

certain periods, on Natural Philosophy and Chemistry; the subjects for discussion will be announced in future.

RECENT AMERICAN PATENTS.

The following are some of the most important improvements for which Letters Patent were issued from the United States Patent Office last week; the claims may be found in the official list:—

Improved Governor.—This invention consists in making the rod which opens and closes the governor or throttle valve, or which bears a similar relation to the source of power and parts to transmit said power to the working machines, with a spring and with a fly-wheel, to which an intermediate rotary motion is imparted, in such a manner that when the intervals characterizing the intermittent motion are long and consequently the motion of the fly-wheel slow, the spring has power enough to overcome the momentum of the fly-wheel and to carry the valve rod back to its original position after each stroke or motion of the fly-wheel; but if the intervals characterizing the intermittent motion of the fly-wheel shorten, and in consequence thereof the circumferential velocity of the fly-wheel increases, the momentum of the fly-wheel overcomes the power of the spring, and the valve rod moves back so as to close the valve and regulate the speed of the engine or other machine with the greatest nicety and entirely independent of the position of the governor, rendering the same of peculiar value for the purpose of regulating the speed of marine engines. Peter Louis, of 220 Center street New York, is the inventor.

Machine for coating and flocking cloth.—The object of this invention is to coat cloth or textile fabrics in pieces a thousand yards, more or less, long, by machinery which applies the requisite coat of water-proof or other composition or varnish, and the flocks if desired, and at the same time conveys the cloth to a drying room and hangs it in folds upon stak or slats automatically. The long pieces of cloth are made up of shorter ones cemented or secured together as for calendaring. The process of coating is effected while the cloth is being conveyed to the drying room, and the machine at the same time delivers a series of newly-arranged lattice frames which are supplied to it at suitable intervals and upon the slats or rounds of these frames the cloth is deposited in folds, four or more yards upon each slat, according to the height of the room. Edwin M. Chaffee, of Providence, R. I., is the inventor.

Knitting Machine.—The object of this invention is to afford facility for what is termed narrowing and widening the work in circular knitting machines, bringing the parts nearer to or further from the center of the machine, and by reducing and increasing the number of loops in the circular courses. The invention consists, principally, in the employment in a circular knitting machine of separately-adjustable sinkers so applied in combination with the needles as to provide for their being set nearer to or further from the center of the machine and for the removal of any number of them at pleasure. It also consists in making the needle operating-cam adjustable for bringing the needles nearer to or further from the center of the machine, and in a device for adjusting the sinkers in a larger or smaller circle. It further consists in so combining the needle operating-cam, the device for adjusting the sinkers nearer to or further from the center of the machine, the yarn conductor, and the rotary-pressing burr, that they are all adjustable together toward and from the center of the machine. Charles W. Blakeslee, of Northfield, Conn., is the inventor.

Simple and Cheap Plan for Preserving Fruits.

A writer in the *Country Gentleman* says:—“Recently I have seen fruits put up upon a plan so cheap, so simple and so easily performed by any member of the family, that I am pleased to furnish it. The fruit is prepared and scalded in the ordinary way, and the jars closed while the contents are hot. The method of sealing is, by simply pasting over the mouth of the jar two thicknesses of stout manilla paper previously pasted together. Fruit thus put up for several years has kept perfectly sweet and sound as when put up in the best ‘self-sealing’ cans or jars.

To render the preservation doubly sure to inexperienced persons, I would suggest several improvements upon the plan. First, I would close the jar with a cork before pasting; this would prevent any moisture coming in contact with the paper, in case the jar should be turned on one side. Second, To be sure to guard against any opening through which the air could enter, owing to any improper pasting, I would put the two pieces of paper in separately, making the outside half an inch larger, so as to extend a little below the first around the neck of the jar, thus covering any defect that may have been left in the first, firmly pasting both together; and last, I would cover the whole with a thin coat of shellac or gumarabic. The whole process is very simple, more easily prepared than any that I have seen practiced.”



ISSUED FROM THE UNITED STATES PATENT-OFFICE
FOR THE WEEK ENDING SEPTEMBER 20, 1864.

Reported Officially for the Scientific American.

37 Pamphlets containing the Patent Laws and full particulars of the mode of applying for Letters Patent, 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.

44,273.—Corn Planter.—J. Armstrong, Jr., Elmira, Ill.: I claim, first, The friction rollers, d, d, placed in the loops, E, in combination with the treadle frame, E, as and for the purpose specified.

Second, The stirrers, P, when arranged or hung so as to be operated from the slide, K, substantially as herein set forth. [This invention relates to a new and useful machine for planting corn, both in hills and drills, and it consists in a novel arrangement of the framing, whereby the part on which the seed dropping mechanism is placed, and the part in which the wheels are fitted may have a certain action or movement independent of each other, and the framing allowed to conform to the inequalities of the surface of the ground over which it passes.]

