(No Model.)

F. WINSLOW.

METHOD OF MAKING SOLE FORMS FOR BEATING OUT MACHINES.

No. 249,438. Patented Nov. 8, 1881.

Fig. 2.

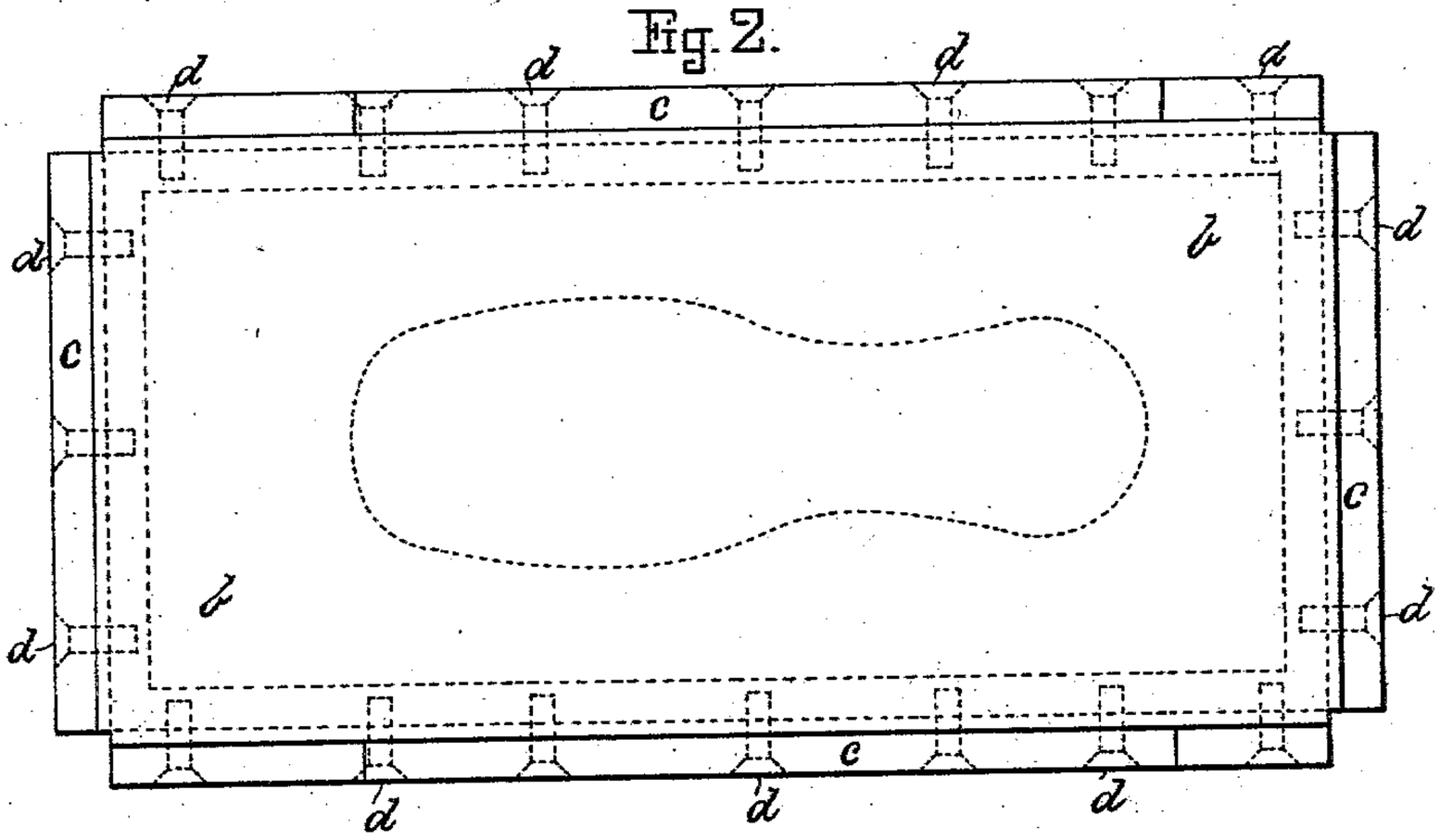


Fig. 1.

