

S. GROSSMAN.
 MECHANISM FOR APPLYING CORNER PIECES TO SUIT CASES AND BAGS.
 APPLICATION FILED JAN. 4, 1910.

969,471.

Patented Sept. 6, 1910.

FIG. 1.

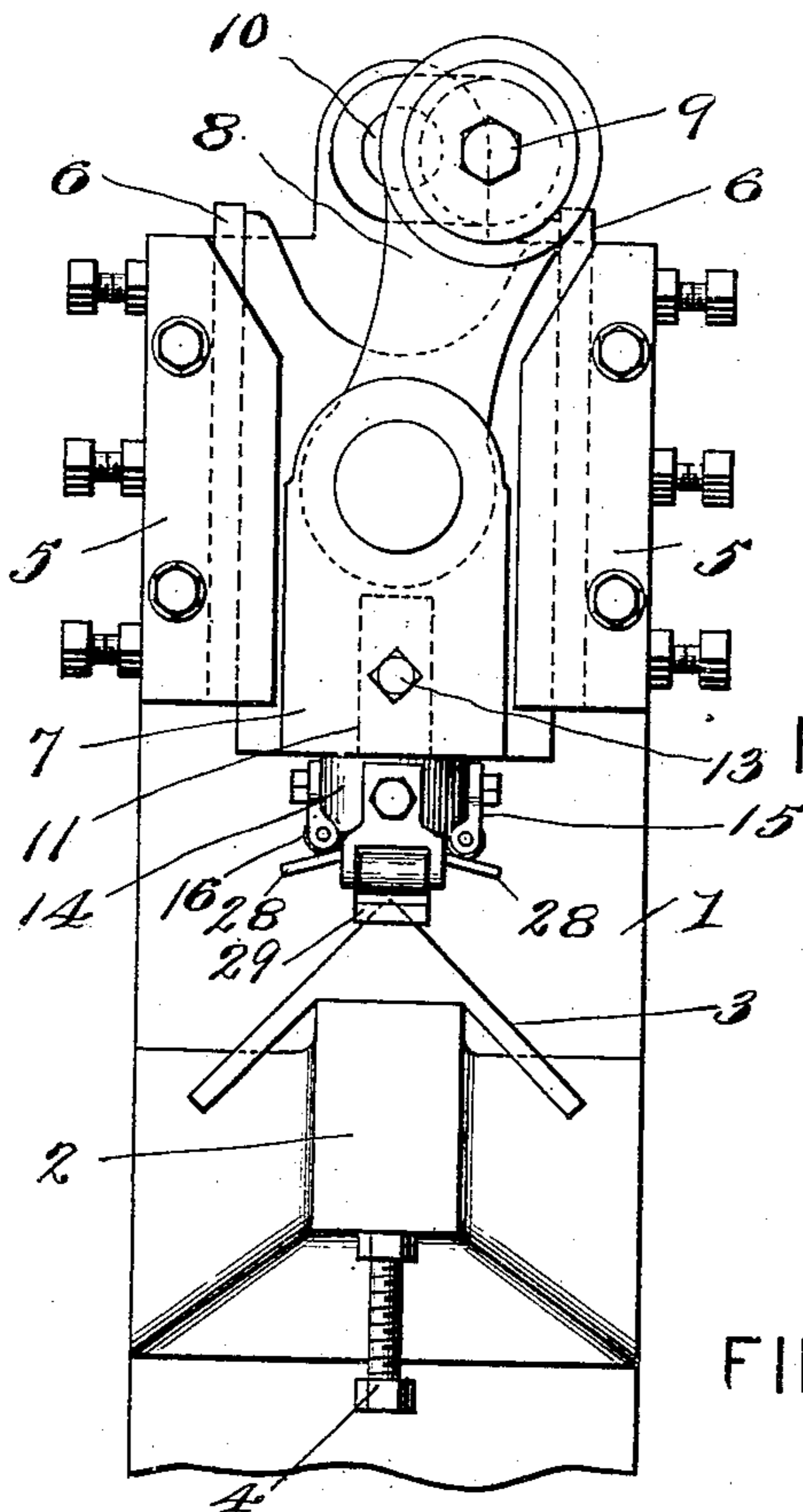


FIG. 2.

