



ISSUED FROM THE UNITED STATES PATENT OFFICE
FOR THE WEEK ENDING SEPTEMBER 3, 1861.
Reported Officially for the Scientific American.

PATENTEES, READ THIS.

The new Patent Laws which went into force on the 2d of March last, authorized the Commissioner of Patents to have all the specifications which form part of the Letters Patent printed.

This is a wise provision, and it renders the documents much handsomer than the old system of engraving them on parchment; besides, in passing before the printer and proof-reader, the clerical errors, which were often made by the copyist, are mostly obviated, thus rendering the patent more likely to be correct.

But, to enable the printer and proof-reader an opportunity to do their work properly, the Patent Office is obliged to withhold the Letters Patent after granting them, for about *three weeks* after the claims are published in the SCIENTIFIC AMERICAN.

This explanation is intended to answer scores of letters received from patentees at this office every week, inquiring why they do not get their documents. We trust it will also save the Patent Office the trouble of writing to every patentee to explain the cause of their not receiving their patents the moment they see their claims published in these columns.

MUNN & CO.

* * Pamphlets giving full particulars of the mode of applying for patents, under the new law which went into force March 4, 1861, specifying size of model required, and much other information useful to inventors, may be had gratis by addressing MUNN & CO., Publishers of the SCIENTIFIC AMERICAN, New York.

2,173.—Levi A. Beardsley, of South Edmeston, N. Y., for an Improvement in Hop Frames.

I claim the employment of permanently fixed horizontal wires, in combination with detachable horizontal sustaining wires supported by the permanent wires, and arranged substantially in the manner set forth for the purposes specified.

I also claim, the combination of two parallel sustaining wires, the one above the other, with the connecting tie poles, l, and the keying clamps, m, substantially as and for the purpose set forth.

I also claim, the keying clamp, n, constructed substantially as above described, in combination with the training coils, for the purpose set forth.

[This invention relates to a novel method of securing short poles or sticks to the two horizontal wires which form the main part of the hop frame whereby said sticks will form braces for sustaining the main wires at intermediate points between the posts on which the wires are hung; and said sticks may be readily removed from the main wires and replaced at pleasure in the training of the wires and the gathering of the hops as will be described.]

2,174.—Benjamin S. Benson, of Baltimore, Md., for a Machine for Moulding Pipes:

I claim, first, The hopper in combination with the flask holder, and moving with it in the manner described.

Second, In combination with a pipe moulding machine, the reel, R, constructed substantially as described, and for the purpose specified.

Third, The combination of the pump plunger with the hopper, so that water will only be discharged while the hopper and flask are descending together, as set forth.

Fourth, The combination of the cone, I, and fingers, J, with the hopper, H, substantially in the manner and for the purpose specified.

Fifth, Packing the flask, as it is moving downwards, as described.

2,175.—William Betto, of Wharf Road, City Road, England, for Metallic Capsules. Patented in England, Jan. 13, 1849:

I claim the new manufacture of capsules and of a material to be employed therein (as described), and for other purposes as stated, that new material being laminated plates, sheets or leaves of lead, covered with tin on the surface or surfaces of one or both sides of such laminated plates, sheets or leaves; the application of the tin to the lead being performed in the manner described, and the adhesion of one metal to the other being obtained by the agency of the same mechanical pressure whereby the lamination of the new material is performed in the manner described.

2,176.—Wm. H. Bigelow, of South Framingham, Mass., for an Improvement in Melodeons:

I claim, first, The employment, in combination with any number of the playing keys of a melodeon or other instrument having reeds and keys of similar character, of a series of hooks, G, G, or other catches or stops, operating substantially as described, to lock the keys after the depression and produce the effect set forth.

Second, The employment, in combination with the series of hooks, G, G, of a sliding stop-bar, operating substantially as and for the purposes specified.

Third, The transmitting of the movements of the keys to the reed valves by means of levers, b, b, working through the air chest on air-tight fulcra, substantially as specified.

Fourth, The combination of the pedal, P, the spring, u, and the board or bar, s, the whole applied to operate substantially as described in combination with the receiving chamber, E, of the bellows for the purpose set forth.

