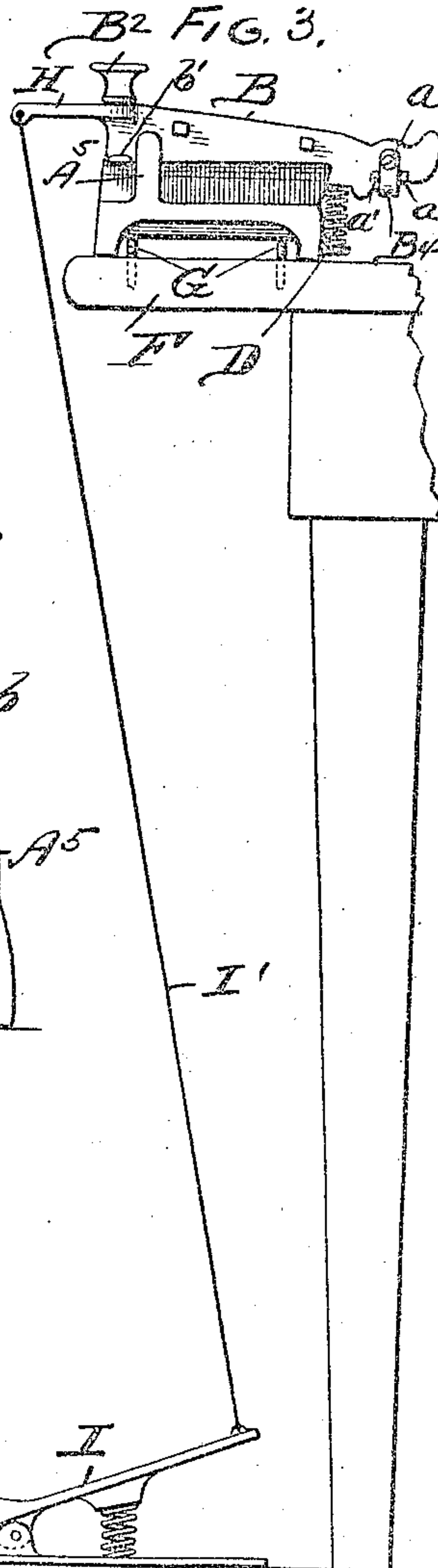
