FOREIGN NEWS AND MARKETS.

The Siecle publishes an analysis of the woolen trade of France, which it considers a national industry par excellence. Prior to the revolution of 1789 the production of woolen cloths in France was estimated at 225,000,000 francs annually; at present it exceeds, in annual value, 500,000,000 francs. The value of the woolen exports from France amounts to 160,000,000 francs, the greatest amount of which comes to the United States. Considering the great amount of exports, the quantity of woolen goods consumed in France is exceedingly small for the number of inhabitants-36,000,000. The native wool of France is obtained from 35,000,000 sheep, five-sevenths of which are inferior breeds and do not yield over 3 lbs. to the fleece; the remaining 10,000,000 yield about 6 lbs. each annually. This supply is inadequate to the wants of the manufacturers. therefore about 78,000,000 lbs. are imported yearlymostly from British possessions. There are 3,000 woolen structure of the hide. Dennis Aldrich, of St. Louis, manufactories in France, in which 280,000 operatives are employed. The wool imported into it is subject to variable duties, according to its value; it is very high on the finest qualities, and woolen goods of all descriptions are subjected to a really prohibitory tariff. There is about to be a very great reduction in the tariff of the wool and goods imported into France from England, by the recent treaty formed between the two governments.

The astonishing number of 523,000,000 letters were carried through the British Post-office last year, which was an increase of 19,000,000 over the previous year. In the year 1839, when the penny postage system was introduced, there was only 75,000,000. The increase, therefore, is sevenfold in twenty years. The English postage system is a model for all nations. It is the cheapest, the most comprehensive and best managed in the world. is not possible for letters to be carried so cheaply in journal-boxes of the piston rod. This engine is partic-America as in England, because the routes are more extensive and the population so sparse in most of the takes up but little room, and it can be run with great States; but the British money order system might be re-adopted with great benefit to the people. We use the in this country as well as in Europe, through the Scienterm re-adopted; for this system was once connected with tific American Patent Agency. our post-office and then disconnected from it about 13 years ago, on account of the peculations which sprung up in the minor post-offices, and which entailed great loss to the government. In England, during 1858, their were no less than \$61,000,000 sent through the Post-office by money orders, most of which were in small sums.

In Birmingham the brass and tin workers are very busy and trade is good.

Welsh rails-the kind mostly sent to the United States-are £5 12s. 6d. at Cardiff. Scotch pig iron has greatly advanced, owing to the strike among the makers and the closing of 100 furnaces. It is selling for £3 1s. 6d. per tun. Refined English tin, £138 per tun. Spelter, £21; a rise of 10s. Tin plates are inactive. Banca tin is at £136. English fine tin is not so highly esteemed as Banca in the United States, and yet it sells for £2 per tun higher in England.

WEEKLY SUMMARY OF INVENTIONS.

The following inventious are among the most useful improvements patented this week. For the claims to these inventions the reader is referred to the official list on another page:-

This invention consists in a novel and ingenious system of valves and passages by which steam is admitted to act upon a whistle or other equivalent device to sound an alarm in case of the water getting low or the pressure of steam too high in a boiler; the same whistle serving for both alarms. The patentees of this novel C. Wurzback, of Memphis, Tenn.

STEAM VALVE.

This invention (by Addison Crosby, of Fredonia, N. Y.) consists in a valve of the oscillating kind, constructed with an opening through it, and with two opposite faces eccentric to its axis of oscillation and fitted to a seat of correspondingly eccentric form, which contains opposite ports or openings which are covered and closed by the faces of the valve whenever the valve bears upon its seat, such valve when used in a steam engine or other apparatus in which there is pressure of steam or other fluid, being subject, when closed, to just sufficient pressure of steam to keep it tight, but being perfectly balanced as soon as it commences opening, and in all its applications, working entirely without friction between its faces and seat.

KNIFE HANDLE.

Lucius Carrier, of Worcester, Mass., has patented an improvement in the construction of knife handles, which, although applicable to handles for all cutlery, is more especially designed for large knives, such as the Spanish knife or machete, and the like. The invention consists in having the body of the handle formed of pieces or horn, leather or wood, and covering the same with a single piece of horn, secured in proper position by rivets or bolts.

TANNING HIDES.

As a green hide becomes dry by the evaporation of its liquids, its flesh surface forms a hard, flinty scale, to relieve the hide of which it has been customary to submit it, during the softening process, to the mechanical action of fulling stocks or frequent and hard hand manipulations, which have, to some extent, the detrimental effect of loosening the small bundles of fibers composing the Mo., has invented a process of softening hides which have arrived at the above condition, known as "flint hides," which dissolves the flinty scale without injuring the texture of the hides; such process consisting in treating such hides successively with diluted acetic acid and a solution of carbonate of ammonia or chloride of ammonium

oscillating piston engine.

On page 1 of the present volume of the SCIENTIFIC AMERICAN, we published an engraving of a novel oscillating piston engine, which was invented by Mr. Mark Runkel, of this city. The object of our present notice is an improvement made by the same gentleman on his former patent. His engine is now so arranged that the pressure on both sides of the piston is equally balanced, and that no extra friction or wear will take place in the ularly adapted for driving propellers on steamboats, as it speed. The inventor has secured patents on the same

APPLICATIONS FOR THE EXTENSION OF PATENTS.

Shell-cutter.-Joel R. Morse, of Lowell, Mass., has applied for the extension of a patent granted to him on the 2d of May, 1846, for an improvement in machines for cutting shell and horn. The petition is to be heard at the Patent Office on the 30th of April next; and the testimony closes on the 16th of that month.

Plow .- John M. May, of Janesville, Wis., has applied for the extension of a patent granted to him on the 3d of May, 1846, for an improvement in plows. The petition is to be heard at the Patent Office on the 1st of May next; and the testimony closes April 18th.

Screw-cutter .- H.A. Harvey, administrator of T. W. Harvey, late of New York, deceased, has applied for the extension of a patent granted to said T. W. Harvey on the 30th of May, 1846, for an improvement in machinery for cutting screws. The petition is to be heard at the Patent Office on the 14th of May next; and the testimony closes on the 30th of April.

SHIPMENTS OF COPPER FROM LAKE SUPERIOR FOR 1859.—We extract the following statement in regard to the shipment of copper from the Mining Gazette, published at Houghton (Portage Lake), Mich .:-"Through the kindness of John S. Blain, Esq., of Eagle River, we are enabled to furnish our readers with full and reliable statistics of the copper shipments from the various districts during the season of 1859:- Eagle device are George W. Grader, Benj. F. Cowan and A. River, 1,301 tuns 1,606 lbs.; Ontonagon, 2,610 tuns 21 lbs.; Portage Lake, 1,573 tuns 332 lbs.; Eagle Harbor, 607 tuns 1,482 lbs.; Copper Harbor, 3 tuns 180 lbs.; total, 6,095 tuns 1,621 lbs. This total shows an increase of 149 tuns 320 lbs. over that of 1858; the amount for that year being 5,946 tuns 1,301 lbs."

> GREAT MORTALITY AMONG CATTLE.—There is much excitement at the present time, in certain districts in Massachusetts, in consequence of the appearance of a new and fatal disease which has broken out among cattle and is spreading to an alarming extent. It is said to have been introduced by some cows which were imported from Germany, and which arrived at Boston in a very sickly condition. One of them soon died and the disease was communicated to others, causing numerous deaths, and producing great anxiety among the farmers.



ISSUED FROM THE UNITED STATES PATENT OFFICE FOR THE WEEK ENDING MARCH 6, 1860.

[Reported Officially for the Scientific American.]

Pamphlets giving full particulars of the mode of applying for patents, size of model required, and much other in fermation useful to inventors, may be had gratis by addressing MUNN & CG., Publishers of the Scientific American, New York.

27,338.—Dennis Aldrich, of St. Louis, Mo., for an Improvement in Preparing Hides:
I claim the treatment of hides successively with diluted acetic acid, and a solution of carbonate of ammonia, substantially as and for the purpose specified.

37,339.-John Allison, of St. Martinsville, La., for an

Improvement in Cane Coverers:

I claim the boards or planks, A A, with blades, D D, rotary harrow, J, and adjustable harrow, K, attached, the frame, E, provided with the roller, F, scraper, G, and one or more retary harrows, H I, the whole being combined and arranged for joint operation as and for the purpose set forth.

object of this invention is to obtain a machine for covering cane that will, during the operation, pulverize the earth, and cause the seed to be covered with a loose, light and friable mold permeable to air and moisture, and thereby greatly favoring its germination.]

27,340.-John Armstrong, of New Orleans, La., for an

27,340.—John Armstrong, of New Orleans, La., for an Improvement in Steam Boilers:
I claim the combination of the upright water vessels, A A A'. horizontal connecting cylinders, B B, and flues, b b, the said vessels, A A A'. being arranged substantially as described, that their upper portions may constitute steam spaces, and their lower parts sediment collectors, as set forth.
And in combination with the said upright water vessels, A A A', horizontal connecting cylinders, B B, and flues, b b, I claim the return flues, CC, passing through the said water vessels and connecting cylinders, as specified.