2,177.—Jacob Bradley, of St. Mary's, Ohio, for an Improvement in Steam Engines:

I claim, first, The hollow valve, E, with its port, d, and cavities, e, e', fitted to a seat having ports, a, b, b', c, c', and combined with the steam

pipe, H, exhaust pipe, I, and the two cylinders, A, G, substantially as specified.

Second, Connecting the two ends of the smaller cylinder, A, by means of a pipe, k, and stop-cock or stop-valve, l, substantially as and for the purpose specified.

2,178.—Jehu Brainerd, of Cleveland, Ohio, for an Improvement in Tanning.

I claim the immersion of skins, prepared as set forth in a decoction of salix grisea, as and for the purpose specified.

2,179.—Edward Buckman, of East Greenbush, N. Y., for an Improvement in Horse Rakes:

I claim the arrangement of the springs, G, and pivoted bar, H, with the independent pivoted teeth, F, arms, E, lever, J, hinged bar, D, and foot lever, L, as shown and described.

[This invention relates to that class of horse hay rakes which are provided with independent teeth. That is to say, teeth which are allowed to work or yield independently of each other, and all placed under the complete control of the driver or attendant, so that they may all be elevated simultaneously when required for the purpose of transportation.]

2,180.—C. Christensen, of Brooklyn, N. Y., for an Improvement in Rotary Engines:

I claim, first, The arrangement of the dogs, G, G, with square notches, k, k', in combination with the tooth, l, bell crank levers, i, m, l', m', arm, o, o', toothed segments, h, h', and abutment, E, all constructed and operating as and for the purpose set forth.

Second, The arrangement of the cam, H, and cut-off valve, I, in combination with the rising and falling abutment, E, as and for the purpose described.

Third, The employment of the conical packing rings, q, and inclined faces, r, on the piston wheel, A, in combination with the conical projections, s, on the inner sides of the disks, J, constructed and operating in the manner and for the purpose specified.

Fourth, The arrangement of the angular packing pieces, b, b, hinged pins, c, c, and springs, z, z, in combination with the rectangular packing pieces, a, z, pins, d, z, and springs, c, z, on the sides of the abutment, E, as and for the purpose described.

Fifth, The arrangement of the locking spring bar, h, h, and lugs, l, z, in combination with the self-adjusting spring piston, D, constructed and operating in the manner and for the purpose specified.

Sixth, The employment of the stationary pointer, L, in combination with groove or mark m, z, on the rotary central shaft, C, as and for the purpose set forth.

Seventh, The arrangement of the conical journal boxes, N, in combination with the tapering journals of the rotary shaft, C, constructed and operating as and for the purpose described.

[The nature of this invention is explained by the claim as well as can be without drawings.]

2,181.—Levin P. Black, of Baltimore, Md., for an Improvement in Hydrants:

I claim the combination, in a hydrant or pump, of an earthenware plunger having a vitreous surface with an india rubber or other similar packing, prepared and arranged substantially in the manner and for the purpose before described.

2,182.—D. M. Cochran, of Richmond, Ind., for an Improvement in the Mode of Measuring and Sacking Grain:

I claim the combination of the elevator, J, screw-conveyer, H, and grain receiver, K, the latter being provided with the slide, L, and valve, M', which valve is connected through the medium of a lever, O, and pawl, P, with a ratchet or register, Q, all arranged for joint operation as and for the purpose set forth.

I further claim the supplemental box, E, connected to the box, B, by joints or hinges, b, and arranged as shown to admit, when not required for use, of being folded down underneath the box, B, as set forth.

[This invention is designed, first, to save labor so far as regards the measuring and sacking of grain, and second, to render the device more portable than those hitherto used, the box which contains the conveyer being capable of being folded when not in use.]

2,183.—John Dickinson, of Brooklyn, N. Y., for a Diamond Protector for Dressing Millstones:

I claim the use of the stem, B, made as described, in combination with the protector stock, A, and pressure spring, F, made and operating for the purposes and substantially in the manner set forth.

