No. 697,728. Patented Apr. 15, 1902.

F. LATULIP.

MACHINE FOR TRIMMING CORNER PIECES.

(Application filed Oct. 4, 1901.)

(No Model.)

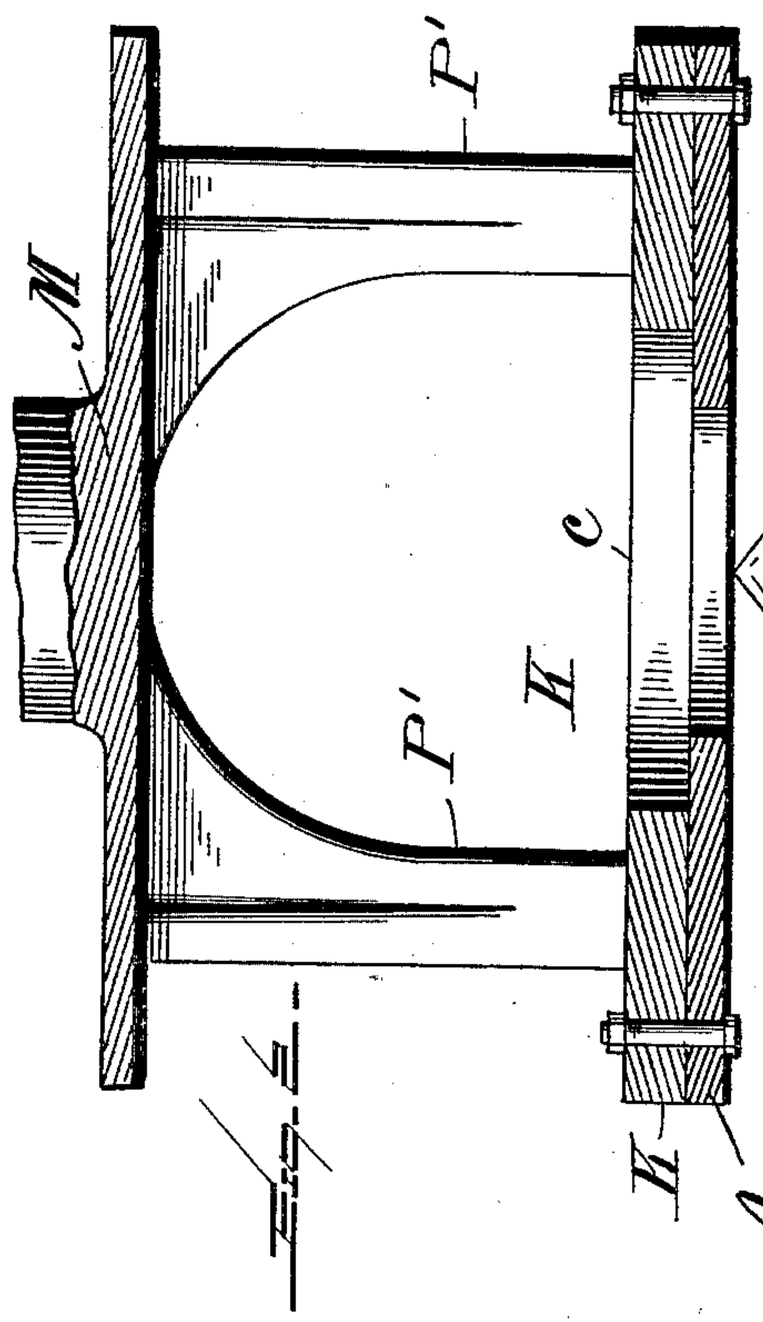

Fig. 1.