[This invention consists in a novel combination and arrangement a series of upright water vessels, horizontal connecting cylinders and flues, constituting a very effective and durable boiler.]

27,341.-E. H. Ashcroft, of Boston, Mass., for an Im-

proved Pressure Gage for Steam Boilers:

1 claim my improved locomotive engine boiler steam gage, as made with the coiled spring, the chain and lever arranged and applied directly to the diaphragm rod, and the index pointer shaft, in manner and so as to operate substantially as described.

17,342.—J. B. Atwater, of Ripon, Wis., for an Improvement in Rifled Fire-arms:

I claim constructing the barrel, substantially in the manner set forth, to wit, with a diminished number of rifles or grooves, from or from near the center or middle'of the barrel to its muzzle, for the purpose of diminishing the friction of the ball, after the powder has exerted its expansive force upon it, as is specified.

27,343,-Francis Baschnagel, of Beverly, Mass., for an

Inproved Plastic Compound:
I claim combining the powder of leather previously boiled and lried, with a mixture of solutions of glue and tannin to form a plastic compound, which may be modified and treated in the manner subtantially as specified.

27,344.—Albion Bean, of Dedham, Mass., for an Im-

21,344.—Albion Bean, of Dedham, Mass., for an Improvement in Railroad Car Brakes:

I claim the arrangement and application of the lever weight with respect to the trunk frame, the brakes and the hand windlase, substantially in manner and to operate as described.

I also claim so connecting the two lever weights of the two adjacent truck frames that both be raised by one chain, or its equivalent, applied to either, as set forth.

plied to either, as set forth.

27,345.—J. H. Bloodgood, of New York City, and M. A. Johnson, of Lowell, for an Improvement in Felting Machinery:

We claim an elastic traversing apron moistened and warmed by steam, and as the sole bed for the material that is being felted, in combination with a revolving vibrating felter, operating in the manner substantially as described for the purpose set forth.

Second, We claim a felting or rubbing surface for felting machines, composed of the end grain of wood and operating as described.

Third, The device for keeping the apron straight upon its roll, consisting essentially of the independent end pieces, S, cord, t, and spring, P, or their equivalents, operating substantially as set forth.

27,346.—J. L. Butler, Wm. L. Hosford, and D. W. Smith, of Brooklyn, N. Y., for an Improvement in

Burners for Vapor Lamps:
We claim the construction of the adjustable thimble or jacket, A A, with expansions or ears, a a, and the adaptation thereto of removable heaters, B B, for the purpose set forth.

27,347.—Joshua F. Cameron, of Livingston county, Mo., for an Improvement in Shovel Plows:

I claim the arrangement of the beam, A, standard, B, shovel, C, hinge screw, D, rods, E E and set screws or pivots, F F, as described, for the purposes set forth.

27,348.—Wm. B. Cargill, of Waterbury, Conn., for an Improvement in Hand Cotton Pickers:

Improvement in Hand Cotton Pickers:

I claim the reciprocating gatherer, aranged and operating substantially as described, whereby I am one bled to keep-steadily in contact with the balls, the said gatherer for extracting the cotton, as set forth and specified.

I also claim the combination with the reciprocating gatherer, the stationary stripper for discharging the cotton from the said gatherer, as set forth and specified.

I also claim widening that portion of the gatherer which is always in the case for the more perfect delivery of the cotton to the receptacle, and to prevent clogging within the case, as set forth and specified.

27,349.—Lucius Carrier, of East Douglas, Mass., for an

Improvement in Knife Handles:
I claim, as an improved article of manufacture, a knife handle ormed of a body or filling of horn, wood, or other suitable material, ecured by a single piece of horn, substantially as described.

27,350.-N. R. Carrington, of Cold Water, Miss., for

an Improvement in Seed-planters:

I claim the combination and arrangement of the seeding wheel, H, constructed as described, the projecting arms, d d, alternating in action on the opposite sides of said seeding wheel, and the tangential sliding gate, I, substantially as specified, and in combination therewith, the "raise floor." L, for adapting the variations of the seeding wheel to different kinds of seed, as set forth.

-Augustus Conradt, of Philadelphia, Pa., for 27.351.an Improvement in Forming Hollow Articles of Sheet Metal:

I claim causing the mandrel, A, whilst rotating, tovibrate or move laterally, under the combined influence of the governor, l, pattern, C, and springs, i i, or their substantial equivalents, in the manner and for the Purpose set forth and described
I also claim giving the said mandrel, A, whilst rotating, a longitudinal motion, when required, by means of the governor, l, pattern, C, and spring, f, or their equivalents, substantially as and forthe purpose set forth and described.

27.352.—B. F. Currier, of Bath, Me., for an Improve

ment in Machines for Cutting-up Cotton Plants: claim the revolving knives or cutters, i, and the pulleys, a their band, o, operating substantially as described for the especified.

27,353.-J. Daman, of Hartford, Ky., for an Improve

ment in Machines for Extracting Stumps:
I claim the arrangement and combination of the connecting bar.
D, the rod, i, sliding frames, F G, springs, b, J, link, I, and lever.
I, as and for the purpose shown and described.

(This invention consists in the employment or use of two rack bar fitted in a suitable framing, and used in connection with sliding catches, and a lever or levers, whereby the desired work, to wit, the extracting or drawing of the stumps from the earth may be effected with facility by a single person or attendant.]

27,354.—Henry Disston, of Philadelphia, Pa., for an Improved Method of Securing Handles in Hand

Caws.

I claim the application of the taper pins, e.e., with the screwed ends and their nuts, f, to the manufacture of hand saws, in the manner and for the purpose set forth.

27,355.—H. Wm. Dopp, of Buffalo, N. Y., for an Im-

21,000.—II. WM. Dopp, of Buffalo, N. Y., for an Improvement in Steam Engines:
I claim, first, The stationary valve balance, B, constructed as described, in combination with steam valves, A A, or their equivalents.

Second, I claim sliding valves, A A, when the same are constructed and used in the manner and for the purpose set forth.

Third, I claim the employment of link, crank or arm, as shown by link, k, in combination with pistons, M. M, and valves, A. A, as constructed.

structed.

Fourth, I claim the combined rocking valve gear, when the same shall be constructed substantially as and for the purpose set forth.

Fifth, I claim the employment of a cam groove around the shaft, J. in combination with hooks, k k.

in combination with hooks, k k.

27, 356.—Darwin P. Flynn and Richmond S. Hayes, of Le Roy, N. Y., for an Improvement in Corn and Cane Harvesters:

We claim, first, The employment or use of the shafts, f, provided with the spiral wires, E, and the shafts, h h, provided respectively with the spiral wires, F, and cylinder, i, in connection with cutters, II, arranged to operate substantially as and for the purpose set forth. Special, The stationary and yielding fingers, 11, in connection with the shafts, h h, provided with the spiral wires and cylinders, arranged for Joint operation as set forth.

Third, The movable platforms, I I, provided with the rotary beds, an in connection with the fingers, 11, or an equivalent stalk-holding device, for the purpose specified.

[This invention relates to a new and improved machine for cut-

This invention relates to a new and improved machine for cutting standing maize or Indian corn and sugar cane, and gathering the same as it is cut into gavels, so that they may be readily bound by an attendant and cast from the machine as the latter moves along. The invention consists in a novel means employed for gathering and presenting the stalks to the cutters, and also in the means employed for conveying the cut stalks to rotary and intermitingly moving platforms, whereby the desired end is attained.]

moving piatforms, whereby the desired end is attained.]
27,357.—Joseph W. Gardner, of Shelburne Falls, Mass.,
for an Improvement in Table Catlery:
I claim an improved manufacture of knife or fork as made not only
with a flat or sheet metal shank and with the scales applied on opposite sides thereof, but with two separate semi-bolsters applied relatively to the shank and the scales, and fastened thereto substantially
as specified.

27,858.-Wm. M. Garee, of Granville, Ohio, for an Im-

provement in Corn Planters:

I claim the arrangement of the flanch, C. seed slide or charger, m, plate, n, brush block, e, chamber, 1 1, uprights, 1 2 3, lid, p, and jaws, b h, as and for the purpose shown described.

27,359.—Edward W. Gordon, of New York City, and William H. Peckham, of Hoboken, N. J., for Improved Spectagle Temples. proved Spectacle Temples:

aim constructing the hollowitem ples and slides of spectacles with of the spring stops, e i, substantially as and for the purposes spe-

27,360.---H. Gortner and J. McCann, of Nashport, Ohio,

ov.---I. Gormer and J. McCann, of Nashport, Ohio, for an Improvement in Corn Harvesters:

We claim, first, The hinged frames, G G and H, bend, c, roller, D, with cords, E, all arranged, combined and operating in the manner and for the purposes set forth.

Becond, We claim the convex knife rest, N, with rotary sickle blade cutters, L, as represented and described, for the purpose specified.

The object of this invention is to construct a machine which will, as it is drawn through the field of standing corn, cut the same with great facility, two rows at one time, and by which the cut corn stalks can be readily gathered into shocks and left on the field in a fit condition for binding. This invention consists in the employ ment of a peculiar shaped rotary cutter for giving an oblique draw cut, operated by the driving wheel through the medium of suitable gearing; and it also consists in a novel constructed platform for receiving the stalks as they are cut by the knives, and discharging the same to one side of the machine in a suitable condition for binding in shocks.]

