

(No Model.)

H. M. HAYNES.

APPARATUS FOR FLANGING AND UPSETTING SOLES.

No. 286,926.

Patented Oct. 16, 1883.

Fig- 1-

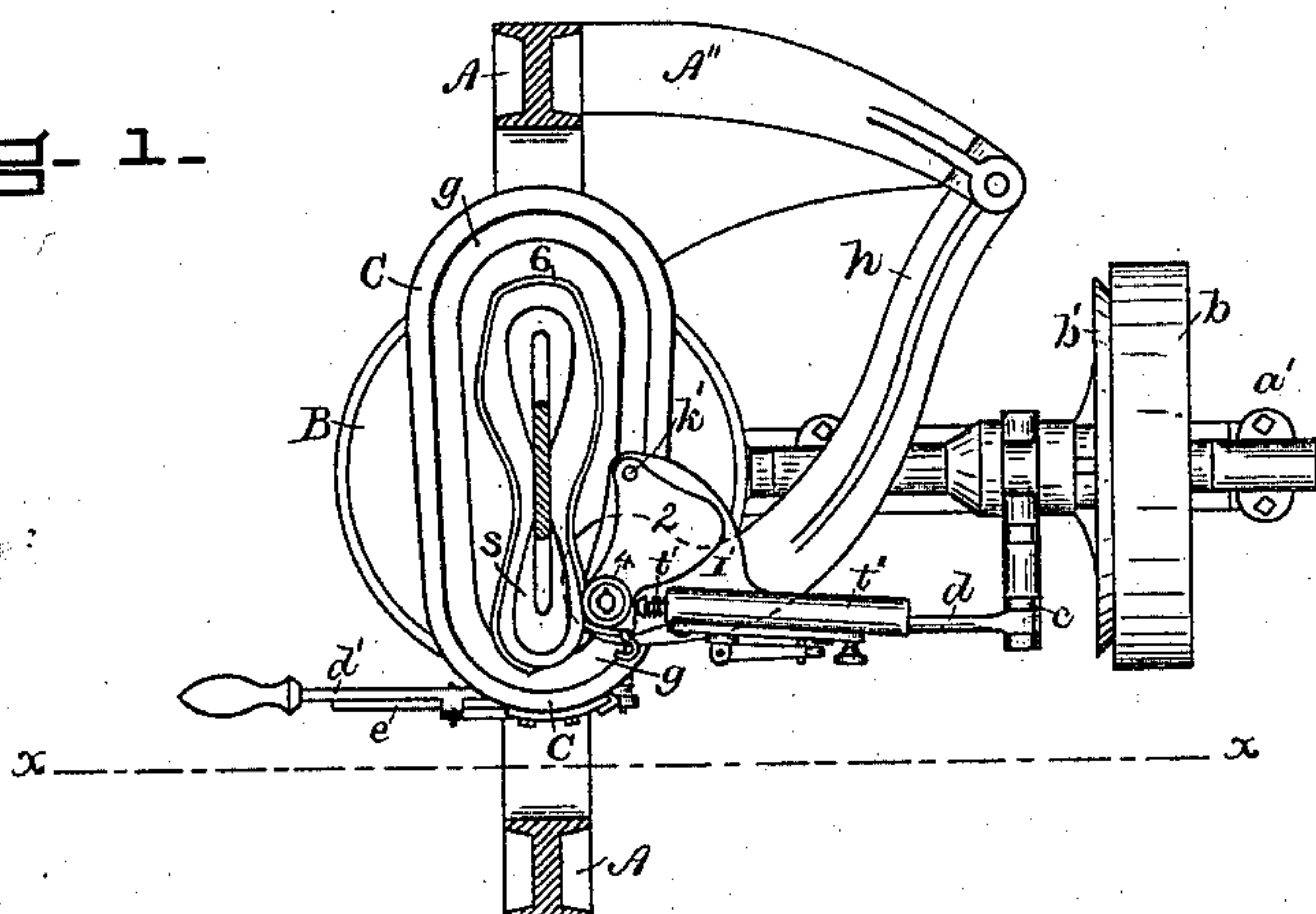


Fig- 4-

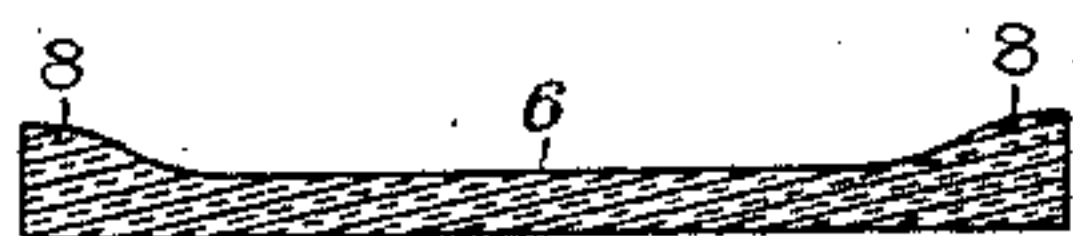


Fig- 3-

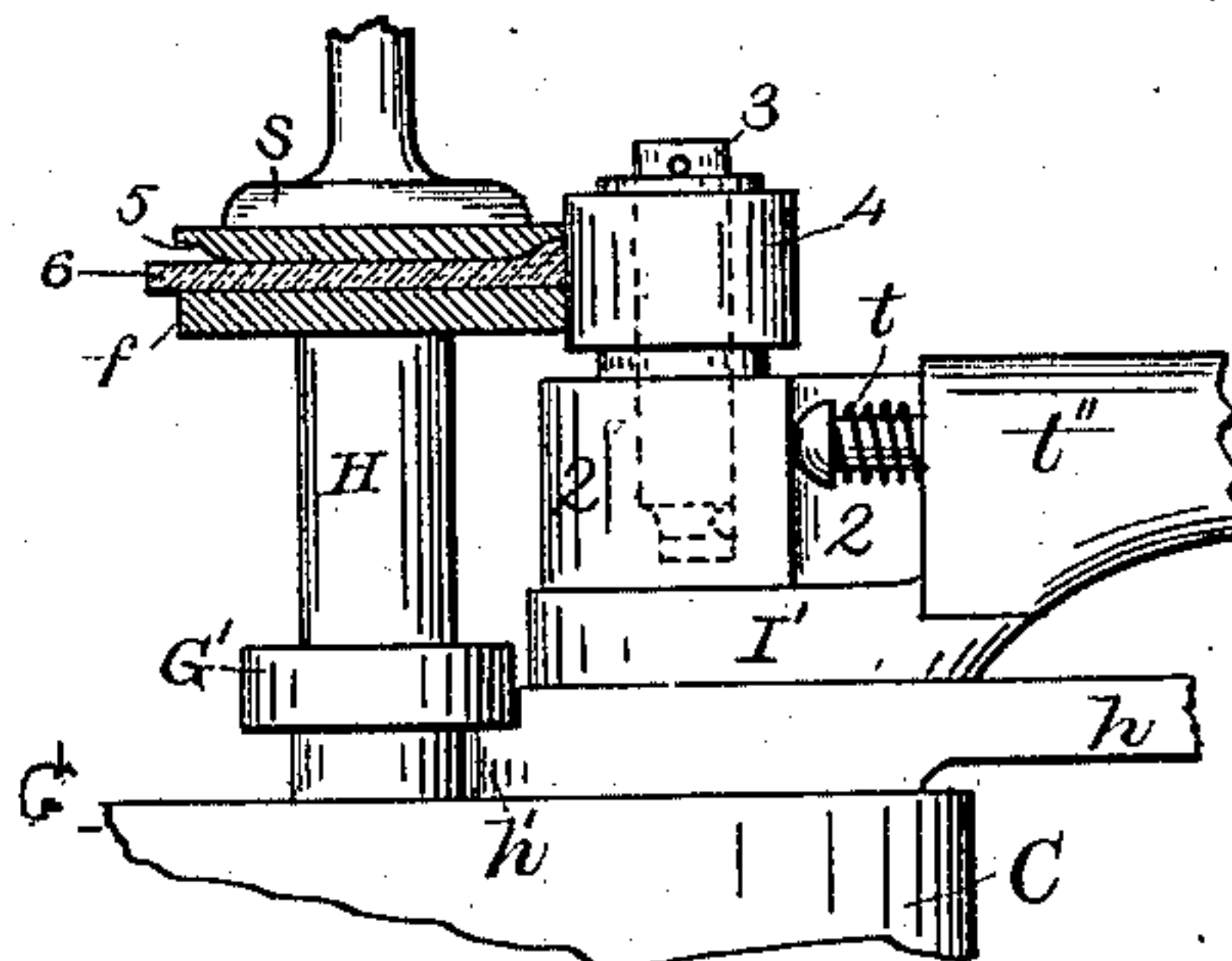