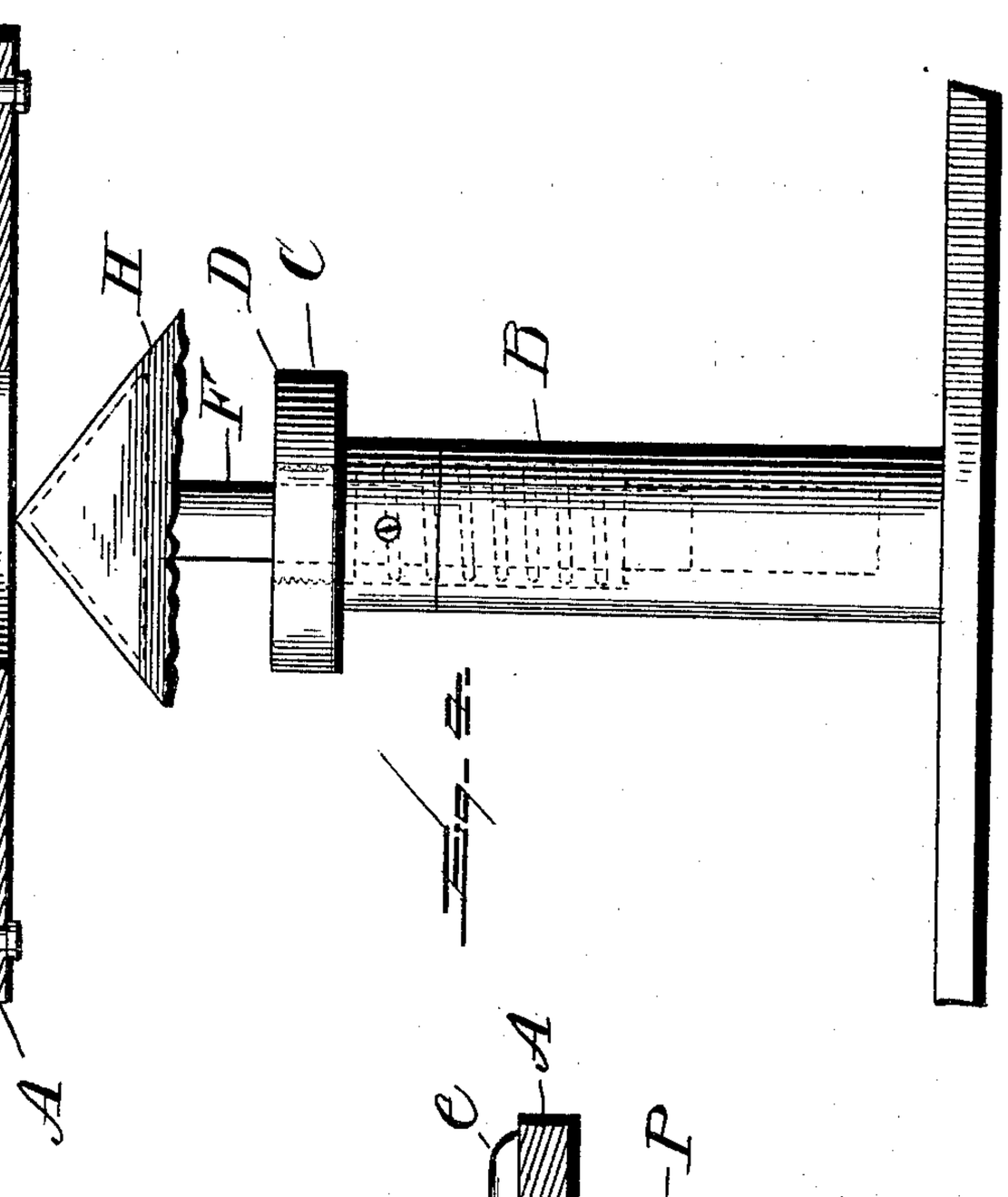

Fig. 4.