2,184.—John Dickinson, of Brooklyn, N. Y., for an Improvement in Mounting Glaziers' Diamonds:

I claim the making of glaziers' diamonds in the form of a pocket knife, substantially as described, as a new article of manufacture.

2,185.—David Dougal and Wm. Truxal, of Butler, Pa., for an Improvement in Beehives:

I claim attaching to beehives a vestibule or entrance provided with guards, D, D, and a sloping bottom, A, constructed and arranged as described, for the purpose set forth.

2,186.—Lucian Fay, of Cincinnati, Ohio, for an Improved Edging Machine:

I claim, first, The double series of traveling and setting up rollers, C, C', E', E', C', E', E', for the simultaneous setting up of two opposite edges of a metallic plate, in the manner substantially as set forth.

Second, The described combination of traveling and setting up rollers, C and C', and E', &c., the axle, D, of the setting up roller being secured and adjusted upon the axle, A, &c., of the traveling roller in the manner set forth.

Third, The notched gages, F, F, preceding the flanging rollers, C, E, C, E, and adapted to guide the machine along the tin and to conduct the edges of the latter between the flanging rollers, in the manner and for the objects stated.

Fourth, Forming each axle, A, &c., in two sections, secured and adjusted to each other in the manner and for the objects stated.

2,187.—Isaac Freligh, of Bardstow, Ky., for an Improvement in Machines for Dressing Stone:

I claim, first, The combination of the feathered shaft, T, cam wheel, W, rockshaft, V, arms, q, r, rack, t', flanged gear wheel, l, and screw-shaft, F, operating in the manner explained, to impart an intermittent motion to the carriage, E, of an automatic stone-dressing machine.

Second, The rag wheels, J, K, shafts, J', K', and springs, L, L', operating in conjunction to adjust the pick and regulate its stroke, as explained.

2,188.—G. B. Gurley and O. G. Brady, of New York City, for an Improved Cot, Lounge and Chair:

The frames, A, A', formed of parallel bars, a, a, with canvas, C, attached, and connected by hinges or joints, B, in connection with the stationary legs, D, and removable legs, E, E', connected by bars, F, and braced by hooks, F', all being combined and arranged to form a new and useful combination of a cot, lounge and chair, substantially as set forth.

[The object of this invention is to combine a cot, lounge and chair in such a way that the device may be used in any one of the capacities named, and serve equally as well as if made separately for any one of them, and be capable of being folded up very compactly for transportation, when required.]

2,189.—Robert Hale, of Roxbury, Mass., for a Pipe Coupling:

I claim the described coupling, C, for conducting pipes, the coupling fitting closely to the pipe at its ends, and having a hole, l, through which cement or other packing is introduced into the space, r, as set forth.

2,190.—Peter Harder, of Danville, Pa., for an Improvement in Cements for Roofing Purposes:

I claim the described roofing composition, made of naphtha, shellac, alcohol, rubber, flax seed oil, asphaltum and soapstone, in the proportions and manner set forth.

[The object of this invention is to produce a roofing compound of such elasticity and power as to resist expansion and contraction that it will not be liable to crack when exposed to the influence of the varying temperature.]

2,191.—D. A. Haviland, of Fort Dodge, Iowa, for an Improvement in Boot Legs:

I claim, as a new article of manufacture, a high boot provided on

each side with a steel spring secured on the outside of the seam in an outwardly projecting welt, all as shown and explained.

2,192.—G. D. Haworth, of Decatur, Ill., for an Improvement in Corn Planters:

I claim the combination and arrangement, as shown and described, of the frame, C, with the bars and levers, f, f, driver's seat, F, and the adjustable, bar, E, for the purpose specified.

[This invention consists in a novel and improved way of adjusting and graduating the depth or penetration of the furrow shares in the earth, whereby the driver may have complete control over said shares and readily adjust the same at any given depth in the earth, according to the depth the seed is required to be planted, and also readily elevate the shares above the surface of the ground when required, as in moving or transporting the device from place to place.]

2,193.—J. A. C. and A. S. Hickman, of Summerfield, Ill., for an Improvement in Corn Planters:

We claim the combination and arrangement of the gearing, E, F, cranks, H, H, rods, I, I, tappets, m, m, and levers, J, J, and T, as shown and described, for operating the reciprocating seed slides, K, K, and covers, R, R, from the axle, B, &c.

