

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:—

**Machine for Cutting Sheet Metal.**—This invention consists in the use of two pairs of shears adjustable for any desired bevel and length, and applied in combination with a treadle or other suitable mechanism, in such a manner that the bevel end from curved pieces of sheet metal can be cut with little loss of time and with perfect accuracy; it consists, further, in the application of adjustable gages in combination with the adjustable shears, in such a manner that the apparatus can be readily set for pieces of sheet metal of any desired width; it consists, finally, in providing the shears with crooks in the cutting edges, fitting one another in such position that by their action the pieces of sheet metal are notched at the same time the bevel ends are cut off, and each piece, when taken from the shears, is ready for soldering without requiring any further proposition. Hosea Low, of Waukon, Iowa, is the inventor.

**Combined Hydraulic and Pneumatic Pump.**—This invention relates to a pump for raising water from deep wells or reservoirs, and is more especially designed for oil wells, mining purposes, etc. The invention consists in the use of an air pump in connection with a water receiver arranged in connection with valves and pipes in such a manner that water and other fluids may be raised from great depths by means more simple and less expensive than the force pumps now used for such purposes. G. M. Woodward, of New York city, is the inventor.

**Steam Boiler.**—This invention consists of certain improvements in the construction of vertical steam boilers, wherein a combustion chamber is employed, and the flues, both downward and upward, are made to pass through the water space, and wherein the upper parts of the apparatus are so arranged that the products of combustion and heated gases are made to superheat the steam in the steam space of the boiler. Thomas Main, of Green Point, N. Y., is the inventor.

**Operating Slide Valves.**—This invention consists in a novel mode of operating slide valves of steam engines, so that they may be made to cut off steam at any desired part of the stroke, and be also moved with a quick stroke, one of the features of the invention being the communication of the motion of the valve stem to the valve through a vibrating lever whose upper end, which is free, is made the fulcrum of the said lever. John B. Cochrane, of Brooklyn, N. Y., is the inventor.

MARKET FOR THE MONTH.

During the month of May the price of gold fell from 150 to 130, and recovered to 137, most other values, of course, going down and up with it. The following are the comparative rates at the beginning and close of the month:—

|   | Price April 26. | Price May 31.   |
|---|-----------------|-----------------|
| Coal (Anth.) 2,000 lb. . . . .                | \$11 00         | \$9 00          |
| Coffee (Java) 100 lb. . . . .                 | 33 @ 35         | 33 @ 36         |
| Copper (Am. Ingot) 100 lb. . . . .            | 34 @ 36         | 30              |
| Cotton (middling) 100 lb. . . . .             | 50 @ 51         | 51              |
| Flour (State) 100 bbl. . . . .                | \$7 00 @ 7 90   | \$5 85 @ 6 95   |
| Wheat 100 bush. . . . .                       | 2 20 @ 2 50     | 1 90 @ 2 20     |
| Hay 100 lb. . . . .                           | 1 32            | 1 00            |
| Hemp (Am. drs'd) 100 tun. . . . .             | 275 00 @ 350 00 | 260 00 @ 270 00 |
| Hides (city slaughter) 100 lb. . . . .        | 8 @ 9 1/2       | 8 @ 9 1/2       |
| India-rubber 100 lb. . . . .                  | 51 @ 90         | 46 @ 75         |
| Lead (Am.) 100 lb. . . . .                    | 9 75 @ 9 87     | 8 25 @ 8 50     |
| Nails 100 lb. . . . .                         | 7 00            | 5 50 @ 5 75     |
| Petroleum (crude) 100 gal. . . . .            | 37 @ 37 1/2     | 35 1/2 @ 36     |
| Beef (mess) 100 bbl. . . . .                  | \$12 00 @ 20 00 | 10 00 @ 18 00   |
| Salt-peter 100 lb. . . . .                    | 28              | 25              |
| Steel (Am. cast) 100 lb. . . . .              | 14 @ 22         | 21 @ 22         |
| Sugar (brown) 100 lb. . . . .                 | 10 1/2 @ 15     | 9 1/2 @ 15      |
| Wool (American Saxony fleece) 100 lb. . . . . | 75 @ 85         | 75 @ 77         |
| Zinc 100 lb. . . . .                          | 13 1/2 @ 14     | 12 @ 12 1/2     |
| Gold. . . . .                                 | 1 51 1/2        | 1 37            |
| Interest. . . . .                             |                 | 6 @ 7           |

