A. F. STOWE.

Strap Machine.

No. 125,766. Patented April 16, 1872.

Fig. 1

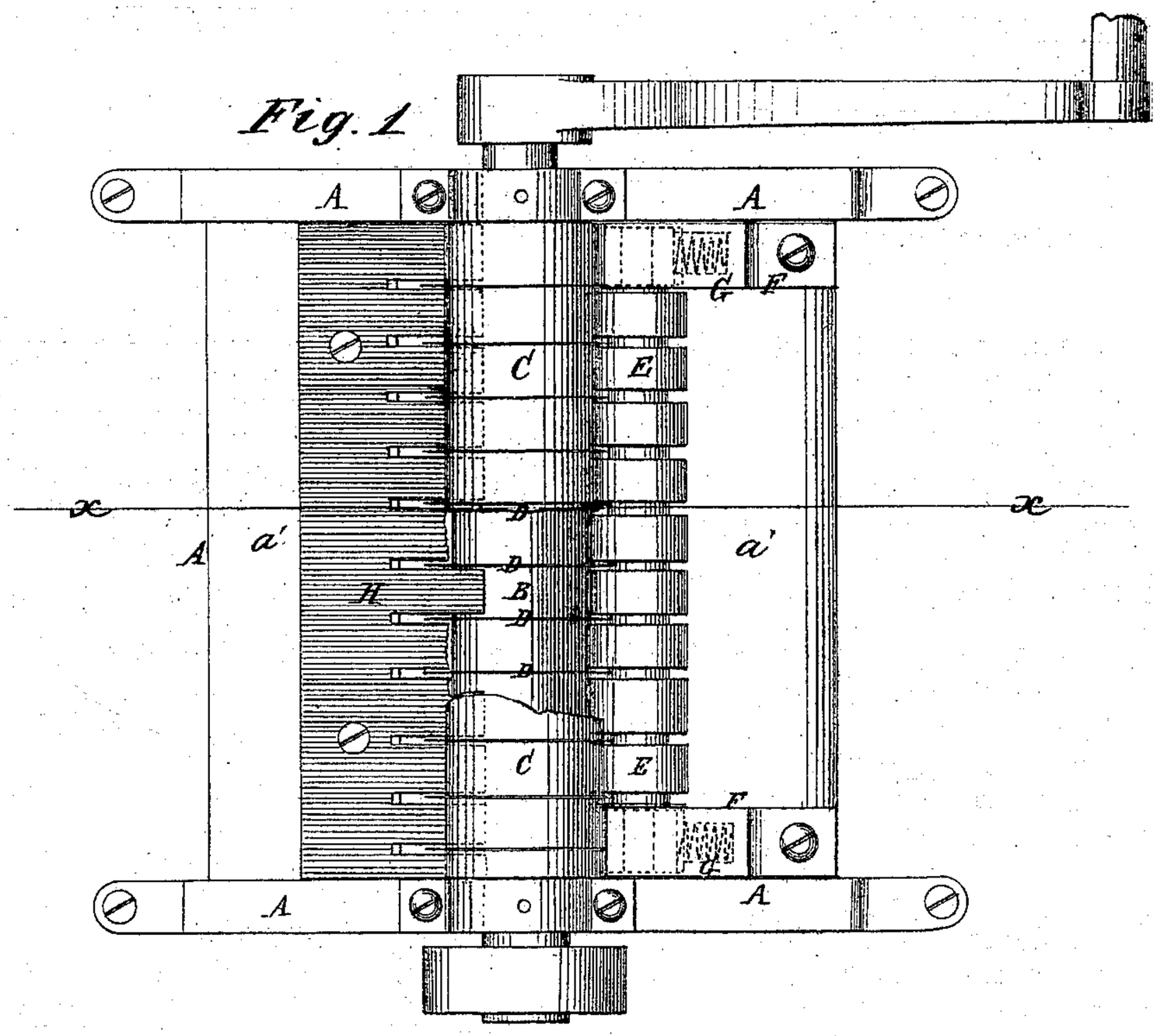
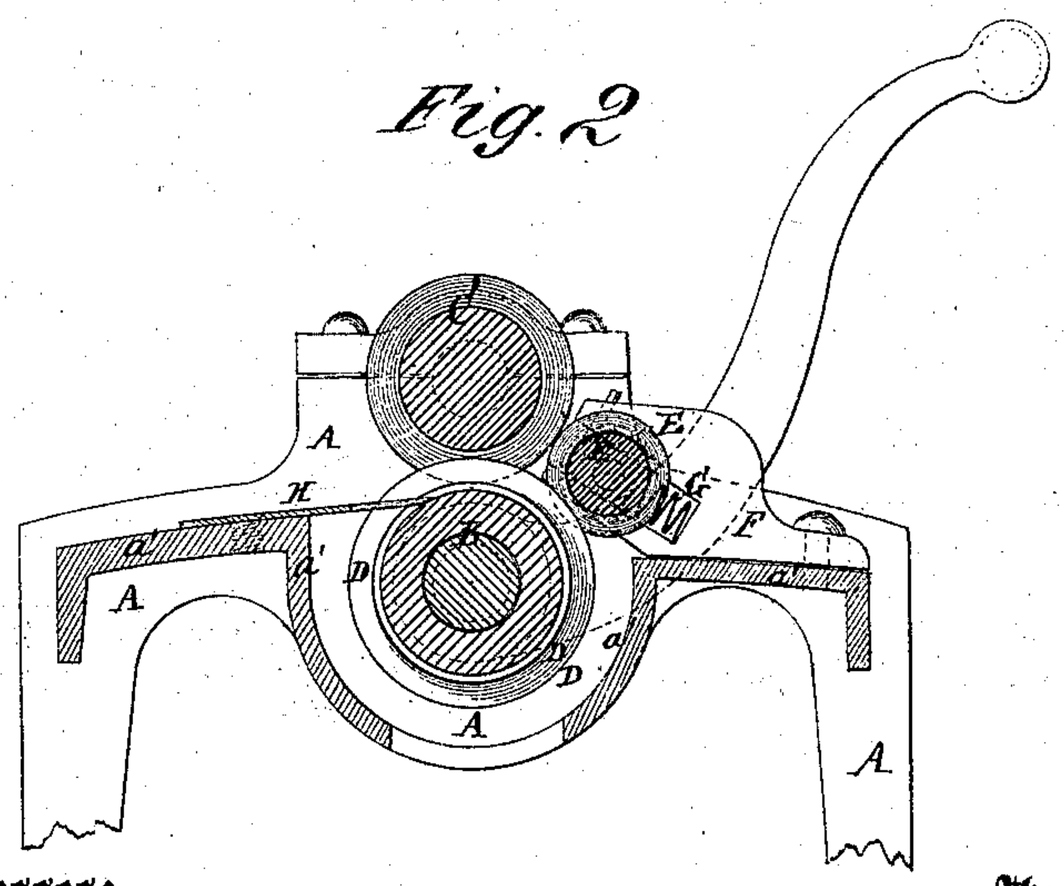