[This invention consists in an improved arrangement of furrow and covering shares, whereby the furrow shares may be readily raised by the driver when not required to operate—as turning at the ends of rows, for instance—and the corn covered automatically, the covering shares being operated from the axle of the back wheels of the machine.]

2,194.—James Hughes, of Scranton, Pa., for an Improved Spring Balance for Safety Valves of Locomotives and other Engines:

I claim the combination of the spring, C, screw, H, bar, E, and lever or levers, F, F, the whole applied, arranged and operating substantially as and for the purpose specified.

And I also claim the described combination of the pressure-regulating screw, H, lever, I, index, e, graduated plate, f, and stop, l.

2,195.—Stephen Inman, of Rockford, Ill., for an Improvement in Gages for Clapboards:

I claim the piece, G, when connected with a siding hook, in the manner and for the purpose specified, in combination with the gage, M, constructed, arranged and operating in the manner and for the purpose set forth.

2,196.—Wm. Jeffers, of Pawtucket, R. I., for an Improvement in Hose Nozzles:

I claim the swiveled head, G, provided with separate necks, c and c', and adapted in the manner explained to exclude water from either neck at which it is desired to apply or detach a tip.

2,197.—R. Keese, D. T. Ward and J. G. Wilkinson, of Cardington, Ohio, for an Improvement in Flood Gates:

We claim the employment of the gate, C, when operated as set forth, through the medium of the cord, a, weight, c, float, d, connecting rod, e, and latch, D, for the purpose specified.

2,198.—R. J. Mann, of Seneca Falls, N. Y., for Improvement in Metallic Sleds:

I claim a semi-tubular sleigh runner, constructed substantially as described.

I also claim a bed frame of a sleigh, consisting of a combination of longitudinal and cross bars of corrugated metal combined together, substantially as described.

I also claim combining the runners of a sleigh with the bed frame thereof by semi-tubular braces constructed and arranged substantially as described.

I also claim the combination of semi-tubular sleigh runners, a corrugated bed frame, semi-tubular braces, and a bed, the four members of this combination being constructed and combined substantially as described.

2,199.—W. P. Martin, of Salem, Mass., for Improvement in Apparatus for Stirring Tan Vats:

I claim the employment in the vat, A, of the deflecting bars, e, and agitating bars, c, the whole constructed and operating substantially as described for the purpose set forth.

2,200.—W. M. Mason, of Polo, Ill., for Improvement in Corn and Cane Harvesters:

I claim the arrangement of the adjustable reel, I, in an inclined position, to operate in combination with the obliquely-hinged platform, M, tilting lever, N, and spring catch, O, in the manner and for the purpose described.

[This invention relates to a machine for cutting standing corn and cane, and depositing the same in gavels on the ground, and consists in the employment or use of an adjustable inclined reel, in connection with a tilting platform and cutting device, arranged substantially as and for the purpose set forth.]

2,201.—T. J. Mayall, of Roxbury, Mass., for Improvement in Flower Pots:

I claim as a new article of manufacture a flower pot formed of india rubber or gutta percha, substantially in the manner described.

2,202.—Frederick Michael, of Des Moines, Iowa, for Improvement in the Arrangement of Apparatus for the Manufacture of Vinegar by the Quick Process:

I claim the employment of alternate layers of corn cobs, charcoal, and ears of corn in the tub which I use in the described vinegar-making process, the said layers of corn cobs, charcoal and ears of corn, may be arranged in the manner set forth, or in any other that will produce the same effect when a liquor to be aceticated is percolated through the said ingredients.

2,203.—Geo. Minor, of Bridgewater, and Burroughs Beach, of West Meriden, Conn., for Improvement in Washing Machines:

I claim the arrangement of the adjustable step, D, with the pivot, C, rollers, F, and tub, B, in the manner shown and described.

[This invention relates to an improvement in that class of clothes-washing machines in which a tub and rubber are made to partially rotate or vibrate, back and forth, or first in one direction and then in the other, and in opposite directions.]

