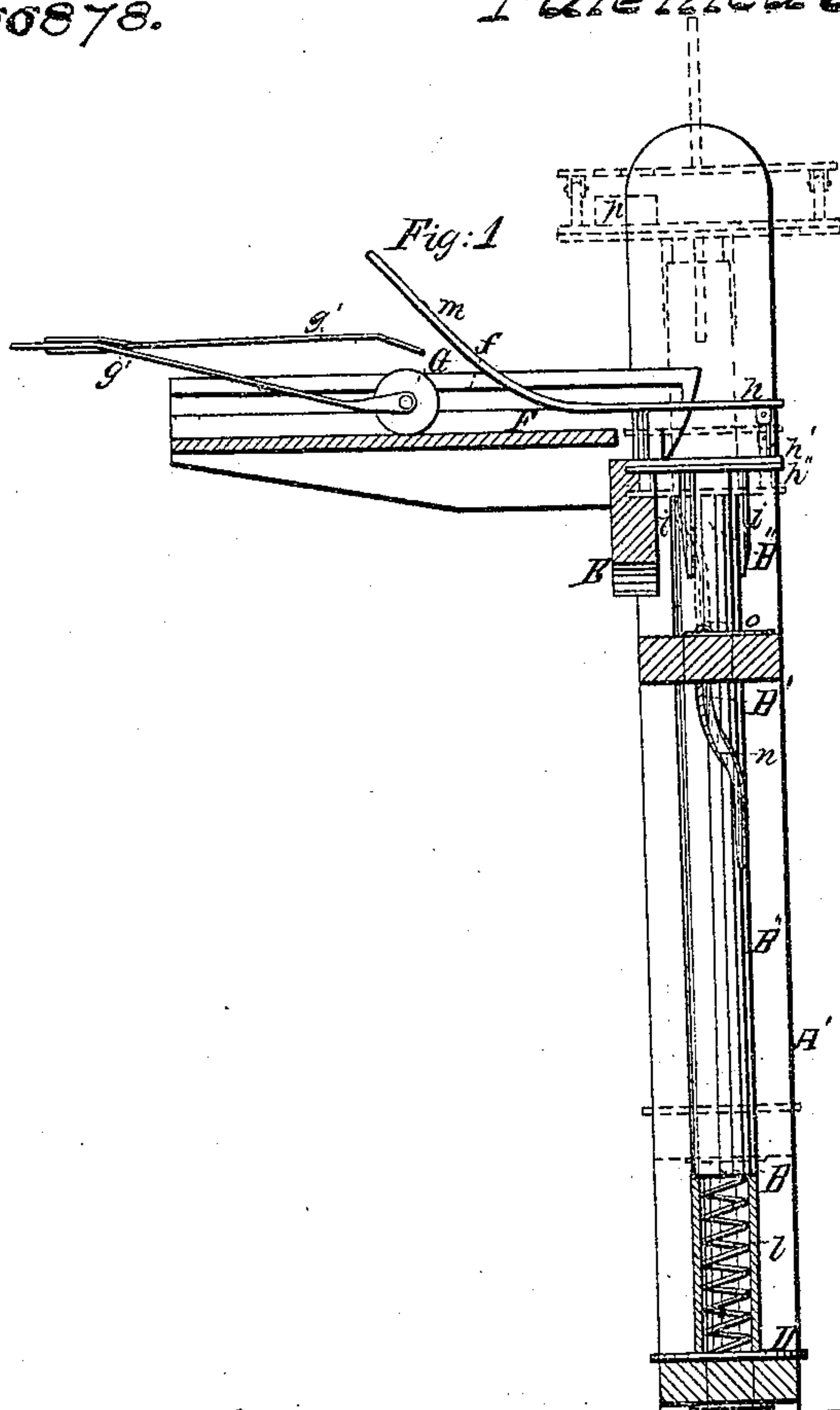


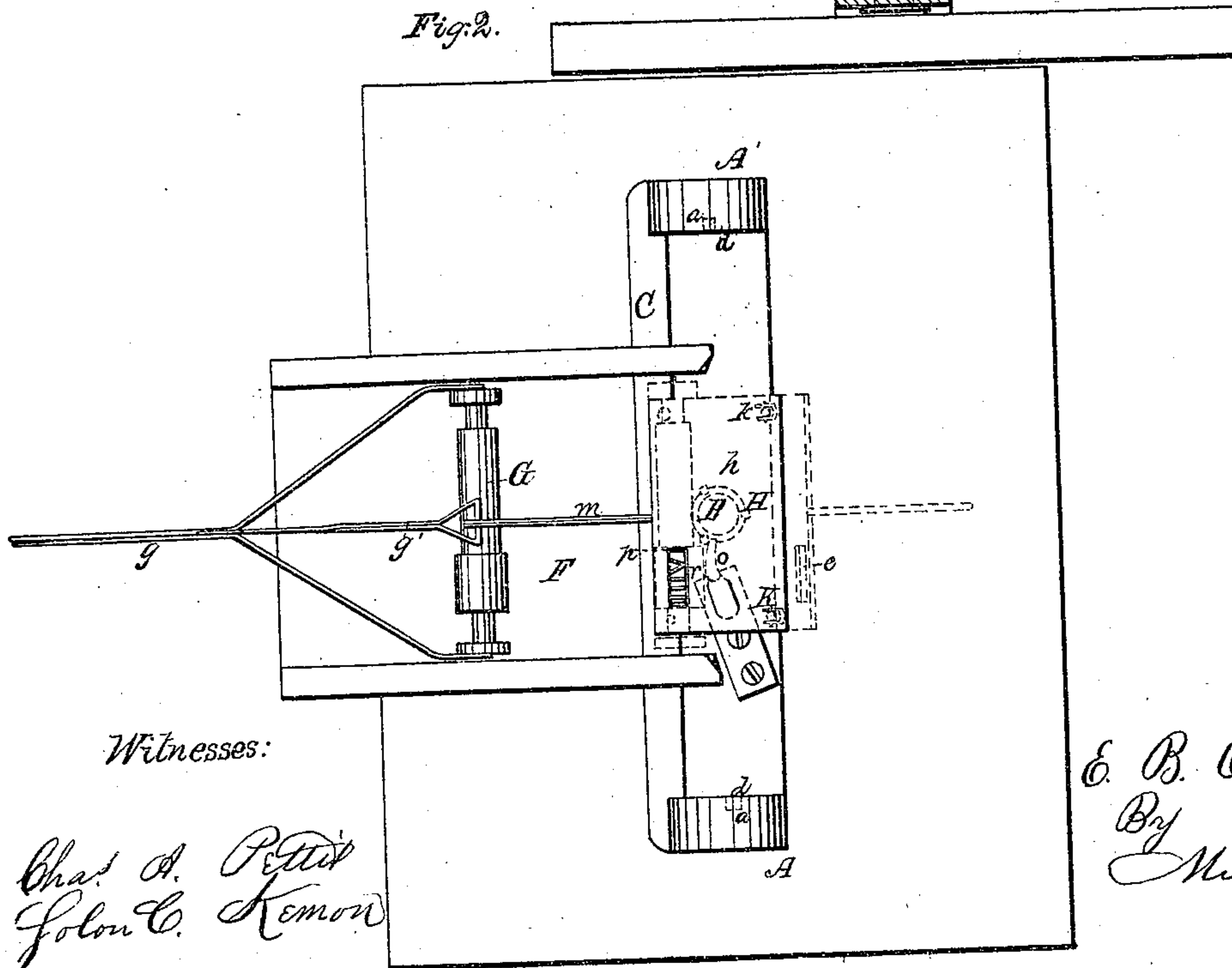
*E. B. Olmstead.*  
*Envelope Machine.*

*N<sup>o</sup> 66878.*

*Patented Jul. 16. 1867.*



*Fig. 2.*



*Witnesses:*

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*E. B. Olmstead*  
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# United States Patent Office.

