent infringements of letters patent in other cases, and may appoint receivers to take possession of any articles manufactured as aforesaid, and shall grant appeals from all final decrees rendered therein, in like manner as appeals are now required by law to be granted in other suits in equity to restrain and prevent infringements of letters patent.

SEC. 26. *And be it further enacted*, That if, upon the final hearing of any bill filed as aforesaid, it shall appear to the satisfaction of the court that the respondent, or any receiver appointed under the foregoing section, has in his or her possession any article or articles, for purposes of traffic, which, upon the principles of the foregoing provision, are liable to an injunction, the court in its final decree shall adjudge the same to be forfeited to the use of the complainant.

SEC. 27. *And be it further enacted*, That in all suits in equity hereafter brought to restrain and prevent the infringement of letters patent, whether under this or any former act, it shall be competent to the court having jurisdiction of the cause to inquire into the damages sustained by the complainant, either by a reference to a master, or by directing an issue to a jury, as the circumstances of the case may require, and to award the same to the complainant in the final decree, and therein to treble the amount of such damages so ascertained in like manner as the courts are now authorized to treble the amount of damages found by a jury in actions at law. And the court shall have like jurisdiction in equity to inquire into and decree the damages sustained by the complainant in consequence of a past infringement where letters patent have expired, as in cases where the bill seeks for an injunction to restrain the infringement of letters patent which have not expired: *Provided*, That in no suit hereafter commenced, upon a patent which has not been confirmed under this act, and where the right of the patentee, as the original inventor or introducer, shall be derived by answer or affidavit, specifically naming the person who is the true inventor, and distinctly describing the time and place where said true inventor made his invention, or where and by whom the same was publicly used, so that perjury may be assigned upon such affidavit, or answer, if it be not true that the invention was made before the time when the patentee proves that equity grant an injunction to restrain the infringement of a patent unless the patentee or his assign shall have established the validity of said patent by the verdict of a jury, or undertake to do so under the direction of the court. And if in any case an injunction shall be allowed, and the validity of the patent shall not be established by

such verdict, the injunction shall be dissolved and the bill dismissed.

[The whole meaning of the *hodge-podge*, in the preceding clause, is, that where an injunction has been obtained in a suit for infringement, the injunction shall be dissolved, if the validity of the patent be not established. As a specimen of English composition, the section is a disgrace to the veriest school-boy that ever scribbled with ink.]

SEC. 28. *And be it further enacted*, That no person who is the actual inventor of any patentable subject, and who is the first to perfect and make that invention public, or who is the first to apply for a patent therefor, shall be defeated in his endeavors to obtain a patent, or to enjoy the benefits thereof, by reason of a previous invention of the same thing by another person, unless such previous inventor had used due diligence in perfecting his invention, and when so perfected had, without unreasonable delay, applied for a patent therefor, or brought the invention into public use.

[This is indefinite. What is unreasonable delay in the subject of inventions? Some inventors think more slowly than others. One man requires, by nature, five years to perfect an invention; while another individual, of greater mental activity, finishes the same thing in five weeks. Does this section propose to cut off the "five year" inventor in favor of the "five week" man?]

SEC. 29. *And be it further enacted*, That all acts and parts of acts heretofore passed, which are inconsistent with the provisions of this act be, and the same are hereby, repealed.

The New Patent Bill.

When we went to press last week, the introduction of this Bill had just been announced by Telegraph, and in such terms as to lead us to believe that its prime object was to extend the Woodworth Patent. Having examined the Bill, we conclude that such, on its face, is not the fact. It is gotten up by the assignees of certain other expiring monopolies; but we presume that the planing schemers are in for it, hand-and-glove. Birds of a feather flock together.

Recent American Patents.

Seed Sower.—By Hosea Willard, of Vergennes, Vt.—Consists in the peculiar devices employed for distributing the seed, whereby the grain is scattered evenly and equally, whether the machine is used on side hills, uneven, or rough ground. A new mode of covering the seed also forms part of the invention. Drawings would be required to convey an idea of the construction.

