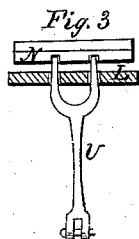
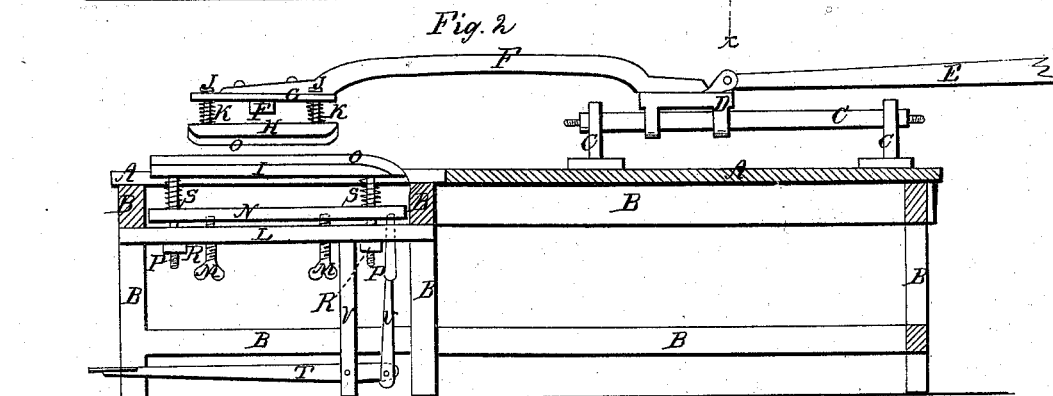
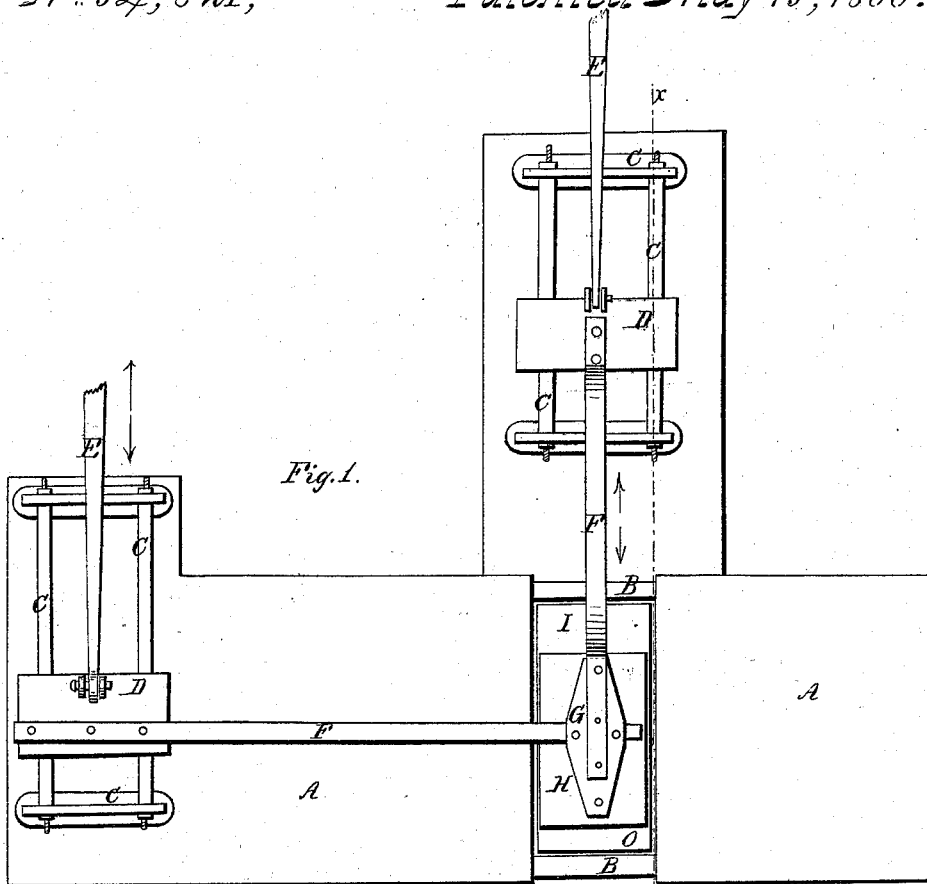


J. Parker,
Boarding & Graining Leather,
No 54,821, Patented May 15, 1806.



Witnesses
Wm. O'Brien
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UNITED STATES PATENT OFFICE.

JAMES PARKER, OF WOBURN, MASSACHUSETTS, ASSIGNOR TO HIMSELF
AND L. AND S. B. AND L. L. HOLDEN.

IMPROVEMENT IN MACHINES FOR BOARDING AND GRAINING LEATHER.

Specification forming part of Letters Patent No. 54,821, dated May 15, 1866.

To all whom it may concern:

Be it known that I, JAMES PARKER, of Woburn, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Machines for Boarding and Graining Leather; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top or plan view of the machine, and showing in red lines the position of the slide when the power is applied in a direct line with the working motion. Fig. 2 is a vertical section through the line *x x*, Fig. 1. Fig. 3 is a detail view, in section, showing how the height of the bolster may be temporarily changed to conform to the inequalities in thickness of the leather.