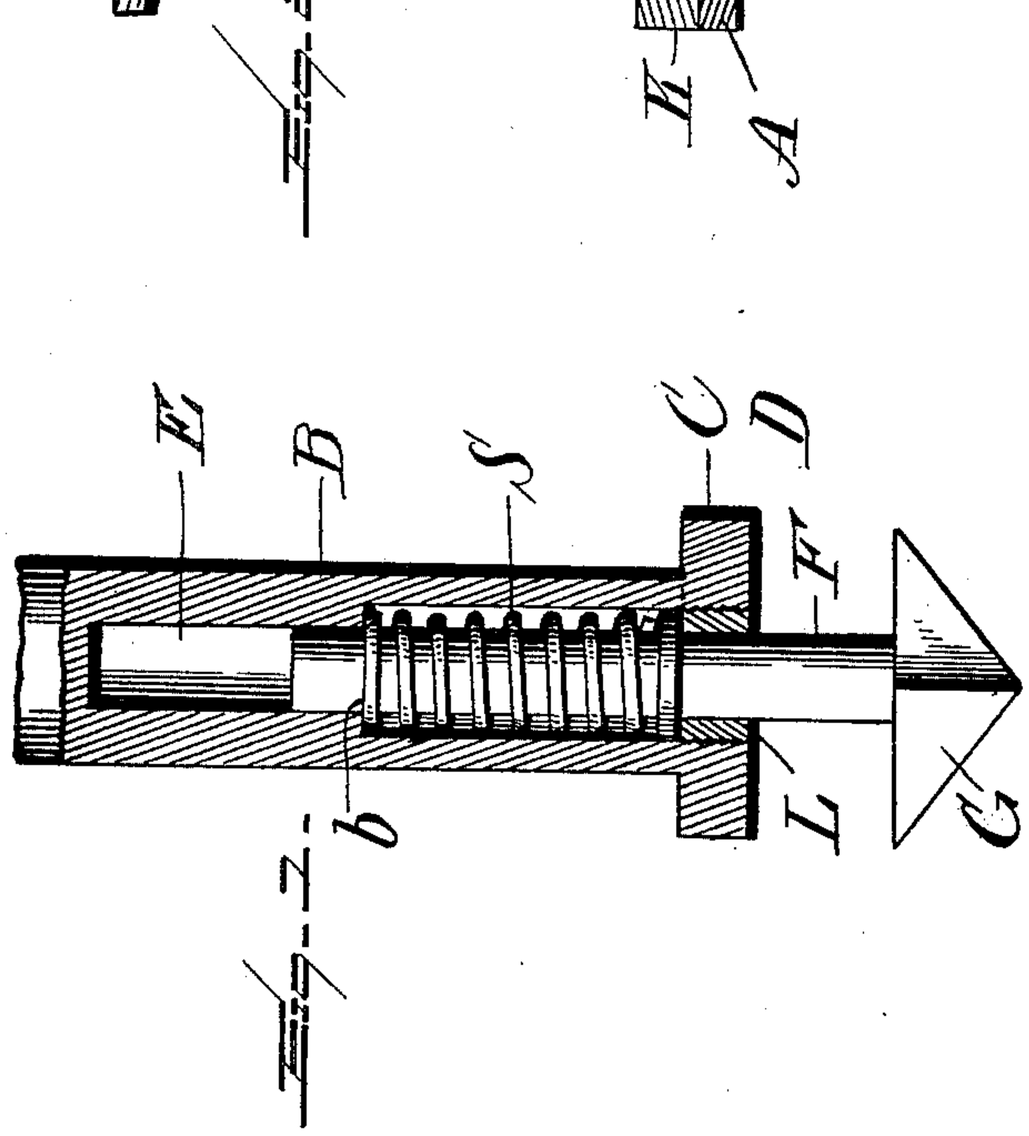

Fig. 2.

