E. L. Barrett. Sheet 1, 2 Sheets.

Envelope Mach.

No. 61,140. Patented Jan. 15, 1867.

Fig. 1.

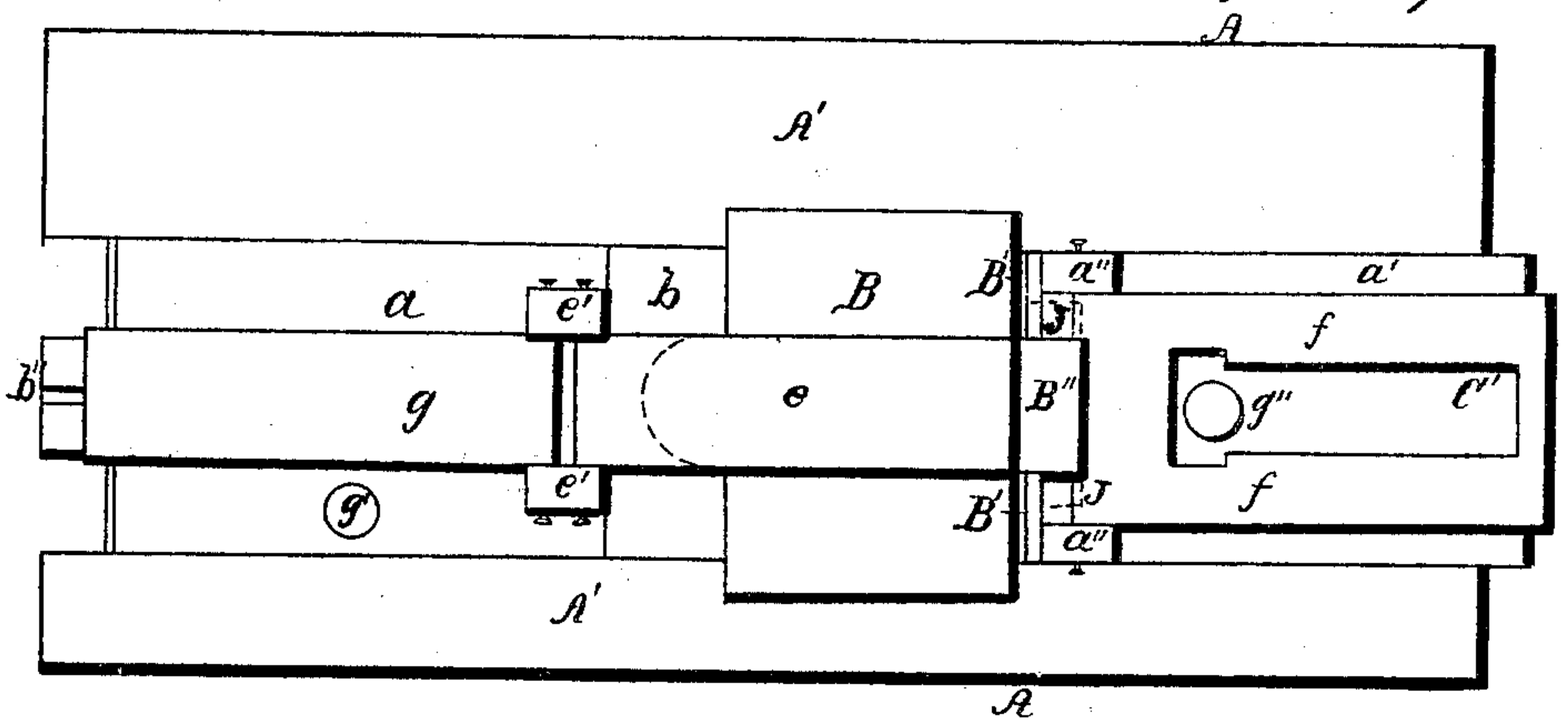


Fig. 2.

