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LIST OF PATENT CLAIMS

Issued from the United States Patent Office

FOR THE WEEK ENDING DECEMBER 14, 1852.

LINING FOR IRON SAFES, &c.—By Wm. P. Blake, of New York City: I claim the application of amorphous zinc oxide, as a lining for safes and refrigerators, and as a covering for steam pipes, steam chambers, locomotive boilers, hot air flues, and chambers, in such manner as to prevent the transmission or conduction of caloric, into or from such chambers or flues."

TRIP HAMMERS—By J C Forrest & Geo Baker, of Schenectady, N. Y.: We claim the employment of the peculiar-shaped movable tappets of different sizes, the said tappets being arranged loosely on the driving shaft, and moved back and forth, or one substituted for the other by means of the lever, in combination with the hammer, having a rectangular notched or peculiarly formed slot cut in it, the whole being constructed, arranged, and operated in the manner and for the purpose described.

Likewise, so arranging the lever, that when the large or small tappets are moved from one position to the other, or the small tappet made to occupy the place of the large one, the controlling spring will also be operated upon and made to assume a proper position to suit the size of the tappet, the arrangement for effecting this object consisting of a hook-shaped shifter and movable collar, which are constructed, arranged, and operated in the manner set forth.

FIELD ROLLERS FOR CUTTING STALKS AND WEEDS—By Jos. H. Gest, of Batavia, Ohio: I claim the employment or use of the knife roller, said knives being either of straight or spiral form, in combination with the pins and fork, the knives, as the machine moves along, cutting the stalks from the roots, and also the stalks into pieces, while lying upon the ground, and the pins and prongs of the fork drawing the stalks within range of the knives, as specified.

BALL CASTORS—By Robert Hinton, of Roxbury, Mass.: I claim the improvement in making the case of the ball castor, viz., of a combination of two halves or parts, the curved lip, and the ring, as constructed and applied together and to the leg or socket ferrule thereof, as set forth.

STONE PICKS—By J. U. Houston of Conway, Mass.: I claim the addition of a guard to the inner side of the hammer of mill-stone picks, which guard will intercept the chips of stone and protect the hand and person of the picker, using for that purpose the metallic guard described, or any other substantially the same, and which will accomplish the same result.

I do not claim the mode of constructing the pick, as described, in other respects than as pertains to the guard.

BUCKETS FOR CHAIN PUMPS—By Clark Polley, of May's Landing, N J: I claim the globular elastic and adjustable bucket, for chain pumps, constructed as set forth.

APPARATUS FOR FRACTURES—By Zimri Hussey, of Chilicothe, Ohio: I claim, first, the hip brace of semi-circular or nearly semi-circular form, and the strap passing over it and around the limb, the said strap and brace operating as set forth.

Second, the knee fork attached either to the upper or lower part of the double inclined plane, for the purpose of attaching a band which clasps the limb, to effect extension or counter extension at the knee, as explained.

Third, the application of the adjustable braces to the crests of the ilium, substantially as described, the said braces being attached to a seat piece, or its equivalent.

Fourth, the seat, in combination with an adjustable back-piece, attached to two double inclined planes, substantially as described, for the purpose of moving the cripple without changing the adjustment of the splints, for the purpose set forth.

SEED PLANTERS—By Henry Nycum, of Uniontown, Pa.: I claim, first, the construction of the compound grain slide, as described, by which the amount of grain required to be sown is graduated at pleasure, as set forth.

Second, the mitre bar, constructed as described, to raise the apparatus for lifting the drill teeth and throwing the slides out of gear, completely out of the way of the operator, thus allowing him to get at the drill teeth, for the purpose of cleaning them of obstructions, with a facility altogether unknown in machines constructed with a horizontal bar in the rear.

SCYTHE SNATHS—By Abram, Charles & Charles N. Clow, of Port Byron, N. Y.: We claim a scythe or cradle snath, composed of a wrought metal tube, which possesses the advantages of great durability and facility of being bent into any desired form, without increasing its ordinary weight, or impairing its usual strength and firmness.

Also the longitudinal rib or its equivalent, on the snath, in combination with a series of notches in the ring of the web, for the purpose of adjusting the webs securely upon the snath, substantially as set forth.

