

30,857.—James Martin, of Toronto, Canada, assignor to himself and J. E. Thomson, of Buffalo, N. Y., for an Improvement for Superheating Steam for Locomotive Engines:

I claim, first, The combination and arrangement of the flues, R, with the steam chambers, A, for the purposes and substantially as described.

30,853.—H. T. Pratt, of Fitchburg, Mass., assignor to himself, A. Davis and C. E. Pratt, of same place, and H. C. Crehore and C. T. Rogers, of New York City, for an Improved Folding Chair:

I claim the legs, A B K, and seat, D; the latter being attached to the former by hinges or joints, b b c, and the legs, A, provided with slots, d, for receiving pins, e, of the legs, B B, substantially as and for the purpose set forth.

[The object of this invention is to obtain a chair that may be folded compactly and be provided with a cane or other stiff bottom. There are chairs constructed to fold quite compactly, but these chairs have a flexible seat composed of webbing, carpet, or other textile fabric. By this invention, a chair may be folded equally as compact as those provided with flexible bottoms, and they have all the advantage of an ordinary cane-seated chair or one upholstered in any of the known ways.]

30,859.—Henry Warren (assignor to Henry Beebe), of Hoboken, N. J., for an Improved Foot Scraper and Brush:

I claim the arrangement of the laterally-sliding, curved brushes, F F, and springs, g e, with the brackets, D, scraping blades, B B, and fixed brushes, C C, as and for the purposes shown and described.

[This invention consists in a novel form and arrangement of brushes for the heel, toe, and both sides of the shoes, in combination with scraping blades for the soles of the shoes.]

30,860.—John Wind (assignor to himself and T. I. Bottom), of Thomasville, Ga., for an Improvement in Machines for Husking and Shelling Corn:

I claim the arrangement of the circular saw, a, auger saw, b, and spiral revolving huster, C, in combination with the conveyor band, c, and sheller, E, substantially in the manner described and for the purposes specified.

RE-ISSUES.

H. A. Burr, of New York City, assignee, through mesne assignments, of H. A. Wells, deceased, for an Improvement in Manufacturing Hat Bodies. Patented April 25, 1846. Re-issued October 7, 1856. Extended for 7 years from and after April 25, 1860, and again re-issued December 4, 1860:

I claim the mode of operation, substantially as herein described, of forming bands of fur fibers of the required varying thickness from the bun to the tip, which mode or operation results from the combination of the rotating picking mechanism, or the equivalent thereof, of the pervious former and its exhausting mechanism, or the equivalent thereof, and the means for directing the fur-bearing current, or the equivalent thereof, as set forth.

I also claim the combination of the rotating picking mechanism, or the equivalent thereof, the pervious former, with its exhausting mechanism, and the lower deflector, substantially as described, to regulate the deposit of the fur fibers on the lower part of the former, as described.

I also claim the combination of the rotating picking mechanism, or the equivalent thereof, the pervious former, with its exhausting mechanism, and the means described, or the equivalent thereof, for inducing a current of air to aid in carrying and giving direction to the fur, and insuring its proper deposit on the surface of the pervious former, as required, as set forth.

H. A. Burr, of New York City, assignee, through mesne assignments, of H. A. Wells, deceased, for an Improvement in Machinery for Making Hat Bodies. Patented April 25, 1846. Re-issued September 30, 1856. Extended for 7 years from and after April 25, 1860, and again re-issued December 4, 1860:

I claim the combined process of forming fur hat bodies by depositing fur fibers to a suitable thickness on the surface of a pervious former of the required shape, and holding them thereon by the pressure of the surrounding air as they are deposited and then hardening or partially felting the hat so formed, and while it is held by suitable pressure on to the surface of the former to give it the required consistency to admit of removing it therefrom in a suitable condition for the after process of sizing by felting, as set forth.

Joseph Jordan, Jr., and Henry Keney, of Hartford, Conn., and Grant, Warren & Co., of Boston, Mass., assignees of Joseph Jordan, Jr., and Thomas Eustice, of said Hartford, for an Improvement in Machines for Grinding and Sizing Paper Pulp. Patented May 18, 1858:

What we claim as our improved machine for the manufacture and sizing of pulp, that is, as constructed of a single conical grinder and outer shell, and with pipes for the introduction of the rags and the size, and the eduction of both arranged with reference to the axis and ends of the grinder substantially in manner and so as to operate to reduce the rags to pulp and mix the sizing therewith, as hereinbefore explained.