MISCELLANEOUS SUMMARY.

COUNTRY readers, fond of toilette fineries, can perfume the water in which they wash by throwing violets into the pitcher, and letting them remain for some hours.

THERE is a paper collar manufactory in Springfield, Massachusetts, that turns out ten thousand dollars worth a day.

**To SOFTEN IVORY.**—In three ounces of spirits of niter and fifteen of spring water, mixed together, put your ivory a soaking. In three or four days it will be soft so as to obey your fingers.

To dye ivory thus softened dissolve in spirits of wine such colors as you want to dye your ivory with. And when the spirit of wine shall be sufficiently tinged with the color you have put in, plunge your ivory in it, and leave it there till it is sufficiently penetrated with it, and dyed inwardly. Then give that ivory what form you please.

To harden it afterwards, wrap it up in a sheet of white paper, and cover it with decrepitated common salt, crumbled by heat, and the driest you can make it to be; in which situation you shall leave it only twenty-four hours.—*Ancient Work.*

**QUALITY OF MILK.**—It is sometimes forgotten that the last gill of milk drawn from the cow's udder is the best part of every milking. Careful experiments made in England, (according to a report lately published), prove that the quality of cream obtained from the last cup taken from most cows exceed that of the first in proportion of twelve to one. The difference in the quantity also is considerable. Hence, a person who carelessly leaves one pint unskimmed loses in reality as much cream as would be afforded by six or eight pints at the beginning, and loses, too, that part of the cream which gives the richness and flavor to the butter.

A NEW company for the manufacture of pocket cutlery has been formed at Rochester, Pa., under the title of the "Pittsburgh Cutlery Company." The men comprising it are all practical English workmen. They will employ from forty to fifty hands, beside using all the most improved machinery.

If you have a lathe job to do, clean your lathe first, keep it clean while you are at work, and clean it when you get done. The lathe will last longer, the work will be better, and you will get a reputation for neatness.

THE owner of the McRae farm, 160 acres, lying east of the Coquette well has been offered and refused \$900,000 for it.



ISSUED FROM THE UNITED STATES PATENT-OFFICE FOR THE WEEK ENDING MAY 30, 1865. Reported Officially for the Scientific American.

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.

**47,911.—Waxed-thread Sewing Machine.**—Hosea P. Aldrich, Spencer, Mass., assignor to himself and George Jenks:

I claim, First, Heating the pressure pad and cloth plate of a sewing machine, or either of them separately, by steam or otherwise, for the purpose of preventing waxed thread from sticking thereto while passing through the machine, substantially as and for the purpose specified.

Second, Inclosing the tension wheel, or other tension device of a sewing machine, over which the waxed thread passes in a heated chamber or casing, for the purpose of preventing waxed thread which passes around it from sticking thereto, substantially as herein described.

Third, Combining with the steam chest of the wax receptacle, D, the casing which contains the tension wheels, substantially in the manner and for the purposes specified.

Fourth, The combination with the wax receptacle D, and its steam chest, A, the pipes, G O K, hollow pressure pad, B, and hollow cloth plate, C, substantially as and for the purposes specified.

**47,912.—Thread-waxing device for Sewing Machine.**—Hosea P. Aldrich, Spencer, Mass., assignor to himself and George Jenks:

I claim, First, The combination of the wax-receptacle, A, with the water tank, U, water jacket, E, and chimney, C, substantially as and for the purposes described.