27,361 .-- John H. Gove, of San Francisco, Cal., for an

27,361.---John H. Gove, of San Francisco, Cal., for an Improvement in Hay Presses:
I claim the cross arms or levers, FF, working in journals upon a movable platform at one end, in connection with the chains or ropes, cc, one end of which is attached to the cross bars, H H, the other fastened to and winding upon a shaft, a.
I claim the arm, n, of lever, m, combined with catch springs, o, as arranged with the crossbar, H', for the purpose of automatically disconnecting the pressing gear at the proper time, as set forth. I claim the sliding bar, r, with the hooks, a, roller, t, and spring, V, for the purpose of releasing the rope or wire, as set forth. I claim the combination of the shaft, a, chains or ropes, cc, and arms or levers, FF, when operated by the axle of a carriage substantially as described, and for the uses and purposes as set forth.

27,362.—Joha R. Grace, of Brooklyn, N. Y., for an Im

proved Surf Life Boat:
I claim, first, The employment of a central ballast chamber, c, then combined with two air chambers, b, substantially as shown and secribed.
Second, I claim the combination of '

described.

Second, I claim the combination of the air chambers, g g, with the ends of boats that are so curved, that, when the boat is capsized, the boat shall be mainly supported upon eald air chambers, as and for the purpose shown and described.

Third, I claim the vertical and endwise arching of the chambers, g, as and for the purpose set forth.

[This invention consists in the construction of surf and life boats of participations are settingled.

ofpeculiar transverse sectional form and with a novel arrangement of air and watertight chambers, by which some advantages are ob27,363.--W. W. Green, of Chelsea, Ill., for an Im-

27,363.--W. W. Green, of Chelsea, Ill., for an Improvement in Cultivators:
I claim, first, Having the wheels, c.c., of the implement attached to vertical perforated bars, g.g., which pass loosely through the back part of the frame, A, in connection with the adjustable draught-pole, B, the whole being arranged as and for the purposes set forth.

Second, Attaching the shares, D, to their standards, j, by means of the sockets, plates, Q, and bolts, n; the sockets and plates being attached respectively to the shares and standards; and the bolts passing through the sockets, plates and standards; the bolts passing through transverse slots, m, in the sockets, and projections, r, on the plates, the whole being arranged as and for the purpose set forth.

[This invention relates, firstly, to an improved arrangement of means for elevating and depressing the shares, so that the same may, when in operation, be made to penetrate the earth at a greater or less depth as circumstances may require, the arrangement also admitting of the adjustment of the shares above the surface of the earth to facilitate the removal of the implement from place to place. earth to facilitate the removal of the implement from place to place The invention relates, secondly, to a novel way of attaching the shares to their standards, whereby the shares may be adjusted more or less obliquely either to the right or left, as the proper cultivation of the crop may require.]

37.364.--George W. Graber, Benjamin F. Cowan and

37,364.—George W. Graber, Benjamin F. Cowan and A. C. Wurzbach, of Memphis, Tenn., for an Improved Gage for Steam Boilers:

We claim the arrangement of the hollow water alarm valve, L, and its seat, k, and passages, n 1 m, in combination with the chambers, C and D, and steam alarm valve, k, substautially as described, to form separate means of communication with the same whistle, or its equivalent, for the water and steam alarms.

27,365.—Herman B. Hammon, of Bristolville, Ohio, for an Improvement in Hand Corn Planters:

I claim the a angement of the seed box, A, sliding front, B, back, C, lid, D, mouthpiece, E, handles, F and G, gage, e, set screw, n, clasps, a'a''a''' a'''', the crocked finger, 9, branch, 7, pins, X X, the flaring mouth, f, channel, t, measuring cavity, 1, brush, r, for joint operation, as described, for the purpose specified.

27,366.—A. B. Johnson, of Washington, Ind., for an Improvement in Horse Hay Rakes:
I claim the combination of the lever, J, pawl, K, wheels. I and H, and stop pawl, L, h combination with a double rake, arranged and operating in the manner set forth.

This invention consists in the employment of a double rake, hung upon a suitable frame or arms which are to be secured to the wheel and axle of a wagon, and capable of turning in its bearings in said frame, and in rotating this double rake so as to alternately bring the tines into operation by a novel device which is placed under the direct control of the driver, which will be understood by the above claim.1

27,367.--Jasper Johnson, of Geneseo, N. Y., for an Improved Gate:

I claim the combination of rod, R, guides, a a', pulley, p, and weighted cords, c, with the gate and poets arranging and operating substantially as described.

27,368 .-- Daniel Kaufman, of Boiling Spring, Pa., for

an Improvement in Hog Elevators:
I claim the post or upright, A, provided with the radial bars, a, in connection with the revolving cap, C, with lever, D, attached, the whole being arranged, as shown, to form a new and useful device, for the purpose specified.

[The object of this invention is to obtain a simple device to facili-

tate the hitherto-laborious manipulation attending the elevating and suspending of slaughtered hogs preparatory to dressing the same, a device that may be operated, if necessary, by a ingle individual, and thereby not only economize in labor but also greatly expedite the work, even with a less number of hands than is usually required.

work, even with a less number of hands than is usually required.]
27,369.—George W. Keene, of Lynn, Mass., for an Improvement in Boot and Shoe Heels:

I claim uniting the top lift, f, of a boot or shoe heel to the body, A, of said heel by means of an interposed metal plate, c, having points or projections on both of its sides, and which enter the top lift and the body of the heel, and thus secure itself to the top lift and the body of the heel, and each to the ofer, substantially as described, for the purpose specified.

27,370.—James W. Lyon, of Brooklyn, N. Y., for an Improved Machine for Finishing Plugs of Stop

Improved Machine for Finishing Fings of Stop Cocks:

I claim, first, Constructing the main bearing surface of a lathe spindle entirely of sharp W grooves, substantially as described.

Second, In combination with the a lathe spindle and belt shipper, the friction brake, substantially as described.

Third, In combination with the chuck, the pins, C6, slots, C7, and adjusting screws, C8, substantially as described.

Fourth, The arrangement, in combination with the machine, of the sliding carriage, substantially as described.

Fifth, The arrangement, in combination with the machine, of the system of levers in connection with the treadle and re-acting spring, substantially as described.

Sixth, The arrangement of the parallel mandrels, G4 G5, in combination with the spindle and chuck, and carrying a cutting and tapping tool, substantially as described.

Seventh, The arrangement and mode of adjusting the different parts of the cutting tool, H, substantially as described.

Eighth, The two slide rests, in combination with each other and with the machine, substantially as described, and substantially for the purposes set forth.

Ninth, In combination with the spindle, brake and lever, operating the belt-shipper, the arrangement of the vibrating arm and rotating cutters, substantially as described.

Tenth, The combination of the vibrating arm with the sliding carriage.

Tenth, The combination of the vibrating arm with the sliding carriage.

Eleventh, The hinged hand rest, in combination with the spindle and bed, A, substantially as described.

Twelfth, The combination of the hinged hand rest with the sliding carriage and treadle lever, substantially as described.

Thirteenth, The arrangement of the internal mandrel and drill, in combination with the spindle and chuck, substantially as described.

Fourteenth, The combination of the internal mandrel and drill with the back slide rest, substantially as described.

Fifteenth, And finally, I claim, in connection with a spindle and chuck suitable for helding the cast plug, and so arranged with relation to the motive power as to be rotated in reverse directions or be held firmly in a fixed position, the cutting tool, H, and tap, the cutting tools, II, and the vibrating rotating cutter or cutters, or their equivalents, when arranged substantially as described, so as to successively perform their respective parts of the operation of finishing the plug without removing it from the chuck and to repeat their operations upon each successive plug, substantially as described.

27,371.—John Magee, of Lawrence, Mass., for an Improvement in Coffee Pots:
I claim the use of the piston, F, and openings in cylinder as applied to tea and coffee pots, for the purposes described.

21,012.—Edward Mattocks, of Lyndon, Vt., for an Improved Shutter Operator:

I claim the described application of the lever, U, to the lever or bar, C, and its arrangement with reference to the sectoral gear, E, and the pinion, G, whereby, by the revolution of the said pinion, the blind may be not only either opened or closed but latched or unlatched, in manuer as set forth.

27,373.—Hazel Maybew, Jr., and E. Maybew, of Lancaster, Pa., for an Improvement in Preparing Coal: We claim the improvement in making coal better in quality by bringing it into contact with hydrogen, by the mode and manner specified.

27,374.—James D. Moore, of Zanesville, Ohio, for an Improvement in Self-loading Fire-arms:
I claim, in combination with a ca ying and cut-off plate, C, the movable and stationary magazines, a b, for containing loose powder and balls or short cartridges, and operating together substantially as described.

described.

I also claim, in combination with a semi-rotating breech-piece, H, the plate, C, and magazines, a b, substantially as described.

I also claim the combination of the cam plate, G, and lever, I, for actuating the slide plate, C, at proper intervals, as set forth.

