

No. 740,871.

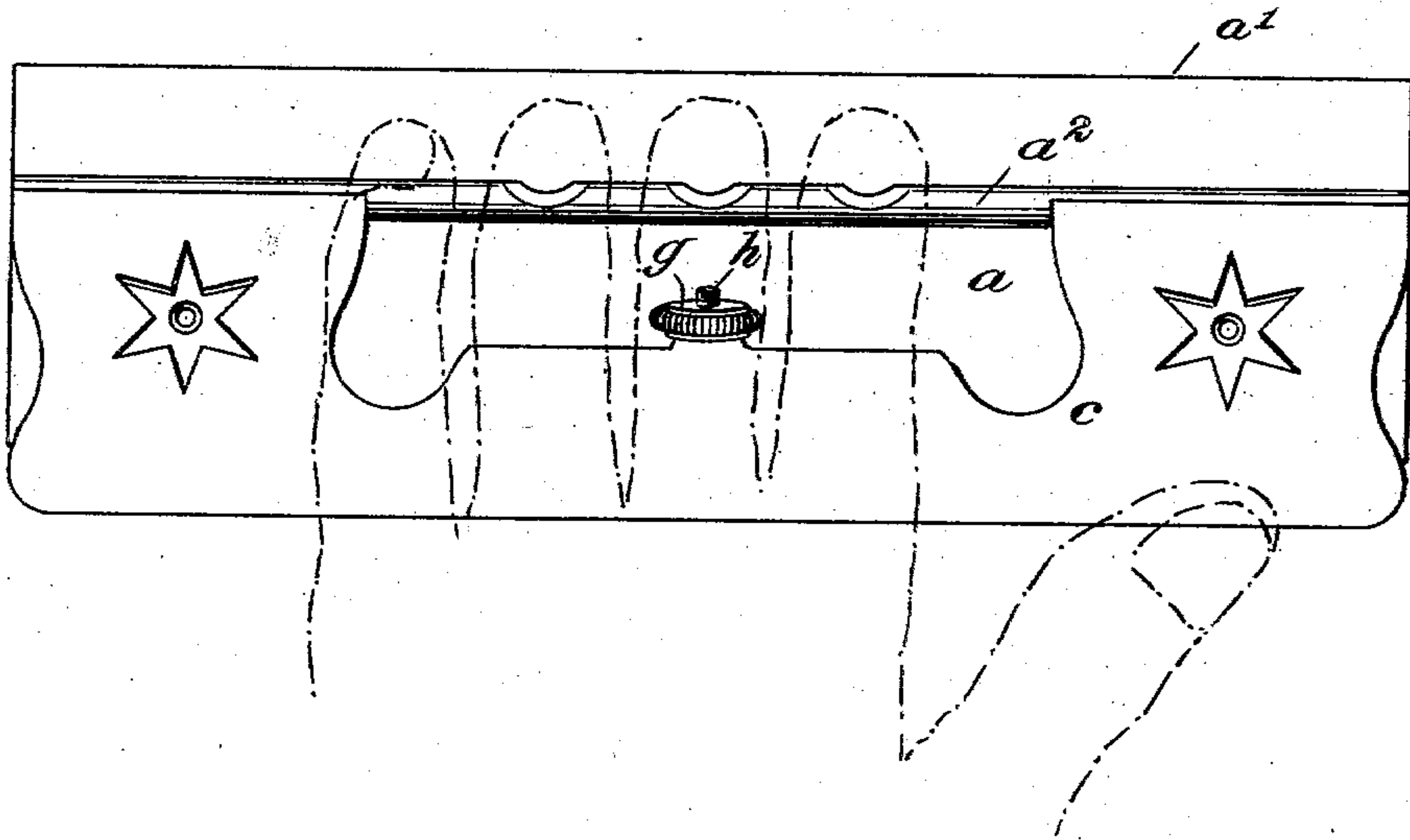
PATENTED OCT. 6, 1903.

