

E. Townsend, *Pegging Machine,*

N^o 44,029.

Patented Aug. 30, 1864.

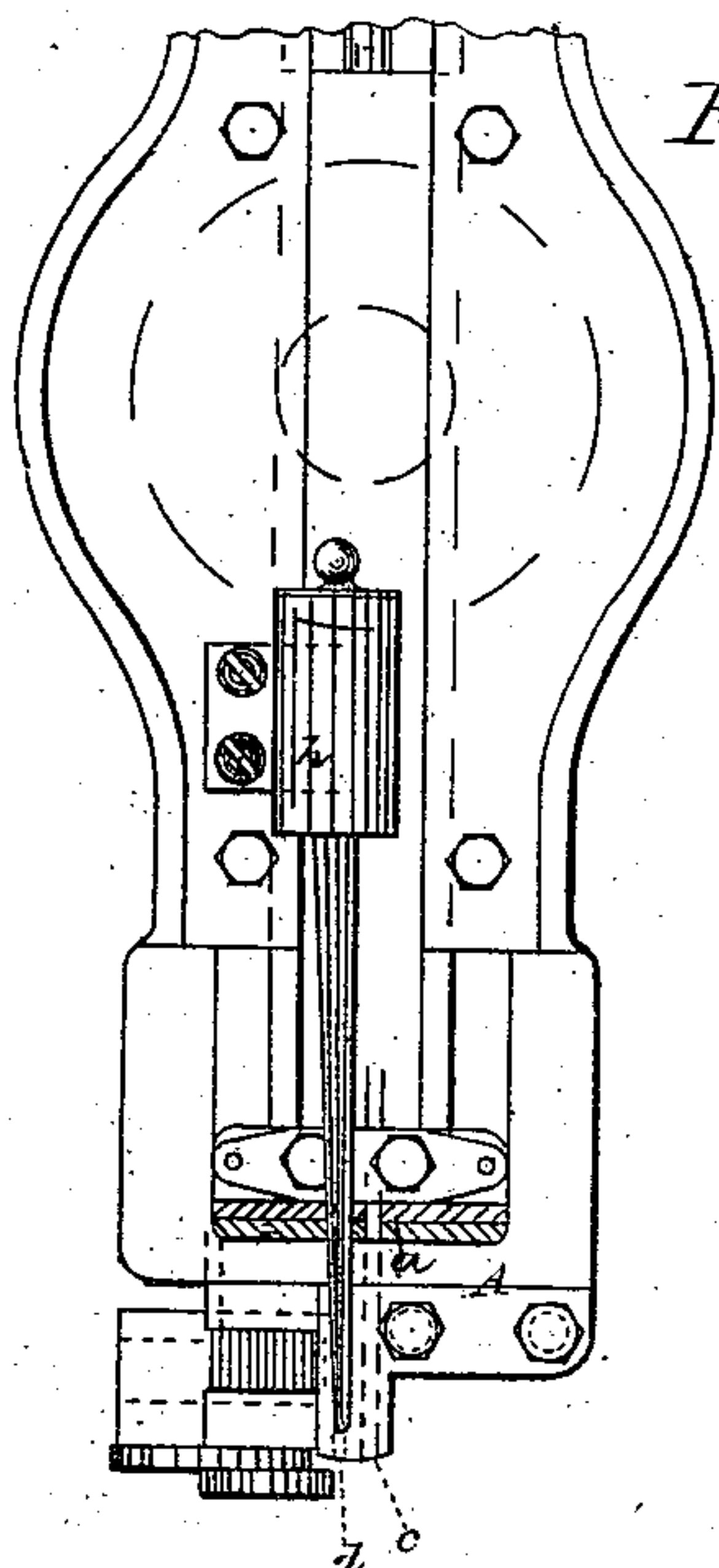


Fig. 1.