I also claim so connecting the dog with the bolt, c, as that the hammer will not catch or stand at full cock unless the bolt is in its proper position to lock the breech and barrel in line, substantially as described.

27,375.—Charles Gustave Mueller, of New York City, for an Improvement in Compositions for Extinguish-

ing Fires:

I claim the described composition of charcoal, sulphur, sugar and red lead, mixed together in the proportions specified, for the purpose of extinguishing fires.

The object of this invention is to produce a composition which. by the quantity of non-combustible gases emanating from the same when lighted, will serve to extinguish fires in rooms which are partially or entirely closed. Itis put up and sold in boxes, which make it convenient to handle and which serve to preserve it against the injurious influence of moisture or heat.]

27,976.—Jimpsey B. Netherland, of (near) Louisville,

Ga., for an Improvement in Cultivators:
I claim the arrangement of the peculiarly-shaped branched standards, BC, constructed as described, in combination with blades or shovels, constructed as described, and attached to the standards in the manner specified.

27,377.—David Newbrough, of Clarksburgh, Ind., for

an Improved Churn:

I claim a churn, constructed substantially as described and specied, that is to say, with a cream receptacle. A, brakes, F and H, with atherer, Q, when these several parts are constructed and arranged or operation conjointly as and for the purposes described.

27,378.—John J. Paxson, of Middleton, Ind., for an

Improvement in Cultivators:

I claim the attacking of the roller or wheel, F, to an elastic frame, C, connected to the cultivator frame, A, by a holt, h, and communicating motion to the slide, F, from the shaft or axle, D, by means of cranks, 11, and connecting reas, m m, attached to the ends of the pivoted bar, u, on the slide, F, the whole being arranged as and for the purpose set forth.

[The object of this invention is to obtain a simple, economical and compact device, in which a cultivator and seeding machine are combined in such a way that the cultivator may be used separately or with the seed-distributing device, as occasion may require; the combination and araangement of parts admitting of a perfect operation of both devices, while the machine is placed under the plete control of the attendant.]

27,379,—Worden P. Penn, of Belleville, Ill., for an Improvement in Seeding Machines:
I claim the arrangement of the hoppers, J and I, compartments, R, partitions, F, the false bottome, D and D', shafts, E and F, feeding wheels, B and O, all constructed and operated as described.

27,380.—Geo. W. Phenix, of New Brunswick, N. J.,
Improved Washing Machine:
I claim the inclined planes, J J J, spiral springs, n p, with the
rollers and washboards to produce friction in washing, and in combination with levers or treadles, m m, as and for the purposes deseribed.

scribed.

27,381.—John T. Plass, of New York City, for an Improvement in Slide Valves of Steam Engines:
I claim, first, The arrangement, in connection with the follower, C, of the cup, f, spring, G, gland, E, and exterior adjusting screw, f, as and for the purpose shown and described.
Second, The combination of the stuffing-box, D, with the follower, C, and gland, E, as and for the purpose shown and described.
Third, The combination of the openings, h, in the follower, C, with the openings, i, in the gland, E, as shown, so that any steam which escapes under the force of the valve, will find exit to the atmosphere, and thus notify the attendant of the leakage and enable him to regulate the adjustment of the valve accordingly.

[This invention consists in the employment of a follower fitted to a stuffing-box in the back of the steam chest, and held against the back of the valve by a set screw with an interposed spring, in such manner as to prevent the action of the steam on the back of the valve to a greater extent than may be desired. It also consists in providing suitable openings in the so-applied follower and in the gland of the stuffing-box, for the escape of any steam that may leak between the back of the valve and the follower for the detection of such leakage.1

27,382.—Huntington Porter, of Cummington, Mass., for an Improvement in Hoes:

all improvement in 110es.

I claim the arrangement of the peculiarly curved and pointed wings, socket, C, and round blade, A, as and for the purposes shown and excribed

(This invention consists in forming the hoe blade with a convex cutting cutting edge and two concave cutting edges terminating in sharp points; or in other words, it consists in giving a serpentine cutting edge to the blade, which will work to a much better advantage among young and tender plants.]
27,383.—Robert Price, of New York City, for an Im-

proved Combination of Mop and Scrubber:
I claim constructing the bandle, A, and cloth frame, D, in such a manner, as described, so as to attach to said bandle and frame a sc ubbing brush and to the wringing rod a mopeloth, for purposes epecified, or any other construction substantially the same, or effecting the same facilities to accomplish the same cnd.

27,384.—Geo. W. Rains, of Newburgh, N. Y., for an Improvement in Slide Valves for Steam Engines:

I claim the combination of the suspended valves, A A', with the carriage, B, and rollers, c, as and for the purpose shown and described.

[This invention consists in a certain mode of supporting the slide valve or valves of a steam engine by means of a carriage running on rollers upon the valve seat, or on a face parallel therewith whereby the valve is relieved of unnecessary pressure and friction.]

27,385.—John R. Rogers, of Sacramento, Wis., for an Improvement in Centrifugal Seeding Machines:
I claim, first, The arrangement of the rod, H, and the cord, a, in connection with the shaft, E, and wheel, F, the same being used in the manner and fer the purpose specified.
Second, I also claim the rrangement of the shaft, E, with the slotted seed slide, C, shaker, c, lever, I, and rod, J, in the manner and for the purpose set forth.

27,386.—Samuel P. Ruff, of Weaver's Old Stand, Pa., Improvement in Mill Spindles:

Indiguite arrangement, consisting of the vertical shaft Chii, grooved plates or blocks, cd B w v, friction roller frames, D E F o, friction rollers, l m n, and axial pin, g, the whole constracted and used together in the manner and for the purpose described.

[This invention consists in a anging the vertical shafts of mills, vater wheels, &c., so that all their points of bearing shall come in

contact with rolling or anti-friction surfaces, and thus much of the power necessarily employed to overcome friction saved. The arrangement appears to be capable of performing all that is claimed for it.]

27,387.-Mark Runkel, of New York City, for an Im-

provement in Oscillating Steam Engines:
I claim the arrangement of the oscillating cylindrical piston, C, or its equivalent, in combination with the stationary cylinder, A, or its equivalent, constructed and operating substantially in the ma ner and for the purpose specified.

27,388.—Thaddeus Scoville, of New York City, for an Improvement in Cultivators:

I claim the arrangement and combination of the side beams, A A. hinged together, the jointed bar, a connecting the thills, the spur wheels, D D D D, acting both as cultivators and supporters, the convertible cultivating teeth, E E, and the sliding or self-adjusting seat, G, substantially in the manner and for the purpose specified.

27,389. - John Adam Scheutz, of St. Louis, Mo., for an Improvement in Anti-rheumatic Liniments: I claim the compound composed of the aforementioned ingred

27,390.—James Selby, of Peoria, Ill., for an Improve ment in Seed Drills:

I claim the arrangement of the shaft, B, serrated wheel, C, slide, ber, F, and cam lever, F, when the same are used substantially and for the purpose specified.

27,391.—Hamilton E. Smith, of Philadelphia, Pa., for an Improved Washing Machine:

I claim the slotted or perforated reel, C, having any convenient number of straight sides when the said reel is arranged to revolve within the water contained in the outer vessel, A, and when it operates in conjunction with the weighted reel or roller, D, as and for the purposes set forth. I also claim the heater, P, with the coiled pipe, F, or its equivalent when combined with the outer casing, A, and the reels, C and D, in the manner and for the purpose specified.

27,392.—George K. Snow, of Watertown, Mass, for an Improved Machine for Folding and Pasting Paper:

Improved Machine for Folding and Pasting Paper:

I claim a machine or combination consisting not only of mechanism for producing a single folding of a sheet of paper, but mechanism which shall operate toproduce either one or two further and parallel folds or turns of such paper in an opposite direction, substantially as specified; such mechanism, as shown in the drawings, being the plates, G H CD and E, arranged and made to operate ogether essentially in the manner and by means as hereinbefore se forth.

And I also claim a combination consisting not only of mechanism for folding a sheet of paper once, and mechanism for producing one or more further parallel folds or turns of the sheet in an opposite direction, but mechanism which shall operate to produce either one, two or three folds of the sheet, at a right or other angle with the line or lines of previous folding of it, such combination of mechanism ex whibited in the drawing, being the plates, G, H, C, D, C, D, E, N, O, and R, operated in the manner and by means substantially as heretofære described.

I also claim a combination or machine consisting not only of mechanism for applying paste or cement on such part or parts of the sheet as may be required, in order to cause the sheet to sitck together at any two or more of its folds or lines of fold; the mechanism shown in the drawings for applying paste being the paste roller, 22, paste fountain, 22, and the wheel, y2, arranged and operated relatively to the platform, B, and the folding plates, substantially as explained.

And, in combination with the receiving two fame, W, for receiving the sheet from the abut ment and conveying it oward and pressing it upon either the pack or pack-holder that may be within the trough, S.