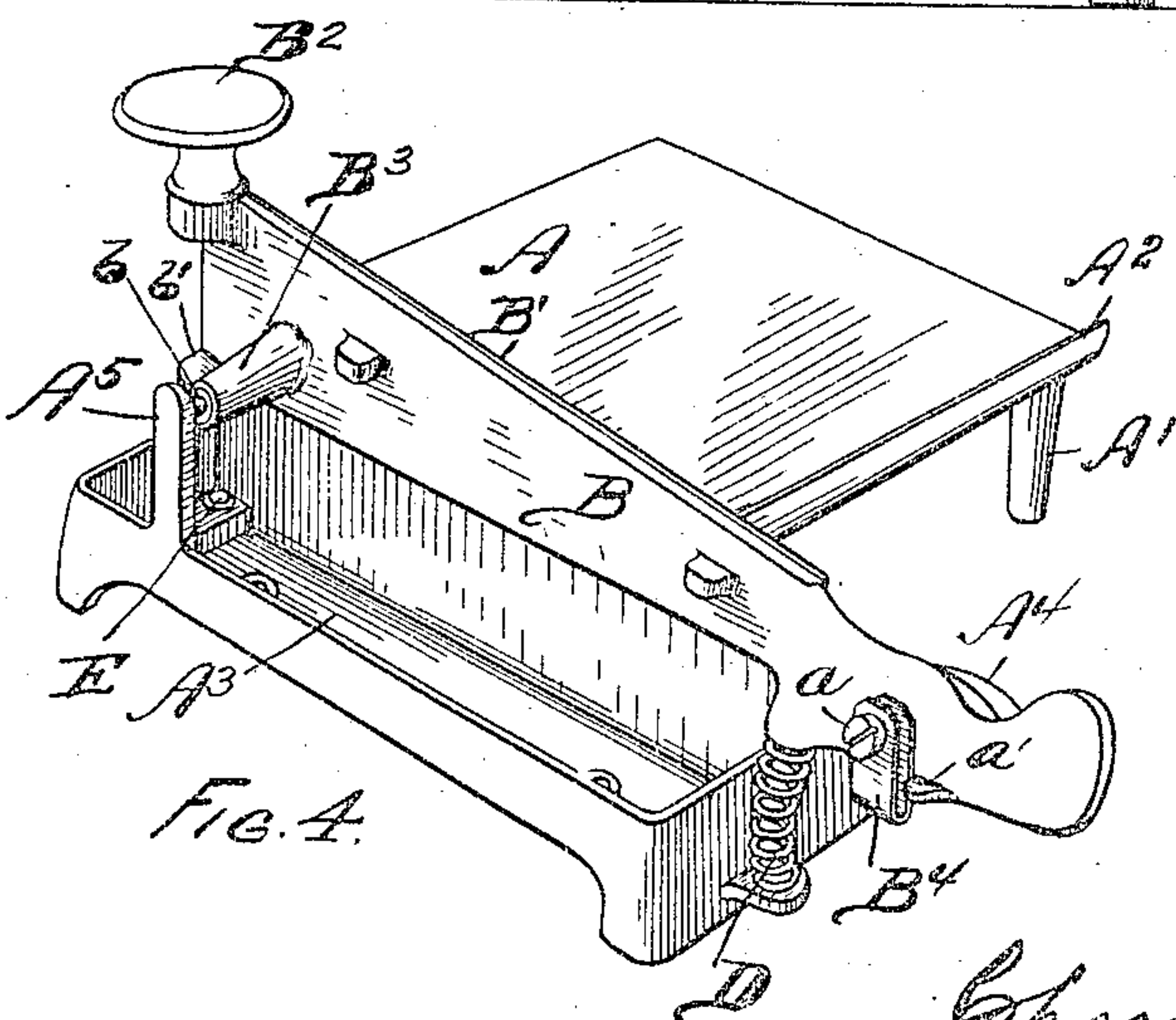
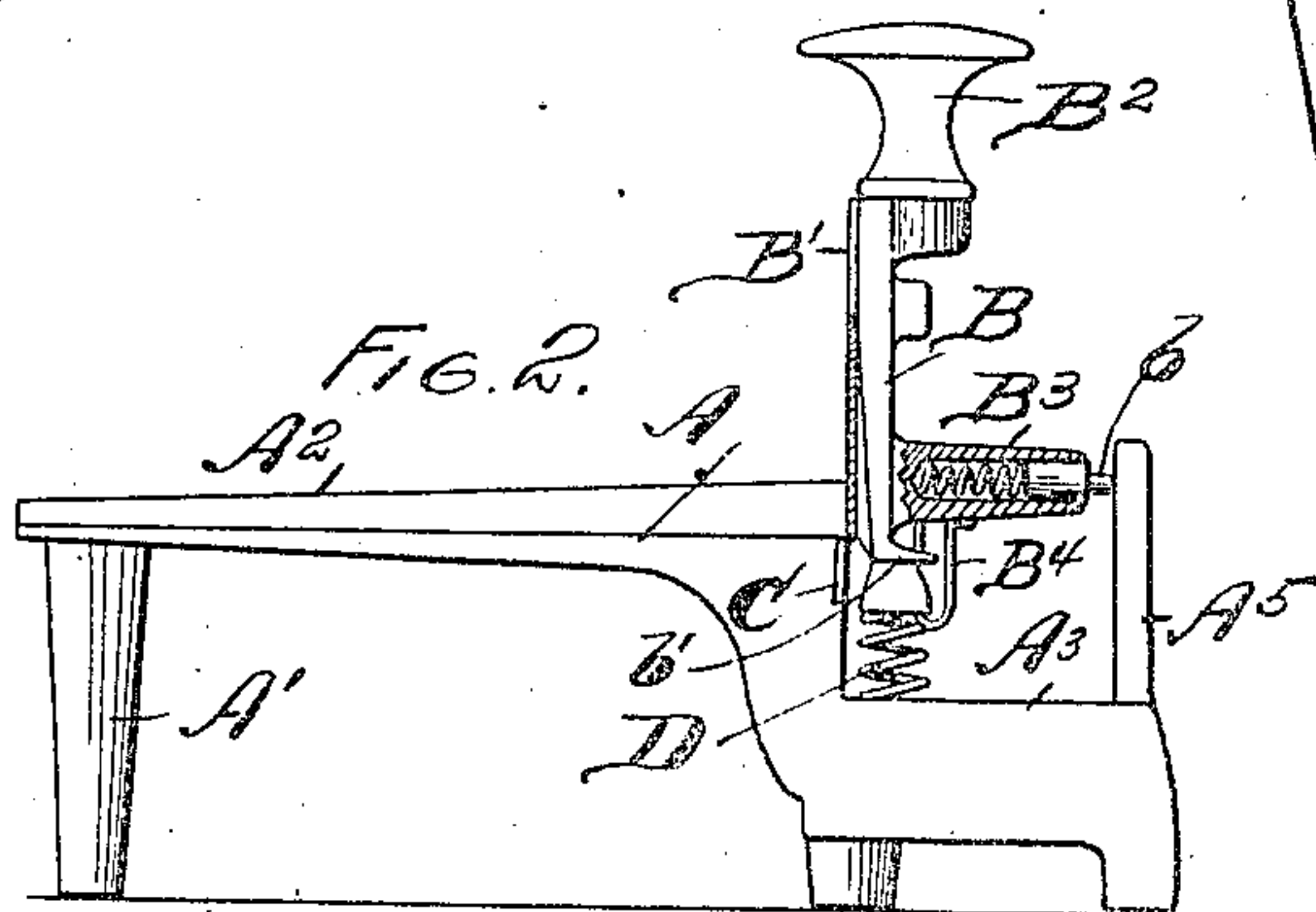