Rolling File Blanks.—By James N. Aspinwall, of Newark, N. J.—The metal out of which files are made is first fashioned into the proper shape by means of rollers, and then cut off into suitable lengths. These are called blanks. They are peculiar in form, being thinner on their edges than in the middle; their ends also taper down somewhat from the center. The present improvement consists in a novel arrangement of the forming rollers, whereby they are made to rise and fall at the proper moment, so as to bevel and taper the metal. We are informed that this invention expedites the process considerably, and also improves the character of the work produced.

Hat Felting Machine.—By A. C. Fuller, of Danbury, Ct.—Consists of a rotating polygonal drum, placed within a cylindrical elastic shell, in combination with a series of rollers. The hat bodies are introduced between the edges of the polygonal cylinders, rollers, and elastic cover, and the operation is such as to felt up or thicken the material in a superior and expeditious manner.

Wardrobe Trunk.—By J. McCracken, of Rochester, N. Y.—Consists in combining with a trunk the ornamental piece of furniture known as a wardrobe. Everything is attached complete, to wit, doors with looking-glasses, drawers, closet room, &c. When set up for use it looks like a substantial piece of mahogany cabinet work, genteel enough for a princess; but, in the twinkling of an eye, it may be folded up into the form of a trunk, and is then ready for transportation; the trunk, which is of an ordinary size, constitutes the base of the contrivance.

If genius continues to progress, the time will come when families emigrating West will be able to carry houses with them, furnished complete, from kitchen to parlor, all within the compass of a flour barrel. Already has a

stove been invented (illustrated in our last,) which uses lime instead of fire. Though hardly bigger than a man's hat, it will cook a domestic dinner at a moment's notice.

Improvement in Iron Hubs for Wagons.—By Henry Nycum, of Uniontown, Pa.—This improvement is of such a nature that any one of the spokes, or the whole of them, may be taken out, changed, or replaced, without disturbing the other portions of the wheel. Where a wooden hub is used, if a spoke happens to become broken, it is necessary to cut the tire of the wheel, and separate the felly, in order to get at the damaged part. The wheel must be then re-composed, the tire re-welded and reset. All this involves a considerable expense and loss of time.

Fig. 1

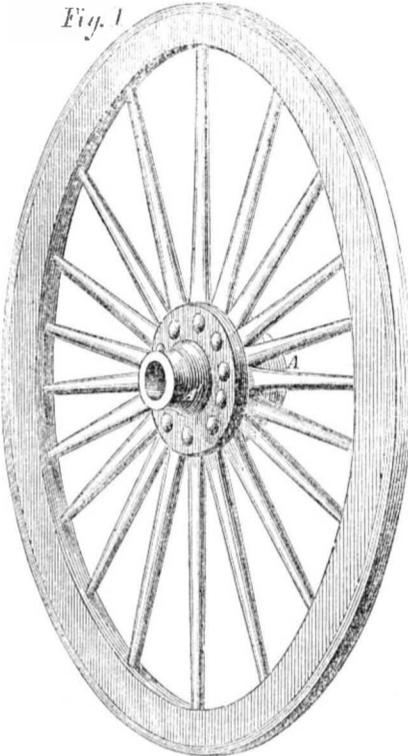
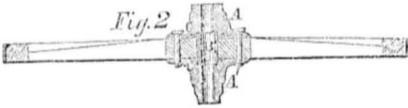


Fig. 2



In the present improvement the inner ends of the spokes are secured in an iron hub which consists mainly of two shells fastened together with screws; by simply turning the screws and taking off one of the shells, any of the spokes may be removed or changed, and the hub again put together, leaving the wheel as solid and firm as ever, all within the space of a few minutes.

The special novelty contained in the invention shown by our engraving, consists in placing a separate tube or sleeve in the center of the hub; the inner ends of the spokes rest against this tube, and are firmly supported. Fig. 2 is a cross section of the wheel. A A are the shell parts of the hub, fastened together with screw bolts, as seen. B is the central tube just mentioned; it is made very thin, so as not to diminish the length of the spokes within the hub. B is made larger than the bore of the hub, and thus forms an oil chamber. C C are washers. The spokes are put in at the back of the wheel.