We also claim the introduction of the sizing into the grinder case and directly between the reducing surfaces when employed as specified in the grinding of pulp or material used in making paper.

Jesse Reed, of Marshfield, Mass., assignor to Catharine M. Hunt, of Boston, Mass., for an Improvement in Steering Apparatuses. Patented March 6, 1855:

I claim the arrangement and combination of the adjustable guide, and guard rails, M M, with the screw shaft or its mechanical equivalent, and its slides or two divisions of the nut, I.

I also claim the application of the pedestals to their stanchions by means substantially as described, for enabling the pedestals and parts supported by them to move either forward or aftwise or up and down under the action of the rudder, as specified.

ADDITIONAL IMPROVEMENTS.

William Sims, of New York City, for an Improvement in Refrigerators. Patented February 8, 1859:

I claim the induction pipe, B, in combination with the escape pipe, C, and fan, E, when applied to a refrigerator, to operate essentially as and for the purpose set forth.

[The object of this invention is to augment or increase a circulation of air through the refrigerator, and thereby render the same more efficient than hitherto.]

Asbury Wilkinson, of Shelbyville, Ind., for an Improved Washing Machine. Patented September 20, 1859:

I claim sliding bar, c, attaching thereto spiral springs, b b b and cord, D', circular board, B, suspended by spiral springs, b b b &c., with a rotary corrugated roller, in combination with pulleys, i, j, &c., ketch, F, ratchet wheel, m, segment, H, cog wheel, N, as set forth and described.

DESIGNS.

Zebulon Hunt, of Hudson, N. Y., for a Design for a Stove.

C. J. Woolson, of Cleveland, Ohio, for a Design for Doors of Cooking Stoves.

C. J. Woolson, of Cleveland, Ohio, for a Design for a Stove Plate.

Isaac De Zouche (assignor to Bridge, Beach & Co.), of St. Louis, Mo., for a Design for Stoves.

C. T. Meyer, of Boston, Mass., assignor to Alden Sampson, of Manchester, Maine, for a Design for Floor Cloths.



G. P., of N. B.—Hollow grate bars are now being employed in several locomotives, and no difficulty is experienced, we have been told, in maintaining the circulation in them. You will find the illustration of hollow grate bars for furnaces on page 394, Vol. III (old series), of the SCIENTIFIC AMERICAN.

P. B. C., of Va.—"Morfit on the Art of Tanning" was published by H. C. Baird, of Philadelphia, in 1852. It does not contain the latest American patents.

J. B., of Ill.—Parchment requires to have all the grease extracted from it, for the purpose of writing. It is there fore steeped in milk of lime during its preparation, to effect this object. The bright red color on morocco is dyed with cochineal, a little muriate of tin and cream of tartar. Carmine dissolved in aqua ammonia makes a beautiful red on leather, when applied with a sponge. Red Russia morocco is imported.

O. C. S., of N. Y.—If B knows that A was a previous purchaser, then B has no claim upon A's territory. In view of such knowledge, the fact of the non-recording of A's assignments gives B no right to A's territory. The papers have been forwarded to W. D.

H. B. M., of N. Y.—The pressure on the bottom of a vertical pipe one inch in diameter and 25 feet long, filled with water, will be 8.5 lbs. A 2-inch column of water will exert precisely four times the pressure of a 1-inch column, both being of the same height. The pressure of the atmosphere on the surface of a 1-inch circle is 11.78 lbs, which, added to the pressure of the water in the 1-inch pipe, makes 20.23 lbs. A brick wall will be preserved from the effects of the heat of a fire, when the same is kept wet all the time during the fire.

J. H. N., of Tenn.—You are correct in stating that the cause of difficulty in telegraphing during wet weather is owing to the absorption of electricity by the moisture; but insulated wires (those coated with gutta-percha) are not patentable as a preventive of the evil, because such conductors have been frequently used already. You are mistaken in supposing water to be the best conductor of electricity. Pure rain water is a very poor conductor; it is to copper wire as 1 to 40,653,000, according to Mr. Farmer, of Boston, who has made many experiments on the resistance of substances to the electric fluid.