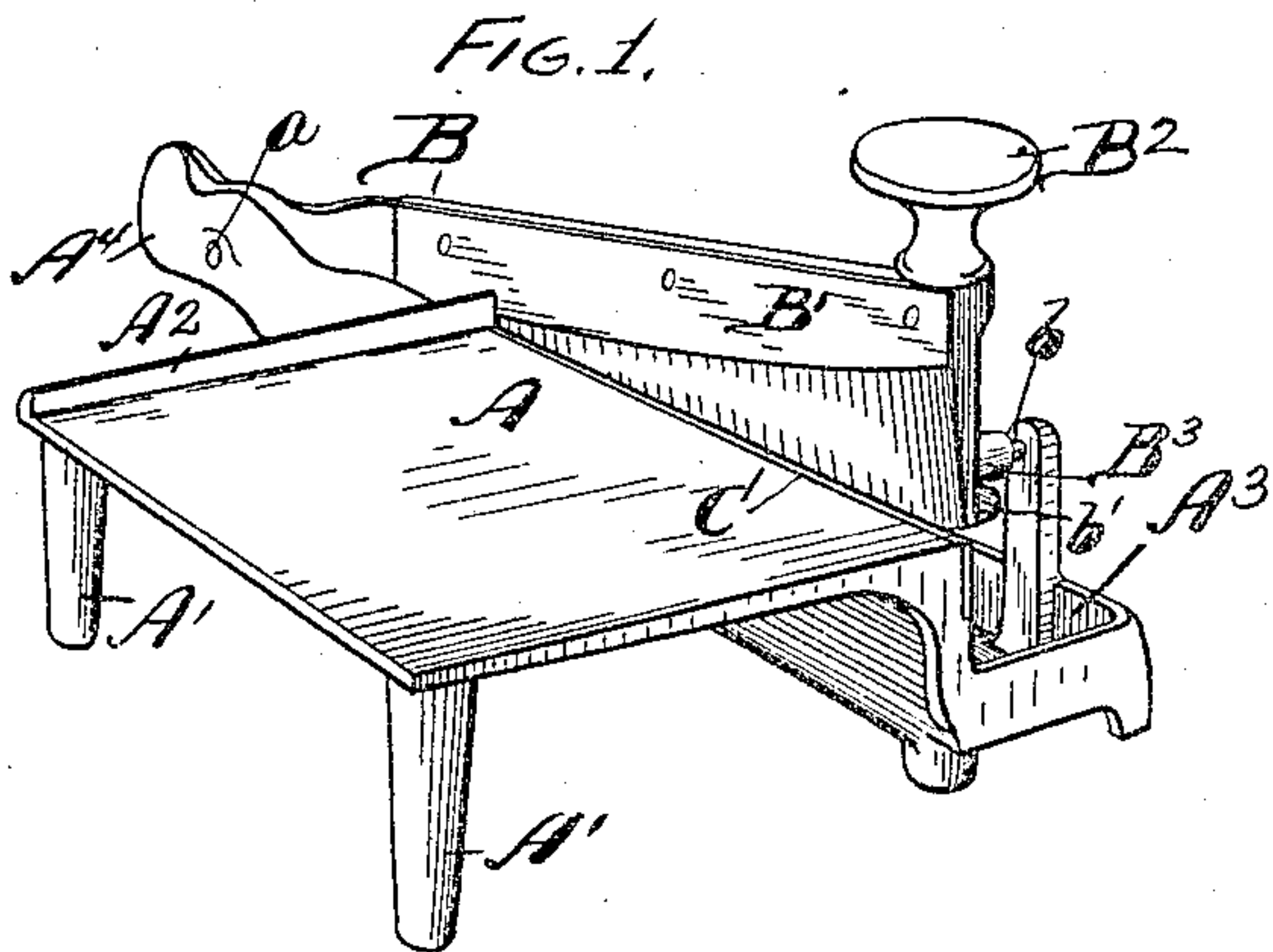


