

HAND PRINTING PRESSES—J. N. Phelps, of New York City: I claim, first, The combination and arrangement of the radial pins, T, on the transverse shaft and shoulder cam, S, on the sides of the lever, N, oscillating arm, J, spiral springs, U, for moving the same automatically, and spiral springs, M, for pressing the ink roller in contact with the printing rollers, Q, R, when receiving the ink from the same, and in contact with the face of the type in the form secured to the under part of the platen, G, substantially in the manner and for the purpose described.

Second, I claim arranging the ink rollers, Q, R in the relation to each other and to the ink roller, K, at the lower end of the bars or arms, J, and the lower surface of the platen, G, when raised as described, and in combination therewith.

Third, I claim the segmental shield or plate, P, so arranged in relation to them and the corresponding segmental formed arm or support, C, as to thoroughly protect the sheets of paper being imprinted, from contact with the said ink rollers, and enable its edges to be moved upward in the space between the shield or plate, P, and arm or support, C, substantially in the manner as described.

LIFTING HANDLES—Joseph B. Sargent, of New Britain, Conn.: I claim, first, handles having been made with projections similar to D, for the purpose of striking on the plate, to prevent the handle from being raised above its proper position when in use.

Second, I claim the arrangement of the beaters or blades, I, J, at varying distances, in combination with the yielding plates, K, as and for the purposes shown and described.

Third, I claim a series of reciprocating beaters are employed, operating or working between stationary blades placed in oblique position relatively with the reciprocating beaters, and consecutively in a reverse position relatively with each other.

Fourth, I claim the combination of the slate with the book, when so connected and arranged that the slate can be used with equal convenience and facility with each page of the book, while the page and the slate are continually before the eye of the user, as represented in Fig. 1, and the whole is constructed and connected substantially as described.

Fifth, I claim the combination of the upper detachable portions, A', and the permanent seats, A, piece of cushion or web, B, C, or D, or other material, capable of being packed in the boxes, B, of the seats, the whole being constructed, arranged and operated substantially as described.

Sixth, I claim the combination of the upper detachable portions, A', and the permanent seats, A, piece of cushion or web, B, C, or D, or other material, capable of being packed in the boxes, B, of the seats, the whole being constructed, arranged and operated substantially as described.

Seventh, I claim the combination of the upper detachable portions, A', and the permanent seats, A, piece of cushion or web, B, C, or D, or other material, capable of being packed in the boxes, B, of the seats, the whole being constructed, arranged and operated substantially as described.

Eighth, I claim the combination of the upper detachable portions, A', and the permanent seats, A, piece of cushion or web, B, C, or D, or other material, capable of being packed in the boxes, B, of the seats, the whole being constructed, arranged and operated substantially as described.

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RUDDER FOR VESSELS—Silas Yerkes, Jr. (assignor to himself and George Yerkes), of Philadelphia, Pa.: I do not claim, broadly, making a rudder in two parts, and connecting them so as to act simultaneously, but independently of each other.

But I claim the gearing of the outer or aftermost of the two hinged portions of the rudder with a fixed gear or toothed arc attached to the vessel, substantially as and for the purpose specified.

[This rudder is made in two parts, called by the inventor the "main rudder" and "outside rudder." The former is hinged in the same manner as a common rudder, to the stern-post of the vessel, and the other one is hinged in a similar manner to the back of the fast one, and has secured to it a concentric toothed gear, which gears with a stationary toothed arc, concentric with the first one. The main rudder is operated in the usual way, and by its action the outside one is caused, by the arc and gear, to move faster in the same direction, and the two combined produce a greater effect on the water by a given movement of the steering apparatus than a single rudder presenting the same area of surface.]

RE-ISSUES.

MODE OF GENERATING HEAT—T. R. Hartell (assignee of Wm. Hartell and Jos. Lancaster), of Philadelphia, Pa. Patented Nov. 29, 1852: I claim the adaptation of, or rendering available, tar, as a fuel for the production of the intense and steady heat required for the melting of glass and for other processes and manufactures, by introducing water or the vapor of water into a furnace or fire place, in contact, combination with, or in close proximity to the tar, substantially as set forth.

SEWING MACHINES—I. M. Singer and E. Clark (assignees of John Bachelder), of New York City. Patented May 8, 1849: What is claimed is the combination of mechanism substantially such as is described, so that the cloth or fabric to be sewed being placed upon the machine will be automatically fastened on to the feeding apparatus, carried forward to receive the stitches, and discharged from the feeding apparatus, substantially as described, and so that seams of any desired length may conveniently be sewed.

CORN HARVESTERS—E. C. Manck and W. T. McGahay, of Conrad's Store, Va. Patented April 22, 1856: We claim, first, The rotary arms, p, in combination with eccentric guides, q, substantially in the manner and for the purpose specified.

Second, The employment of a double series of cutters, for cutting stalk and stump, as described.

ADDITIONAL IMPROVEMENT.

METHOD OF ATTACHING LAMPS TO LANTERNS—John F. Jones, of Philadelphia, Pa. Patented July 6, 1853: I claim the improved arrangement described, the same consisting in the attachment of the spring, D, and clips, E, E, to the lamp case, instead of to the lantern as and for the purpose specified.

