3 Sheets—Sheet 1.

J. R. APPLEGATE.

MACHINE FOR ENCASING POCKET PORTRAITS.

No. 178,706. Patented June 13, 1876.

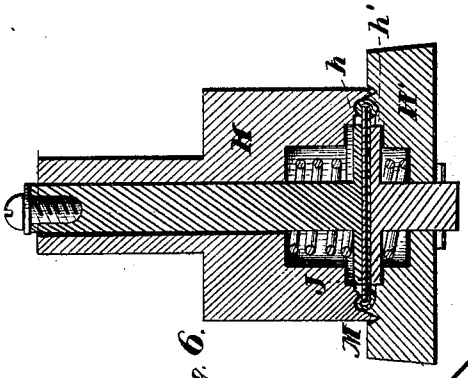

Fig. 6.

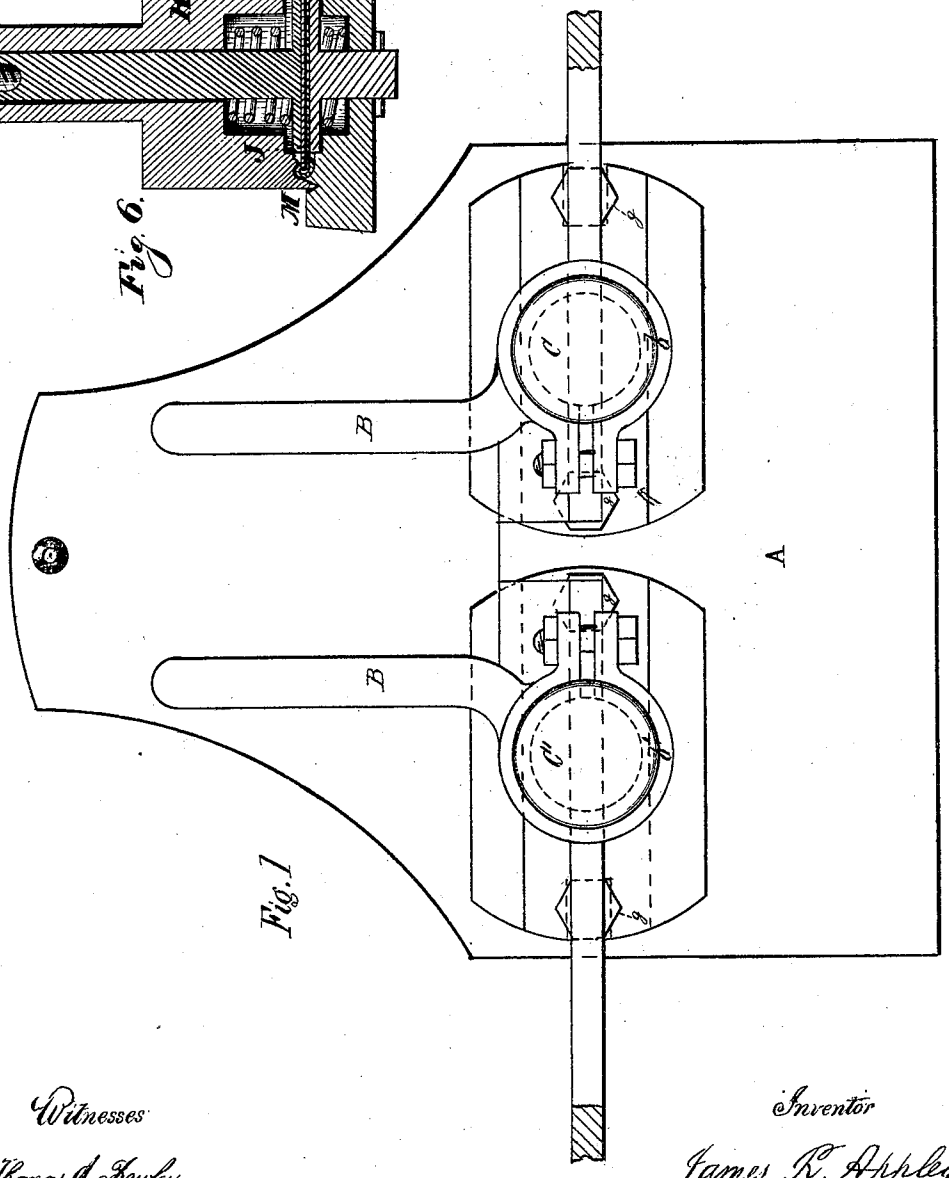

Fig. 1

Witnesses

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3 Sheets—Sheet 2.