C. E. CAMPBELL.
MACHINE FOR CLIPPING ENVELOPS.
APPLICATION FILED DEC. 4, 1908.

938,741.

Patented Nov. 2, 1909.



Witnesses

Wayne S. Thomas.
M. E. Thomas

Charles E. Campbell Inventor

J. E. Thomas

Attorney

UNITED STATES PATENT OFFICE.

CHARLES E. CAMPBELL, OF DETROIT, MICHIGAN.

MACHINE FOR CLIPPING ENVELOPS.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES E. CAMPBELL, citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Machines for Clipping Envelops, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improvement in a machine for opening envelops, shown in the accompanying drawings and more fully disclosed in the following specification and claims.

The object of this invention is to supply a machine which will rapidly cut the end of sealed envelops without danger of damaging the inclosures.

One purpose of the invention is to provide a platform for supporting the envelop and a guide for feeding it to the cutting knife in order to further insure against damaging the contents of the envelop often resulting from carelessly clipping the end of an envelop.

A further improvement consists in means whereby the device may be operated by hand,—or by foot movement leaving the hands free to feed and remove the letters from the cutting device.

In the drawings: Figure 1 is a perspective view looking at the device from the platform side of the machine. Fig. 2 is an end elevation with parts broken away and in section to disclose the means employed to force the swinging blade into shearing contact with the stationary blade. Fig. 3 shows the device operated by foot power. Fig. 4 is a perspective view disclosing more clearly the chamber into which the clipped ends of the envelop drop.

Referring to the letters of reference indicated on the drawings: A is a platform on which the envelop to be clipped is placed. The platform A is supported by suitable legs A' and is provided with an upstanding flange or guide A² against which the envelop is forced in order to insure its end being exactly parallel with the cutter blade.

Below and beyond the end of the platform and preferably integral therewith, is a suitable pocket or chamber A³ to receive the

clipped ends of the envelops. Projecting rearwardly from the platform and also integral with the wall of the pocket A³ is an arm A⁴ to which a cutter blade is pivoted.

B is a swinging arm pivoted at *a* to the member A⁴. Secured to the upper portion of the swinging arm is a cutter blade B' adapted to serve in conjunction with a fixed blade C, attached to the wall of the pocket A³ its edge flush with the top of the platform.

B² is a knob mounted upon the upper edge of the swinging arm by means of which the arm may be operated.

Rising from the wall of the pocket A³ is a short post A⁵ serving as an abutment for the spring actuated plunger *b* housed within the tubular stem B³, which latter projects rearwardly from the swinging arm B.