DESIGN.

SHOVES—E. J. Cridge, of Troy, N. Y.

Monster Steam Hammer.

There is at present being constructed in Newcastle-on-Tyne, says the London Times of the 4th ult., by Messrs. Morrison & Co., engineers, of that place, a monster steam hammer, ordered by the Russian government. It is the largest ever constructed on the Tyne, and is of most gigantic proportions. It is constructed on the principle of Messrs. Morrison's patent. The hammer bar and piston are forged in one solid mass. The diameter of the bar is thirteen inches, and that of the piston thirty-one inches, and the total weight of this portion of the hammer exceeds five tons. It was forged by a two-ton hammer of similar construction. The cylinder stands on two frames of three feet in width, and there is a clear working space of fourteen feet between them. The frames arch overhead, and clasp the cylinder, the whole being securely fitted and bolted together, and forming one solid mass. The total height from the ground to the under side of the frame is nine feet four inches, and the total height of the hammer itself is eighteen feet, the hammer having a clear fall of six feet. The ingress and egress of the steam is regulated by a double balance piston valve, which is worked by hand, by means of a long lever reaching from the valve to a staging, on which the engine-man stands. The number and force of the blows can be regulated, by means of this valve, to the most astonishing nicety, so great being the command which the workmen have over this immense mass, that it can be arrested in a moment, while in the act of falling. One of the great features of this hammer is the entire absence of all complication in its construction, so great, indeed, that it hardly looks complete as it stands, and it seems impossible that one lever could make various changes of movement and varieties of blows, so necessary to forge work, but this is the case. It is very well suited for the rough work it has to undergo, and is peculiarly adapted to be used in countries where—as in Russia—skilled labor is scarce, as it is almost impossible for any portion of it to get out of repair. The breaking of piston rods and cylinder rods, so common in other hammers, cannot occur here, as the hammer bar or piston rod is of such enormous dimensions, and is forged solid in the piston, the two combined forming

the whole weight of the hammer. This novel machine is just completed, and will, in a few days, be shipped for St. Petersburg.

Domestic Recipes.

ARTIFICIAL FLOWERS.—The beauty of these imitations of the floral world depends upon the taste and skill of the makers. The delicate fingers of woman and her quick powers of imitation, combined with an exquisite taste for the beautiful in nature, enables her to excel in this branch of art, which at present is carried to the highest pitch of perfection in the French capital. Although all the finest qualities of our artificial flowers are imported, still great quantities of them are manufactured in New York City, and they may be imitated by many females as a domestic recreation affording much pleasure. The materials required for them are velvet and fine cambric for the petals, and taffety for the leaves, with thin whalebone or wire for the stems. These are cut into the proper forms and pasted together with a solution of gum-arabic. The colors to produce the shades are put on with a fine hair pencil in the same manner as drawings are colored and shaded. Carmine is employed to produce the red and pink colors; the yellow is a tincture of turmeric; green of distilled verdigris; blue neutralized sulphate of indigo; and purple a tincture of orchil or logwood and the oxyd of tin. Great care is necessary in the employment of these colors.

TO CLEAN GLOVES.—Lay them on a clean board, and first rub the surface gently with a clean sponge and some camphene, or a mixture of camphene and alcohol. Now dip each glove into a cup containing the camphene, lift it out, squeeze it in the hand, and again rub it gently with the sponge, to take out all the wrinkles. After this gather up the cuff in the hand, and blow into it to puff out the fingers, when it may be hung up with a thread to dry. This operation should not be conducted near to a fire, owing to the inflammable nature of the camphene vapor. The receipts given in all the printed books we have consulted for cleaning gloves are barbarous.

MAHOGANY STAIN.—The color of mahogany may be imitated with a strong solution of logwood and fustic put on boiling hot with a brush. The color can be reduced to any depth of shade according to the strength of the liquor employed. After it is quite dry the wood should be varnished and afterwards polished. A varnish made with dragon's blood dissolved in alcohol, and applied in two or three coats will make a very good imitation of mahogany. When dry it should be rubbed down with rottenstone and oil.

ROSEWOOD STAIN.—This is made of a strong solution of logwood and red wood, commonly called hyperic. It is put on the wood when hot with a brush, the dark lines being produced by giving two or three coats, and the light shades one. By washing over the surface of this stain with a weak solution of saleratus, it will receive a bluish tinge and appear of a darker shade. When dry, use any kind of varnish for the production of a polished surface.

YELLOW STAIN.—A decoction of turmeric and a little alum, or the grounds of beer and a little sulphuric acid, makes yellow stain on white wood. Dilute nitric acid brushed over white wood, then exposed to the heat of a stove, also makes a yellow stain; this is the most convenient one for imitating maple.

BROWNING GUN BARRELS.—Mix one ounce of nitric acid and four ounces of the sulphate of copper in a pint of water, and apply this to the surface of the barrel, and set it aside to rust for two days. The barrel must now be rubbed with a stiff brush, washed with lime water, dried, and afterwards varnished. It is sometimes necessary to apply two and three coats of the acid solution to obtain a proper coating of oxyd. The lime water neutralizes any free acid that may be left on the iron.