Fig. 2



Witnesses:

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125,766

UNITED STATES PATENT OFFICE.

AARON F. STOWE, OF WORCESTER, MASSACHUSETTS.

IMPROVEMENT IN STRAP-MACHINES.

Specification forming part of Letters Patent No. 125,766, dated April 16, 1872.

Specification describing an Improvement in Strap-Machine, invented by AARON F. STOWE, of Worcester, in the county of Worcester and State of Massachusetts.

Figure 1 is a top view of my improved machine, part being broken away to show the construction. Fig. 2 is a detail vertical cross-section of the same taken through the line *x x*, Fig. 1.

My invention has for its object to furnish an improved machine for cutting the draw-straps for boot-legs, which shall be so constructed as to adjust itself to the varying thickness of the doubled leather, and which will feed the leather steadily to the knives, so that the straps may be cut straight; and it consists in the combination of the grooved or channeled feed-roller with the circular knives, knife-roller, and top roller of the machine, as hereinafter more fully described.

A represents the frame of the machine, in bearings in the end parts of which revolve the journals of the rollers B C, which are placed the one directly above the other, as shown in Fig. 2. To the lower roller B, at distances apart equal to the desired breadth of the straps, are attached circular knives D, the edges of which enter grooves in the top roller C. The frame A is made with front and rear tables or aprons, *a'*, the inner parts of which are extended downward and inward, so as to cover and protect the knives at the front and rear sides of the machine, as shown in Fig. 2. E is the feed-roller, the journals of which revolve in bearings placed in slots in the brackets F, attached to the frame A. The slots in the brackets F are made inclined, as shown in Fig. 2, and the bearings of the feed-roller E are held forward by the coiled or equivalent springs G. The feed-roller E is placed in the space between the rollers B C, and is made small, so that it can enter the said space, the inclination of the slots in the brackets F causing the springs G to press the rollers E against the upper roller C. The roller E is grooved or channeled to receive the edges of the knives D. By this construction the leather is held between the rollers C and E until, or nearly until, the knives D take hold of it, so that it cannot turn or wrinkle, thus causing the straps to be cut straight. At the same time the springs G allow the roller E to yield to accommodate itself to the varying thickness of the leather. As the straps pass from the machine they are received by the plate H, attached to the table or apron *a'*. The inner edge of the plate H enters the space between the rollers B C, and is slotted for the passage of the edges of the knives D, as shown in Figs. 1 and 2. If desired, part of the knives D may be placed at a distance apart different from the others, so that straps of different widths may be cut by the same machine and at the same time. This construction is particularly advantageous in shops where different sizes of boots are made—as, for instance, men's, youth's, and boy's.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The grooved feed-roller E, constructed and arranged, in connection with the rollers B C, knives D, and frame A, substantially as herein shown and described, and for the purpose set forth.

AARON F. STOWE.

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