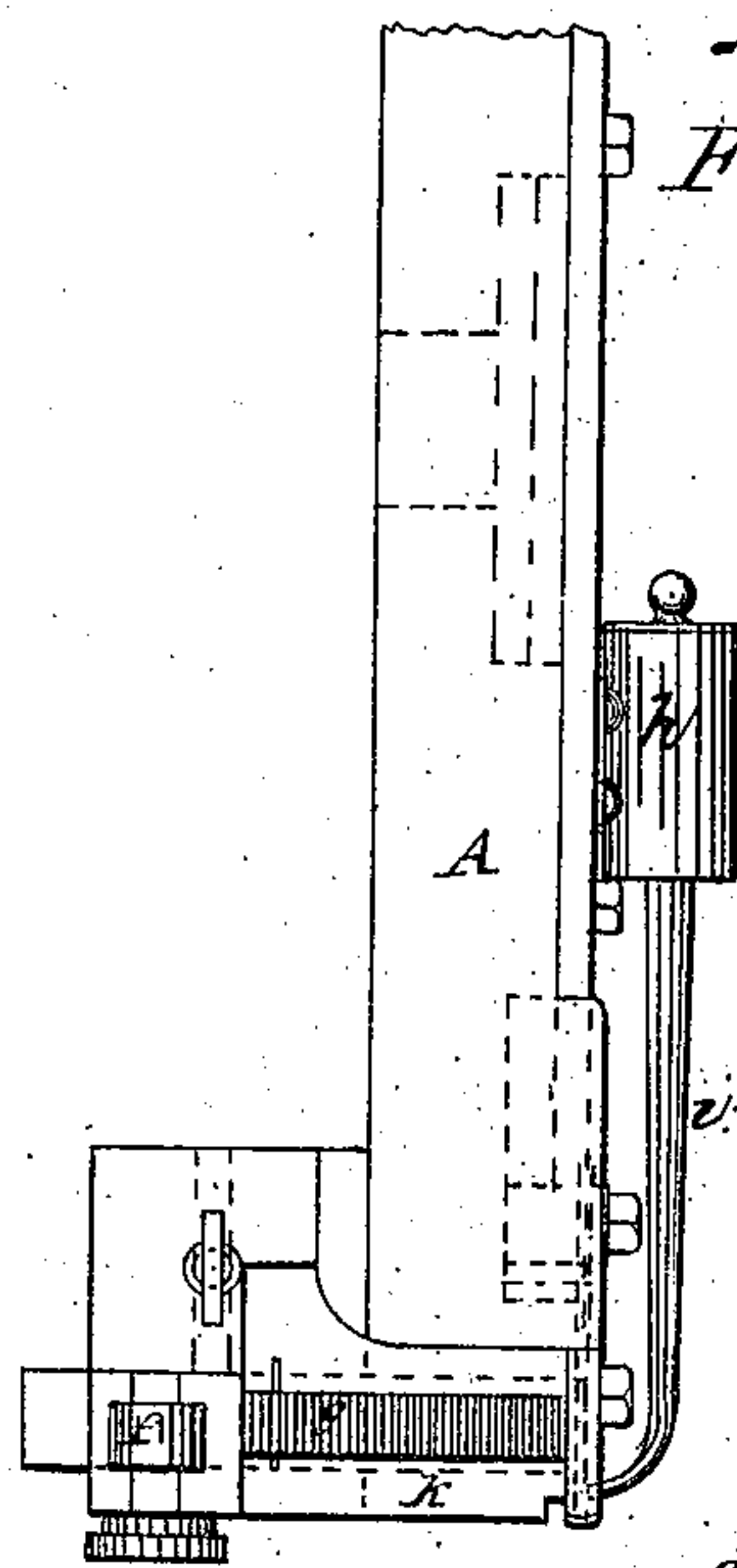


Fig. 2.

Fig. 3.