44,274.—Cattle Pump.—John B. Atwater, Chicago, Ill.: I claim, first, The apparatus consisting of the cylinders, A and B, connected by the pipe, C, and provided with the discharge pipe, H, operating in combination with the piston, D, and tilting platform in position by means of the spring catch, e, or its equivalent.

Second, In combination with the foregoing I claim regulating and adapting the apparatus to be operated by animals of various weights, by means of weights applied to the box, b, substantially as specified. Third, I claim securing and holding the piston, D, and tilting platform in position by means of the spring catch, e, or its equivalent.

44,275.—Stitch for Soles and Vamps.—Lyman R. Blake, Quincy, Mass.: I claim the employment of the new stitch for uniting soles and vamps of boots and shoes, and for a similar use in other manufactures, in the manner substantially as described.

44,276.—Windlass.—Marcus Bockman, Brooklyn, N. Y.: I claim the shafts, C D E, cog wheels, F F H, levers, K, and spools, Y, in their specified combination on the bench, B, constructed and arranged substantially as specified.

44,277.—Harvesting Machine.—Jeremy Bradley, Cedar Falls, Iowa: I claim, first, The combination of an endless chain-raking apparatus having horizontal riving shafts, with the jointed shafting, d, m, sliding piston, k, side gear, J, and lever, L, arranged and operating substantially as described.

Second, The toothed segments applied to guide, H, in combination with rakes which are pivoted to, and operated by, endless chains, and otherwise constructed and adapted for being brought into raking position by said segments, substantially as described. Third, The combination of open slatted platform, e, endless chain of rakes and toothed segments, for turning the rakes at the commencement of the raking stroke. Fourth, The combination of the two levers, L L', pistons, K K', inclined shafts, m m', driving wheel, N, cutting apparatus, and endless chain of rakes, all arranged and operating substantially as described.

44,278.—Mode of connecting Cars to Trucks.—Alfred Bridges, Newton, Mass.: I claim, first, In railroad cars the spring, H, on the truck frame, so combined and arranged with the suspension rod, G, or its equivalent, that it controls both vertical and side motions, substantially as herein set forth.

Second, I claim the combination of the two springs, H and N, with the truck frame, D, d, substantially in the manner and for the purposes herein specified. Third, I claim the thimble, h, when used with the spring, H, truck frame, D, d, suspension rod, G, and pedestal, F, substantially in the manner and for the purposes herein specified.

44,279.—Bed Bottom.—James Bromiley, Pawtucket, R. I.: I claim a bed bottom composed of slats, B, connected at their ends to elastic straps, C, by means of clamps, F, constructed and applied as shown, and the straps, C, secured to the head and foot rails of the bedstead by means of the hooks, D, fitted in the straps, substantially as described.

[This invention relates to a new and improved bed bottom of that class which are composed of a series of parallel slats, connected at their ends by elastic straps to the head and foot rails of the bedstead. The invention consists in a novel manner of attaching the elastic straps to the slats, and also in attaching said straps to the head and foot rails of the bedstead, whereby all rails, screws, and bolts are avoided, the slats and bands readily connected and disconnected, and also readily applied to the bedstead, and a greater or less number of slats used, as circumstances may require.]

44,280.—Fruit Basket.—Henry Carpenter, New York City: I claim a peach or fruit basket, provided with a vertical central

partition and lids or covers, substantially as herein shown and described.

[This invention consists in having the basket made of double the capacity of these now used for holding peaches and other fruit, and providing the same with a central partition and two lids, as herein after fully shown and described, whereby the expense of transportation is reduced one-half, and the baskets rendered capable of being stowed one on the top of the other without having their contents injured.]

44,281.—Apparatus for coating and flocking Cloth.—Edwin M. Chaffee, Providence, R. I.:

I claim, first, The rollers, A C F G I J K L, and doctor, E, or their equivalents, arranged in relation to each other and to the cloth, substantially in the manner herein described, so that long pieces of cloth can be coated and conveyed to the drying room without bringing the face or varnished side of the cloth in contact with the rollers or anything else except the edge of the doctor.

Second, The employment or use of two toothed wheels, j, arranged substantially as herein specified, to check the fall of the cloth at the desired intervals.

Third, The jointed arms, k, l, in combination with the toothed wheels, j, to act substantially as and for the purpose set forth.

Fourth, The combination of the rock-shaft, m, adjustable arms, k, l, and wheels, j, substantially as herein specified, to insure the simultaneous catching of both edges of the cloth.

Fifth, The employment of the lattice frames, N, substantially in the manner set forth for the purpose of supporting the cloth while in the drying room.

44,282.—Pump.—John K. Cobick and Jacob Fesher, Mountville, Pa.:

We claim the action of the pump, P, by means of the oscillating beam, c, and jointed connecting rods and piston, f, d, in connection with the crank, XI, and triple gearing when operated by a weight and pulley, in combination with a fly-wheel, X, and lever arm, L, click, n, and ratchet, m, and side support, t, all constructed and operating substantially in the manner and for the purpose specified.