STRAW CUTTERS—By Joel Dawson, of Barnesville, Ohio: I claim, in combination with the rake and spring, the pressure piece and roller, constructed and arranged as set forth.

MACHINERY FOR FORGING METALS, &c.—By Wm. Field, of Providence, R. I. Ante-dated June 14, 1852: I claim, first, the mandrel or its equivalent, for chucking or griping the metal to be forged, and holding the same in the proper position, and from time to time, changing its position between the reciprocating rollers, in combination with reciprocating rollers, for shaping the metal so held, whose action upon the metal is regulated by a pattern guide, substantially as set forth.

Second, the method of regulating the thickness and shape of the metal being forged, without stopping the rollers or withdrawing the metal therefrom by the simultaneous adjustment of the pattern guides, as described.

APPARATUS FOR CLUB FEET.—By Zimri Hussey, of Chilicothe, Ohio: I claim the side pieces to which are attached the adjustable foot pieces, connected and adjustable to each other, as described, by the back piece, plates, bolts, and slots.

PLOW REGULATORS—By Harvey Sprague of Riga, N. Y.: I claim the combination of the arms with the connecting and regulating bar, the arms and the connecting bar forming an arch and working on an axle which passes through the beam, in the manner and for the purpose set forth.

SPIKE MACHINES—By P. P. Trayser, of Baltimore, Md.: I do not confine myself to any particular form or arrangement of the several parts of the machine I have just described, provided the spike is headed and pointed by the mode of operation I have described, as a great number of changes may be introduced into the machine, that will not, in any way, affect the principle upon which it works; indeed, the improvements which I have made could be introduced with advantage either separately or together, into various machines now in use.

What I claim is the combination of the hinged pointing die, pressed forward by a spring, with the guard or stop, or the equivalent thereof, which guides the die and limits its forward movement, substantially as set forth.

SEED PLANTERS—By M. D. Wells, of Morgantown, Va: I claim the reciprocating bar, having wings projecting horizontally on the front and rear sides of the same, to scoop the seeds in the discharge apertures, arranged and operating in the manner and for the purpose specified.

GRAIN AND GRASS HARVESTERS—By Wm. H. Seymour, (assignor to W. H. Seymour & Caton S. Morgan), of Brockport, N.Y. Ante-dated Oct. 25, 1852: I claim the method of supporting the staud for the raker, at the back of the platform, by means of a brace extending to the outer end of the frame, and so arranged as not to impede the action of the rake or the discharge of the cut grain, the several parts being constructed and arranged as described.

Also the method of protecting the gearing of the machine from injury by the working and twisting of the main frame, by mounting the said gearing in a supplementary metallic frame, constructed as described, and rigidly connected to one end of the main frame, upon which it is mounted, as set forth.

SCREW BLANKS—By Cullen Whipple, of Providence, R. I (assignor to the New England Screw Co.) Ante-dated Oct. 16, 1852: I do not claim the broad idea of pointing and chasing the blank in the same machine by different cutters, irrespective of the mechanism employed for the purpose, as I have made such a claim in another specification; my claim on this head is restricted to the mechanism described.

I claim the arrangement of the pointing and chasing tools, on the same tool holder, in such a manner that they are operated by a common motion, as set forth.

CUTTING WHALE BLUBBER—By Lydoriann Ricketson (Admx. of Henry H. Ricketson, deceased), of New Bedford, Mass.: I am aware that in machines for cutting straw, or such like matters, a cutting cylinder has been made to operate on a bed roller, and that the knives on the said cutting cylinder have been arranged in a helix upon it. It is not claimed that such constitutes, in any respect, the invention of the said Ricketson, deceased.

But what is claimed is the wheel, composed of two or more spiral knives, made to rotate on an axis, arranged parallel and in the direction of the movement of the strip of blubber to be cut, as set forth, meaning to claim two or more spiral knives, formed, arranged, and made to operate with respect and in combination with a set of bed and feed rollers, substantially in the manner and for the purpose of cutting blubber as described.

DESIGNS.

BOX STOVE—By James Wager, Volney Richmond, and Harvey Smith, of Troy, N. Y.