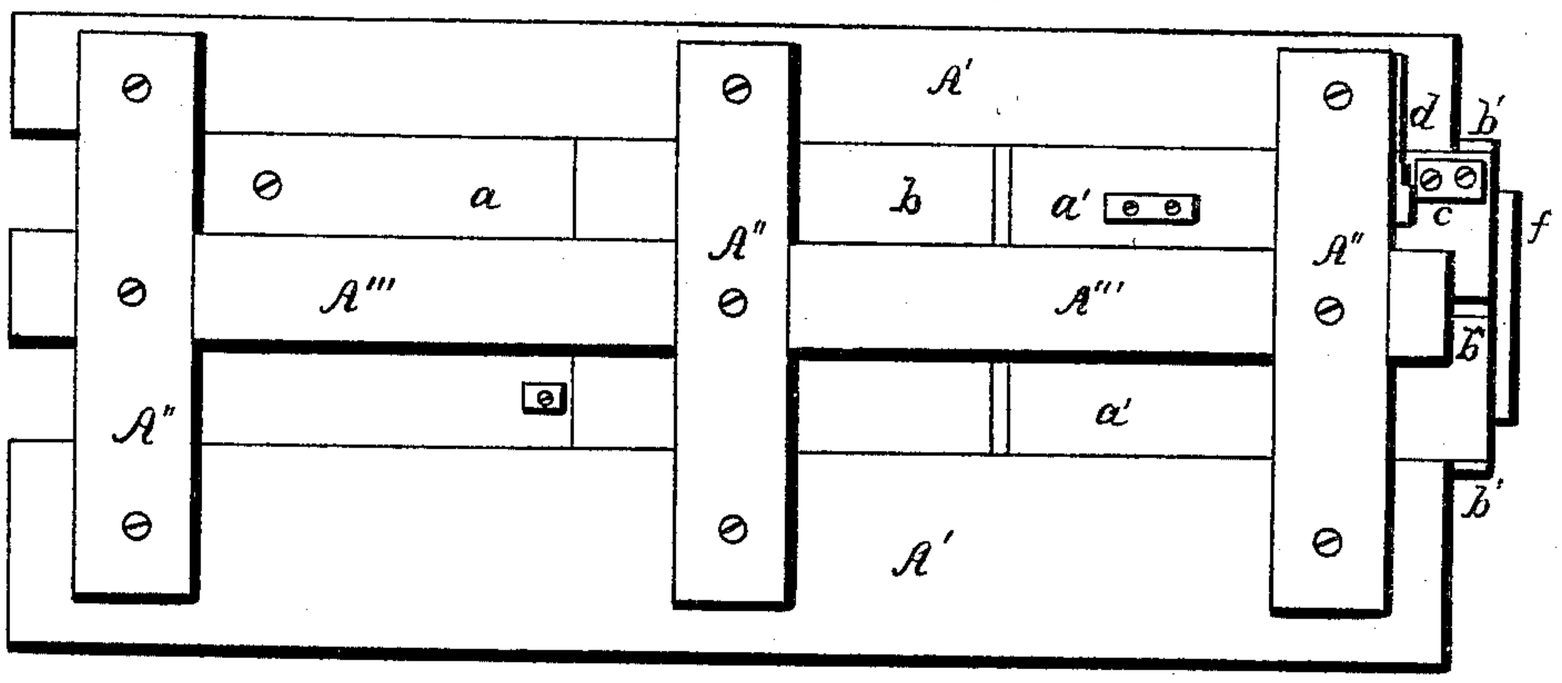


Fig. 3.

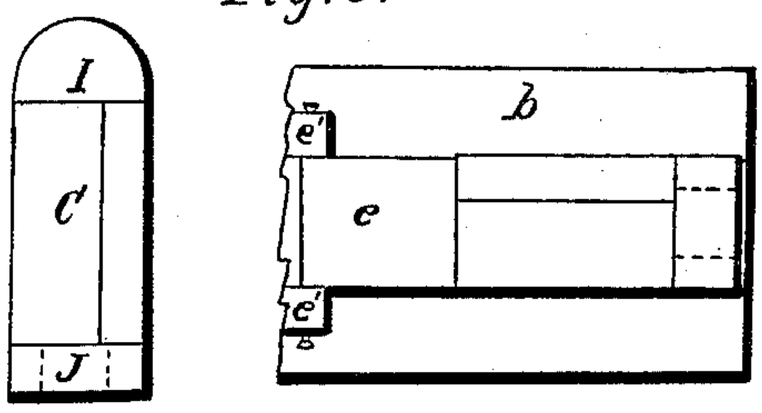
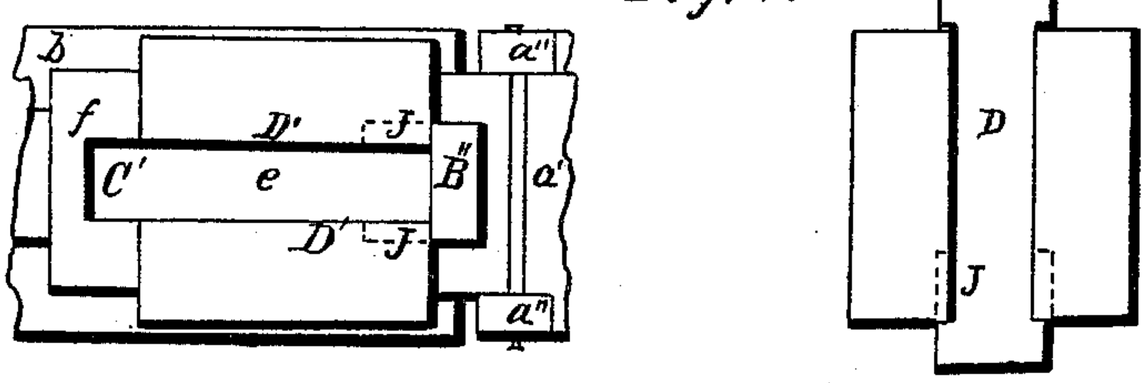