2,204.—J. B. Morehead and T. A. and G. G. Pool, of Bellefontaine, Ohio, for Improvement in Cultivators:

We claim arranging the shanks, c, c, with a square notch, e, in combination with the square key, f, notched piece, g, socket, d, and adjustable handles, B, B, arranged in the manner and for the purposes described.

2,205.—John H. Morris, of Niles, Mich., for Improvement in Machine for Holding Bags while being filled:

I claim the sliding or adjustable frame, D, with hopper, F, attached, provided with hooks, c, the frame being fitted between the uprights, B, B, and operated by the rack, E, and pinion, H, and retained at the desired point by the ratchet, J, and pawl, K, substantially as and for the purpose set forth.

[The object of this invention is to obtain a simple device for holding bags during the process of filling, whereby the orifices or tops of the bags may be kept distended and provided with a hopper or funnel, and the bags also readily adjusted vertically, so that their lower ends may rest on the platform of the device, and the weight of the bags and their contents supported thereby, so that the tops of the bags will not be torn by the supporting hooks, and the former, when filled, readily detached from the latter.]

2,206.—J. Melvey and C. Ohlemacher, of Aurora, Ill., for Improvement in Railroad Car Brakes:

We claim the swinging frame, D, connected with the hand-lever, K, and provided with the worm wheel, F, ratchet, H, and pulley, G, with the chain, L, of brake-rod, M, attached, in connection with the screw, C, on one of the axles of the truck, and the pawls, b, b, attached to bar I, all arranged as and for the purpose set forth.

We also claim the spring, T, applied to the brake rod, M, and arranged substantially as and for the purpose set forth.

[This invention relates to that class of car brakes in which the power

is applied to the brakes through the medium of the axles of the cars, and consists in the employment or use of a swinging frame, provided with a worm wheel, ratchet and pulley, in connection with a screw on the axle pawls, and rods and levers.]

2,207.—Henry Noblit, of Philadelphia, Pa., for Improvement in Metal Fences :

I claim the metallic button and the recess of railing adjusted to the button, constructed and arranged substantially as set forth for the purposes described.

2,208.—A. W. Olds, of Green Oak, Mich., for Improvement in Rotary Harrows :

I claim the interchangeable adjustment of the wheels, F F', in the sockets, e e', operating in the manner and for the purpose set forth.

2,209.—Robert Parker, of North Cohocton, N. Y., for an Improved Churn :

I claim the combination of the cranks, the curved links and the operating lever, arranged as described, for the purpose set forth.

2,210.—William Riess, Sen., of Reading, Pa., for the Manufacture of Sheet Iron :

I claim the new and improved process of manufacturing sheet iron, as an entirety, consisting of the following subdivisions :

First, The mixture of equal parts by weight, of chalk, porcelain clay and gippsite diluted with water to the consistency of molasses, as described above, substantially in the manner and for the purpose specified.

Secondly, The bath, consisting of one part concentrated sulphuric acid and three parts water, substantially in the manner and for the purpose specified.

Thirdly, The lye, consisting of one part potash diluted with twenty parts of water, substantially in the manner and for the purpose specified.

Fourthly, The method of producing a carburet on the surface of the plates, and of embodying the said carburet with the latter, substantially as and in the manner set forth.

2,211.—Peter Shearer, of Reading, Pa., for Improvement in Air or Gas Engines :

I claim, first, The combination of the reservoir or cooler, A, the power cylinder, C, and its piston, C', the supplementary cylinder, F, and its piston, F', and the two heaters, D E, the whole applied in relation to each other, to operate substantially as specified.

Second, The combination with the said reservoir, cylinders and heaters, of the pump, B, applied and operating substantially as set forth.

Third, Combining the piston, F', of the supplementary cylinder, F, with the main shaft, a, by means of the crank, a', of longer stroke than the driving crank, and the jointed connecting rod, F3, applied and operating substantially as set forth.

[The principal objects of this invention are, first, to obtain the advantages which, in the use of air as a motive agent, results from subjecting it to a very high degree of compression before expanding it by heat, viz., economy of heat. Second, to obtain the advantages resulting from the use of water as a medium through which the air acts, viz., lubricators of the wearing surface and the prevention of leakage at the valves and other parts of the engine.]