R. KASTMANN.  
SECTION LINER.

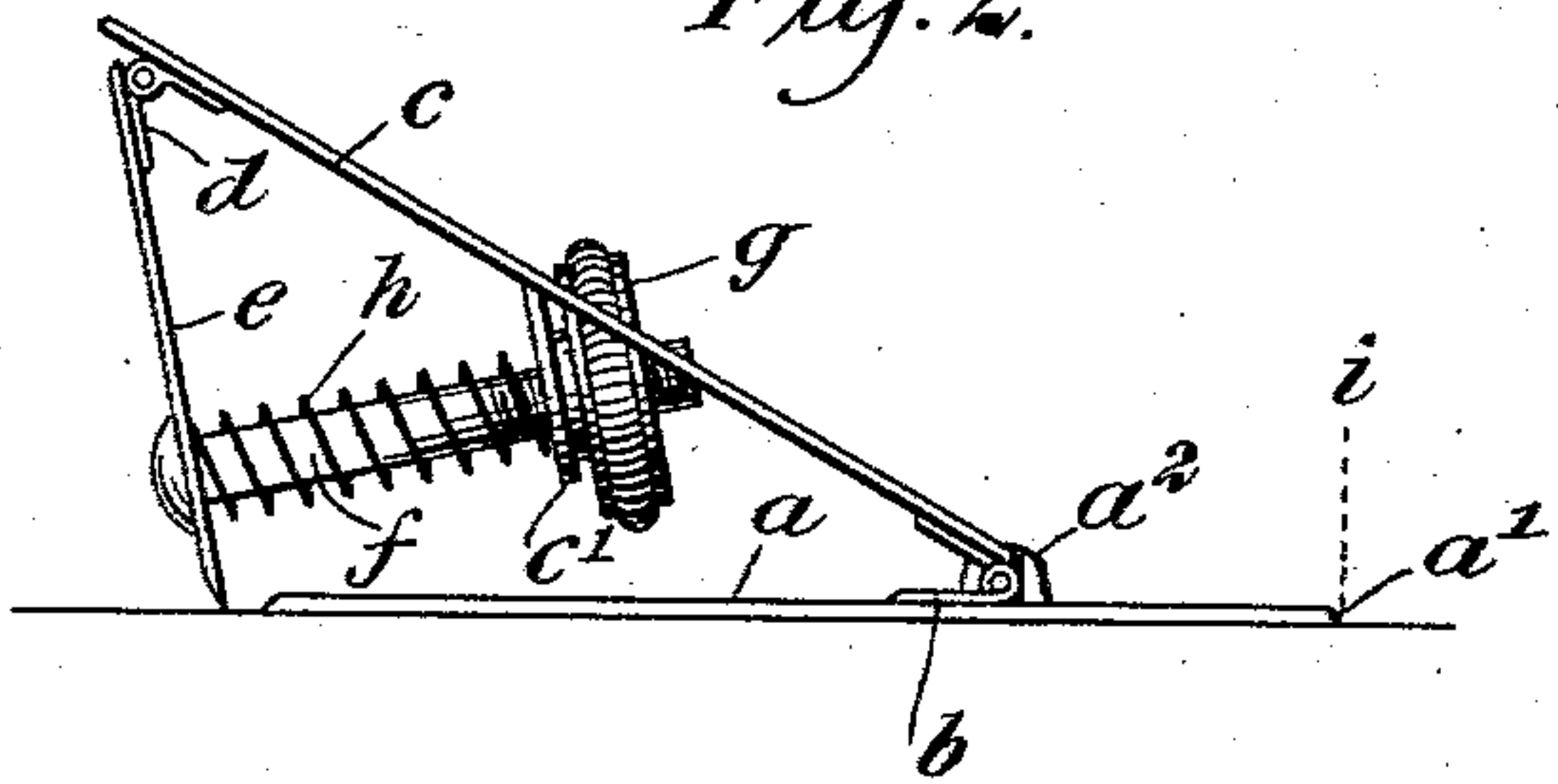
APPLICATION FILED AUG. 26, 1902.

NO MODEL.