Fig. 4.



Witnesses.

Geo. W. Hastings

Frank Aldeh

Inventor.

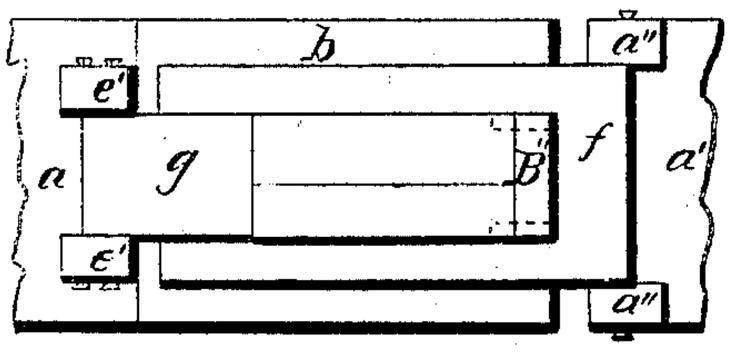
E. L. Barrett

E. L. Barrett. Sheet 2, 2 Sheets.

Envelope Mach.

No. 61,140. Patented Jan. 15, 1867.

Fig. 5.



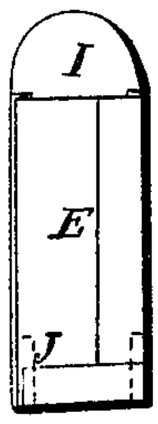


Fig. 10.

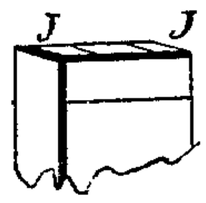
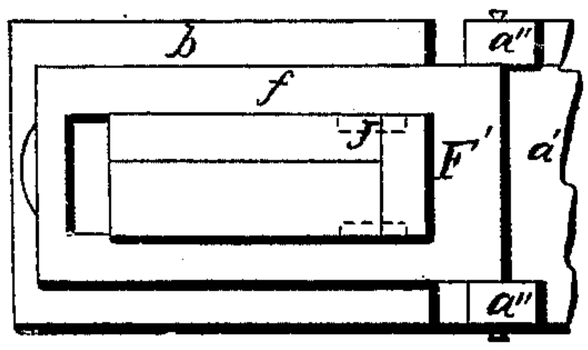


Fig. 6.



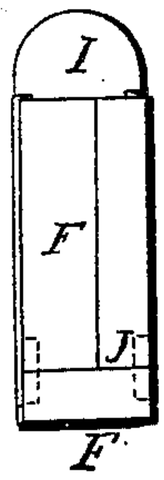


Fig. 8.

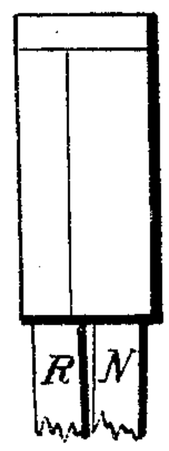


Fig. 7.