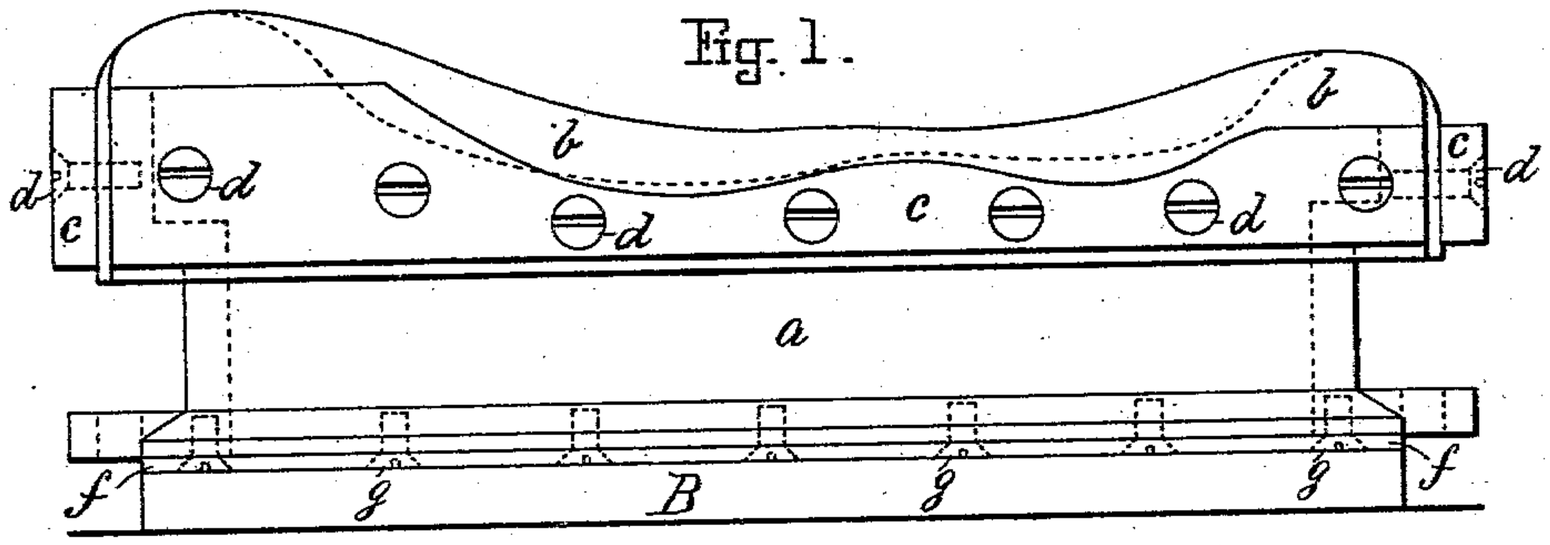
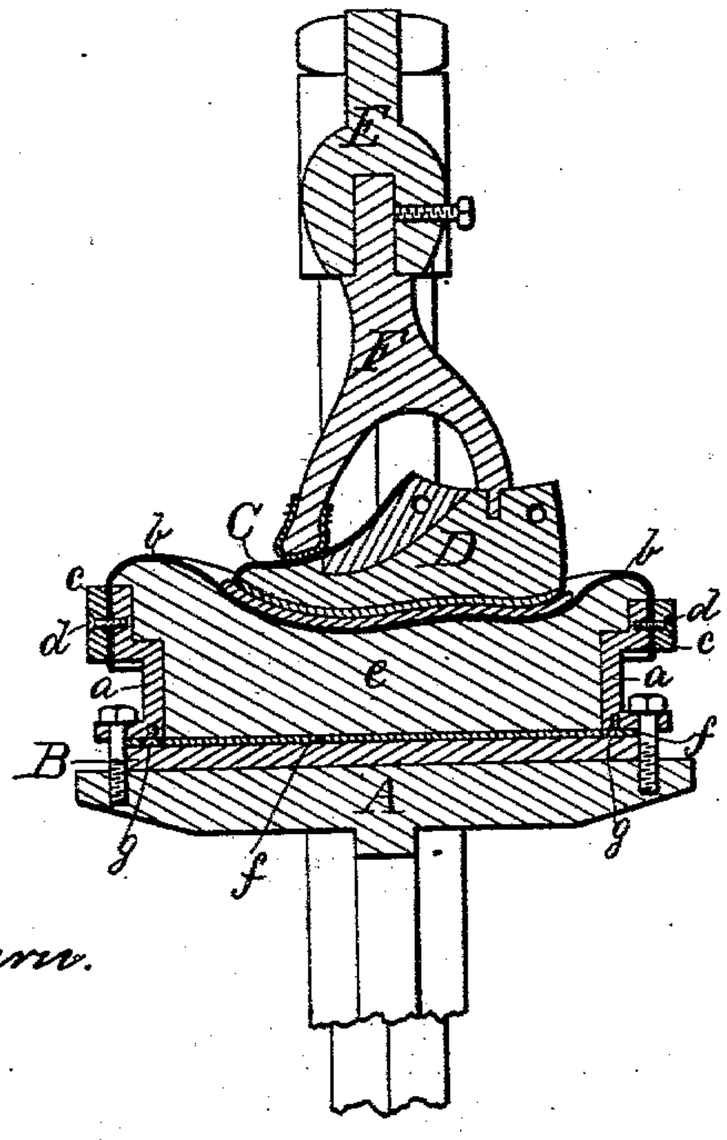


Fig. 3.