Sleeved on the pivot of the swinging arm and bearing against the head of the pivot pin *a* is a spring B⁴ which may be U-shaped and held between the lugs *a'*, *a'* as shown or may be of other suitable form, such as a coiled spring sleeved on the pivot pin. As will be readily understood, the purpose of both the spring actuated plunger *b* bearing against the post A⁵, and the spring B⁴ supported on the pivot and bearing against the swinging arm is to force the cutter blade of the swinging arm into shearing relation with the stationary cutter blade. It will also be seen that the swinging arm projects rearwardly a relatively long distance from the pivot *a* and that the supporting arm A⁴ also projects rearwardly an equally long distance, the ends of each abutting and formed arc-shaped,—the purpose being to assist the springs in maintaining the blades in a cutting relation throughout the entire stroke of the swinging blade.

D is a coiled spring one end of which is supported on a lug formed on the wall of the pocket A³, the other engages the underside of the swinging bar B to return it to its initial position after being actuated.

E is a rubber buffer or cushion supported in a suitable socket formed in the wall of the pocket A³ and is designed to receive the impact of the blow resulting from the operation of the swinging arm. *b'* is a lug formed near the lower edge of the swinging arm to encounter the buffer E when the arm B is operated.

In Fig. 3 I have shown how the device may be operated by foot power.

F indicates a table, to the top of which it is secured by screws G, passed through apertures provided in the bottom wall of the pocket A³.

5 H is a bar cast integral with the swinging arm or otherwise secured thereto as desired.

I is a foot pedal and I' a pitman connecting the pedal and bar H.

10 Having indicated the several parts by reference letters, the operation will be readily understood.

The envelop to be cut is laid upon the platform A and against the guide A² forcing it into contact with the lower portion of the 15 swinging arm B, it being noted that the cutter blade B' proper is above the edge of the platform when the swinging arm is in its initial position. The swinging bar is then actuated by striking the knob B² which operating clips off the end of the envelop depositing the clipping into the pocket A³.

20 Upon referring to Fig. 2 it will be noted that the swinging arm is slightly beveled in cross section on the side adjacent to the platform commencing at a point directly below the cutting edge of the blade secured to the swinging arm and slanting away from the platform. The object of this is to provide room for the clipped end of the envelop 25 and to assist in conveying it downwardly into the pocket A³.

Having thus described my invention, what I claim is:—

35 1. In a machine for clipping envelops, a platform to support the envelops and provided on one side with a guide, a pocket formed with the platform and depending therefrom at one end thereof, said pocket receiving the clippings, a swinging cutter 40 blade adapted to pass the edge of the platform in shearing relation therewith and immediately above said pocket, whereby the end of an envelop may be clipped and the clipping deposited in the pocket.

45 2. In a machine for clipping envelops, a platform to receive the envelops and provided on one side with a guide and on one end with a depending portion, a pocket disposed beneath the plane of the platform and of which pocket said depending portion of 50 the platform forms a wall, said pocket receiving the clipping, a swinging cutter blade adapted to pass the edge of the platform in shearing relation with said depending portion of the platform, whereby the end of an 55 envelop may be clipped and the clipping deposited in said pocket.

60 3. In a machine for clipping envelops, a platform to support an envelop and provided at one side with a guide and at one end with a depending portion, a pocket to receive the clippings and of which pocket said depending portion of the platform forms a 65 wall, a blade fixed against said depending portion, and a swinging cutter blade adapt-

ed to pass the platform in shearing relation with said fixed blade whereby the envelop may be clipped and the clipping deposited in the pocket.

4. In a machine for clipping envelops, a 70 platform to support an envelop and provided at one side with a guide and at one end with a depending portion, a pocket to receive the clippings and of which pocket said depending portion of the platform 75 forms a wall, a blade fixed against said depending portion, a swinging cutter blade adapted to pass the platform in shearing relation with said fixed blade whereby the envelop may be clipped and the clipping de- 80 posited in the pocket, and means for cushioning the swinging blade at the limit of its downward movement.

5. In a machine for clipping envelops, a 85 platform to support an envelop and provided at one side with a guide and at one end with a depending portion, a pocket to receive the clippings and of which pocket said depending portion of the platform 90 forms a wall, a blade fixed against said depending portion, a swinging cutter blade adapted to pass the platform in shearing relation with said fixed blade whereby the envelop may be clipped and the clipping de- 95 posited in the pocket, means for cushioning the swinging blade at the limit of its downward movement, and means having engagement with the swinging blade to force it normally against the depending portion of 100 the platform.