2,212.—William Staehlen, of Brooklyn, N. Y., for Improvement in Bird Cages :

I claim, first, The arrangement of the sockets, a, formed by the edges of the cross bands, A, of bird cages, substantially as and for the purpose described.

Second, The perforated disk, E, in the interior of the seed cup, D, substantially as and for the purpose set forth.

2,213.—Orlando Tallcott, of Chicago, Ill., for an Improvement in Feeding Paper to Printing Presses :

First, I claim the use of friction pads for the purpose of moving the top sheet of a pile of papers forward against front stops, and sideways against side stops, substantially as described.

Second, I claim feeding the sheets between two frames or plates, placed far enough apart to allow a single sheet to pass freely between them, and near enough together to prevent the sheet from doubling up by means of the force applied to bring it to its proper place, when constructed and operated in the manner and for the purpose set forth, substantially as described.

Third, I claim, in combination with the pads, 3 3, the adjustable side stops, 4 4, the same to be adjustable at any required distance from the center.

Fourth, I claim the several devices in combination substantially as set forth and described.

2,214.—Hamilton E. Towle, of Exeter, N. H., for a Machine for Drawing Bolts and Spikes :

I claim, first, the combination with the jaws of bolt-pulling machines, constructed and arranged to operate substantially as described, of grooves which are larger at or near the back part of them than further forward, making substantially dove-tailed grooves; in which the jaws are positively guided, by having their exterior surfaces fitted to them, so as to slide freely in the grooves and operate substantially as described.

Second, In combination with the jaws of bolt-pulling machines I claim the links, d, having joints at either or both ends, by which the jaws are moved in the dovetailed grooves, substantially as described.

2,215.—James Turner, of Chicago, Ill., for Improvement in Application for Rendering Lard and Tallow :

I claim the combination of the float, c, the sliding pipe, a, and the stationary pipe, l, in the manner described and for the purpose specified.

2,216.—Henry Van Dewater, of Weedsport, N. Y., for Improved Water Wheel :

I claim the two wheels, A A, having their buckets, b, interlocked or geared into each other, in combination with the draught tube, D, substantially as and for the purpose set forth.

I further claim the gate, F, formed of two planes, c c, resting on V-shaped guides, d' d', connected by a joint, d, and attached to a windlass, H, all arranged as and for the purpose set forth.

2,217.—Henry Warren, of Goshen, Ind., for an Improvement in Soap :

I claim, as an article of manufacture, a soap made of the ingredients described, in the manner and in the proportions substantially as set forth.

2,218.—Hugh Whitehill, of Newburgh, N. Y., for an Improvement in Machines for Dressing Yarn :

I claim, first, The arrangement of the reed, C, consisting of a longitudinal central rod, a, and vertical partition rods, c, in combination with spring bars, b, substantially as and for the purpose described.

Second, Regulating the speed of the dressing brush, by imparting rotary motion to it through the agency of the yarn itself, substantially as and for the purpose specified.

Third, The employment of a steam cylinder, O, with a fluted surface, as and for the purpose set forth.

2,219.—James A. Wilcox, of Rocky Hill, Conn., for a Pipe Wrench :

I claim, first, The combination of a hooked or bill-shaped jaw and an adjustable fulcrum, to which the jaw is pivoted, and on which it turns, and the combination with said jaw and fulcrum of the stop or shoulder, l, substantially as described.

Second, I claim a wrench for turning pipes or round bars or rods constructed and operated substantially as above described.

2,220.—Louis Youmans, of Fulton, F. Y., for an Improved Low-Water Detector for Steam Boilers :

I claim the combination of the tube, A, whistle, G, or its equivalent, cock, E, hollow arm, D' hollow ball, F', and balance ball, F, arranged and operating in relation to each other substantially as and for the purpose specified.

2,221.—E. A. Marshall, of New York City, assignor to himself and Thomas Carter, of the same place, for an improvement in Tobacco Pipes. Antedated Aug. 10, 1861 :

I claim, as a new article of manufacture, a smoking pipe, made extensible by fitting one portion of the stem so as to slide within the other as and for the purpose specified.