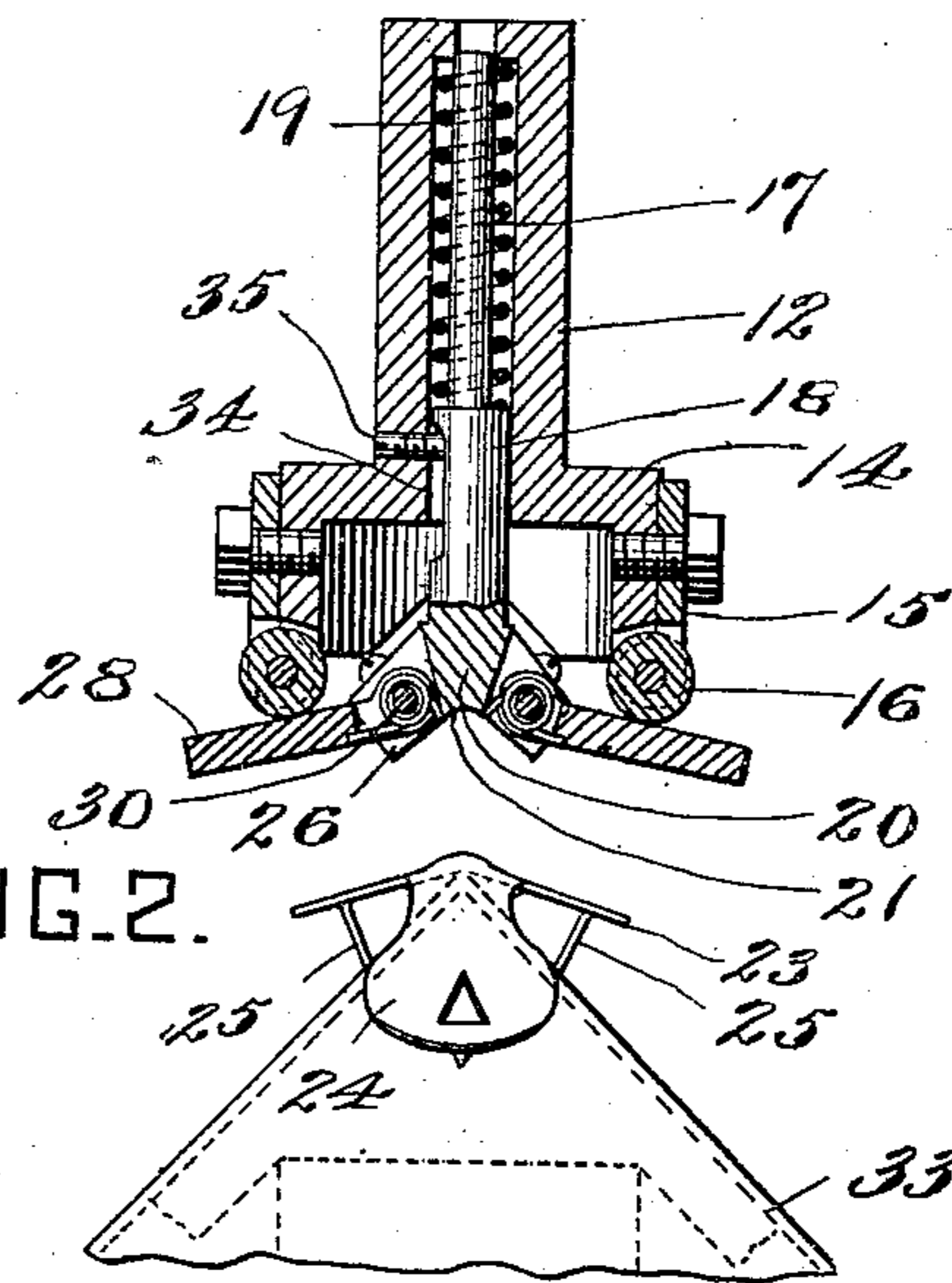


FIG. 3.