6. In a machine for clipping envelops, a 105 platform to support the envelops, an upstanding flange guide on one side of the platform, a fixed cutter blade at the end of the platform, a pocket beneath the fixed cutter 110 blade to receive the clipped ends, a swinging arm pivoted to the frame of the platform, a cutter blade secured to the swinging arm but relatively narrow, the face of said 115 swinging arm beneath the cutter blade slightly tapering from the edge of the blade to assist the discharge of the clipped end of the envelop into the pocket below.

7. In a machine for clipping envelops, a 120 platform to receive the envelop and provided on one side with a guide and at one end with a depending portion, a pocket disposed beneath the plane of the platform and of which said depending portion forms a wall, 125 said pocket receiving the clipping from the envelop, a post rising from said pocket, a swinging cutter blade adapted to operate against said depending portion of the plat- 130 form to clip the envelop and to discharge the clipping into said pocket, and a spring controlled plunger having engagement with said post and the swinging blade to tension the latter to hold it positively in shearing relation with said depending portion of the platform.

8. In a machine for clipping envelopes, a platform to support the envelopes, an upstanding guide flanged at one side of the platform, a fixed cutter blade secured to one end of the platform, a pocket to receive the clipped ends of the envelopes beneath the cutter blade, a swinging cutter blade pivoted to the frame of the platform, a spring sleeved on the pivot and bearing on the swinging blade, a tubular stem formed on the swinging end of the cutter blade, a spring actuated plunger housed therein, an upstanding post rising above the wall of the pocket to receive the end of the spring actuated plunger, a knob mounted on the top of the swinging cutter blade, and a spring supported in the frame bearing on the under side of the swinging cutter blade to support the latter in its initial position.

9. In a machine for clipping envelopes, a platform to receive the envelope and provided on one side with a guide and at one end with a depending portion, a pocket disposed beneath the plane of the platform and of which said depending portion forms a wall, said pocket receiving the clipping from the envelope, a post rising from said pocket, a swinging cutter blade adapted to operate against said depending portion of the platform to clip the envelope and to discharge the clipping into said pocket, a spring controlled plunger having engagement with said post and the swinging blade to tension the latter to hold it positively in shearing relation with said depending portion of the platform, other means for forcing the swinging blade into shearing relation with said depending portion, means for cushioning the blade at the limit of its downward stroke, and means for swinging the blade normally to its upward limit of movement.

10. In a machine for clipping envelopes, a platform to support an envelope and provided on one side with a guide and on one end with a depending portion, a pocket of which said depending portion forms a wall,

a swinging cutter blade adapted to pass the edge of the platform in shearing relation therewith and immediately above the inner side of said pocket, whereby the end of an envelope may be clipped and the clipping deposited in the pocket, and means for placing the cutter blade under tension.

11. In a machine for clipping envelopes, a platform to support an envelope and provided with a depending portion, a pocket of which said depending portion forms a wall, an arm secured to the platform, a swinging blade pivoted at the outer end of said arm and adapted to pass said depending portion of the platform in shearing relation therewith, whereby the end of an envelope may be clipped and the clipping deposited in the pocket.

12. In a machine for clipping envelopes, a platform to receive an envelope and provided with a depending portion, a pocket of which said depending portion forms a wall, the remaining walls of the pocket being below the plane of the platform, an arm projecting from the platform, a second arm having pivotal engagement with the aforesaid arm, a cutter blade carried by the second mentioned arm and adapted to pass said depending portion of the platform in shearing relation therewith, the lower edge of the cutter blade terminating short of the lower edge of said second mentioned arm whereby the portion of the latter arm below the blade may serve as a stop for the envelope, the face of said second mentioned arm upon which the cutter blade is disposed being slightly beveled to assist in a discharge of the clipping from the clipped envelope into said pocket.

In testimony whereof, I sign this specification in the presence of two witnesses.

CHARLES E. CAMPBELL.

Witnesses:

GRACE E. WYNKOOP,
SAMUEL E. THOMAS.