IRON RAILING—By N. T. Horton, of Cincinnati, Ohio.

COAL STOVE—By Gilbert Knapp & A. H. Neal, of Honesdale, Pa.

NOTE—In last week's List of Patents, eight of the number issued were obtained through the Scientific American Foreign and American Patent Agency. In the above list five were obtained through the same source, thus demonstrating that, on an average, one American patent issues every day through this Office.

The Patent Office.

The Secretary of the Interior, in his Report makes some excellent suggestions respecting the Patent Office. He says:—

"There is probably no bureau connected with the government in whose operations the public at large feel a deeper interest than those of the Patent Office. It is inseparably associated with every interest of our country. The mechanic, the merchant, the manufacturer, and the farmer, are all concerned in every thing which diminishes the labor of production in any of the departments of industry. Our people are eminently practical and ingenious. They are constantly employed in the discovery of new means of accomplishing important results at a diminished rate of time, labor, and money. The steam engine, the cotton gin, and the magnetic telegraph, are striking and imperishable memorials of the success which has attended their efforts. In the early period of our history, when population was sparse and the prices of agricultural productions high, the labor of the country was directed mainly to the cultivation of the soil. But, as population progressively increases, more attention is devoted to mechanical pursuits and the invention of machinery by which the work of many may be accomplished by a few. Not a day passes without furnishing some evidence of this fact in the form of applications for patents for important inventions and discoveries. The mechanical interest has therefore become one of great magnitude, and it is justly entitled to all the protection and assistance which can be bestowed by Congress consistently with the provisions of the Constitution.

The general principle of our patent system seem to have met with universal approbation, and to have been attended with beneficent results in practice. Since the organization of the office in 1836, it has advanced with rapid strides. At that state one "examining clerk" was enabled to make all the preliminary investigations which were required to ascertain whether the applicant was entitled to a patent; but such has been the increase of the business that six principal examiners and as many assistants are not now able to keep pace with it. The number of models in the office on the first day of January, 1836, was 1,069. In the beginning of the year 1851, they had increased to 17,257, and at the close of the present year they will fall but little short of 23,000. If they should continue to increase in this proportion, making no allowance for the augmentation consequent on the increase of population, by the close of the present century they will amount to 150,000, and the whole of the present Patent Office edifice will not be sufficient for their convenient display. To provide against this contingency, as well as to accomplish other important results, I respectfully propose that the Commissioner of Patents be required to have prepared for publication a careful analytical and descriptive index of all discoveries and inventions which have been patented, accompanied by accurate descriptions and drawings which will fully explain the principles and practical operation of the subject of the patent. The advantages of such a publication would be almost incalculable. It would not only perpetuate the invention or discovery by avoiding the casualities by fire and other causes, but it would multiply and diffuse among the people at large the specifications and descriptions, and substantially bring home to every neighborhood to which a copy of the work might be sent the benefits of the Patent Office. In much the larger number of cases the necessity for preserving and displaying the models would be obviated. The pages of the published report would be a safer and more convenient depository for them than the cabinets of the Patent Office, and they would be accessible to everybody. Inventors in remote parts of the country would be placed on an equal footing with those residing near the seat of Government.—When their thoughts were turned to a particular class of machinery, instead of being compelled to make a journey to Washington to see what had already been done in that department of the arts, they could at once turn to the analytical index and ascertain what progress had been made by others.

The report of Mr. Stansbury on the London Industrial Exhibition of 1851, to which allusion was made in my last annual report, has been delayed by causes beyond his control.—It will be ready to be laid before Congress in the course of a few weeks.

[We like the above; we hope that something of this kind of policy will be carried out for the benefit of inventors. It is now four years since we proposed the same thing, only we thought at the time that the Smithsonian Institute could not do better than perform such a task—an illustrated history of American inventions and discoveries.

With respect to the models, it would please us if Mr. Stuart had recommended that those belonging to rejected applicants should be returned; of what use is it to retain them, they being only duplicates. Some thousands of them are rusting in the Patent Office cellar.

Extension of a Patent.