44,283.—Spinning Machine.—E. C. Cleveland, Worcester, Mass.:

I claim, first, Enclosing the lifter, C, and the clock and their appurtenance within the arch and one of the posts of the frame, substantially as described.

Second, The locking slide, e, constructed and operated substantially as shown, for locking the lifter, C.

Third, The lifter, C, for operating the clock, constructed and operated substantially as shown.

Fourth, Adjusting the relative positions of the hand wheel shaft and the tin cylinder shaft, in the manner substantially as described.

Fifth, The combination of the bearing of the hand wheel shaft with the means employed for adjusting the inner end of the shaft, substantially as described.

[This invention consists in certain improvements in the construction of jacks whereby I am enabled to place the clock, for indicating the amount of work done, and its mechanism within the frame of the jack; and also in the construction of the mechanism for causing the clock to indicate the work of the jack, and in the manner of operating said mechanism, and also in the manner of constructing and adjusting the bearings of the shaft which drives the shaft of the tin cylinders.]

44,284.—Washing Machine.—Luiman W. Cook, Dowagiac, Mich.:

I claim, first, The arrangement and combination of vibrating arms, B, longitudinal arms, C, raised boards, g, and levers, E, substantially as described.

Second, The application of the beaters, D, to longitudinal swinging arms, C, in combination with the divisions, a, g, g, and vibrating levers, E, substantially as described.

Third, The arrangement of the vibrating arms, B, longitudinal arms, C, and vibrating levers, E, within a wash-box, constructed substantially as described, in such manner as to admit of the ready removal and replacing of said parts, as herein described.

44,285.—Composition for preserving and Water-proofing Vegetable Tubers.—George A. Cowles, Jesse P. Chase, and Victor Viorow, New York City:

We claim, first, The use of a composition of alum and blue vitriol, mixed together, substantially in the manner and about in the proportion above set forth.

Second, The use of a composition of alum and vitriol, mixed with gelatine, or with soap, or with a mixture of gelatine and soap or oil, substantially in the manner and about in the proportion specified.

Third, The employment of acetate of lead, with or without gum arabic, in combination with the ingredients hereinbefore named and mixed together, substantially in the manner and about in the proportion set forth.

[This composition has been applied with great success to sails and other similar articles exposed to the influence of the atmosphere, also to clothes and other textile material.]

44,286.—Clasp for Shoe Lacings.—William E. Darrah, Middletown, N. Y.:

I claim, as an improved article of manufacture, a clasp for lacings, made in one piece, but with double string plates, a, b, disconnected at the outer corners, and central channel, c, all as herein shown and described.

[The object of this invention is a clasp, produced by folding over a piece of sheet metal in such a manner that the plates or jaws are formed with a suitable opening to let the strings of a shoe, or lacing of any other description, pass freely, and to return the ends of said strings or lacings, when the same are drawn midway between the two plates or jaws.]

44,287.—Skeleton Skirt.—Theodore D. Day, Brooklyn, N. Y.:

I claim, first, Forming the hoops of the skirt with joints at the back, so that the springs or hoops will fall more easily when the person is seated, as set forth.

Second, I claim uniting the ends of the springs or hoops of a skeleton skirt, by means of the tapes or strips receiving the said ends, in the manner specified.

44,288.—Potato Digger.—Daniel N. Denman, Millburn, N. J. Ante-dated Sept. 5, 1864:

I claim in a potato digger, of the construction specified, arranging the two driving wheels, P P', directly behind the landsides, C C', as herein described and for the purposes specified.

[This invention consists in the employment or use of an inclined curved screen, provided with a share and landside, and having a toothed shaft placed underneath the back and curved part of the screen; the teeth of the shaft working through the screen, and the shaft being rotated by a traction wheel placed behind one of the landsides, whereby a very simple and efficient potato digger is obtained, and one that may be advantageously used for cultivating or preparing the earth for the reception of seed, etc.]

44,289.—Cattle Pump.—Joseph A. Dickson, Sandwich, Ill.:

I claim the radius frame, D, provided with the trough, J, and connected with a pump, or any suitable water-elevator in such a manner that the animal in its effort to drink will rotate the frame, and thereby actuate the pump and supply the trough with water, substantially as set forth.

I further claim the way, B, in connection with the frame, D, provided with the water receptacle, I, and trough, J, or its equivalent communicating with each other by a trough or tube, I, all arranged to operate substantially as and for the purpose specified.

[This invention relates to a new and improved pump by which cattle themselves may pump up at will the water they require for drinking purposes. The invention consists in having an elevated annular way around and concentric with an ordinary section or force pump, and having one end of a frame fitted loosely on the pump and the other end extending out to the way, said frame having a trough at