[This invention consists in making a smoking pipe stem in telescopic sections, so that it can be shut up in a small compass and made of a convenient size for carrying about in the pocket.]

2,222.—Rufus Porter, of Melrose, Mass., assignor to himself and H. T. Litchfield, of East Boston, Mass., for an Improvement Apparatus for Elevating Liquids by Retained Power :

I claim the combination of the pump, A, the weight, W, the pinions, I K, the gears, J L, and the discharging pipe, G, when the whole are constructed and made to operate together, substantially in manner as set forth.

I also claim the pump, A, as constructed, and made to operate substantially in manner as specified.

2,223.—H. S. Pratt, of Hartford, Conn., assignor to J. J. Hough & Co., of Meriden, Conn., for an Improved Tinsmith's Shears :

I claim as an improved article of (old) manufacture, viz., tinsmith's shears, having the back of the inner surfaces of the blades or jaws made diverging or curved, from the line of motion of the working surfaces, substantially in the manner as and for the purpose described.

RE-ISSUE.

121.—J. S. Harbison, of Sacramento, Cal., for an Improvement in Bee-Hives. Patented Jan. 4, 1859 :

I claim, first, The adjustable sectional comb frames, K, constructed and arranged and supported within the hive as described, so that they may be readily removed through the side or door thereof, substantially as set forth.

Second, A separate store honey box in the upper portion of the hive, constructed in sections temporarily connected together in the manner explained and for the purposes specified.

Third, The combination in a bee-hive of their chamber, B, ventilation passage, m, and curtain, C, substantially as and for the purpose set forth.

DESIGN.

106.—J. G. Thuber and L. Dexter, of Providence, R. I., for Design for Spoons.

107.—Elias Ingraham, of Bristol, Conn., for Design for Clock Case Fronts.

108.—Gilbert Knapp, of Honesdale, Pa., for Design for Cook Stove.

NOTE.—The number of patents issued on the 3d inst., and recorded above, amounts fifty-four. Of this number TWENTY-ONE were solicited through the Scientific American Patent Agency. Persons desiring to secure patents are referred to the advertisement of Munn & Co. on another page.

"WORK" AND "POWER."

If a pound of any matter is raised one foot high, one "foot-pound" of "work" is done; ten pounds raised a foot, or one pound raised ten feet, measures ten foot-pounds of work; and ten pounds raised ten feet give the measure of 100 foot-pounds.

Any other mechanical effect produced, as the grinding of a bushel of corn, or the sawing of a thousand feet of boards, is "work," and when it is ascertained how much power is required to produce the effect it may be expressed in foot-pounds; this being the most convenient measure of work.

It will be observed that work is entirely independent of time. If ten pounds are raised ten feet high, whether the operation consumes one second or ten thousand years, in either case 100 foot-pounds of work is done.

"Power" is the force capable of accomplishing any given amount of work in each second, or minute, or day. One horse power is a power which will raise 33,000 lbs. one foot in each minute; in other words, will perform 33,000 foot-pounds of work per minute.

PATENTS IN THE SOUTHERN CONFEDERACY.

The New York Tribune has just published some correspondence emanating from high public functionaries in the Confederate States, which was intercepted by the capture of a vessel in the Gulf of Mexico, on the way to Texas.

One of the letters appears to have been written by our old friend Rhodes, formerly in the United States Patent Office, but now Commissioner of Patents in the C. S. A. Hear what he says to an inventor:—

RICHMOND, Va., June 22, 1861.

To A. Richards, Danville, Montgomery Co., Texas :

SIR:—A letter, dated S. C. Patent Office, with reference to the petitions, oaths and specifications in the matter of two applications of A. Richards, Danville, Montgomery Co., Texas, for Letters Patent for alleged improvements in breech-loading cannon, together with photographic representations of said improvements, informs the luckless inventor that his photographs are poor, and that the fee will be forty dollars in each case, and though the whole amount is not required to be paid upon the filing of the application, you are yet recommended to pay it, to prevent delay in the issuance of your letters, if their issue should be ordered. Very respectfully,

RUFUS RHODES, Commissioner of Patents.