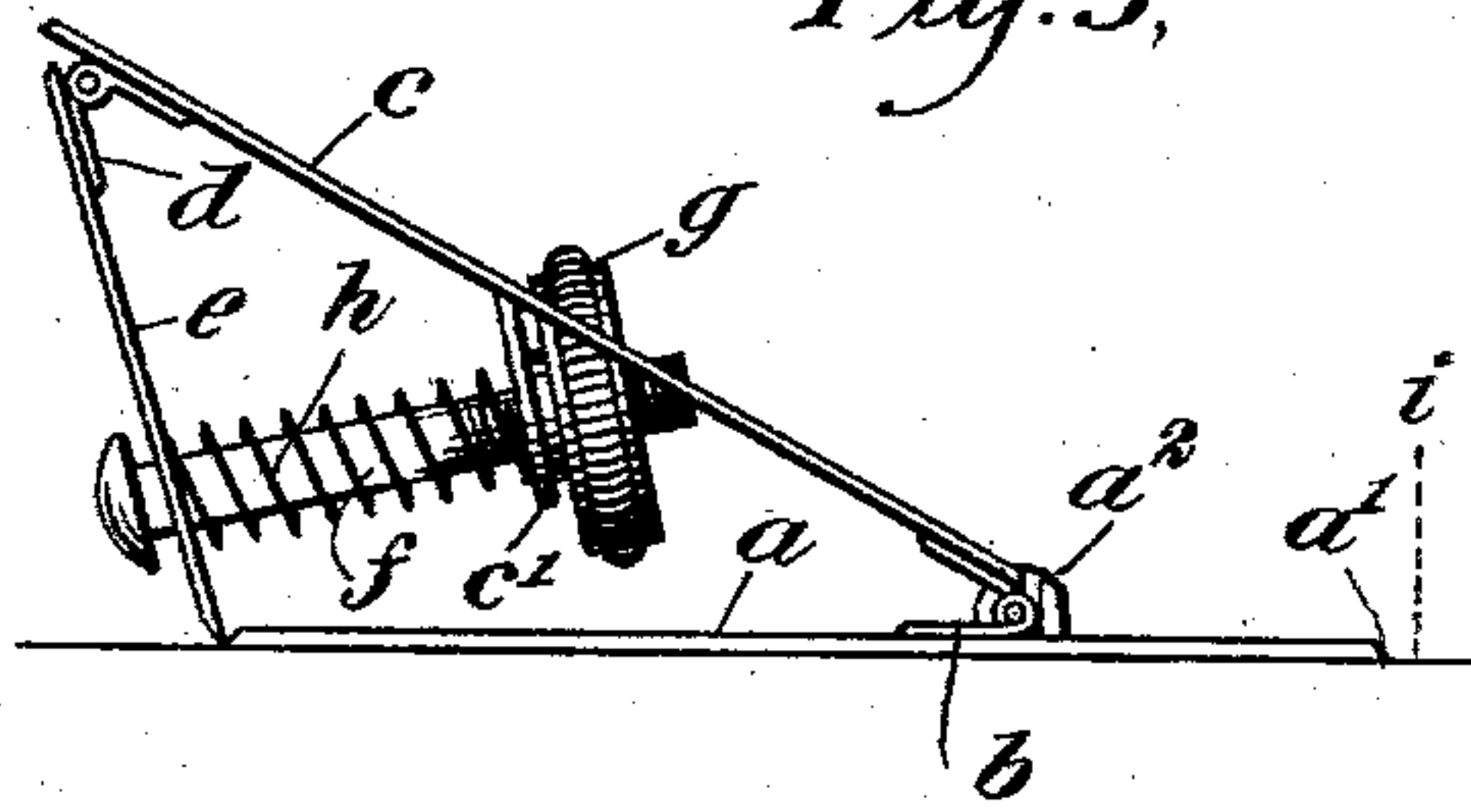
*Fig. 1,*



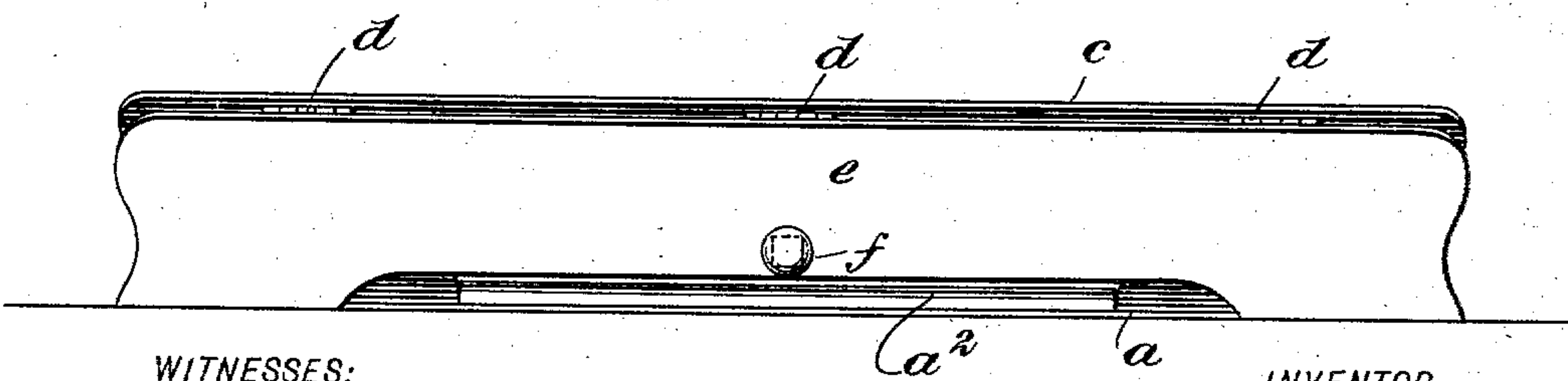
*Fig. 2,*



*Fig. 3,*



*Fig. 4.*



WITNESSES:

*Edward Thorpe.*  
*Isaac B. Owens.*

INVENTOR

*Richard Kastmann*

BY

*[Signature]*  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

RICHARD KASTMANN, OF NEW YORK, N. Y.

## SECTION-LINER.

SPECIFICATION forming part of Letters Patent No. 740,871, dated October 6, 1903.

Application filed August 26, 1902. Serial No. 121,055. (No model.)

*To all whom it may concern:*

Be it known that I, RICHARD KASTMANN, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Section-Liner, of which the following is a full, clear, and exact description.

This invention relates to an instrument for facilitating the drawing of parallel lines. Such lines are very commonly employed in the art of drafting to indicate sections, and it is to this work that the invention is especially adapted, although it is clear that it may be employed in the various other branches of drawing, if so desired.

This specification is a specific description of one form of the invention, while the claims define the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view. Figs. 2 and 3 are end views illustrating the action of the device, and Fig. 4 is a rear view.

The apparatus comprises a base-plate *a*, having a straight or ruling edge *a'*, against which the pen is drawn to rule the line. A bead *a<sup>2</sup>* is formed on top of the base-plate *a*, and this bead is notched at its middle to facilitate grasping it in the manner indicated by the dotted lines in Fig. 1.

*b* indicates hinges which connect the plate *a* with the top section *c*, these hinges being located just rearward of the laterally-reduced or narrowed ends of the bead *a<sup>2</sup>*. This top section *c* is joined by hinges *d* to the rear section *e*. The top section *c* extends upward and rearward from the plate *a*, and the section *e* extends downward from the rear edge of the section *c*. The section *c* is adapted to swing on the base-plate *a*, and the section *e* swings on the top part *c*. The relative movement of the parts *e* and *c* is limited by a screw or pin *f*, which is adjustably held in a lug *c'* of the section *c* by means of a finger-nut *g*. A spring *h* surrounds the pin *f* and presses between the section *e* and the lug *c'*, thus tending normally to throw the section *e* into its rearwardmost position.