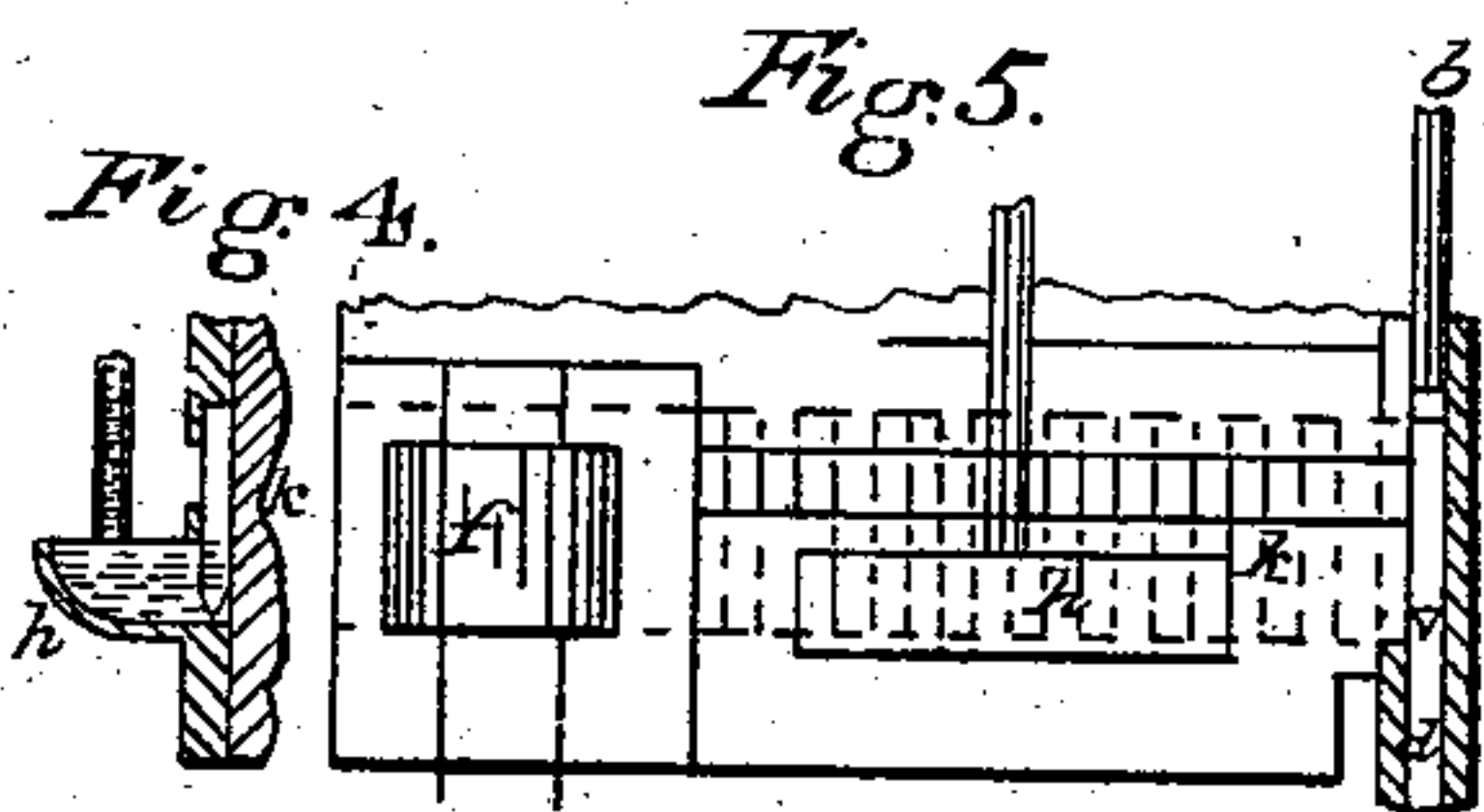


Fig. 4.

Fig. 5.