Witnesses:

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by

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UNITED STATES PATENT OFFICE.

FREEMAN WINSLOW, OF BEVERLY, MASSACHUSETTS.

METHOD OF MAKING SOLE-FORMS FOR BEATING-OUT MACHINES.

SPECIFICATION forming part of Letters Patent No. 249,438, dated November 8, 1881.

Application filed June 17, 1881. (No model.)

To all whom it may concern:

Be it known that I, FREEMAN WINSLOW, a citizen of the United States, residing at Beverly, in the county of Essex and State of Massachusetts, have invented an Improved Method of Making Sole-Forms for Beating-Out Machines; and I do hereby declare that the same is fully described in the following specification and illustrated in the accompanying drawings.

This invention relates to the manufacture of sole-forms for beating-out machines; and the object of the invention is to provide a novel method of producing the forms from a plastic composition.

To this end my invention consists in supplying a surrounding frame or shell with a filling of composition in a plastic state which will set and become rigid and inelastic, then covering said composition with leather or other flexible material, and, while in the plastic condition, impressing therein the shape of the boot or shoe sole by the pressure of the boot or shoe on its last.

In carrying out this method I employ the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of the shell or frame, its filling, and the leather or other covering thereto; Fig. 2, a top or plan view of the same; and Fig. 3, a longitudinal sectional view of a beating-out machine, showing the manner of producing the sole-form.

In the drawings, the letter *a* indicates a metallic shell or casing. This shell or case *a* is covered at the top by means of a sheet of leather or similar material, *b*, that is secured to the upper edge by means of the metallic bars *c c c c* and screws *d d*, as shown, or equivalent means.

e is the filling within the case *a*, and said filling consists, preferably, of softened gutta-percha, which, previous to its being put into the casing *a*, is softened in hot water, and when in such plastic state the gutta-percha is placed within the casing *a*, the latter being, during the operation of filling it, placed upside down, with its leather covering *b* firmly secured to it all round its sides, as described. After the gutta-percha has been introduced within the shell *a*, completely filling the same, it is inclosed within said shell by means of the metallic cover *f*, that is secured to the bottom of the shell *a* by means of suitable screws, *g g*, as shown. Before the gutta-percha in the case *a* has had time to cool and set I place the form on the table A of a beating-out machine, with a sheet of india-rubber, B, placed between the bottom of the form and the upper side of the table A, as shown in Fig. 3. In this condition of the form I cause the shoe C, or its last for which it is intended, to be pressed against the leather *b*, the shoe during such operation being lasted on its original wooden last D, as shown.

E represents the upper beam on a beating-out machine, and F represents the usual shoe-jack. The lasted shoe or its last is firmly pressed against the yielding form and held so until the gutta-percha *e* is firmly set and hardened to form a proper mold for the desired boot or shoe, after which the improved form is ready for use.

I do not wish to confine myself to a filling made of gutta-percha, as other materials—such as, for instance, cement, or other plastic materials capable of being molded by direct pressure of the shoe or last and set—may be used to equal advantage.

In using gutta-percha as a filling it may be softened and removed from its case or shell, if so desired, and remolded to produce any other desirable shape for a larger or smaller boot or shoe, as may be required, without any waste of the filling material, which may be used over and over again for various sizes and shapes of boots and shoes.

The metallic casing *a* or the covering *b*, or both, may be removed after the plastic filling is properly set and hardened to its proper shape, and the latter may be used alone, if so desired.

What I desire to secure by Letters Patent, and claim, is—

The method herein described of making a sole-form for a beating-out machine, the same consisting in supplying a surrounding shell or frame with a filling of composition in a plastic state which will set and become rigid and inelastic, covering said composition with leather or other flexible material, and, while in the plastic condition, impressing therein the shape of the boot or shoe sole by the pressure of the boot or shoe or its last, substantially as set forth.

In testimony whereof I have affixed my signature in presence of two witnesses.

FREEMAN WINSLOW.

Witnesses:

ALBAN ANDRÉN,

HENRY CHADBOURN.