O. COOGAN.

Leather Boarding Machines.

No. 138,133. Patented April 22, 1873.

Fig. 1.

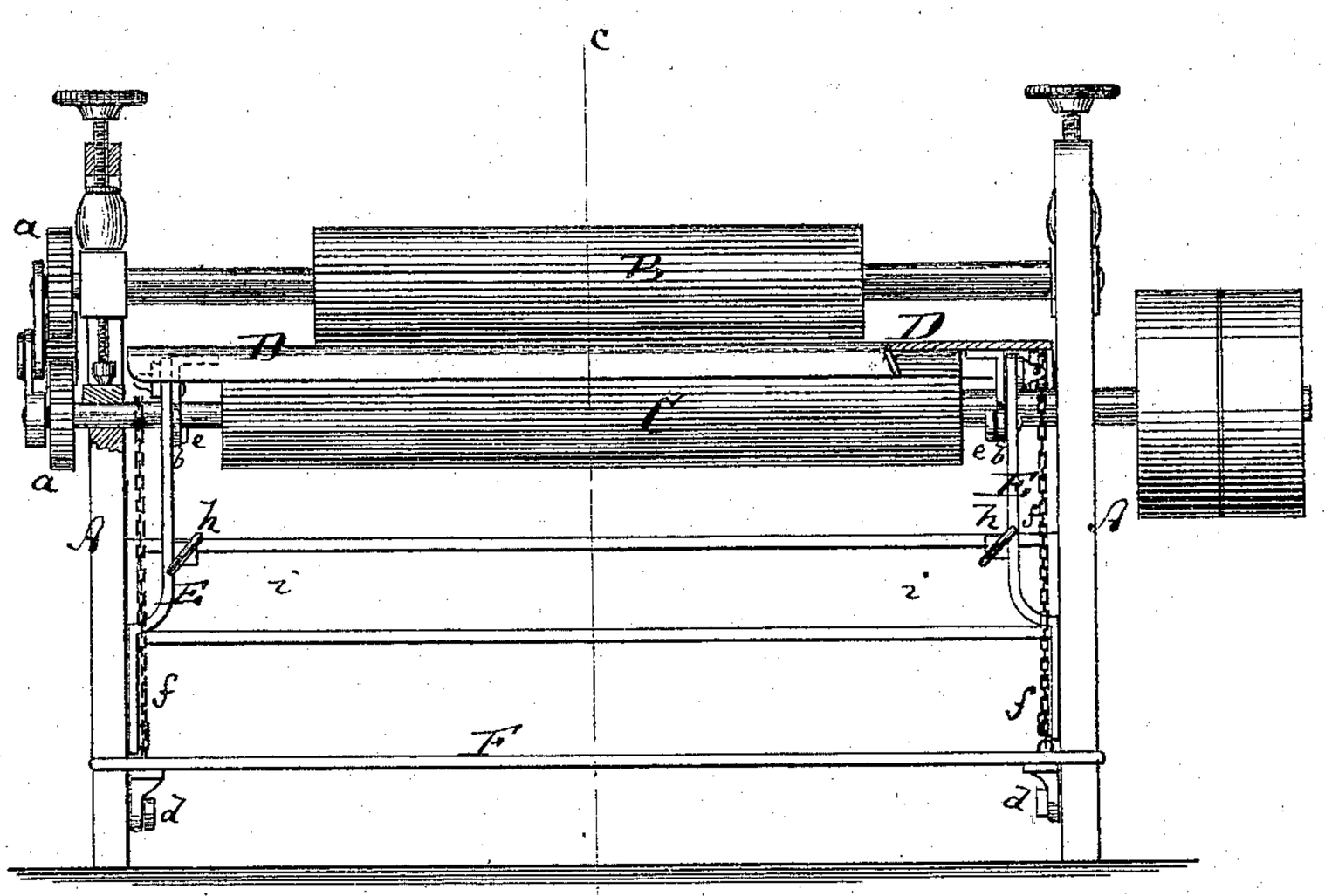
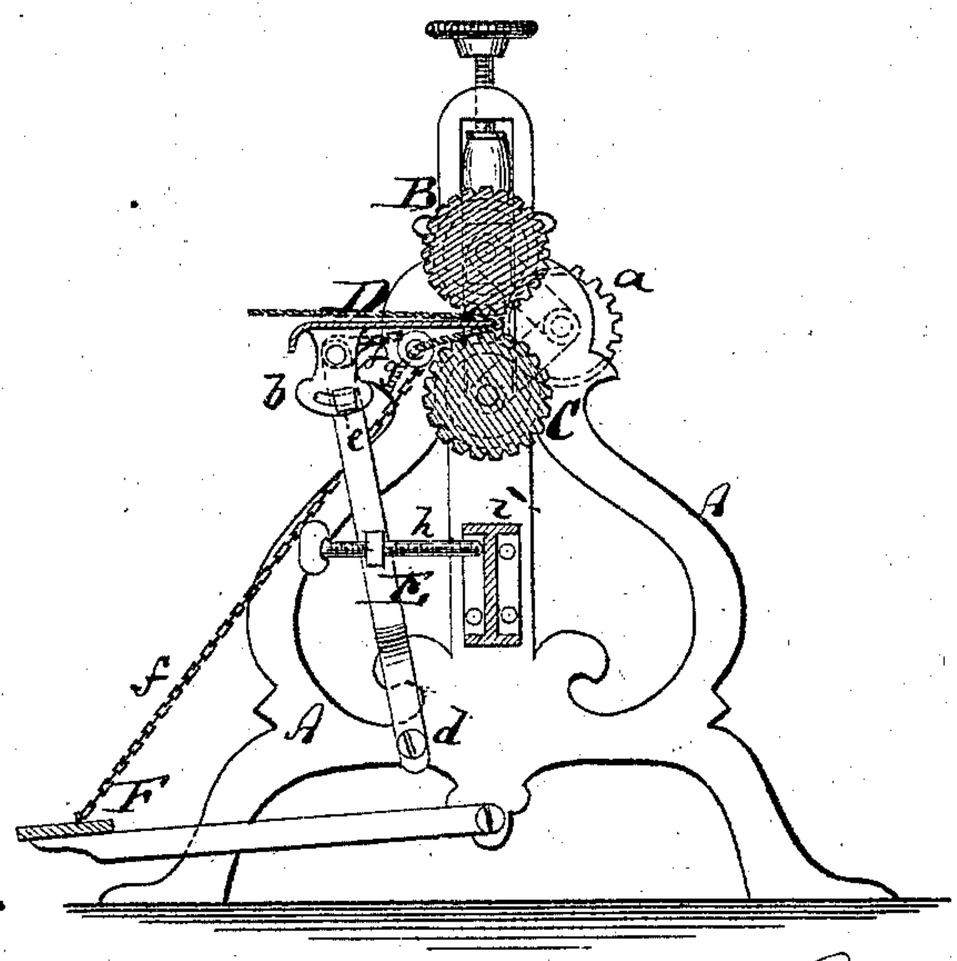