GRAND SOUTHERN EXPEDITION.—It is announced on good authority that a grand fleet accompanied by an army of 20,000 men will soon sail from this city for some point on the Southern coast. Troops are now being concentrated here for that purpose.

His Imperial Majesty, Alexander, the Emperor of Russia, has addressed a friendly note to his American Minister, Baron Stoeckl, desiring him to make known to the Federal government the deep interest he feels in the prosperity and existence of the Union, in which he justly sees the symbol and the pledge of our former prosperity and dignity as a nation. It is a grand letter,

RECENT AMERICAN INVENTIONS.

Water Wheels.—This invention, by Henry Van Dewater, of Weedsport, N. Y., relates to an improvement in that class of water wheels which are provided with draught tubes, for the purpose of attaining a two-fold action of the water, first gravity, and second suction. The invention consists in the employment or use of two water wheels, the buckets of which interlock or work into each other, and are arranged with a draught tube or gate, whereby it is believed that a good or large percentage of the power of the water is obtained by a very simple and economical arrangement of parts.

Dressing Frame.—This invention consists in the employment of a reed of peculiar construction; also in regulating the speed of the dressing brush by the yarn itself, so that the disadvantages generally arising from a varying speed of the yarn in regard to the brush are avoided; also in the employment of a fluted cylinder for the purpose of taking up the yarn, instead of a cylinder with a plain surface, whereby a baking or overheating of the yarn is avoided, if the dressing frame is stopped. Hugh Whitehill, of Newburgh, N. Y., is the patentee.

Low-Water Detector.—This improved low-water detector consists of a pipe entering the boiler at or near the top and opening thereto at the lowest level to which it is intended for the water to sink and furnished outside with a cock, to whose plug is attached two opposite arms carrying balls, or their equivalents, one of which is hollow and always in communication with the boiler through the cock. When the water level is above the lower end of the pipe, the latter and the hollow arm and ball are kept filled with water by the pressure of steam, and are made to more than balance the other arm and ball and to keep the cock closed against the escape of water; but when the water level descends below the pipe, the water runs from the hollow arm and ball, and the other arm and ball, having the preponderance, open the cock to the atmosphere or to a whistle, and permit the escape of steam to give an alarm. This invention is by L. Youmans, of Fulton, N. Y.

Improvement in Steam Engines.—This invention, patented by J. Bradley, of St. Mary's, Ohio, relates to that class of steam engines known as "high and low-pressure" steam engines, in which the steam first acts upon a piston in a smaller cylinder, and afterwards upon a second piston in a larger cylinder. It consists in an improved valve and system of ports for effecting the induction and eduction of steam to and from the two cylinders; also in certain means whereby, when it is desired to exert great power, the full pressure of steam can be made to act upon the larger piston.

Improvement in Melodeons.—This invention consists in the employment, in combination with any desirable number of the playing keys of a melodeon, or other reed instrument of similar character, of a system of hooks controlled by a pedal, for the purpose of keeping the keys depressed and prolonging the tones of the reeds for as long a time as desired after the removal of the fingers of the player from the keys. It also consists in operating the reed valve by means of levers, connected with the air chest by means of an air-tight fulcrum. It further consists in an improved device operated by a pedal, and combined with the receiving chamber of the bellows to reduce its capacity and have the effect of a soft swell on the tone of the reeds. This invention has been patented by W. H. Bigelow, of South Framingham, Mass.

The Pittsville (Pa.) Gazette states that an oil well was lately sunk near that place, which spouted a volume of oil 70 feet in height, and which for eight days past has been running at the rate of 800 barrels per day. It requires from eight to ten teams to carry off the barrels, and fifteen men to barrel it. The oil is very limpid, and the well is said to be "the biggest extant." It is 513 feet deep, and is sunk to the third sand stone series.

RECRUITING in Canada for the Union army is meeting with violent opposition from the local authorities. We do not wonder at it. Recruiting in the United States for the Crimean war came near leading us into serious trouble. We feel certain that the government has authorized no such movement, and will discountenance any attempts to recruit on Canadian soil.