J. R. APPLEGATE.

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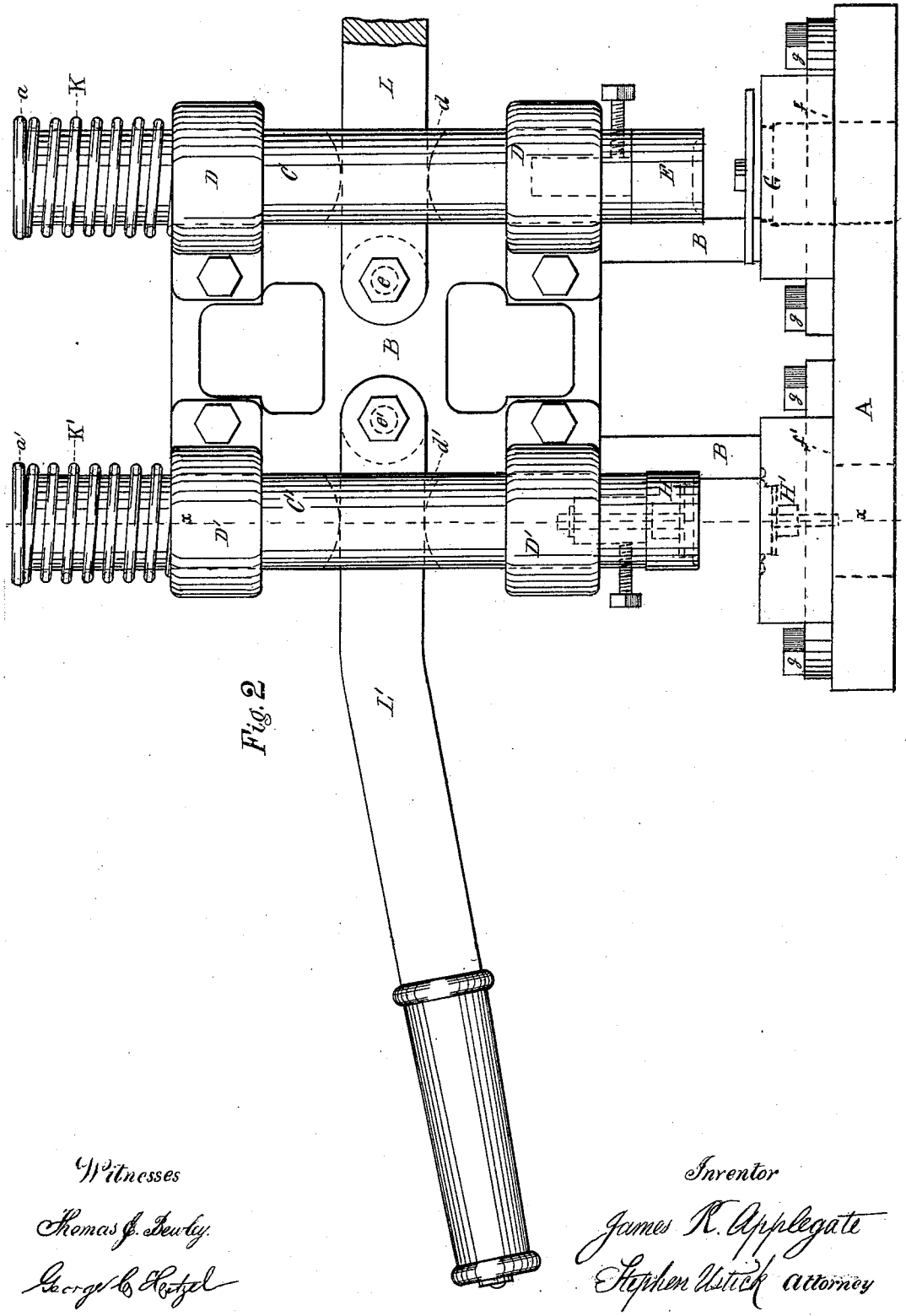

Fig. 2

Witnesses

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3 Sheets—Sheet 3.