On the petition of Elizabeth Otis, administratrix of Wm. S. Otis, deceased, praying for the extension of a patent granted to him on the 24th of February, 1839, for an improvement in the Crane Excavator, for excavating and removing earth, for seven years from the expiration of said patent, which takes place on the 24th Feb., 1853.

It is ordered that the said petition be heard at the Patent Office on Thursday the 17th of February, 1853, at 12 o'clock M.; and all persons are notified to appear and show cause, if any they have, why said petition ought not to be granted.

Persons opposing the extension are required to file in the Patent Office their objections, specifically set forth in writing, at least twenty days before the day of hearing; all testimony filed by either party to be used at the said hearing, must be taken and transmitted in accordance with the rules of the office, which will be furnished on application.

S. H. HODGES, Com. of Patents.

Washington, Dec. 12, 1852.

Recent Foreign Inventions.

GAS RETORTS—John Suarbrick, of Blackburn, Eng., Patentee.—The inventor takes clay as dug from the pit, and if it contains coal or other refuse, burns it until the coal is reduced to ashes; or if no coal exists in the clay, then he mixes the ashes with it, or other varieties of clay, until a suitable material for his purpose is obtained. He then grinds this with just such a quantity of water as will produce a stiff doughy mass. Having taken a mould of the size required (and which should be made in sections) and placed it in an upright position, he introduces a core-bar into it, wedging it firmly into the centre. The stiff clay is then rammed into the spaces between the mould and core, the wedges are withdrawn, and their spaces filled up with clay. The core-bar is then raised by a lever, and another section of the mould united to the first, the same operation being again repeated until the retort is fully moulded. The retort thus moulded is dry enough to be taken at once to the oven and baked. Retorts made of Stourbridge clay are much superior to those made of iron, for making gas.

COMBING WOOL.—S. C. Lister, of Manningham, England, patentee.—The gill-fallers are simply made of much narrower dimensions than usual—about from one-fourth to one-eighth of an inch. Small portions of the material can be operated upon at once, and less oil, it is stated, is required. He also combs cotton on fine combs.

MACHINE FOR DETERMINING A SHIP'S LONGITUDE—John Moore, of Arthur's Town, Wexford, Ireland, patentee.—This instrument consists of two graduated brass circles intersecting each other, and a third circle equatorial to these two. The position of these circles is capable of being adjusted with reference to each other, and they are used in combination with a fourth circle, also graduated, which forms a great circle to the skeleton globe composed of the intersecting circles mentioned. The modes of using these circles vary with the nature of the particular position requiring to be solved.

SUBSTITUTES FOR SUSPENDERS, &c., IN CLOTHES.—J. Saillant, of Paris, tailor, patentee. He inserts into certain parts of articles of dress, such as pantaloons, vests, coats, &c., strips of india rubber, by which a good fit of the garments is secured and they thus are retained in their proper positions without the aid of straps, &c.

REFINING GOLD AND PRECIOUS METALS.—A. Parks, chemist, of Pembrey, Wales.—For separating gold, which is mixed with auriferous earth, it is first smelted with lead and the usual fluxes, and the compound thus resulting is melted, with the addition of one per cent. zinc to every ton, which contains ten ounces of gold. The zinc is added when the compound is in a melted state, and at about the temperature of molten zinc. After stirring so as to insure all the gold being taken up, the mixture is allowed to cool, and the zinc and gold are found in combination. The gold is separated from the zinc by an acid.

VACUUM SUGAR PANS.—J. Walker, of Wolverhampton, Eng., patentee.—The improvement consists in introducing into the body of the vacuum pan a series of vertical tubes, through which steam is admitted to facilitate the operations of evaporation and crystallization. The tubes are enclosed within a cylindrical casing between the sides of the pan, a vacant space is left. This arrangement causes an upward current of the solution in the pan, at the centre of the series of tubes, whilst a gentle descending current is produced between the cylinder and pan, by which compound motion the contents in the pan are prevented from burning.

COATING THE INSIDE OF TUBES—John J. Russell, of Wednesburg, England, patentee.—This improvement simply consists in coating the inside of iron tubes with successive coatings of gutta percha in a state of solution. The coating is laid on with a brush or by pouring in the solution.—[Condensed from the "London Mechanics' Journal," "Expositor," &c.