WING'S CRIMPING MACHINE.

After all the complicated contrivances that have been introduced into the construction of machines for crimping leather, it is a relief to see the operation as perfectly performed by so neat, cheap and simple a machine as is illustrated in the accompanying cut.

The leather, A, Fig. 1, to be crimped is folded around the lower edge of the crimping bar, C, to which it is secured by the clamp represented in Fig. 2. A cast iron block, C, fitted to straddle the upper edge of the clamping bar, has its outer edges serrated, and the screw, *d*, passing through its middle. Straddling the block, C, is the block, B, through which passes loosely the smooth part of the screw, *d*. It will be seen that as the screw, *d*, is turned, the block, C, is drawn upward towards the block, B, griping the edges of the leather between the serrated parts of the two blocks; and if the turning of the screw is continued, both blocks are drawn upward, stretching the leather around the lower edge and along the sides of the crimping bar. The crimping bar is pivoted at one end, *e*, and after the leather is secured, it is forced down between the jaws, F, by means of the pinion, *g*, acting upon the rack, *h*. The jaws, F, are secured to the frame of the machine by loose bolts, and their distance apart is controlled by a screw which has the crank, *i*, upon its end, for turning it. This arrangement is for the purpose of adjusting the space between the jaws to leather of various thicknesses.

Besides the remarkable simplicity of this machine, it is manifest that it is convenient for its purpose, easily operated, durable, and can be afforded at a very small price. The patentee is manufacturing the machine and offers them for sale.

The patent for this invention was granted July 31, 1860, and further information in relation to it may be obtained by addressing the patentee, Horace Wing, at Buffalo, N. Y.

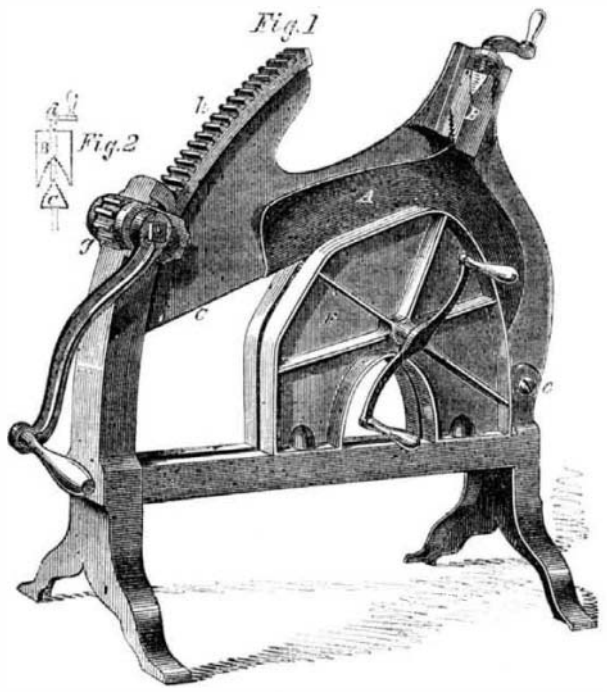
HOW TO KEEP SWEET POTATOES.

A correspondent of the Oskaloosa (Iowa) *Herald* gives the following method of keeping the sweet potato through the winter:—"I use dry sand and put them in; it does not matter how the sand is dried—in a kiln, in a log heap, or in the sun, so that it is dry, that is all that is required. I prefer drying in a log heap, as it costs four times less and is just as good. Any family that has a little room with a stove in it, may keep a box or two of eight or ten bushels without much inconvenience. The boxes must be raised six or eight inches from the floor, and they must not be nearer than four inches from the wall. Fill the box with potatoes, and then put in sand; cover the potatoes with sand. There is a good deal said about kiln-dried sand, but it is all fudge. I have also known them to be kept well in buckwheat chaff. In order to keep potatoes with success, there must be a thermometer kept in the room. The mercury must not sink below 40°; if it does, the potatoes will chill and rot; it also must not rise above 60°, or they will grow. I never lost any of my potatoes except by letting the room get too cold. A thermometer only costs a dollar, and every man ought to have one."

NEW PROCESS OF GILDING AND SILVER-PLATING.

We learn from *Le Génie Industriel* that a new process of silver-plating and gilding has recently been patented in France by MM. Peyraud and Martin, which has some decided advantages over any processes heretofore in use, as the substances are applied cold with a pencil, and can thus be placed on any part of the object to be plated.