And, in connection with the receiving and conveying apparatus of frame, W, applied to the trough. S. and its shutment.

ing it upon either the pack or pack-holder that may be within the trough, S.
And, in connection with the receiving and conveying apparatus or frame, W, applied to the trough, S. and its abutment, U, as described, I claim the application to the abutment of a carriage, V, and a hand lever, Z. or any equivalent mechanism by which such abutment may be moved in a direction away from the sheet-receiver, so as to enable the latter to expel from the machine an imperfect sheet or an imperfectly folded sheet, essentially as specified.

I also claim the arrangement and combination, in the manner described, of the adjustable stop bar, 02, with the two folding plates, G, H, and the plate, E, to run between them.

I also claim, in combination with a paper-folding machine, constructed so as to fold paper or fold and apply paste to it, substantially as described, a heating apparatus so applied as to heat a pack of folded paper while in the machine, the same being to facilitate the designation of the pack or paste applied thereto, for the purpose set forth.

forth.

I also claim, in a paper-folding machine, the combination of the lifter bar, g2, with the register points, f2, applied to the platform upon which the sheet to be folded is placed.

And I also claim the combination of the slotted plate or bearer, h3, orits equivalent, with a folding plate and ap asting apparatus of the paper-folding machine; the same being to prevent a pasted part of a sheet from adhering to the outer surface of the folding plate.

27,393.-C. M. Spencer, of South Manchester, Conn.,

27,393.—C. M. Spencer, of South Manchester, Conn., for an Improvement in Self-loading Fire-arms:
I claim first, The combination of the rolling breech, E, the lever, G, and sliding locking bolt, F; the whole fitted and applied substantially as set forth.

Second, The slide, H, applied to the rolling breech and operating in combination with the hammer, substantially as and for the purpose specified.

Third, The combination of the serrated projection, n m, the rolling breech, and the tengue, J, applied and operating substantially as described within the opening in the breech-supporter.

[This invention consists in an improved mode of locking the movable breech of a breech-loading fire-arm, whereby it is easily opened and closed, and very firmly secured in place during the opened and closed, and very firmly secured in place during the explosion of the charge. It also consists in certain contrivances for operating in combination with the movable breech, for the purpose of withdrawing the cases of the exploded cartridges from the chamber of the barrel and for conducting new cartridges thereinto

trom a magazine in the stock.]
27, 394.—Thomas Stewart, of Philadelphia, Pa., for an Improvement in Slide Valves for Steam Engines:
I claim the elastic oryielding diaphragm, I, attached to the balance frame, H, and to the steam chest, and arranged in the manner set forth, when the said diaphragm has such an extent of its upper surface exposed to the pressure of steam that while the latter maintains the balance frame in close, steam-tight contact with the valve, the said valve is relieved in a great measure from the pressure of steam, as specified.

27,395.—Grey Utley, of Chapel Hill, N. C., for an Improved Head Rest for Travelers in Railroad Cars, Carriages, &c.:

I claim the rest, H, supported by the shoulders of the wearer and having terminations for supporting the wearer's arms, so that the weight thereof shall counteract the pressure of the head against the said rest, substantially as set forth.

27, 396.—Aaron C. Vaughn, of Johnstown, Pa., for an Improved Churn-dasher:

Improved Churn-dasher:

Iclaim arranging the shafts of a series of revolving churn dashers longitudinally in the churn box, and connecting them by means of cogged wheels or other mechanical equivalents, when the latter are arranged inside of the churn box and rotate each adhaent pair of dashers in contrary directions, as shown, and when the blades of the dashers in each series incline in contrary directions also, substantially in themanner and for the purposes described.

27,397.—Aaron C. Vaughn, of Rainsburg, Pa., for an Improved Mortising Machine:
I claim two nipper jaw cutters constructed and operating substantially as described, for the purpose of cutting a square or oblong

mortise in wood; and this I claim whether the cutters be operated or fed up to their work by the mechanical contrivances represented or by any others substantially the same.

27.398.-Nicholas S. Vedder, of Troy, N. Y., for an

Improvement in Cooking Stoves:
I claim the arrangement of the door or doors, f f', of the oven, A, directly opposite to the side or sides, h h', of the fire-box, and of the most capacious and effective portion of the oven, as and for the purpose set forth, the smoke flues being extended from the fire-box along the top, c, end or ends, d d', and bottom, e, of the oven, substantially as described.

27,399.—J. M. Wampler, of London county, Va., for an Improvement in Breech-loading Fire-arms:

an Improvement in Breech-loading Fire-arms:

I claim, first. The double catch, X and K, which holds down the breech and at the same time holds the rear end of the trigger-guard, both being relieved by one pressure of the finger in the act of pulling down the guard to raise the breech for loading.

Second, The peculiar construction set forth whereby the percussion bar is forced back and locked to a short half cock or safety catch, sufficiently far to clear the cap, cartridge or breech; this being done by the same pressure of the majer that frees the double catch and the trigger-guard.

Third, The rock lever, P, for freeing the percussion bar from its half cock at the instant of full cocking.

Fourth, The back sight, Y, constructed and operated as described, for the purpose specified.

27,400.—Henry Waterman, of Haverhill, Mass., for an Improved Apparatus for Hoisting Water:

I claim the trough D, around the well curb, in combination with the self-discharging bucket, H, when operated substantially as set forth.

27,401.—E. D. Williams, of Philadelphia, Pa., for a Improvement in Solidified Fuel from Coal Dust:

I claim compounding and preparing a solidified fuel from coal dust, peat, and other like substances, by mixing the same with glutinous paste, subjecting the composition to pressure in molds, and subsequently drying the condensed blocks, as set forth.

27,402.—F. O. Wilson, of Mount Olive, N. C., for an Improvement in Cultivators:

I claim the double mold turn plow, F, and the side turn plowe, H H, in combination with the bea m, A, middle stock, E, cross frame, D, and side stocks, G G, when said beam, A, and middle stock, E, shall be braced and supported by the stay, C, and the other parts constructed and arranged substantially as and for the purpose specified.

27,403.—Joseph Woodruff, of Rahway, N. J. for an Improved Steam and Fire Regulator:

Improved Steam and Fire Regulator:

I claim, first, The disks or diaphragms, B and C, connected together so as to form a double diaphragm, constructed and operating substantially as set forth.

Second, The clamping rings, D, when applied to diaphragms, for the purpose of making a steam or air tight loint.

Third, The conceve cup or bearing, G, for supporting the lower diaphragm, when about the size of the standard or bearing, F. Feurth, The hollow packing screw, K, constructed as described, and operating in the manner set forth.

Fifth, The double adjustable clevis and yoke, I, in combination with the standard, F, and lever, H.

27,404.—Austin Woolfolk, of the Parish of Ibeville, La., for an Improvement in Ditching Machines:

I claim, first The combination of the inclined excavator wit an adjustable throat plate or its equivalent, so arranged as to prevent the earth from breaking and deliver it in a sheet to the carrying

combination with the excavator, I claim the adjustable $t = \min_{n \in \mathbb{N}} t$ to the side of the excavating plow, substantially as de-

In combination with the excavator, I chain the adjustants sloper joined to the side of the excavating plow, substantially as described for the purpose set forth.

Third, In combination with the inclined excavator, I claim the continuous carrying band arranged across the end of the inclined plane and extending outside the same and at right angles thereto, to receive the earth, substantially as described.

Fourth, Arranging the joint pivot of the frame of the continuous carrying band extending acrose the end of the excavator, substantially as described, so as to prevent the inclination of the band being changed at the rear of the inclined excavator, when the inclination of the band is varied outside of the frame of the excavator.

Fifth, The combination of a carrying band with a pressure roller arranged substantially as described, to compress the earth on the band so as to form a continuous sheet for the purpose set forth.

27,405.—Wm. Chadwick, of Bury, England, assignor to himself and Wm. Griffiths, of Philadelphia, Pa., for an Improvement in Ventilators. Patented in England May 28,1858:

I claim the combination of the spiral vanes or worms, d, with the screw vanes, b, standard, c, and case, a, when the same are arranged without any partition between the vanes, d and b, and without any casing around the vanes, d, but in the manner and for the purpose specified.

27,406.—Robert Craig (assignor to himself and J. W. Ludlow), of State Line City, Ind., for an Improvement in Cultivators:

I claim the employment or use of the curved beveled keys, F, interposed between the shares and their feet, and secured by the same boits, d, which attach the shares to the feet, as and for the purpose specified.

[This invention consists in the employment of bevel keys inter posed between the feet of the implement and the shares, for the purpose of adjusting the latter in oblique positions to the right or left, so as to throw the earth outward from the implement or inwards towards its center, as circumstances may require. The object of the invention is to adapt one and the same implement for the various kinds of work required in the cultivation of crops.]

27,407.—Henry Eastman (assignor to D. Henderson), of Indianapolis, Ind., for an Improvement in Horse

Hay Rakes: I claim the arrangement of the toothed rake heads, A P, triangular frame, Dl D2 D3, axle, C, hand lever, B, arm, F, friction roller, G, and catch, H, substantially in the manner and for the purpose described.

27,408.-W. A. Flanders (assignor to himself and T. W. Boyce), of C ment in Beehives: of Cleveland, Ohio, for an Improve-

I claim, first, The combination or the triangular reversible comb frame or comb frames, B B, and the angular adjustable case or chamber, A, or their equivalents arranged substantially in the manner and for the purposes set forth.