S. & Co., of Conn.—You can obtain all kinds of steel from Sanderson, No. 16 Cliff-street, this city—a Sheffield house.

F. A. W., of Ky.—There will be no difference in the quality of corn for feeding hogs, whether it be first ground and then boiled, or whether it is first boiled and then crushed between rollers. The employment of a tank with a false bottom, placed above a steaming kettle, for cooking food for animals, is an old and useful arrangement, and should be more generally used by farmers. You cannot obtain a patent for your arrangement of boilers and crushing rollers, as the system is old.

G. H., of N. Y.—The best varnish known to us for coating bright iron, to prevent it from rusting, is clear copal; it contains oil and is not liable to crack. The metal cadmium is rare, but may be obtained in this city. Sheet copper cannot be welded into a mass, like iron. We are much obliged to you for your kindness in sending us a club of subscribers.

D. N. T., of Ga.—Instead of "awaiting the turn of events," as you term it, we think your apprehensions should stimulate you to make an application for a patent immediately, while you are required to pay only \$30 for government fee. You need not fear but that the rights of a patentee will be ever respected, let the inventor reside where he will. The rights of French and English citizens and all other foreigners who have taken patents in this country are just as much protected under our laws as the rights of the patentee who resides in Washington city. To be sure, the right to this protection has cost the Englishman and Frenchman more than it has the resident of Washington city (the government fee being, in the first case, \$500, in the next, \$300, and in the last, only \$30), but the law that protects the one in the peaceable enjoyment of his property—patent—protects all, and after the patent is granted, all are on an equal footing.

H. C., of N. C.—Our new volume will commence in two weeks. We are glad to know that you are forming a club in your town. In a few days we shall issue an edition of the Patent laws and information upon all subjects connected therewith. Inventors, patentees and assignees will find it an indispensable work for their use.

S. H., of Ga.—You can procure such brass castings as you want, of George Pollock, of this city. We can recommend S. C. Mills, No. 12 Platt street, this city, as a reliable dealer in machinery.

A. T., of N. Y.—The plan of steaming wood to season it has been long practiced in this country. By calling at this office, you will be able to learn all you want to know about our patent laws and about the patentability of your inventions.

H., of Pa.—You ask:—"Would a shaft support a greater weight, hung on the middle, when rapidly than when slowly revolving?" Answer.—"It would not."

N. T., of N. J.—There is no single work known to us which contains illustrations of all kinds of machinery. Uré's Dictionary of Arts and Manufactures will, perhaps, come nearest the kind of book which you want.

J. L., of Pa.—Your article on Pittsburgh and its steel manufactures has been received and will meet with attention.

P. J. K., of Wis.—It is well known, according to the discovery of Sir Humphrey Davy, that a piece of zinc soldered to a piece of iron prevents the latter from rusting. The zinc corrodes, and in doing so establishes an electric action which protects the iron, as you have described. You could not obtain a patent for such a discovery.

C. C., of Ohio.—We do not think there is any chance for a patent on your grain separator. The same device is covered by Sanders' patent. We advise you to make a model of your grain dryer and send it to us, as we think it contains patentable features. Sneed's patent does not embrace the same elements.

D. F., of N. Y.—We are afraid that india-rubber balls would not answer for the valves of pumps in tanneries. The tanning liquors would be liable to affect the india-rubber by coating its surface. Some of the rubber companies, however, might agree to make suitable valves for you.

W. O. H., of Pa.—We do not know of any better mode of pulverizing rosin than to pound it in a mortar and screen it through a sieve. The blows should be light, so as not to make the rosin stick to the crusher. In grinding it between stones, the stones should be light and have a rapid rotation.

MONEY RECEIVED

At the Scientific American Office on account of Patent Office business, for the week ending Saturday, Dec. 8, 1860:—