This method of constructing iron hubs gives them unusual strength and lightness, besides obviating several other objections that have heretofore attended their use; the cost of manufacture is also reduced. Address the inventor for further information. Patented March 11, 1856.

Brace Bit Fastener.—By Horace Lettington, of Norwich, N. Y.—Consists of a thumb button fitted into the stock of the brace, so that when a bit is placed in the stock, and the button turned, the fastening is complete.

This is a simple but very useful contrivance.

Improvement in Hat Felting Machines.—By James S. Taylor, Danbury, Conn.—In this improvement there is a large cylinder, having on its periphery a series of rollers, and over these is placed an elastic cover or jacket. The large cylinder rotates in one direction and the rollers in another. The hat bodies are carried around and felted by rubbing between the rollers and the jacket, and are discharged

at the mouth of the machine, where they are put in.

The machine is adapted especially for felting the finer quality of fur hats, for it gives a light easy motion to the felts, and works them in hot water. We are informed that two men can do three times more work with one of these machines than they can by hand.

Improved Punching Machine.—By Edward Heath, of Fowlersville, N. Y.—The punching is done in the usual manner, by a plunger moving up and down. The improvement consists in placing a tool holder between the plunger and the metal to be punched; the punches are contained in the tool holder, and the arrangement is such that when the plunger comes down it will strike the head of one of the punches, and force it through the metal. The tool holder rotates upon an axis, and is divided into a series of chambers, in each of which is a punch fixed in an upright position, ready for use. When a different tool is required it is only necessary to revolve the holder and bring the head of the desired punch beneath the plunger. This is an ingenious invention.

Cabin Chair for Preventing Sea Sickness.—By Wm. Thomas, of Hingham, Mass.—Consists in hanging the chair in swivel bearings, so that the seat will always remain level without changing position, no matter how much the vessel rolls. It is alleged that the occupant will be thus relieved from sea sickness; if this is so it presents a fine example of the triumph of mechanical genius over medicine. The improvement is also applicable to beds and settees.

Machine for Dressing Mill Stones.—By S. W. and R. M. Draper.—This invention for which a patent was last week granted, was fully illustrated and described in No. 24 of our present volume.

Mowing Machine.—By C. M. Lufkin, of Ackworth, N. H.—This improvement relates chiefly to the cutters, which are round in form, like the circular saw; they are arranged in pairs, one above the other; each pair is placed so as to form a sort of bay, like an open pair of shears. Stationary fingers are used, which direct the grass in against the cutters; the latter revolve, and thus clip the grass. Endless belts are employed to convey the grass over and out of the way of the knives, thus preventing any choking.

Improved Violin Bow.—By Samuel F. French of Franklin, Vt.—When the musician wishes to execute a delicate passage upon the violin, he turns the bow over so that only the edge hairs will scrape the strings. The present improvement consists in attaching the ends of a few of the hairs, to a spring pin, placed in the handle of the bow; whenever a fine tone is wanted the operator compresses his hand and pushes out the pin, and thus separates, or throws out beyond their fellows, those hairs that are connected with the pin. The music produced by the separated hairs will be of the most delicate nature. By loosening the hand the pin instantly flies in and brings all the hairs properly together again. This improvement does not interfere with the straining of the bow.

Machines for making Sewing Silk.—By Lucius Dimock, of Hebron, Ct., and Ira Dimock of Mansfield, Ct.—In many kinds of stitching particularly that done by sewing machines, it is a matter of great importance to have the thread perfectly smooth and even. The ordinary silk is full of irregularities and small knots, often rendering its use in sewing machines quite troublesome. To avoid these difficulties, it is common to treble the thread and make it up into what is known as silk twist. The trebling operation consists in unwinding the single thread from a ball, and then looping it up so that three threads will come parallel; they are then twisted together, and form one thread. Machines for trebling have been long used, but the looping operation requires the assistance of an attendant, and the process is comparatively slow. The present improvement consists in making the machine self-acting; it unwinds the single thread from a ball, trebles, twists, and reels up the twist as fast as made. The various movements are executed with great rapidity, and the quality of silk produced is superior.