The object of my invention is to furnish a machine by which leather of different varieties and of different thicknesses may be boarded, grained, or softened quickly and thoroughly; and consists in combining an adjustable rubber-board and its attachments with an adjustable bolster-board and its attachments.

In describing my invention I will give the dimensions of a machine of convenient size, though these dimensions may change without affecting the operation of the machine. The table A, to which the machine is attached, is twelve feet long and four feet wide, and of convenient height to accommodate the operator. The frame B of said table must be strong and permanent.

C is the slide-frame, which is placed on one end of the table A, the width of which at that point may be increased to accommodate said slide C, or the slide may be placed upon an independent stationary support.

D is the sliding plate, to which the arm or rod E is attached for communicating motion from the power employed. To the sliding plate D is also attached an arm, F, the other end of which is attached to the board G, and gives motion to the rubber-board H. The sliding apparatus may be placed in various positions with reference to the rubber-board H and bolster I. Thus it may be placed in the

position described, or it may be placed in position represented in red lines in Fig. 1, so that the sliding plate D may move in a direct line with the motion of the rubber-boards H. (This latter position I prefer, as it gives a steadier motion to the rubber-board.) Or it may be placed overhead, the arm F rising vertically from the board G, and being connected with the sliding plate D by an arm at right angles to the arm F and securely attached to it. These different positions of the sliding frame C will depend upon the space at command in the room in which the machine is erected. The board G is connected with the rubber-board H by the bolts J and springs K in such a manner that the board H may rise when affected by the pressure of any substance coming between the boards I and H, the bolts J passing up freely through the board G, and the springs K forcing the board H back to its normal position as soon as the pressure may be removed.

The board H is about two and a half feet long and twenty-one inches wide—that is to say, it is of the same width as the bolster-board I and about one foot shorter, and having its front and rear ends slightly rounded, as represented.

The slide C D should be so arranged with reference to the rubber-board H that when the slide is drawn back to its farthest point the forward end of the rubber-board H shall slightly overlap the rear end of the bolster I, and when the slide is pushed forward to its farthest point the forward end of the rubber-board H shall slightly project beyond the front of the bolster I, or about come into line with the front of the table.

L is a board or frame securely attached to the lower part of the frame B of the table A. Through this board or frame L pass four set-screws, M, upon the ends of which rests the trencher-board N, which is entirely free from the table on all its sides.

The bolster-board I is about twenty-one inches wide and three and a half feet long, or long enough to work up and down within the frame B of the table. The rear end of the bolster-board is rounded off, as represented in Fig. 2. The upper surface of the bolster-board I and the under surface of the rubber-board

H are covered with cork O, rubber, leather, felt, or any other flexible substance that will prevent the leather's slipping.

From the under side of the bolster-board I project four bolts, P, which pass freely through the trencher-board N and the board or frame L, and allow the bolster to play up and down. The upper movement of the bolster-board I is limited by the nuts R upon the lower ends of the bolts P, and is caused by the pressure of the coiled springs S, or their equivalent, placed between the bolster-board I and the trencher-board N. In the drawings the springs S are represented as being coiled around the bolts P.

By means of the set-screws M, bolts P, springs S and K, the top of the bolster may be leveled and the machine made to board, grain, or soften heavy or light stock and to conform to the different thicknesses found in the same skin, boarding it all alike in all its parts.

In addition to the parts already enumerated for enabling the machine to conform to the various inequalities of thickness in the leather, I have combined with the machine the lever T and arm U, to enable the operator to accomplish the same thing upon the occurrence of any sudden inequality of thickness.

V is a standard, the lower end of which rests upon the floor, and the upper end is secured to the under side of the board or frame L. To this standard is pivoted the lever T. To the end of the short arm of the lever T is attached by a joint the arm U. The upper end of the arm U may be made branched, as represented in Fig. 3, the branches passing through the board or frame L, and resting against the under side of the trencher-board N, as represented, so that the operator can at any time suddenly

increase the pressure between the bolster-board I and the rubber-board H by pressing with his foot upon the projecting end of the lever T.

Among the advantages of my invention may be mentioned that it will board heavy or light stock or any substance to which the process of boarding can be applied.

A glossing apparatus or a pebbling-roller may be applied to the end of the arm F by having a bed to set on and take off at pleasure.

I claim as new and desire to secure by Letters Patent—

1. The combination, in a boarding-machine, of the top board, G, with the arm F and slide C D, substantially as described, and for the purpose set forth.

2. The combination of the top board, G, with the springs K and rubber-board H, substantially as described, and for the purpose set forth.

3. The combination of the rubber-board H and bolster-board I, substantially as described, and for the purpose set forth.

4. The combination of the bolster-board I with the springs S and trencher-board N, substantially as described, and for the purpose set forth.

5. The combination of the trencher-board N with the springs S, screws M, and board or frame L, substantially as described, and for the purpose set forth.

6. The combination of the arm U and lever T with the trencher-board N and bolster-board I, substantially as described, and for the purpose set forth.

JAMES PARKER.

Witnesses:

HORACE COLLAMORE,
SAMUEL MOORE.