J. C. G., of Cal., \$272; E. M., of N. Y., \$45; H. H. R., of N. Y., \$35; W. W., of Ala., \$30; H. H., of Pa., \$30; A. F. F., of Vt., \$35; C. H. D., of Ill., \$30; J. B. C., of N. Y., \$30; C. J., of N. Y., \$20; W. R., of Mo., \$25; H. V., of Texas, \$30; A. A., of N. Y., \$20; B. & C., of Ohio, \$30; F. M. B., of Wis., \$30; E. & H., of N. J., \$25; T. S. W., of Pa., \$55; A. J. G., of Mass., \$30; W. W. H., of N. Y., \$30; P. P. S., of N. J., \$25; G. J. C., of Vt., \$25; O. S., of Conn., \$30; I. W., of Mass., \$22; J. W. F., of Pa., \$25; L. J. W., of S. C., \$30; T. J. F., of Ill., \$28; J. H. W., of N. Y., \$30; H. P. G., of Pa., \$50; E. L. G., of Conn., \$30; W. F. G., of N. Y., \$30; N. McC., of N. Y., \$12; A. R., of N. Y., \$20; A. F., of Ill., \$32; J. R. B., of R. I., \$25; B. & M., of Ill., \$25; C. T., of Va., \$25; J. S., of Texas, \$30; E. M., of N. Y., \$25; J. N. P., of N. Y., \$25; G. C., of N. Y., \$35; A. B. A., of Pa., \$35; L. A. B., of France, \$35; F. B. P., of Mo., \$35; C. O. L., of Vt., \$30; W. H. G., of N. Y., \$30; W. Y., of Ind., \$25; O. C. T., of Pa., \$30; E. C., of Mass., \$375; D. C. S., of N. Y., \$30; C. A., of Ill., \$25; F. B., of Mass., \$32; J. T. S., of Wis., \$30; G. P. J. C., of N. J., \$30; E. B. B., of N. Y., \$25; J. H. D., of Mich., \$25; J. E., of Cal., \$10; C. S. H., of N. Y., \$25; R. B. B., of Pa., \$25; P. R., of Ill., \$15; C. H. S., of N. Y., \$25.

Specifications, drawings and models belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, Dec. 8, 1860:—

L. A. B., of France; W. W., of Ala.; H. H. R., of N. Y.; W. W. H., of N. Y.; J. W. G., of Pa.; J. N. P., of N. Y.; T. B. J., of Ill.; J. H., of England; S. H. D., of Mich.; T. J. F., of Ill.; J. R. B., of R. I.; C. C., of N. Y.; A. G. M., of N. Y.; E. M., of N. Y.; F. B. P., of Mo.; T. K., of N. Y.; W. R., of Mo.; N. McC., of N. Y.; J. J. D., of N. Y.; S. & J. H. B., of Mo.; C. R., of France; E. B. B., of N. Y.; B. & M., of Ill.; P. P. S., of N. J.; F. B., of Mass.; J. P. S., of N. Y.; I. W., of Mass.; W. H. S., of Pa.; C. H. S., of N. Y.; C. A., of Ill.; W. Y., of Ind.; J. H. W., A. F. F., of Vt.; H. & M., of Ohio; C. T., of Va.; C. S. H., of N. Y.; G. C., of Maine; P. R., of Ill.

NEW BOOKS AND PERIODICALS RECEIVED.

MESSRS. APPLETON & Co., the well known publishers, Nos. 443 and 445 Broadway, this city, have just issued "New Fairy Stories for My Grandchildren," by George Keil; "A Year with Maggie and Emma;" "A True Story," by Mary J. McIntosh; and "The Young American Picture Gallery," containing 500 beautiful engravings. All who love to make children happy, and delight to see their eyes sparkle with joyous glees, will find the above books exactly suited to produce these results.

FRANK LESLIE, publisher of the "Illustrated Newspaper," publishes also "Frank Leslie's Monthly," a magazine of literature, art and fashion; profusely illustrated.

HOUSEHOLD JOURNAL. Monthly part. By Alex. Haythill & Co., No. 20 North William-street, this city. This enterprising firm are now issuing two useful journals, and are evidently prospering in their business. The "Household Journal" is an interesting family paper, at \$1.50 a year. Monthly parts, 12 cents.

ATLANTIC MONTHLY. By Ticknor & Field, Boston. The number for December is full of able contributions. This magazine has a high rank.

AGRICULTURE must not be overlooked. Our neighbor, Charles V. Mages, has issued a splendidly illustrated catalogue of all sorts of agricultural implements. It is a work of interest to all who are engaged in this noble pursuit.

CENTRAL PARK. C. M. Saxton Barker & Co., Park-row, have published a cheap, yet beautiful guide to the most remarkable enterprise of the kind ever undertaken in America, viz., the Central Park, in this city. Our neighbor, Saxton, who loves to make people happy, will be most happy to sell everybody a guide book. He has also a large stock of all sorts of agricultural works always on hand.