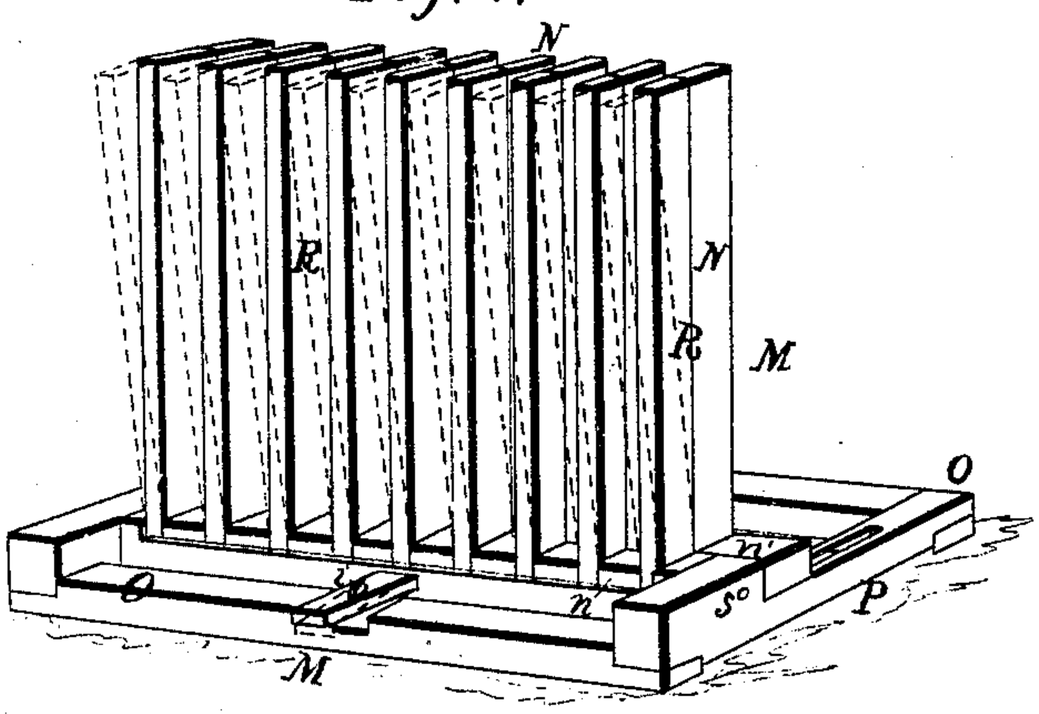
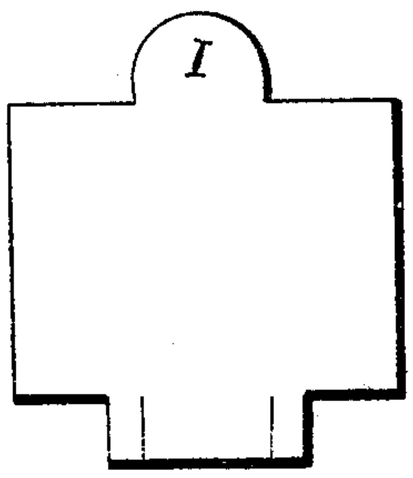


Fig. 9.



Witnesses.

Geo. W. Hastings

Frank Aldeft.

Inventor.

E. L. Barrett

United States Patent Office.

E. L. BARRETT, OF SPRINGFIELD, OHIO.

Letters Patent No. 61,140, *dated January* 15, 1867.

APPARATUS FOR MAKING ENVELOPES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, E. L. BARRETT, of Springfield, in the county of Clark, and State of Ohio, have invented certain new and useful improvements in the Process of Making Envelopes; and I do hereby declare that the following is a full and complete description of the construction of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a top view of the machine.

Figure 2 is a view of the reverse side.

The other figures will be referred to in the description.

Like letters of reference refer to like parts in the several views.