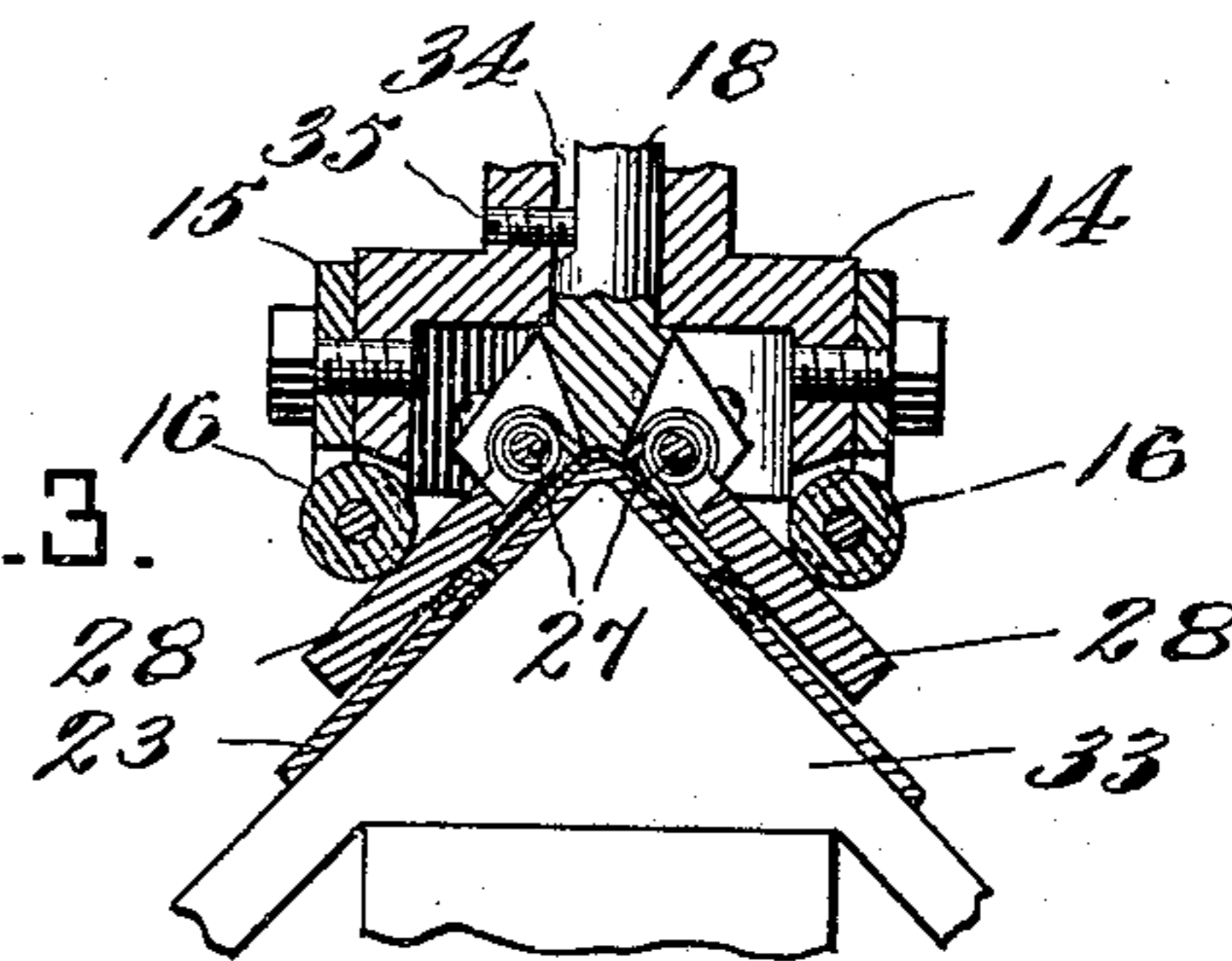


FIG. 5.