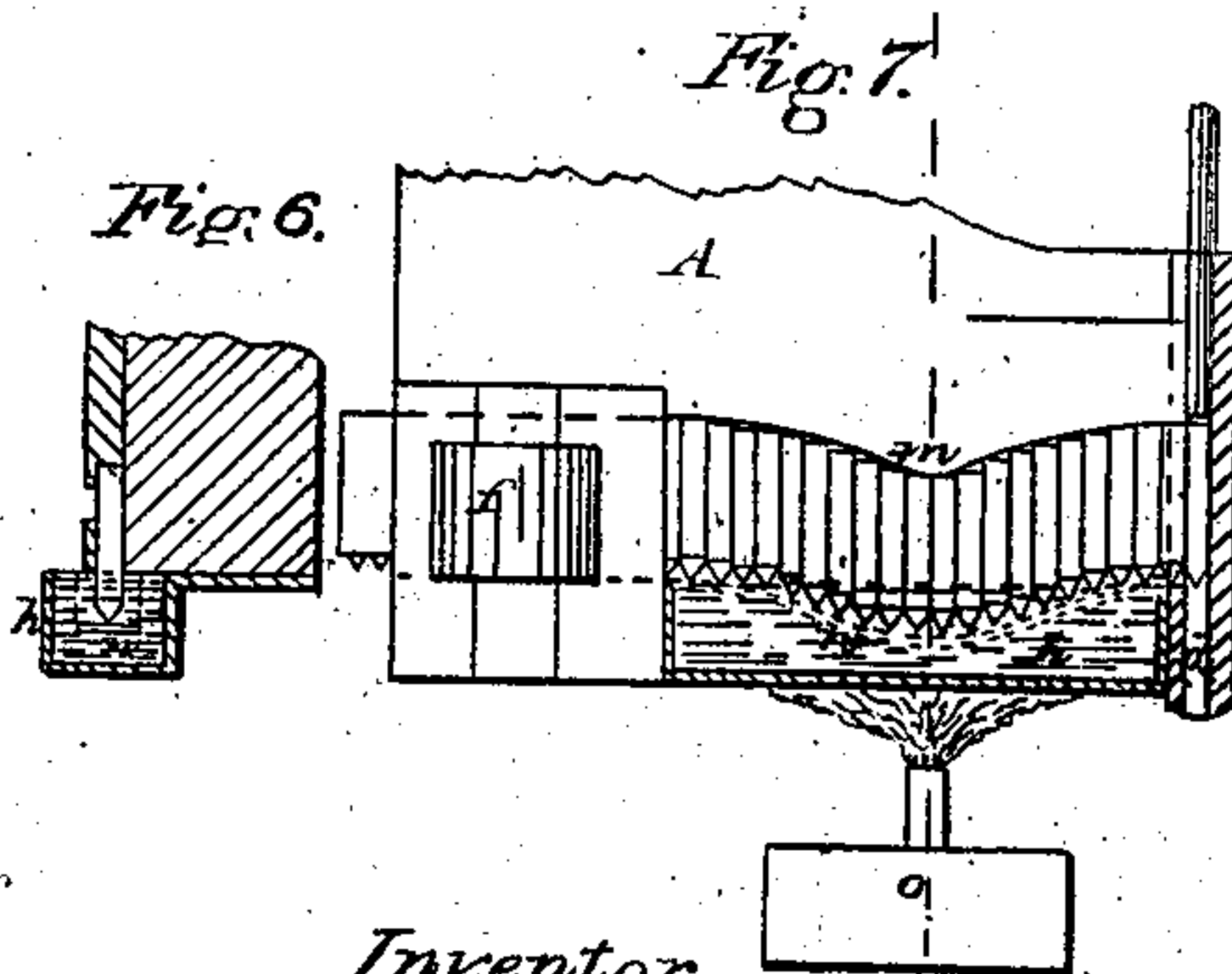


Fig. 6.

Fig. 7.

Witnesses

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UNITED STATES PATENT OFFICE.

ELMER TOWNSEND, OF BOSTON, MASSACHUSETTS.

MACHINE FOR INTRODUCING PEGS AND CEMENT INTO SOLES, &c

Specification forming part of Letters Patent No. 44,029, dated August 30, 1864.

To all whom it may concern:

Be it known that I, ELMER TOWNSEND, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Machine for Introducing Pegs and Cement into Soles or Various other Articles; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a front elevation, and Fig. 2 a side elevation, of such machine, or those parts of a pegging-machine which, in accordance with my invention, have a cementing apparatus combined with them. Fig. 3 is a section of the lower part of the cement-conduit and the chamber or channel from which the peg is expelled by the peg-driver. Figs. 4, 5, 6, and 7 are illustrations of other kinds of cementing apparatus which may be employed in carrying out my invention.

The nature of my said invention may be said to consist in a combination composed of a pegging-machine and a mechanism or apparatus either for introducing cement into the awl-holes for the reception of the pegs, or for applying cement to the pegs preparatory to their being driven, or for applying a cement-softening liquid to pegs previously coated in whole or in part with cement, and prior to such pegs being driven, the object of the machine being to drive pegs and cement them in and to their holes, in order that they may not only be held therein by friction, but by the cement when set or indurated; and my invention embraces pegging machinery, whether operated either entirely automatically or by manual power, in whole or in part.

In the drawings, Figs. 1, 2, and 3 represent not only the peg-wood or peg-feeding mechanism and the awl for making the peg-reception holes, but the peg-driver of an ordinary pegging-machine, the mechanism for automatically operating these members of the pegging-machine, not being exhibited, it being well understood or known. Each of the said members may, however, being operated by manual power applied to them in the proper order for driving a peg.