J. R. APPLEGATE.

MACHINE FOR ENCASING POCKET PORTRAITS.

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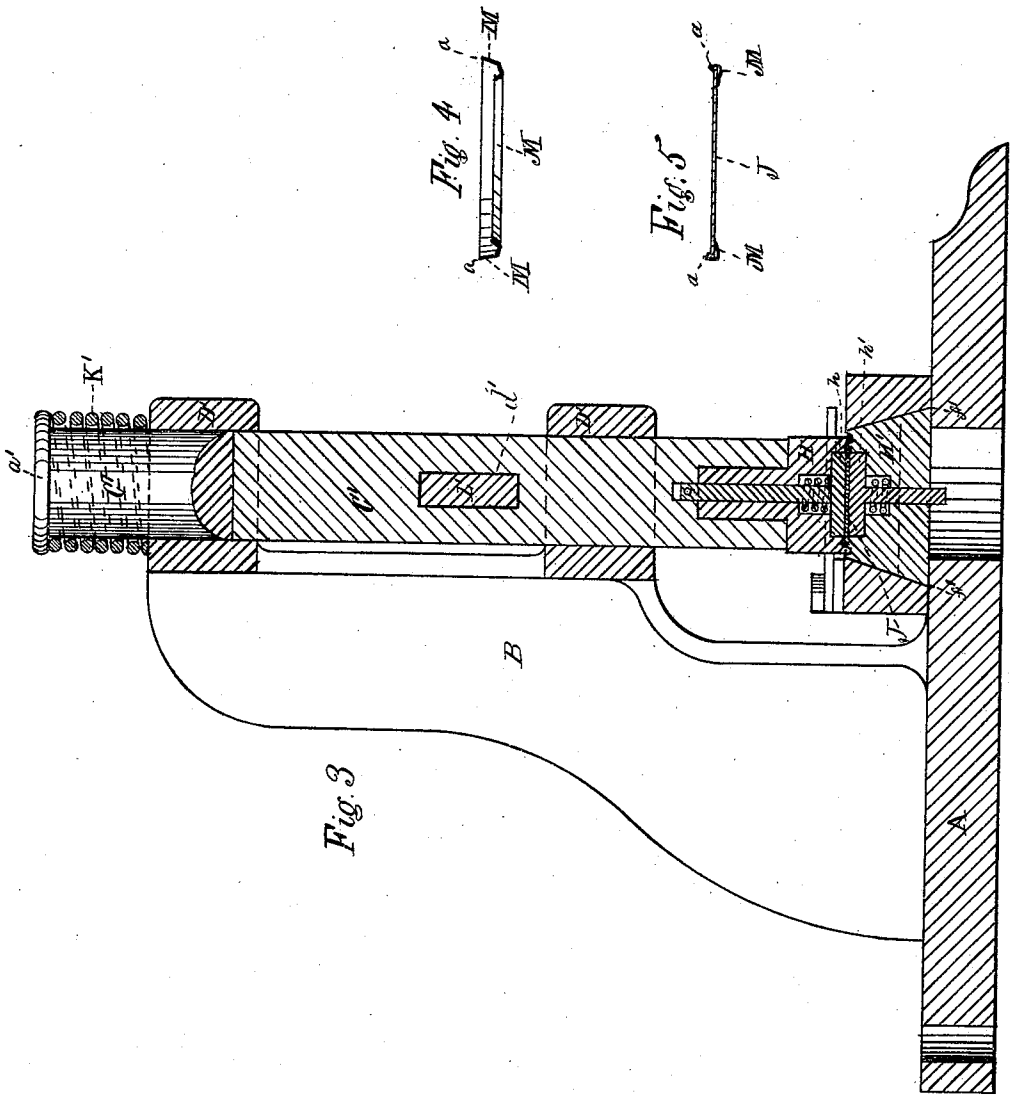

Witnesses

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UNITED STATES PATENT OFFICE.

JAMES R. APPLEGATE, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN MACHINES FOR INCASING POCKET-PORTRAITS.

Specification forming part of Letters Patent No. **178,706**, dated June 13, 1876; application filed April 28, 1876.