Fig. 2.



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UNITED STATES PATENT OFFICE.

OWEN COOGAN, OF PITTSFIELD, MASSACHUSETTS.

IMPROVEMENT IN LEATHER-BOARDING MACHINES.

Specification forming part of Letters Patent No. **138,133**, dated April 22, 1873; application filed March 10, 1873.

To all whom it may concern:

Be it known that I, OWEN COOGAN, of Pittsfield, in the county of Berkshire and State of Massachusetts, have invented an Improved Leather-Boarding Machine, of which the following is a specification:

Figure 1 represents a front elevation partly in section of my improved leather-boarding machine. Fig. 2 is a vertical transverse section of the same on the line *c c*, Fig. 1.

Similar letters of reference indicate corresponding parts.

This invention relates to a new movable table, which is to be applied between the simultaneously-moving or rolling surfaces of a leather-boarding machine. The invention consists in hanging the table, over which the leather to be boarded is folded, by means of pivoted arms, to the supporting-frame, and in connecting it with a treadle, or equivalent operating apparatus, by means of which it can be readily swung into position between the boarding-rollers. The invention also consists in so pivoting or hanging the said table to or on the aforementioned arms that its inclination may be varied at will. This last-named feature of my invention is very important, inasmuch as it permits the forward or folding edge of the table to be always set midway between the two rollers, no matter how far apart the same are from each other. Furthermore, my invention consists in the arrangement of screws, or equivalent stops, by which the position of the table between the two rollers is regulated in accordance with the thickness of the leather, it being necessary that the table should enter further between the roller for thin leather than for thick, in order to have the fold of the leather directly between the middle portions of the rollers.

In the accompanying drawing, the letter A represents the stationary frame-work of my improved boarding-machine. B and C are the boarding-rollers, hung thereon parallel to each other, and suitably prepared on the surface to properly take hold of and affect the leather. These rollers are connected with each other by suitable gearing, *a*, or otherwise, so that when one of them is rotated by a suitable mechanism the other will also be revolved in the same direction. One of these rollers, B or C, is made adjustable in its bearings, so that the distance between the two rollers may be varied at will. D is the table or platform over which the leather is folded while it is subjected to the action of the two boarding-rollers. This table or platform, which may be made of thin metal or other suitable material, is by the ears *b b* connected with arms E E, that are, with their lower ends at *d*, pivoted to the frame A. The ears *b b* are slotted, and connected by bolts *e* to the arms E, so that by means of such bolts the table can be set at a suitable angle to its supporting-arms E. By means of cords or chains *f*, which pass over friction-rollers *g*, the table is connected with a treadle, F, or with a suitable handle or lever, so that by stepping on such treadle, or actuating such lever, the table may be swung forward between the two rollers or cylinders B C, and into the position shown in Fig. 2. Set-screws *h*, projecting from the arms E and bearing against a cross-bar, *i*, or other fixed part of the frame A, serve to limit the forward motion of the table. The leather to be boarded is, before the table is swung between the rollers, folded over the front edge of the table, or at least placed upon it in such manner that a small portion of the leather may hang over the edge of the table. The latter is then by means of the treadle swung between the rollers as far as the stop *h* will permit it, and motion being imparted to the cylinder B C the leather will be carried forward above the table by the upper cylinder B, and backward below the table by the lower cylinder C. It being desirable to have the fold of the leather acted upon by those parts of the cylinders which are nearest together, it is necessary that the table should be varied in its position in accordance with the thickness of the leather; therefore, for thin leather, I place the table further forward, because the thickness of the fold is less than on thick leather, for which the table is set further back; and when the table is adjusted for thicker or thinner leather, it is also necessary to adjust its angle to the arms E, so that its front edge will be equidistant from the two cylinders, no matter how far the adjustable cylinder is moved away from or toward the one that is not adjustable.

What is here claimed, and desired to be secured by Letters Patent, is—

1. The adjustable table or platform D, arranged between and in combination with the boarding-cylinders B and C, substantially as herein shown and described.

2. The supporting-arms E of the table D, when jointed, to permit the angle of the table with said arms to be regulated in accordance with the thickness of leather, as specified.

3. The adjustment-stops *h*, applied to the movable table D, or to its arms E, as and for the purpose set forth.

4. The combination of the table D of the boarding-machine with the ears *b*, bolts or fasteners *e*, arms E, stop *h*, and treadle or lever F, all arranged as specified.

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Witnesses:
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