E. B. OLMSTED, OF WASHINGTON, DISTRICT OF COLUMBIA.

*Letters Patent No. 66,878, dated July 16, 1867.*

## FOLDING AND PRINTING-BED FOR ENVELOPE MACHINES.

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. B. OLMSTED, of the city and county of Washington, and District of Columbia, have invented a new and improved Folding and Printing-Bed of Envelope Machines; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 represents a side elevation of my improved folding and printing-bed with its supports.

Figure 2 represents the same apparatus, as seen from a point directly above it.

Similar letters of reference indicate corresponding parts in the two figures.

The invention consists in adjusting the bed upon which the envelope is folded upon springs, which permit it to be depressed till the envelope comes in contact with the printing form, and also in regulating the motion of the bed for the economical cutting of the paper and the proper delivery of the envelopes to a carrier.

In the drawings, A A' represent the posts which support and guide the motions of the upright shaft B, which carries the printing and folding-bed. C is a fixed cross-beam connecting the posts A A'. D is a movable cross-beam, having tenons, *d d*, which run in vertical grooves *a a* in the posts A A'. E is also a fixed cross-beam attached to the posts A A', and supporting the ink-bed F. G is the ink-roller, guided by grooves *f f* in the sides of the ink-bed, and actuated by the pitman *g*. H is the bed upon which the folding and printing of the envelope is done. It is composed of three plates, *h, h', and h''*, the middle one, *h'*, fixed to supports *i i i*, attached to the outer tube B'' of the upright shaft B, and the upper and lower ones, *h* and *h''*, connected together by pins *k k* to the upper extremity of which the plate *h* is hinged. The connecting-pins are only two in number, and are situated upon the same side of the bed. Upon the opposite side are two pins of the same size as the connecting-pins, but not attached to the plate *h*. All these pins are fixed to the under plate *h''*, and move up and down with it through slots in the middle plate, carrying with them the upper plate *h*. The under plate is supported by a rod, B', sliding vertically in the hollow tube B'', and resting on the spiral spring *l* in the interior of that tube. By this means a power is applied to the upper surface of the plate *h*, and will depress it together with its connected plate *h''*, and when the power is removed the spring *l* will cause both plates to return to their original position. In one corner of the middle plate *h'* is fixed the form *p*, directly beneath the slot *r* in the upper plate. These plates are situated at such a distance from each other that when the upper plate *h* is depressed, an envelope lying upon it and depressed with it will receive an impression from the printing form *p*. The form *p* is inked by the roller G. *m* is an arm projecting from the side of the bed *h* towards the ink-roller G, and lifted by the arm G', attached to the pitman *g*, when the ink-roller approaches the bed to ink the form, thereby raising the edge of the plate *h* so as to cause the envelope lying upon it to slide off into the carrier. The latter is not shown in the drawings, but is situated below the bed, and on the side upon which the upper plate *h* is hinged, opposite to the roller G. The motions of the shaft B are governed by the curved slot *n* in the surface of the shaft and the pin *o* attached to the cross-beam C. By means of these, the bed H, when it is elevated above the level of the inking apparatus to receive the envelope from the cutter above, is turned to a position diagonal to its position as shown in the drawings, and is made to resume the position shown in the drawing when it descends to the level of the roller again. By this arrangement the cutter is enabled to cut the paper to the greatest possible advantage, effecting an immense saving of material over the machines in which the cutting is not done diagonally.

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

The triple bed H, composed of the plates *h, h', h''*, connected as shown, supported and guided by the shaft B, and actuated by the arm G', substantially as and for the purpose described.

E. B. OLMSTED.

Witnesses:

JOHN S. HOLLINGSHEAD,

JOHN D. BLOOR.