To all whom it may concern:

Be it known that I, JAMES R. APPLEGATE, of the city and county of Philadelphia, in the State of Pennsylvania, have invented a new and useful Machine for Punching and Incasing Pocket-Portraits, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

My invention relates to a combined machine in which the picture-plates are cut out of iron, or other suitable material, by means of a die, and are incased in appropriate cases, and are laid successively in a contiguous die, the border edge of the cases being turned over upon the edges of the plates by the action of said die, as hereinafter described.

In the accompanying drawings, Figure 1 is a plan view of my improved machine. Fig. 2, Sheet No. 2, is a front elevation of the same. Fig. 3, Sheet No. 3, is a vertical section at the line *x x* of Fig. 2. Fig. 4 is a cross-section of a case, M, ready for the reception of the plate. Fig. 5 is a face view of the plate J in its case M. Fig. 6 is an enlarged view of the sealing-dies.

Like letters of reference in all the figures indicate the same parts.

A is the bed-plate of the machine, and B the frame connected therewith, which is provided with vertical reciprocating mandrels C and C′, which work in bearings D D and D′ D′, respectively. Connected with the lower end of the mandrel C is the circular cutter E, and beneath said cutter the die G, of the size required for the plates; and connected with the lower end of the mandrel C′ is the male die H, for turning over the edge *a* of the case M, as seen in Fig. 5, on the plate J. Beneath the die H is the female die H′. On the mandrel C, between the upper bearing D and the annular lip *a* of the mandrel, is the spiral spring K, for returning the mandrel to its upper position for elevating the cutter E above the die G; and on the mandrel C′ is a spiral spring, K′, between the upper bearing D′ and the annular bearing *a′* of the mandrel, for returning the latter to its upper position, to remove the male die H above the female die H′. In a suitable slot, *d*, in the mandrel C, is placed the lever L, for operating the mandrel, the lever moving on the fulcrum-pin *e*, which projects from the front side of the frame B. A like lever, L′, for operating the mandrel C′, is placed in the slot *d′* of the mandrel, the lever working on the fulcrum-pin *e′*. The dies G and H′ are held in their adjusted positions in their grooved seats *f* and *f′*, respectively, by means of the screw-bolts *g*, and are thereby removable and attachable at pleasure.

The operation is as follows; The sheets of metal or other suitable material having one or more pictures are in succession laid upon the female die G, and the pictures, being arranged successively in position, are punched from the sheets in proper size and form for sealing in their cases by means of the circular cutter E, connected with the lower side of the mandrel C by the operation of the lever L. As the picture-plates are cut they fall into a suitable receptacle under the die G. They are taken directly from the receptacle, and, as the cases M are laid in succession in the female die H, they are in like manner laid therein, and the edges of the cases turned over on the edges of the plates, as seen in Fig. 3, by the downward stroke of the mandrel C′, given by means of the lever L′, a single stroke of the lever connecting or sealing the two edges together. The dies H and H′ are provided with spring-plates *h* and *h′*, respectively, which yield to the force of the stamping operation. Hence, it will readily be seen that the whole operation of cutting the picture-plates to the requisite size and form, and connecting them with their cases, is very simple.

By having the cutting and stamping devices combined in a single machine simplicity of construction is attained, and the machine so constructed takes up only half the space which would be required for separate machines for the cutting and stamping process.

If desired, the levers L and L′, instead of being placed at the sides of the machine as represented, may be placed in front.

I am aware that there are punching devices essentially the same as shown in the drawings for cutting metal sheets into a variety of forms; but I do not claim such device, but its joint use with the sealing device, whereby the whole operation of cutting the pictures from the sheets and sealing them in their frames is

carried on simultaneously in the same machine, so as to perform the joint operation of cutting and sealing with great dispatch, and thereby to enable artists to furnish portraits at a greatly reduced price.

I claim as my invention—

1. In a machine for the manufacture of pocket-portraits, the cutting-die and punch G E and the sealing-die H′ H jointly, the parts being constructed and arranged to be successively operated, substantially as and for the purpose specified.

2. The combination, with the upper die H′, having an annular lip, and provided with a yielding central plate, *h*, of the lower die H, having an annular groove formed at its outer edge, and provided with a yielding central plate, *h′*, substantially as and for the purpose specified.

3. The combination, with the slotted mandrel C′, spring K′, and lever L′, of the dies H H′, each of which is provided with yielding plates, substantially as and for the purpose described.

JAMES R. APPLEGATE.

Witnesses:

STEPHEN USTICK,

THOMAS J. BEWLEY.