The awl *a* and the peg-driver *b* are exhibited as projecting from a slider, *c*, they operating or being arranged in separate channels made in the foot or lower part of the feeding-

head *A*. The feed-wheel is shown at *f* as suitably applied for operating or feeding forward a strip of peg-wood or a range or row of pegs, *g*, which are to be successively fed into the peg-driver channel *d*, and are to be successively driven out of the same and into a sole or other article while the machine may be in use for such purpose.

In case a strip of wood is used in the carrier, a knife is to be employed to separate the peg from such strip, either preparatory to or while such peg may be in the act of being forced downward by the peg-driver.

The awl or apparatus for puncturing the sole or article to receive the peg may be used in connection with my invention, but it is not absolutely essential to that element by which the peg is driven into the hole, as such hole may be made in the leather by an awl or apparatus preparatory to the use of my invention, such awl or apparatus being separate from the pegging-machine. I prefer, however, in carrying out my invention in its most practical form, to combine with it a mechanism or apparatus for puncturing in the sole or article the holes to receive the pegs, such additions constituting with the pegging mechanism and the cementing apparatus an extended combination, which I also herein include in my invention; and I do not confine my invention to the use of pegs of wood, as pegs of any other well-known material or combination of materials may be used with it in lieu of the ordinary wooden pegs; and, furthermore, I would remark, that instead of cement being employed in the cementing apparatus I have contemplated the use therein of a liquid such as water, whether in a liquid state or in a state of steam, it being understood that under such circumstances the pegs are to have glue or cement applied to them previous to the application of the water or liquid to the peg or in the peg-hole, the water, steam, or softening-liquid under such circumstances being applied for the purpose of softening or rendering sticky the cement or glue on the peg or in the hole for its reception.

The second portion of my invention—viz., the cementing apparatus—consists, as shown in the drawings, of a small cistern or reservoir, *h*, and a conduit, *i*, the latter being led out of the reservoir and into the channel *d*, through

which the peg is driven by the driver *b*. This cementing apparatus is affixed to the head *A*, and by the action of gravity it discharges its cementing-liquid into the channel *d*, and below the peg. Each peg, while being driven, forces with it into the peg hole a portion of the liquid cement.

In Figs. 4 and 5 I have represented a cement-reservoir, *h*, as so applied to the side of the peg-carrier *k* as to cause the pegs to pass through such reservoir in their passage to the peg-driver channel *d*. So in Figs. 6 and 7 the pegs are shown in their passage through a reservoir, *h*, and as being forced into and out of the same by means of curved guides, the reservoir being arranged underneath the peg-passage of the peg-carrier. A lamp, *o*, or a means of heating or rendering liquid the cement of the reservoir *h*, is also shown in Fig. 7.

Figs. 4 and 6 are transverse sections taken through the mechanism shown in Figs. 5 and 7.

In using the machine represented in Figs. 1 and 2, the feeder *f* is to be revolved so as to force the strip of peg-wood or the series of pegs, as the case may be, forward and cause them to be introduced successively into the channel *d*. On the entrance of each peg into the said channel the peg-driver *b* is to be forced downward so as to expel the peg from the channel and drive it into the awl-hole intended for its reception, a sole or other article being supposed

to be underneath the passage *d*. The reservoir *h* is to be charged with the cementing-liquid or with the softening-liquid, as the case may be, which is to be conducted into the channel *d* by means of the pipe *i*. During the descent of the peg-driver both the peg and some of the liquid will be expelled from the channel *d*, and will be driven into the awl-hole or into the material to be pegged.

I do not claim either a pegging-machine or a cementing machine or apparatus, when separately considered; but

I claim as my invention—

A combination composed of a pegging-machine (whether with or without an awl for making holes in an article to be pegged) and a mechanism or apparatus either for introducing cement into the awl hole or holes for the reception of the peg or pegs or for applying cement to the pegs preparatory to their being driven, or for applying a cement-softening liquid to pegs previously covered, either in whole or in part, with cement and prior to such pegs being driven, the object or purpose of such combination being as hereinbefore set forth.

ELMER TOWNSEND.

Witnesses:

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R. H. EDDY.