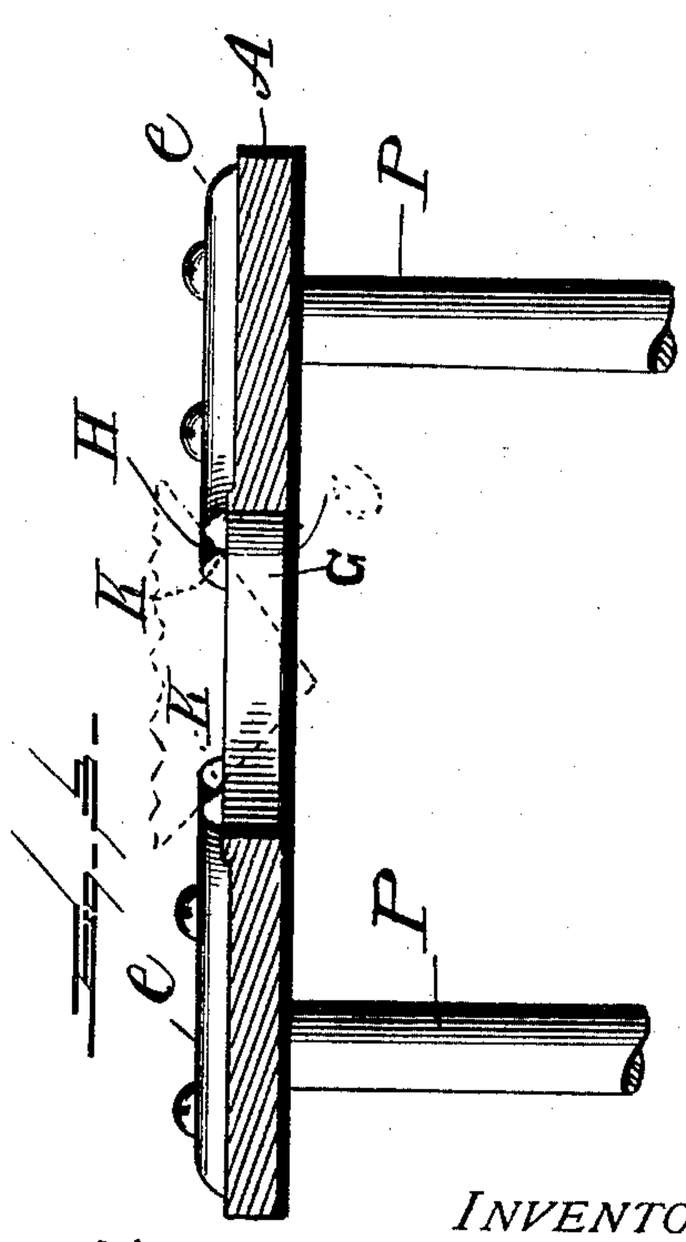

Fig. 3.

WITNESSES:

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MACHINE FOR TRIMMING CORNER-PIECES.

SPECIFICATION forming part of Letters Patent No. 697,728, dated April 15, 1902.

Application filed October 4, 1901. Serial No. 77,617. (No model.)

To all whom it may concern:

Be it known that I, FRED LATULIP, a citizen of the United States, residing at Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in Machines for Trimming Corner-Pieces for Suit-Cases and Trunks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to a new and useful machine for trimming corner-pieces designed to be used upon the outer corners of suit-cases and traveling-bags; and it consists in certain features of novelty in the detail construction and arrangement of the several parts thereof, all as hereinafter more fully described, and specifically pointed out in the claims.

In the annexed drawings similar references denote corresponding parts in all the views.

Figure 1 is a vertical elevation, partly in section, of the part hereinafter called the "plunger," with its coöperating connected parts. Fig. 2 is a cross-sectional view of the part hereinafter called the "plate." Fig. 3 is an elevation, partly in section, of a modified form of plate and connected parts. Fig. 4 is an elevation of the plunger of Fig. 1 reversed.

Referring to Fig. 1, it will be observed that the plunger consists of several members, namely: a shank B, forming a holder, which is pierced from its lower end to a point near the top of the portion shown with a longitudinal channel E, wider at its lower end portion, so as to form a spring-pocket in which is held the spring S, which bears at one end on the collar L, secured to the shank F of the leader G and at the opposite end against the shoulder *b* of the channel E. The leader G consists of a triangular-shaped piece of metal, preferably integral with the shank F and triangular at its attached end, running thence to a point at its outer end, with all sides of substantially the same area.

The plate of Fig. 3 is supported upon or above any suitable bed (not shown) by means of posts P P, which are connected at their lower ends to the bed of the machine, preferably the bed-plate of an ordinary punching-machine, and is provided at its central portion with a right-angled opening of the same contour as the head C of the plunger, through which opening said plunger passes in the operation of the machine. Upon the upper face of the plate A are three guide-plates *e e*, two of which are shown in Fig. 3. At the inner ends of the guide-plates *e e* are the beveled channels K K, designed as guides for holding the corner-pieces H. (Shown in dotted lines in position in Fig. 3 and in full lines in Fig. 4.)

The members shown in Figs. 1 and 3 coöperate in trimming the corner-pieces, and the members shown in Figs. 2 and 4 are companion coöperating members. In each pair of views the parts are placed relatively as designed for operation.