Second, I claim the mechanism or means arranged substantially as described, or their equivalents, by which I am enabled to adjust or place the embryo brood contained within the bive or in the frames above or nearly above the feeding swarm in the manner and for the purposes specified.

above or nearly above the feeding swarm in the manner and for the purposes specified.

Third, I claim the improvement in the comb guide consisting of the wire saidle; D, hooks, D, and glass plate, D, or their equivalents, constructed and applied in the manner and for the purposes specified.

Fourth, As an improvement in moth traps I claim the hinged wings, O O, in combination with the central inclined plane, N; the several parts being constructed and arranged in the manner described for the purposes set forth.

Fifth, I claim the drone separator, H, provided with the passages, J J, when used in combination with the wings, I I, substantially as set forth for the purposes specified.

27,409.—George H. Horn (assignor to himself and Edwin B. Horn), of Boston, Mass., for an Improvement in the Needle-holder of Sewing Machines:

I claim my improved device or mechanism for holding and adjusting the needle, it being composed of the secondary socketed holder and ite ball and supporting socket, applied to the needle-carrier and having a device or devices for clamping the ball to the carrier, substantially as specified.

And in such I also claim making the ball needle-holder with the split or slit in its ball, substantially as described, and so as to co-operate with the clamping screw or device and cause it to clampboth the needle and the needle-holder, at one and the same time, as described of the complete of the same time, as described of the complete of the same time, as described of the complete of the same time, as described of the complete of the same time, as described the same time,

27,410.—Gibbons L. Kelty, of New York City and T.
G. Harold, of Brooklyn, N. Y., assignors to R. H.
Kelty, of New York City, for an Improved Curtain Fixture:

We claim first, A head or center pin, d, on which the roller revolves, combined with the metallic bracket, c, substantially as specified, whereby the roller is prevented from becoming disconnected by end motion to the roller or looseness of the bracket, as set

forth.

Second, We claim the combination of the center pin provided with a head, with the spring, g, that acts to draw the head of the center pin to the bracket, as set forth.

Third, We claim confining the blind cord by means of two flat or nearly flat surfaces that are pressed towards each other by means of a spring, when one of those flat or nearly flat surfaces is stationary and the other is attached to the shade or curtain roller whereby the said roller can be revolved or will remain in any position to which it may be turned, as specified.

27,411.—Walter J. F. Liddell (assignor to himself and Benjamin Hershey), of Erie, Pa., for an Improve-

ment in Car Springs:

I claim so connecting or suspending the yielding part of a creariage to the unyielding part thereof by springs arranged vealify as that the weight or force applied thereto shall clongar extend said springs longitudinally or in the direction of the plud force and their-removal allow the said springs to contract that direction, substantialty as described.

27,412.-Alvin R. Paine (asignor to John M. Myers, of New York City), for an Improvement in Sewing

Machines:

I claim, first, The clamping segments, g, g, within the ring, 1, of the feeding wheel, when said segments are formed with the flat side or removed portion, 2 g, for the purposes and as specified.

Second, I claim the combination of the vibrating lever, h, and segments, g, g, when the segments are formed with the ram-shaped openings, 3 g, at their centers, acted on by the block, of the lever, in the manner and for the purposes specified.

27,413.—Septimus C. Stokes (assignor to himself and Benj. S. Stokes, of Manchester, N. H.), for an Im-

Benj. S. Stokes, of Manchester, N. H.), for an Improved Knife-sharpener:

I claim the combination and arrangement of two cylindrical or other files or bars. A B, with a frame or holder, C, and a clamp, substantially as and for the purpose described.

And, in combination with the two rods or bars, A and B, and a frame or holder, C, arranged with respect to each other substantially as specified, I claim the gages or guides, F G, arranged relatively to the said bars essentially in manner and for the purpose as set forth. I alse claim the cambination and arrangement of the projecting rest, D, with the two crossed bars, A B, and their holder, C, provided with a handle, as specified.

27,414.—Henry Wright, of Cambridge, Mass., assignor to Wm. C. McClerland, of Springfield, Mass., for an Improvement in Wooden-soled Shoes:

an improvement in Wooden-soled Shoes:
I claim the new manufacture of bootor shoe described, viz.: a boot
or shoe with a wooden sole, having the tops or upper fastened to the
sole in a proper manuer by peg, nails of screws passing-through a
portion of the wood of the sole and through the upper or edge of the
top, and into the wood work of the sole again, substantially as set
forth.

RE-ISSUES.

The Newark Patent Hosiery Company of Newark, N. J.

(assignees through mesne-assignments of Henry
Burt), for an Improvement in Knitting Machines.

Patented Sept. 23, 1843; re-issued Sept. 23, 1847; and again re-issued Feb. 28, 1860:

I claim the combination with a knitting machine, which is capable of producing a fabric of uniform width, of a pattern cylinder or other equivalent go verning device, having upon it a pre-arranged pattern in such manner that said device shall control automatically the formation of more or less stitches or loops as the work progresses, whereby variations in the width of the fabric may be effected in accordance with said pre-arranged pattern, as set forth.

The Newayl Potent Hosisew Company of Newayl N. I.

ance with said pre-arranged pattern, as set forth.

The Newark Patent Hosiery Company, of Newark, N. J. (assignees through mense-assignments of Henry Burt), for an Improvement in Knitting Machines. Patented Sept. 23, 1843; re-issued Sept. 23, 1847; and again re-issued Feb. 28, 1860:

I claim the mechanism for "narrowing and widening," the same consisting of the movable stope, a2 a2, combined with a rack of teeth or other suitable contrivance formed upon the shifting bar, and acting upon the carriage, 0, of the yarn guide, as set forth.

Also, the top rack, k, co mbined with the tube, S, of the yarn guide, and actuated in the manner and for the purpose as set forth.

Also, The mechanism which effects the changes of the clutches, the same consisting of the shifting bar, the aspor, u2, having a circular depression and radial recesses in its head, and levers and other parts connected to the same, and connecting the same with the clutches; the whole b ing arranged and operating substantially as specified.

Also, the estationary roller, y', and the projections, t3 w3, and their

parts connected to the same, and connecting the same with the clutches; the whole b ing arranged and operating substantially as specified.

Also, the stationary roller, y', and the projections, t3 w3, and their intervening curve formed upon the shifting bar, in combination with the spring, S3, the toggle bars and also in combination with the rait, t, and its depressions; the whole being for the object as described.

Also, the cloth bar, c', arranged and operating in the manner and for the purpose as set forth.

Also, the particular method by which the depressing bar, c, is carried and forced down upon the pointed ends or barbs of the needles, in order to pars them into the greeners In their shanks, viz.: by a combination of bark levers, fig gh 12, and arms, 12; the same being actuted substantially as described.

Also, the manner of raising the stitch hook, viz.: by an elevering plate, y, through which they extend, and which is combined with and operates them, as set forth.

Also, the method of cleaning the point or lower end of the yarn guide from the depressing bar when the latter descends upon the medles, viz.: by a ledge, b, on the said bar, in combination with the roller, a, applied to the T piece of the yarn guide; the whole being as specified.

Also, the method of cleaning the point of the yarn guide from the stitch hooks when the roller, r, passes by the thread guide, or as soon as the lateral motion of the thread guide is stopped, viz.: by the beveled edge, k', in combination with the screw or other con trivance of similar character projecting from the T piece of the yarn guide.

Also, the medeles shall retract, viz.: by the movable curved and operating substantially as explained.

Also, the mode of adjusting or regulating the distance to which the points of the needles shall retract, viz.: by the movable curved and operating substantially as explained.

Also, the mode of adjusting or regulating the distance to which the points of the needles shall retract, viz.: by the movable curved and operating subs

John G. Forbes and R. Squires (assignees through mesne-assignments of A. D. Fisk), of New York City, for an Improvement in Coffins. Patented Nov. 14.

1648; re-issued March 6, 1860; I claim, first, The manufacturing of coffins of cast or raised metal, and manner described, that is say, corresponding nearly with the human form, and making the

coffin in two parts or shells, united by a flauch, substantially as set forth.

forth.

Second, The manufacture of coffins of raised or cast metal in two
shells, each formed with recesses of greater or less depth, which
shall respectively constitute a portion of the receptacle of the corpse,
thus approximating the coffin more nearly in shape to that of the human body than could otherwise be done.

[The advantages of air-tight coffus are very manifest, but the diffi-culty of making them of metal has been the great weight of the material. This difficulty could, of course, be overcome only by making the plates very thin; and it is the purpose of this invention to s
fashion the plates as to combine the requisite strength with a reason able degree of lightness. The coffin is made of two shells, united by flanges extending around the coffin about midway between the top and bottom, the flanges bolted together, and the seam made air-tight by iron cement.1

Charles H. Morgan, of Clinton, and L. Whitney, Jr. rles H. Morgan, of Clinton, and L. Whitney, Jr., and S. Priest, of Watertown, Mass. (assignees through mense-assignments of Benj. F. Rice), for an Improvement in Machines for Making Paper Bags. Patented April 28, 1857; re-issued March

Bags. Patented April 28, 1857; re-issued March 6, 1860:

I claim the machine as a whole composed of mechanism for forming, feeding, cutting and pasting the tube or bag, combined, arranged and operating substantially as described.