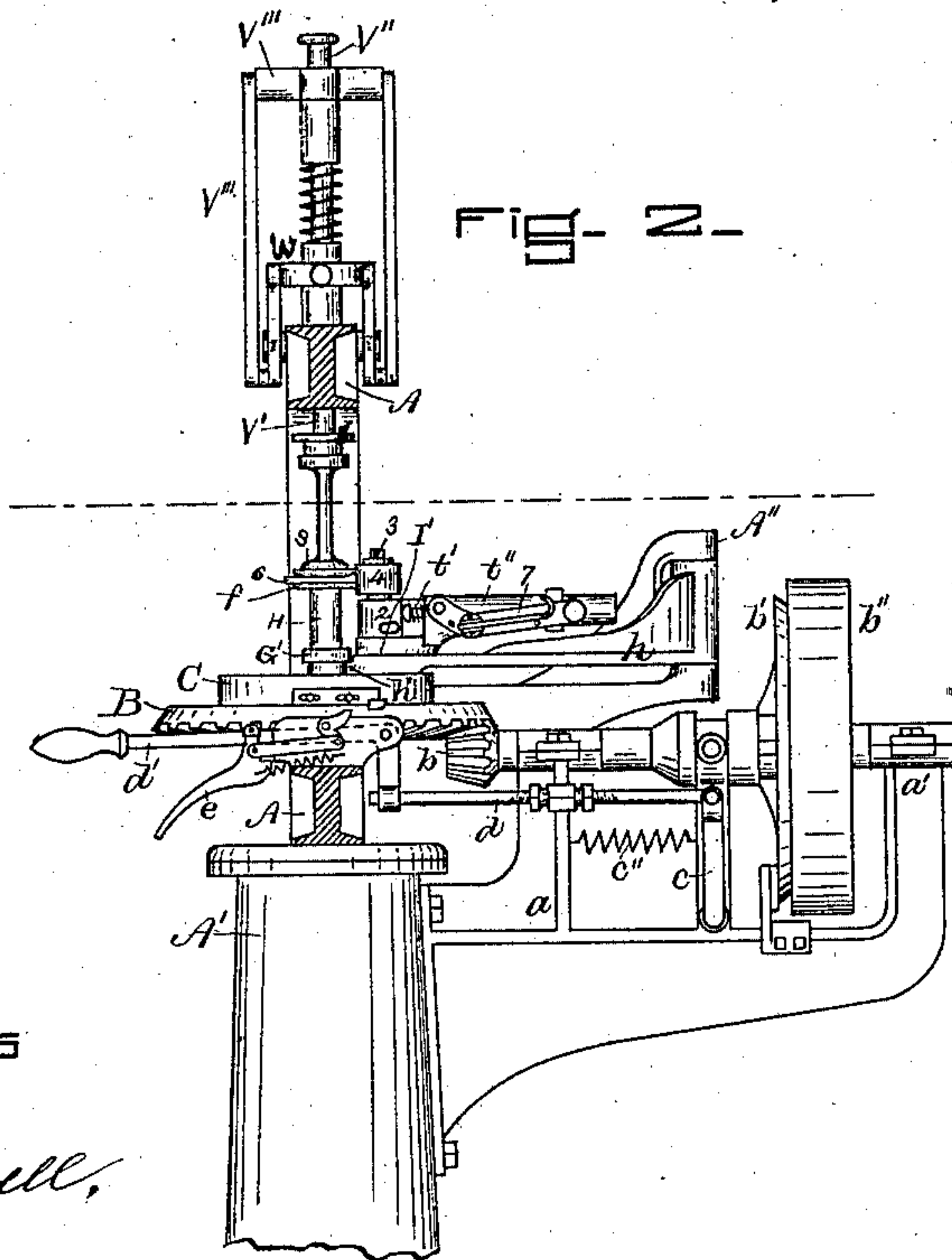


Fig- 2-



WITNESSES

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APPARATUS FOR FLANGING AND UPSETTING SOLES.