A represents the frame, composed of two side pieces, A′, which are connected together by means of the strips A″, on the under side, shown in fig. 2. Between the side pieces is the table *b*, and slides *a a′*. At one end of the slide *a′* are lugs, *a″*, to which is pivoted the plate *f*, of the form shown in fig. 1; and to one end of the slide *a* are lugs, *e′*, to which the plates *e* and *g* are pivoted as indicated. In the edge of the side pieces A′ are grooves that form ways *b′* in which the slides move, and way *b″* is also formed in the centre of the slide and strip A‴. The slides *a a′* are pushed up to the table *b*, the slide *a* close to it, and the slide *a′* as close as the stop *e*, on the back end of the slide, will allow. *d* is a gauge which determines the distance of the end of the slide *a′* from the table *b*, and by which means the depth or length of the fold at the end of the envelope is gauged, there being a slot in the gauge allowing it to be moved. In making the envelope the piece B is first laid on the table *b*, the sides in line with the folding-plates; the plate *e* is then laid over, so that the ends B′ will be even with the end of said plate; the sides of the envelope are then lapped or folded over on to the plate, and the end lap B″ is then laid over, as in Figure 3, which represents the plate with the sides and end folded over, as stated; when this is done it gives the shape seen at C, fig. 3. The plate *f* is then lapped on to the partially formed envelope C, and the end lap B″ folded back on the plate through the slot C′ in said plate; then the slide *a′* is moved back to allow the raising up of the sides A″ between said slot or opening in the plate *f*, and folding them back on to the sides of said plate. This fold is shown in Figure 4, and the form of the envelope after folding is seen at D. The next step is to lap the plate *g* on to the sides and end which have been folded back along the line D′, against the edge of the plate in the opening C′, when the plate is laid over in this way so that the end of the plate is even with the ends B′ of the envelope, the sides are first folded over on the plate *g*, and then the end, shown in Figure 5, E, giving the form of the envelope when folded thus far. The plates *e* and *g* are then withdrawn by moving back the slide *a*; *g′ g″* being a handle or knob for the convenience of moving said slides. When these plates are moved back or withdrawn, the plate *f* is raised so as to remove the partially formed envelope from the opening or slot in said plate; the folded end B″ is then withdrawn and lapped over on to the sides along the line F′, in Figure 6, thus reversing the fold from the position in fig. 5 to that in fig. 6, which is a view with the envelope folded thus, seen at F; then by pasting this end down the envelope is finished. If desired to cover the openings at the corners of the envelope, which are left in making and folding said envelope, corner laps J may be made, the piece being cut in the form seen in Figure 9, and the laps folded with the sides, the envelope being folded substantially the same as without laps, the dotted lines in the figures representing the said laps J when the envelope has been folded as described, and is of the shape seen in fig. 6. It is then put on to the stuffer M, seen in Figure 7. A view of a portion of the stuffer, with the envelope on it, as stated, is shown in Figure 8, and the corner laps turned up and pasted on to the under end of the envelope, making a close, neat article, completed as shown at Figure 10. The fingers or frame N of the stuffer are made to slide to or from the pivoted fingers R, as may be required in making envelopes of various sizes, by means of a slot, P, in the stand O of the stuffer. The fingers N, when at the desired distance from the fingers R, are secured in place by a set-screw at each end on the under side of the frame. The fingers R and N are each connected to a head, *n n′*, the head of the fingers R being pivoted at S, so as to allow them to be turned to or from the fingers N, which is done by pressing on the piece *i*, and thus moving it forward as indicated by the dotted lines in fig. 7, as may be required in holding the envelope for pasting the corner laps J over the end, as by moving out the fingers R, the ends are extended, which expands the envelope and allows the work to be readily done, and by closing the fingers the envelope is easily removed. In place of these corner laps J, an independent piece may be pasted over the openings at the corners which will answer the same purpose. I, are lappels to

cover the open ends of the envelope, which may be made with or without said lappels, or the open ends may be provided with laps to cover the corner of said end similar to the corner laps J, but not pasted as in the closed end, and may be made to open at the side instead of the end. By this process an envelope with the entire end closed, as at fig. 10, may be made in place of the open corners in the one described. If the envelope is to be made without open corners, it is first cut into the shape seen in fig. 9, which is folded in the same way and by the same means, excepting the laps J are folded back upon the sides, as seen at C, and the folding proceeds as in the other envelope, the laps being folded in with the sides and at the same time into the shape seen at E. The plates *e*, *f*, and *g*, can be made of any desired size according as the envelope is larger or smaller. This machine may be adapted to the manufacture of envelopes opening at the side instead of the end, by making the plates *e*, *f*, and *g*, shorter and broader in proportion to the size and shape of the envelope desired.

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

1. The plates *e*, *f*, and *g*, in combination with the slides *a a'*, substantially as and for the purpose set forth.

2. The stop *c*, gauge *d*, in combination with the slide *a'*, and plate *f*, substantially as and for the purpose specified.

3. Pivoting or hinging the plates *g*, *e*, *f*, to the slides *a a'*, substantially as and for the purpose described.

4. The stuffer M, fig. 7, constructed and operating as and for the purpose substantially as set forth in the herein-described process of making envelopes.

E. L. BARRETT.

Witnesses:

GEO. W. HASTINGS,

WM. W. RICE.