I also claim the use of a supporting bar, or its equivalent, around which paper may be formed into a tube, and in connection with which has and paper tube may be severed; each and the whole substantially as described.

I also claim giving the paper the variable feeding motion, for the purpose and in the manner substantially as described.

I also claim cutting the paper, without waste of material, into such a form as shall have suitable projections for the formation of the bottom lap or seam of the bag, and for the convenient opening of the bag at the mouth, substantially as described.

Addison Crosby, of Fredonia, N. Y., for an Improved Valve for Steam Engines. Patented August 30, 1859; re-issued March 6, 1860:
I claim the oscillating valve constructed with an opening right throughit, and with two eccentric faces, and fitted to a double seat of correspondingly eccentric form, which contains opposite ports or openings that are covered and closed by the faces of the said valve whenever the said valve is in contact with the said seat, substantially as described.

D. W. Crocker, of Deposit, N. Y., for an Improvement in Railroad Chairs. Patented Jan. 25, 1859; re-

m Manioau Chairs. Patented Jan. 25, 1859; re-issued March 6, 1860: claim the construction of the chair, as shown and described, so the passing weight will cause the jams of the chair to gripe the has and for the purpose shown and described.

[This invention consists in constructing a railroad chair with each jaw of a separate piece of metal, and so applying it to the rails at a joint that the downward pressure produced upon the chair by the locomotives and care hasing over the joint will tend to draw the jaws will endure much longer and will not warp so readily. If cast hollow toward each other, and to make them gripethersils more firmly thereby causing the ends of the rails to be so confined together tha they cannot be displaced vertically or laterally relatively to each other, and making a very rigid and durablejoint.]

other, and making a very rigid and durablejoint.

Edward Hall and Joseph L. Hall, of Cincinnati, Ohio, for an Improvement in Fire-proof Safes. Patented August 21, 1849; re-issued March 6, 1860:

We claim, first, The employment of hydraulte cement, in whole or in part, as forming the insulating medium or admixture used between the outer and inner cases of safes and chests, when said inner cases are formed of iron or other suitable metal, substantially as described forthe purposes set forth.

Second, Joining the outer and inner metallic cases of safes and chests by means of the door frame, c, and flange, b, or their equivalents, when said hydraulic cement, in whole or in part, is used as the insulating medium between taid metallic cases, as described, and also by means of the anchors or bolts, d, extending from the outer and inner cases, and into the space between said cases, substantially as and for the purposes set forth.

Ephraim Brown, of Lowell, Mass., for an Improved Burglar's Alarm. Patented Oct. 31, 1854; reissued March 6, 1860:
Iclaim the making of the knob of a drawermovable, and so combining it with an alar mapparatus as to cause analarm to be sounded whenever an attempt to open the drawer by pulling on the knob is attempted.

I also claim the combination of the latch or spring bolt or the secondary bolt, and key or lever, with the movable knob and the drawer; the same being to operate together as specified.

I also claim combining the alarm pawl, m, with the knob rod by means of a movable hanging lever, u, to be operated or moved by a stud, or its equivalent, fixed in the knob rod.

I also claim to combination of a decoy key or an auxiliary alarm-pringing mechanism with an alarm-giving apparatus, its springing device and a latching or belting apparatus applied to a drawer, or its equivalent: the said decoy key or auxiliary alarm-giving apparatus, so as to cause it to sound an alarm, as it would be caused to do by reason of any movement of its main springing device.

I also claim combination of a decoy key with the hanging lever so as

would be caused to do by reason of any movement of its main springing device.

I also claim connecting the decoy key with the hanging lever so as
to operate as specified, also connecting the said hanging lever to the
secondary lever, so that a forward pull on the secondary lever shall
move the hanging lever so as to effect the sounding of the alarm.

I also claim the combination of the counter or numbered wheel, and
its operative mechanism, with the knobrod, the same being to exhibit the number of the attempts at opening the drawer; meahing
also to claim the so combining the operative mechanism of the counter wheel with the hanging lever that a movement of the latter will
effect a movement of the said wheel.

E. H. Augamar, of New Orleans, La., for an Improvement in Mode of Staying Piles for Wharves, Piers, &c. Patented July 12, 1859; re-issued March 6, 1860:

I claim, first, The linked frame, S S, constructed and operating as escribed for the purpose appendicd. Second, In combination with piles, as described, the sleeves, a, and races, b, constructed and operating substantially as specified.

ADDITIONAL IMPROVEMENTS.

Harry H. Evarts (assignor to himself and Phineas E. Merrihew), of Chicago, Ill., for an Improved Machine for Sawing Staves from the Bolt. Patented May 27 1859.

May 27, 1859:
I claim the use of the rotating block carriage, as described, in combination with the saw, H, as shown and for the purposes set forth in the specification.

John Huston, of Ottawa, Ill., for an Improvement in Seeding Machines. Patented Jan. 19, 1858:
I claim the arrangement of the stop har. N. shares, C. spout tube, E. slides, d. d. levers, F. G. I. rockshaft, H. Berners, M. and rollers, B. as and for the purposes set forth and described.

(The object of this improvement is to facilitate the dropping operation or the distribution of the seed, and also to provide against the contingency of the adhering of the seed and other substances to the pressure rollers; and, further, to control the upward movement on using the machine where the plow shares are raised out of the earth.] E. H. Augamar, of New Orleans, La., for an Improvement in Mode of Staying Pries for Wharves, Piers, &c. Patented July 12, 1857; re-issued March

&c. Patented July 12, 1857; re-issued March 6, 1860:
I claim, first, The constructing and arranging of the giant steam pile-driver boat and its driving frames, as and for the purpose set forch, or in any equivalent manner for the same purpose.

Second, The disgonal bracing of piles in deep water by the means directived, or by any equivalent contrivance for the same purpose, and in the manner specified (Figs. 1, 2, 3 and B).

Third, Preventing the abrasion of the soil at the foot of the piles, and between them, by the means specified by any equivalent contrivance for the same purpose (Figs. 1 and B).

Fourth, Laying down the bottom crossile, by the means, in the manner and for the purpose specified, or by any equivalent contrivance for the same purpose.

Fifth, The combination of the whole arrangement and modus operandi, as described and specified, or any equivalent arrangement for the same purpose.



J. W. S., of Conn .-- We do not know what pressure of the carbonic acid gas is employed for charging the dough by the company which makes effervescent bread. About seven pounds on the square inch should be sufficient for the purpose

W., of C. W .-- The application of brakes, by which the wheels are arrested from revolving and made to slide on the rail, is the most efficient for quick stoppage, but is most de, structive of the permanent way. This action of brakes, we believe nost safe be cause the most efficient

J. N. H., of Ga.---We have heard of California yeastmoss, but have never seen any ofit. If you have any ofit send us a sample, so that we may call attention to its peculiar qualities.

N. A. P., of N. C .-- The sulphate of zinc is not so poisonous as the sugar of lead. Brown japan is made with copal varnish, colored to the shade you desire. Gum shell-lac must be heated until fusion takes place, then boiling linseed oil is poured úpon it, so as to make an oil varnish. Gum copal is better, how

A. Y., of N. J.---It is allowable to make a model or machine in England of any patented invention and bring it to this

will endure much longer and will notwarpso readily. If cast hollow and the feed waterto your boller allowed to flow through them, they will last three times longer and save considerable fuel by the extra heat imparted to the water.

M. R. L., of Tenn --- A drop of clear glass, like a bead. carefully set in a lead or brass plate, will make a very good single microscope. A drop of any transparent gum, or pure water, if you could set it, would answer the same purpose. The small hole made in a dark colored sheet of paper with the prick of a pin is also a microscope, and enlarges objects. You do not require to take insects to pieces, unless for dissecting purposes, when examining m with a microscope. We are much mistaken if you do not make a very good microscope with these instructions

A. K., of Ill .-- We do not believe there is any loss of power (aside from that of friction) occassioned by what are called the "dead points" in the crank motion. We have been frequently told there was about 21 per cent of power thus lost, but when we asked the question "Where does it go?" it always struck the person interrogated dumb as an oyster.

W. S. M. D., of Mass.—We have seen coal oil that was perfectly odorless, and have made it so ourselves; but the process was rather expensive for common use. The method by which you have accomplished the object would be very interesting and useful information to the public if you saw fit to publish it.

H. J. B., of Pa .--- You cannot obtain a patent for depositing alloys by an electric battery, because this has been done (though not very successfully) by others. There were the (though not very successfully) by others. There may be some point of greatvalue in your process that is patentable. We do not know of any other method of making Bunsen negative carbon plates, than by mixing the carbon with flour paste. The plates should be thoroughly dried before they are used.

D. M. B., of Ill .-- There is no peculiar work devoted to petrefactions. You will find the information you desire, we think on this subject in Lyell's "Geology."