SPECIFICATION forming part of Letters Patent No. 286,926, dated October 16, 1883.

Application filed April 23, 1883. (No model.)

To all whom it may concern:

Be it known that I, HENRY M. HAYNES, of Saxonville, county of Middlesex, and State of Massachusetts, have invented an Improvement in Apparatus for Flanging or Upsetting Soles, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object the construction of a machine upon which to flange or thicken the edge of a sole.

This invention consists, essentially, in a pattern or support for the sole and a pressing-plate beveled or cut away, as hereinafter described, to permit the edge of the sole to be upset and thickened when held between the pattern and presser, combined with a roller co-operating therewith and rolling against the edge of the sole with a force sufficient to force the edge of the sole into the beveled or enlarged space at the edge of the pattern-plate, and pressed to thicken the edge beyond the thickness of the remaining part of the same back of and between the said edges, as will be hereinafter described; and shown in the accompanying drawings.

Figure 1 represents in partial plan view a sufficient portion of an apparatus, taken in connection with the mechanism represented in United States Patent No. 270,498, January 9, 1883, to which reference may be had, to illustrate my invention. Fig. 2 is a partial section, taken from the side of the machine, on the line *xx*, Fig. 1. Fig. 3 is a sectional detail, showing the sole rest or pattern and the pressing-plate above it, the roller for upsetting the sole-edge, and part of the apparatus for carrying the said roller about the sole; and Fig. 4, a cross-section of a sole, showing its edges upset and thickened.

The frame A, post A', arm A'', arm *h* pivoted thereon, ledge *h'* at the end of said arm, cam C, cam-groove *g*, gear-wheel B, bevel-pinion *b*, link *d*, levers *c* and *d'*, latch *e*, sole-pattern *f*, pattern-rest H, rod V', nut V'', cross bar or frame V''', knuckle-joint W, shelf G, lever I', barrel *t''*, spring-bolt *t*, lever 7, and

pivot *k'* are all substantially as in the said patent, and are moved in a like manner. The carrier-block 2, pivoted at *k'*, is very much like the block marked K in the said patent, but it does not extend up so high; but it does have the same movement as does the block K in the patent. The block 2 has a hole to receive the stud 3, on which is placed the roller 4, and this roller is caused to travel about the pattern *f*, as are the block K and the several knives described in the said patent. The presser *s*, carried by the rod V', is beveled about its edge at its under side, leaving a space at 5, into which the projecting edge of the leather sole 6 (see left of Fig. 3) is pressed, as at the right of Fig. 3, by the action of the roller 4, thus causing the edge of the sole to be upset and thickened, as at 8. (See Fig. 4.) As in the said patent, the lever I' will have a disk with attached rollers to enter the cam-groove *g*. The presser-plate *s* will be raised and lowered as the clamp U in the said patent. The presser-plate and pattern are substantial counterparts as to width and length.

To convert the said patented machine into a machine for upsetting the projecting edge of a sole, it is practically necessary only to provide the same with the presser-plate and substitute the roller 4 and its stud 3 for the frame L and pin *l* shown in Fig. 7 of the said patent.

Instead of the particular devices shown for holding the roller while the pattern-plate is rotated, or instead of the particular means shown to rotate the pattern-plate, I may employ any other well-known or equivalent mechanism.

If desired, the pattern-plate *f* may be beveled instead of the presser-plate, in which case the sole would be held with its finished side uppermost. If the pattern-plate were stationary and the roll were moved about it with a carriage—the converse of the construction shown—I consider that it would come within the scope of this invention.

I claim—

The rotating pattern and the presser-plate

beveled or cut away, as described, to permit
the sole to be upset or forced into the space
so made, combined with the roller, to act
against the edge of and upset the sole into
5 the said space and thicken the edge of the
sole, and actuating means, substantially as set
forth.

In testimony whereof I have signed my name
to this specification in the presence of two sub-
scribing witnesses.

HENRY M. HAYNES.

Witnesses:

C. G. THAYER,
WILLIAM NUTT.