In the use of the invention the parts normally assume the position shown in Fig. 2,

owing to the action of the spring *h* with the pin *f*. The sharp lower edge of the back section *e* engages the drawing-surface, and to operate the device a line should be drawn at the point indicated by the broken line *i* in Fig. 2, after which the base-plate *a* should be moved rearward, thus causing the parts to assume the position shown in Fig. 3 and spacing the ruling edge *a'* from the point *i* at which the first line was drawn. A second line should now be drawn, and then relaxing the downward pressure on the plate *c* the spring *h* will push the plate *e* rearward and the parts will again assume the position shown in Fig. 2. When this has been done, the above-described operation should be repeated—that is to say, the base-plate *a* should be moved rearward, the line drawn, the pressure on the plate *c* relaxed, and the spring *h* permitted to throw the plate *e* back in position to act again.

In order to operate the device, one's fingers should be placed on the base-plate, gripping the bead *a<sup>2</sup>*, and the palm of the hand pressed down on the rear edge of the plate *c*. Then the base-plate *a* should be moved rearward by a movement of the fingers, and after this is effected the pressure on the plate *c* should be relaxed, so as to enable the plate *e* to recover the position shown in Fig. 1. By adjusting the nut *g* the throw of the plate *e* may be regulated, and by this means the distance between the section-lines is regulated.

The length of the base-plate *a* is not material, and in practice this plate may be made as long as it is desired to draw the lines, or, if preferred, the base-plate may be made relatively short and a straight-edge attached to the bottom of the plate by screws, tacks, or any other suitable fastenings.

Various changes in the form, proportions, and minor details of my invention may be resorted to without departing from the spirit and scope thereof. Hence I consider myself entitled to all such variations as may lie within the scope of my claims.

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

1. A section-liner comprising a base-plate, an inclined member hinged on the base-plate, said member having a lug, a second member hinged on the free end of the first-named



hinged member and extending downwardly with its free end forming a stop for the base, a screw extending from the second hinged member to the lug, means for adjustably engaging the screw with said lug, and a spring pressing the second hinged member rearward.

2. A section-liner, comprising a base, a member projecting from the base, a hinged and spring-pressed member carried by the first member and forming a stop against which the base is adapted to be moved, and means for adjusting the second member with respect to the first member, as set forth.

3. A section-liner, comprising a base having a ruling edge, a member projecting from the base, a hinged member carried by the projecting member and extending downwardly therefrom to form a stop for the base, and a yielding and adjustable connection between the said members, as set forth.

4. A section-liner, comprising a base, a stop against which the base is adapted to be moved, said stop being formed of hinged sections, one of which is hinged to the base and the other extends downwardly for engaging the surface upon which the base rests, and means for adjustably connecting the sections together, as set forth.

5. A section-liner, comprising a base, a member hinged to the base and inclining upwardly and outwardly toward one edge of the same, a second member hinged to the free end of the first member and projecting downwardly therefrom and against which the base is adapted to be moved, and means for adjusting the second member with respect to the first member, as set forth.

6. A section-liner, comprising a base, a member hinged to the base and inclining upwardly toward one edge of the base, a second member hinged to the first member and pro-

jecting downwardly therefrom and against the lower end of which the base is adapted to be moved, and means for adjustably and yieldingly connecting said members, as set forth.

7. A section-liner, comprising a base, a member hinged to the base and inclining toward one edge of the same, a second member hinged to the first member and projecting downwardly therefrom and against the end of which the base is adapted to be moved, a screw connecting the said members, and a spring surrounding the screw between the members, as set forth.

8. A section-liner, comprising a base, a member hinged to the base and inclined toward one edge of the same, said member being provided with a downwardly-projecting lug, a second member hinged to the first member and projecting downwardly therefrom, a screw projecting through the second member and lug of the first member and provided with a nut, and a spring surrounding the screw between the first member and said lug, as set forth.

9. A section-liner, comprising a base having a bead formed thereon, a member hinged to the base at said bead, the said member having its central portion cut out and provided with a downwardly-projecting lug, a second member hinged to the first member, a screw passing through the first member and said lug and provided with a nut, and a spring on said screw, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

RICHARD KASTMANN.

Witnesses:

ALBERT KIMMERLE,  
W. REINHARDT.