Second, Attaching the wax receptacle to the sewing machine by passing a rod through the hollow tube, I, which tube performs the function of a thread guide for immersing the thread under the surface of the wax, substantially as herein described.

Third, The combination of the tube, L, india-rubber plug, O, and screw, M, substantially as and for the purposes described.

Fourth, Making the india-rubber plug, O, convex at both its ends, in combination with socket of tube, L, and that on screw, M, substantially as and for the purposes set forth.

Fifth, The application to thread-waxing devices of the tube, L, when constructed as and for the purposes described.

**47,913.—Shade Holder for Lamps.**—Lewis J. Atwood, Waterbury, Conn.:

I claim, First, The combination of mortises and rivets or eyelets, with the springs for securing the latter to the ring, as set forth.

Second, In combination with the springs for holding the lamp shade upon the chimney, I claim the ring formed of thin sheet metal, stiffened by corrugations running around it, for the purposes and as specified.

Third, I claim securing the exterior ring by projections from the springs, in the manner set forth.

**47,914.—Compound for Removing Scale from Boilers.**—Albert B. Aner, Babcock's Grove, Ill. Antedated April 27, 1865:

First, I claim the compound herein described composed of gum catechu, salt and saltpeter, substantially as and for the purposes specified.

Second, I claim, in combination with a compound for removing boiler incrustations, the employment of flaxseed, as and for the purposes herein described.

**47,915.—Desk.**—Frederick Baltz, New York City:

I claim the arrangement and combination of the levers, B C and D, with the desk and cover of the desk or table, and with the furniture, in such a manner that the opening or shutting of the cover or door will pull the desk outwards or inwards, substantially in the manner and for the purpose described.

**47,916.—Potato Digger and Separator.**—John M. Bartlett, Harmer, Ohio:

I claim, First, The combination of the iron frame, A2, scraper, E, endless apron or chain, F, main shafts, G, spur wheel, H, with gearing, as stated, or their equivalent, by means of which the machine is made to dig and automatically separate potatoes, as set forth.

Second, The platform, X, in combination with the chute, Y, and sacking device, X', in the manner and for the purpose set forth.

**47,917.—Apparatus for Applying Paint to Stencil Plates.**—Caleb Bates, Kingston, Mass.:

First, I claim the apparatus herein set forth for applying paint or ink to stencils, constructed and operated substantially as above described.

Second, I claim the plate, I, for compressing the brush at the time it receives paint or ink from the hopper, substantially as above described.

(This invention consists in an apparatus for applying paint or ink to stencil plates by means of a revolving brush, to whose surface the paint is applied from a hopper, the brush and hopper being carried upon a truck, which is made to travel over the stencil plates, and the brush being revolved by means of gearing which is connected to one of the shafts of the truck.)

**47,918.—Coupling Conducting Wires.**—G. W. Beardslee, College Point, Long Island, N. Y.:

I claim for effecting the insulating coupling or union of electric conductors, the combination of the metallic disks, or the equivalents thereof, on the conductors, the coupling tube and nut, or its equivalent, and the elastic plug interposed between the metallic discs and the coupling tube and nut, substantially as and for the purpose specified.

**47,919.—Hay Spreader.**—Horace Beers, Brookfield, Conn., assignor to Smith & Burham:

I claim the employment of the revolving head piece, D, provided with spirally-arranged teeth, in combination with the supporting pieces, E E', and with the movable journal box, J, all arranged in the manner and for the purposes substantially as herein described and set forth.

I also claim the arrangement and combination of the coil springs, L, platform, M, and lever, K, in the manner and for the purposes substantially as herein described and set forth.

**47,920.—Bridge.**—John Boles, Jr., Boston, Mass.:

I claim the combination as well as the arrangement of the lacing, b, with the truss composed of the posts, top and bottom chords, braces and vertical tie rods, as specified.