W. J. L., of N. Y.—If any treatise on astronomy does teach that the sun passes through 3600 of the ecliptic in a tropical year it is very manifestly an error, as you say. It is 50" less

S. D. S., of N. Y.—The substance which you send us is not gold, but vellow mica.

H. W. O., of Conn.-Ladders have been made to join together in sections as you suggest.

W. P. W., of ----.-It is very common to exhaust steam into water for the purpose of heating the water before it is forced into the boiler

E. S. W., of Ill.—The gross pressure upon steam must be doubled to reduce its bulk one half. Steam at 50 lbs. above the atmosphere would be under a pressure of 65 lbs.; double its volume, its pressure would be 32%, and at 16% it would occupy four times the space, provided it were confined in a close vessel. If it were allowed to escape into the open air it would expand just much as if it escaped into a vacuum

B. R., of N. Y.—Your questions are so numerous that we have not space for intelligible replies to them all. We suggest to you, as the shortest way to understand all these matters, to ake a thorough study of the sciences of chemistry and natural philosophy. You will find them very interesting.

G. H. F., of Conn.—The \$20 paid as government fee in a caveat may be applied towards the full fees in an application for a patent on the same invention at any time, even after the caveat has expired; but the amount cannot be transferred towards the government fee on any other invention than the one on which J. P. P., of Mass.-The gas which causes the "pop" in champagne is carbonic acid, generated by the decomposition of augar in the process of fermentation. The wine is allowed to ferabout 15 days, when the casks are closed with tight bungs In the mouth of January the wine is racked off and clarified with isinglass. In May it is bottled, when about three per cent of syrup is added, made of sugar candy disclived in wine. The bottles are placed with their necks inclined downward to allow the sediment to settle in the neck, when, by a dexterous withdrawal of the cork for an instant, this sediment is blown out by the pressure of the gas. This process, preceded each time by the fining operation, is sometimes repeated several times. This, accompanied by the breaking of the bottles, which not unfrequently amounts to 40 per cent, must always make champague expensive.

Money Received

At the Scientific American Office on account of Patent Office business, for the week ending Saturday, March 10, 1860:—
C. J. F., of Iowa, \$25; II. II. A., of Iowa, \$30; C. R. A., of Conn., \$90; D. S. H., of Ill., \$25; E. W. B., of Wis., \$30; J. A., of Pa., \$30; E. B. C., of ——, —; J. H. & A. T. G., of N. Y., \$20; L. C. R., of N. J., \$25; M. V., of Ga., \$30; A. K., of Ill., \$15; S. S., of Mass., \$25; A. O., of N. II., \$25; J. W. C., Jr., of Ill., \$15; S. S., of Mass., \$25; A. O., of N. II., \$35; J. W. C., Jr., of Ill., \$55; S. H. II., of R. I., \$30; G. F., of Ill., \$30; E. M., of N. Y., \$35; J. G., Sr., of R. I., \$30; H. & M., of Ohio, \$30; J. L. H., of N. Y., \$25; J. H., of Ga., \$35; J. M. W., of L. I., \$25; J. G., C., of N. Y., \$23; I. H., of Ill., \$25; D. H., of Mass., \$30; M. A. H., Jr., of Ill., \$30; P. C., of Conn., \$25; S. T. S., of Mass., \$30; J. C. C., of Conn., \$25; C. A. B., of Vt., \$30; D. J. V., of Ill., \$35; W. & T., of Ill., \$30; E.H. B., of N. Y., \$30; H. A. H., of N. J., \$30; A. S. & D. M., of Ill., \$30; D. T., of Mass., \$10; F. A., of Mass., \$30; J. M. H., of Cal., \$20; G. K. B., of N. Y., \$25; J. L., of N. Y., \$25; A. I., of N. Y., \$30; H. A. J., of Mo., \$25; J. L., of N. Y., \$30; J. L., of N. Y., \$30; J. M., of N. J., \$30; J. M. H., of Cal., \$20; G. K. B., of N. Y., \$35; J. P. F., of N. J., \$35; S. T. McC., of Ga., \$30; H. A. J., of Mo., \$25; A. M. B., of Vt., \$30; J. L., of N. J., \$30; W. S., of Ill., \$35; D. M., of N. B., \$12; S. McG., of Iowa, \$25; G. S., of Mass., \$30; R. & S., of Vt., \$250; P. & McG., of Iowa, \$25; G. S., of Mass., \$30; R. & S., of Vt., \$30; J. C. G. of Mo., \$30; J. G. R., of Maine, \$30; J. W. M., of N. Y., \$30; H. W. W., of Ill., \$36; J. R., of N. Y., \$30; J. R. H., of Ohio, \$30; E. B. W., of Ill., \$36; I. R., of N. Y., \$35; J. F., R. L., of N. Y., \$30; J. M. T., of Mich., \$30; J. G. M., of N. Y., \$30; J. R. T., of N. Y., At the Scientific American Office on account of Patent Office business, for the week ending Saturday, March 10, 1860; of Mo., \$40; D. S. McK., of N. Y., \$25; F. R. L., of N. Y., \$30; J. R. T., of N. Y., \$30; G. O., of N. Y., \$35; J. S., of N. Y., \$30; M. M., of Ill., \$30; J. B. S., of Tenu., \$25; J. J. U., of La., \$50; J. B. of Mass., \$30; J. H. P., of Iowa, \$30; C. H. W., of N. Y., \$42; J. G., of La., \$20; W. C. M., of N. Y., \$12.

Specifications, drawings and models belonging to parties with the following initials have been forwarded to the Patent

ties with the following initials have been forwarded to the Patent Office during the week ending Saturday, March 10, 1860:—
L. E., of Mich. (3 cases); C. J. F., of Ill.; D. McK., of N. Y.; P. M., of La.; I. H., of Ill.; W. S., of Ill.; C. H. W., of N. Y.; J. B. L., of Tenn.; A. H. S., of N. H.; C. J., of Mo.; J. L., of N. Y.; D. D., of N. Y.; I. P. F., of N. Y.; R. H., of Mass.; J. C. C., of Conn.; J. C., of N. Y.; S. M. M. G., of Ind.; T. R. T., of Ohio; J. M. W., of N. Y.; J. H., of Ga.; D. J. V., of Ill.; J. S., McO., of L. I. (3cases); C. S. L., of Ind.; J. L., of N. Y.; S. C. T., of Ga.; L. C. R., of N. J.; E. B. W., of Ill.; P. C., of Conn.; G. K. B., of N. Y.; S. H. H., of R. I.; A. O., of N. H.; G. F. L., of N. Y.; G. W. D., of N. Y.; R. & McE., of Tenn.; J. L. H., of N. Y.; D. N., of Iowa; A. I., of N. Y.; M. & C., of N. Y.; E. M., of N. Y.; D. S. McK., of N. Y.; I. R., of N. Y.

Literary Notices

THE WESTMINSTER REVIEW .- Published by Leonard Scott & Co., No. 67 Gold-street, this city.—This quarterly periodical maintains its old excellence. Among the feast of good things set before us, in the number for February, may be mentioned the articles headed "Government Contracts," "The Resilities of Paris," "Ceylon," "The Social Organism," "Sicily as it Was and Is," "Christian Revivals," "Italy and the Designs of Louis Napoleon," and "Cotemporaneous Literature."

NOTES ON NURSING.—We have received from the publishers, Messrs. D. Appleton & Co., of this city, a copy of this useful work, by Florence Nighttingale. It is full of practical suggestions as to the proper care of children and the sick, from one who has a right to speak on such subjects. The authorses signalized her heroid devotion to suffering humanity by visiting the Crimea in 1855, and attending upon the sick and wounded soldiers. We heavily commend this work, not only to professional nurses, but to all heads of families.

THE COURTSHIP AND ADVENTURES OF JONATHAN MERRED, Dick & Fitzgerald, publishers, New York.

TEN THOUSAND WONDERFUL THINGS.—Dick & Fitz-gerald, publishers, New York.

HINTS TO OUR READERS.

To New Subscribers .- Back numbers to commence the volume.—As most subscribers to this paper desire the back numbers to render their volumes complete for binding, we shall continue to send the back numbers to January 1st (the commencement of Vol. II, new series), unless the person ordering the paper instructs us to the contrary, at the time of making the remittance. Should the person sending for the paper desire his subscription to commence at the time he makes his remittance, or at any other period, he can be accommodated, as we are constantly re-printing back numbers from our electrotype plates, and can supply as many of any number as may be desired, up to a million of copies; in fact we have printed over 70,000 copies of a single number—such has been the demand for back numbers.

BOUND VOLUME I .- Covers for Binding, &c .- New subscribers who may desire the first volume of the New Series which contains the numbers from July 1, 1859, to January 1, 1860, can be supplied with it by mail or express, handsomely bound, in cloth, at the following prices:—At the office of publication, or by express, \$1.50; by mail (which includes postage), \$2; in sheets, complete, \$1. Covers may also be had separately, which answer as portfolios for preserving the papers, or for binding. Price for covers at the office, or delivered by express, 40 cents; by mail (including postage), 50 cents. For the same investment no work containing so much valuable information can be obtained as is contained in one volume of the Scientific American. Orders should be addressed to MUNN & CO., 37 Park-row, New York. Bound volumes may also be had of most all the periodical dealers throughout the country.