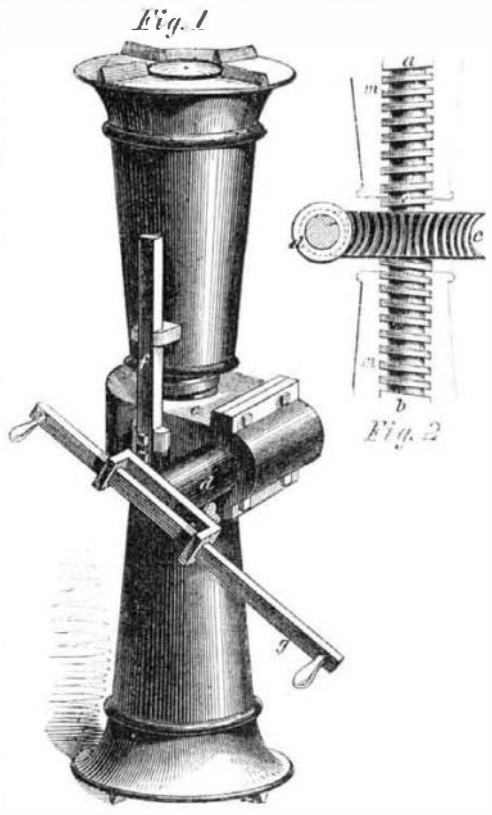
For gilding, 10 grammes of laminated gold are mixed with 20 grammes of hydrochloric acid and 10 grammes of nitric acid. The liquid thus composed is placed over a moderate fire and stirred constantly until the gold passes into the state of the chloride. It is allowed to cool, and then dissolved in 20 grammes of distilled water. A second liquid is formed by dissolving 60 grammes of the cyanide of potassium in 80 grammes of distilled water. The two liquids are mixed together in a decanter, stirred for twenty minutes, and then filtered. Finally, 100 grammes of whiting, dry and sifted, are mixed with 5 grammes of pulverized cream-of-tartar. This new powder is dissolved in a portion of the above-described liquid, in sufficient quantity to form a paste of the proper consistency to be spread with a pencil on the object or part to be gilded. The superabundant powder is then removed from the object by washing it and cleaning it with a brush.



WING'S CRIMPING MACHINE.

For silver-plating, 10 grammes of nitrate of silver are dissolved in 50 grammes of distilled water; then 25 grammes of cyanide of potassium in 50 grammes of distilled water. The two liquids are mixed in a decanter and stirred during ten minutes, then filtered. Finally, 100 grammes of sifted whiting are mixed with 10 grammes of pulverized cream-of-tartar and 1 gramme of mercury. This powder and the dissolving liquid are used in the same manner as directed for the gilding operation.

KEARNEY'S IMPROVED SCREW JACK.



One of the most convenient implements in various industrial operations is the lifting jack, and it is surprising that it is not in more general use. There is hardly a large farm in the country on which one of these convenient little implements would not pay for itself every year. At present its employment is mostly confined to heavy operations, like the raising of buildings, upon railroads, &c., though it is the practice, in some parts of the country, among the drivers of large teams, to carry a jack on the road for use in greasing the axles of a loaded wagon, or in lifting a wheel out of the mire in case of need. The convenience of the implement is, however, forcing itself upon the attention of the community more generally, and the larger demand is stimulating inventors to make improvements in the article. The one here illustrated was invented by William Kearney, of Newark, N. J., and its advantages will be readily understood from the following description:—

A stout screw, with the thread upon its two ends, *a* and *b*, running in opposite directions, fits into the two cast iron nuts or cases, *m m*, so that when the screw is turned in the cases they are forced asunder. For turning the screw, a gear-wheel, *e*, is fastened rigidly around its middle portion, and a worm, *d*, is made to mesh into the wheel, *c*, this worm having its bearings in the box, *e*. To prevent the box, *e*, from turning round instead of the wheel, the bar, *f*, is placed between the studs on the case and on the box as clearly shown in Fig. 1. The worm, *d*, is turned by means of the crank, *g*, which is constructed of a sliding bar and handles, the bar being secured in any position desired by means of a set-screw. This arrangement of the lever, it will be perceived, allows the working of the jack in a very narrow space, permitting its employment in places where it would be impossible to use a jack with a horizontal lever. By the employment of the worm in connection with the gear wheel, great multiplication of power is obtained, as it requires eleven turns of the worm to effect one revolution of the gear wheel, and consequently of the main screw; and as there are four threads to the inch on each end of the main screw, one of its revolutions raises the load half an inch.

The inventor states that, in an experiment with this jack made on the Morris and Essex railroad, the fire-box end of the engine "Delaware," which weighs 30 tuns, was raised by one of these jacks weighing only 60 pounds.

The patent for this invention was granted Oct. 19, 1855, but has only recently been introduced to the public. Additional information in relation to it may be obtained by addressing D. G. Pettengill, agent and manufacturer, at Belleville, N. J. The jacks are also for sale at the store of S. A. Heath & Co., 102 William-street, this city.