I claim the construction of the truss with the arrangement of the several curved braces, and the several curved counter braces diverging with respect to each other, as described, whereby the crossings thereof are increased from the top to the bottom chord, as specified, and in combination therewith I claim the two tension wires or cables, c, c, arranged as specified.

**47,921.—Sorghum Evaporator.**—Jesse Brockway, Oswego, Ill.:

I claim, First, In combination with an evaporator, the heater, B, constructed and operated as and for the purposes specified, substantially as described.

Second, In combination with an evaporator, the damper, E, constructed and operated as and for the purpose specified, substantially as set forth.

Third, In combination with an evaporator having various compartments, the conductor, C, when used as and for the purpose specified, substantially as set forth.

Fourth, In combination with an evaporator having various compartments, the gates, D, constructed and operated as and for the purpose described.

Fifth, An evaporator, or having sides that overlap the furnace upon which it rests, and extending down the outside thereof, for the purposes specified, substantially as set forth.

**47,922.—Piano-forte Action.**—Stephen P. Brooks, Somerville, Mass. Antedated May 21, 1865:

I claim the combination of the hammer arm, D, with the standard, C, and fly lifter, F, in connection with the escapement on the rail, G, substantially as and for the purpose specified.

I also claim extending the hammer arm through and in the rear of the standard, in connection with the back catch, H, for the purpose of holding the hammer after the blow is struck, as set forth.

I also claim placing the back catch, H, in the rear of the hammer arm, substantially in the manner and for the purpose specified.

I also claim the combination of the standard, C, upon the key lever, B, the hammer arm, D, the fly lifter, F, with the button and spring, the escapement, g, and the back catch, H, substantially as shown and described.

**47,923.—Damper for Stovepipes.**—H. C. Brown, Buffalo, N. Y.:

I claim the combination and arrangement of the annular disk, C, and hollow perforated cones, D D', with the pipe, A, substantially as and for the purposes herein specified.

**47,924.—Washing Machine.**—Hiram Brown, Burton, Ohio:

First, I claim the beaters, H, when constructed and arranged as herein specified, in combination with the ribs, F, for the purpose set forth.

Second, I claim the slotted arm, H', in combination with the arm, p, plate, n, lip, p', and key, l, when constructed and arranged in the manner, substantially as and for the purpose set forth.

**47,925.—Blasting Rock.**—George C. Bunsen, Belleville, Ill.:

I claim the application for blasting purposes of a disk, a, when used either with a cylinder, d, or support, c, or in combination with both cylinder and support, substantially in the manner and for the purposes specified.

**47,926.—Harvester.**—Wm. H. Burkhart, Bucyrus, Ohio:

First, I claim arranging the spring, l, so that it is pendant from near the reel shaft, upon the reel post, and so that it supports the pulley, s, near the lower end of the reel post, in the manner and for the purpose described.

Second, The arrangement of the pendant spring, l, swivelling pulleys, s, reel shaft, 3, pulley, 4, and driving chain or cord of the reel, in the manner and for the purpose described.

**47,927.—White wash Brush and Handle Attachment.**—W. B. Burtriet, New York City, and J. P. McIntosh, Brooklyn, N. Y.:

First, We claim securing a handle to a brush by means of a screw fastener, which is applied to the rounded portion, D, constructed substantially as described.

Second, The adjustable section, C, having a screw formed on it, in combination with a hemispherical slotted speed, D, and ferrule, E, substantially as described.

**47,928.—Die for Spike Machine.**—Samuel Cameron, Pittsburgh, Pa. Antedated May 17, 1865:

I claim the use of dies for spike machines made to overlap each other, each having two convex operative faces at right angles to each other, one such face being horizontal and the other perpendicular, for the purpose of making spikes with fluted shanks, substantially as described.

I also claim the use of a removable clip for forming the point of the spike, so constructed as hereinbefore described, as that its operative