Referring to Figs. 1 and 3, the operation of my machine is as follows: The corner-pieces, which have been previously pressed into form and kiln-dried to harden them, are placed one at a time in position upon the plate A, with their angular edges resting in the guides K K of the guide-plates and with the open portion toward the leader G, when the plunger is caused to descend by the usual operation of any suitable punching-machine. The leader G thereupon first strikes the corner-piece H and automatically adjusts its position centrally within the opening of the plate A. The spring S of the plunger permits the leader G to approach the head C of said plunger during the time required for such automatic adjustment of the corner-piece, and by the time the corner-piece H is properly positioned the head C strikes the same. Continuing in its downward course, the head C passes through the opening *c c* of the plate A, spreading the rawhide when the leader abuts against the head C and trimming off all the surplus beyond a true circle where a round trimming-tool is used. At the same time, because of the projection of the leader G beyond the head C forming an acute angle, the edges of the rawhide will be beveled slightly in passing into the opening *c* of the said plate A.

It will be apparent that the head C, with its cutting edge D, may be formed of any suit-

able design and the opening *c* formed in the same corresponding design as may be desired, and the result will be various designs of corner-pieces.

Referring to the modified apparatus shown in Figs. 2 and 4, it will be apparent that the position of the several parts is substantially reversed. In the view Fig 4 the plunger is made fast to a bed-plate of a punching-machine, with the leader G rising above the shank B and there supported by an internal spring, which may be placed entirely behind the shank F, if desired. The support K for the plate A is carried from the head M by suitable posts P′ P′, leaving a considerable space between M and K A and also sufficient free space between said posts for all practicable purposes. With the exception of the guide-plates *e e*, the general conformation of the several parts is substantially the same as in Figs. 1 and 3 and the operation is similar, but with this difference, which has been found to be advantageous in practice: The head C is screwed into place on the shank B, so as to be removable at will for the purpose of substituting heads of different size and design, and the plate A is attached to a supporting-plate K, being bolted thereto and removable therefrom, so as to permit of the substitution of companion plates with openings of the proper size and conformation to correspond with the shape of the head C. The shank B being rigid and leader G rising above the same and having plenty of free room it is easily accessible, and it has been found more convenient to have the plate movable, in which case the roughly-formed corner-pieces are placed in position on the leader G open side down, whereupon the plate A and connected parts are caused to descend, riding over the head C, thereby trimming off the superfluous material of the corners, thereby the better fitting them for the practical purpose intended. The finished corners after passing through the opening *c*, because of the resiliency of the material from which they are formed, will automatically fly off the leader-head. Some will fly upon the upper face of the plate K, from whence they may be brushed, though the major portion may be easily directed into any suitable receptacle provided for the purpose.

Having described my invention, what I claim is—

1. In a machine of the described class, a plunger with a rigid head having an angular cutting edge and provided with a longitudinal recess terminating at the cutting end of said plunger, a spring-actuated triangular-shaped leader projecting from said recess and terminating at its free end in an angular apex, said apex normally removed some distance from the end of said plunger, and a plate in the line of movement with said plunger provided with an opening therethrough corresponding in form to the head of said plunger and having an angular cutting edge around the entire mouth of said opening through said plate.

2. In a machine of the described class a plunger with longitudinal opening extending into the shank thereof, a movable spring-actuated leader riding in said longitudinal opening and terminating in a triangular apex with straight lines from the point of said apex to the outer edges of said leader, a head having a right-angle cutting edge on said plunger, a plate in proximity to said plunger having an opening conforming to the head thereof, and guide-plates with suitable beveled channels adapted to hold therein the angular sides of the material to be operated upon.

3. In a machine of the described class, a plunger with a rigid removable head having an angular cutting edge and having a longitudinal opening therein, a spring-actuated triangular-shaped leader projecting normally to some distance beyond said removable head and terminating in an apex, a plate-holder with central orifice therein in line with said removable head, and a detachable plate secured to said plate-holder with central opening coincident with that of the opening in the plate-holder and also in line with said head.

4. In a machine of the described class, a cutting-plunger with spring-actuated triangular leader normally removed from the cutting-face of said plunger, a plate-holder with central orifice and rigidly connected with a parallel head and slightly removed therefrom, posts connecting said head, a cutting-plate removably connected with said plate-holder and provided with a central opening corresponding to the contour of the cutting edge of said holder.

In testimony whereof I affix my signature in presence of two witnesses.

FRED LATULIP.

Witnesses:
FREDERICK H. GIBBS,
JOHN J. GLYNN.