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Machine for Boarding, Pebbling and Glossing Leather.

Our engraving illustrates a machine designed to accomplish the above purposes, for which important claims are made, both as to the economy resulting from its use and the superior quality of the work turned out. A large amount of work is done with very little expenditure of power and very much less effort, on the part of the operator, than is required in the old way. The machine is adjustable to any thickness of leather and to give any requisite pressure. The precision with which the lines can be run at any angle in graining is a matter of much importance, this facility being derived from the action of the feed plate.

The machine can board the largest whole hide if necessary, taking its entire breadth, even to the points of the shanks, at one operation, producing a superior appearance which, with thin leather, is very notable as compared to that boarded by hand.

The pebbling and polishing appliances are especially claimed to be superior to anything yet devised for the purpose, and their advantages will, we think, be apparent to practical men upon examination. The pebbling roll can be quite small and of any length, as there is no strain on its bearings. The pressure is also perfectly controlled while the work is rapidly performed, and the leather is held in position by the machine itself.

Fig. 1 is a perspective view of the machine as it appears in the operation of boarding, the object of which is to raise the grain and to give the leather pliability. Fig. 2 is a section showing the operation of some of the parts of the machine during this process. Fig. 3 is a section which shows the application of the pebbling roller. A represents the upper roller, B, the under roller (these rollers being preferably made of cork), C, the steel feed plate, D, the treadle which operates the feed plate, E, a chain running over suitable pulleys, which chain connects the treadle and feed plate; F represents adjusting screws; G, the trough, which receives the leather as it passes over the edge of the feed plate; and H, Fig. 3, is a section of the pebbling roller.

In boarding, the hide is placed over the feed plate as shown in Fig. 1. This plate is carried by pivoted arms, so constructed that the edge of the plate may be brought to exact line with the line of conjunction of the upper and lower rollers, A and B. Its motion toward the rollers is adjusted and limited by set screws in the vibrating arms which carry the plate. By suitable gearing, the rollers, A and B, are caused to revolve in the same direction, as shown by the arrows in Figs. 2 and 3.

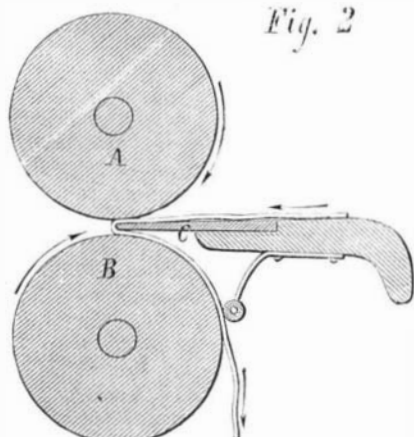


Fig. 2

The machine being in motion, and the hide placed as shown in Fig. 1, the operator places his foot upon the treadle D, which carries the plate, C, up flush to the rollers and slightly between them as shown in Fig. 2. The action of the rollers then causes the hide to pass over the edge of the feed plate in the direction shown by the arrows. The trough, G, receives the hide as it passes through, and the operation is repeated as often as may be necessary.

For pebbling, a pebbling roller, H, Fig. 3, is placed in suitable bearings found at the ends of the front edge of the feed plate, and the leather is handled in precisely the same way as in boarding. Polishing or glossing, and creasing, are also

need tenderer care, and for them we have these directions from an experienced hand.

If you have no loam laid away for this purpose, take, any warm day, the upper surface of loam from your richest garden beds. Bake it in the oven in an old tin pan; when so dry as to crumble in your hands, add one third white sand. Now fill your pots, boxes, or pans with the mixture. The pots made for planting seed, with large holes for drainage, are the best; but salt, raisin, or cigar boxes will answer. Fill to the brim with heated soil, press down firmly, and, while milk warm, plant your seed. If large enough, place them in one at a time, about one inch apart; if very small, like

petunias, sprinkle over the soil, press them in gently with the hand, then sprinkle on sand. Take a piece of any old flannel, double it, and lay on the seeds, pressing it down at the corners; then water with lukewarm water over the flannel. Put your pots or boxes in some warm place, on the shelf of a range, or on a mantel piece. The kitchen hob is the best place, for the steam from the kettles keeps the air moist.

Leave the boxes there until the seeds begin to push, giving lukewarm water over the flannel every day; then put in a sunny window, and, if the nights are chilly, return the boxes to the mantel shelf or back of the range. This way of planting rarely fails; the earth, being warmed through, starts the seeds as well as a hot bed, and the flannel prevents the caking of the top of the soil, and also keeps up a uniform heat.

Of course, the same treatment will be as effectual with seeds for the kitchen garden, though most of them do not need such careful nursing.—J. S.

STEAM FLYING SHIP.

As a contribution to the stock of lore on the subject of aerial navigation, we illustrate the following curious but impracticable machine, invented by a western correspondent:

This gentleman takes the ground that gas is too light, and has neither the elevating nor directing power essential to the proper guidance of a balloon. He thinks, however, that steam (although, as he says, hitherto employed with but lit-



performed by suitable attachments carried by the feed plate, the general operation of which is analogous to that described for the pebbling roller.

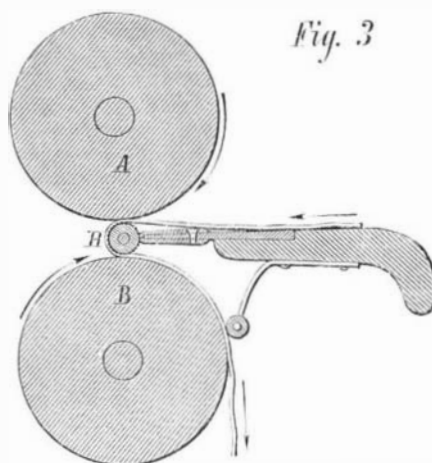


Fig. 3

This machine was patented through the Scientific American Patent Agency, Oct. 10, 1871, by Owen Coogan, of Pittsfield, Mass., who may be addressed for further information.

Starting Flower Seeds.

The sudden arrival of extremely hot weather, in New York and adjacent States, has taken everybody by surprise, and turned public attention to the country and horticulture. The following paragraph will be of interest, at this time, to all who have a garden:

There is nothing like loving them, to coax flowers to grow. Some old ladies seem to quicken the sap in drooping plants the moment their kind hands touch them. They give them their hearts, and so a thoughtful, quick-witted care, and their fuchsias are always the largest and their pinks the sweetest. Beginners are often troubled at the outset to get seeds to germinate. Some will grow anywhere. Others

(the success in ballooning) has a natural ascending power, which may also be used as a means of propulsion. The main objection to it was in the great weight of the apparatus employed; and this objection he intends to remove by using