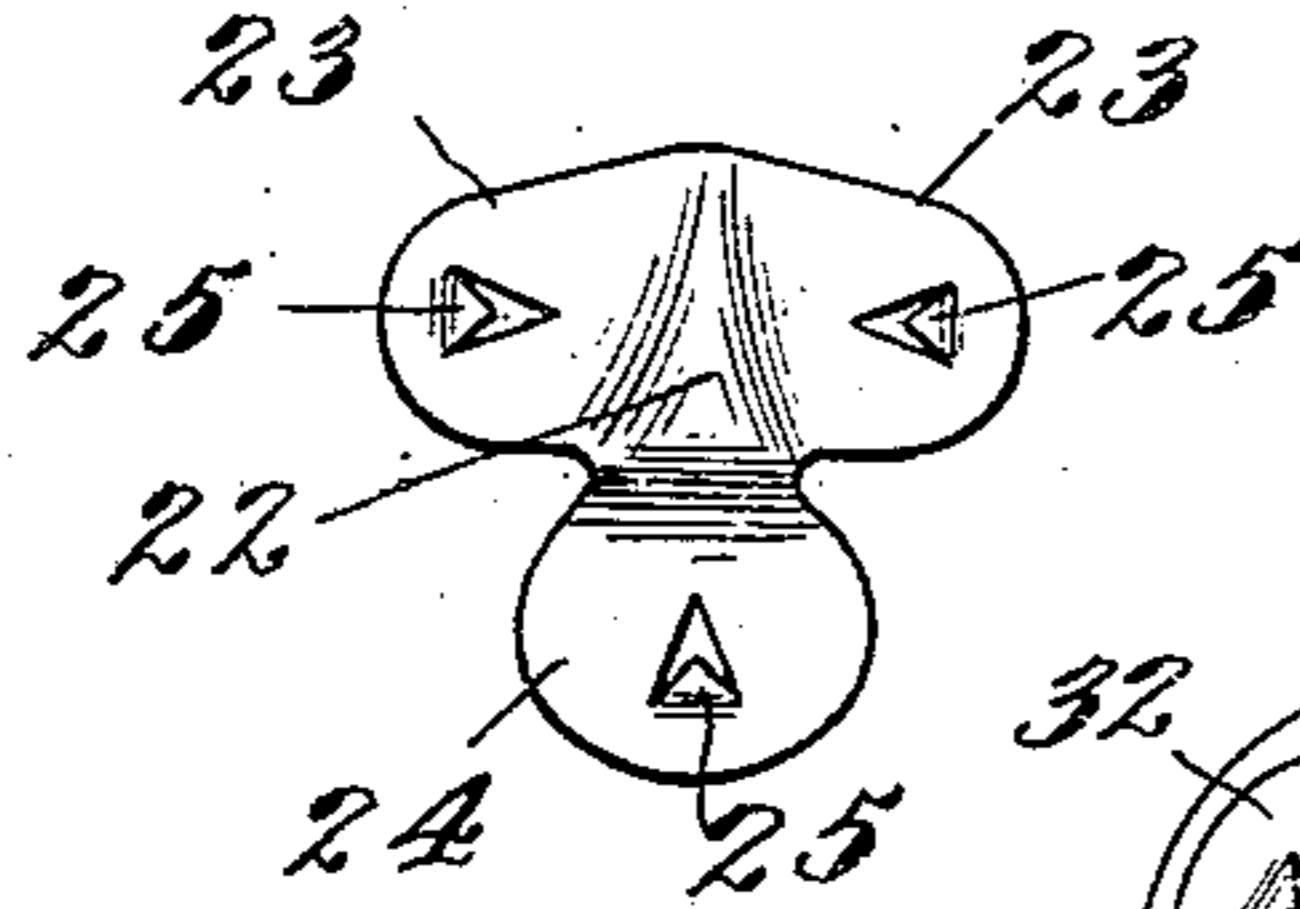


FIG. 6.

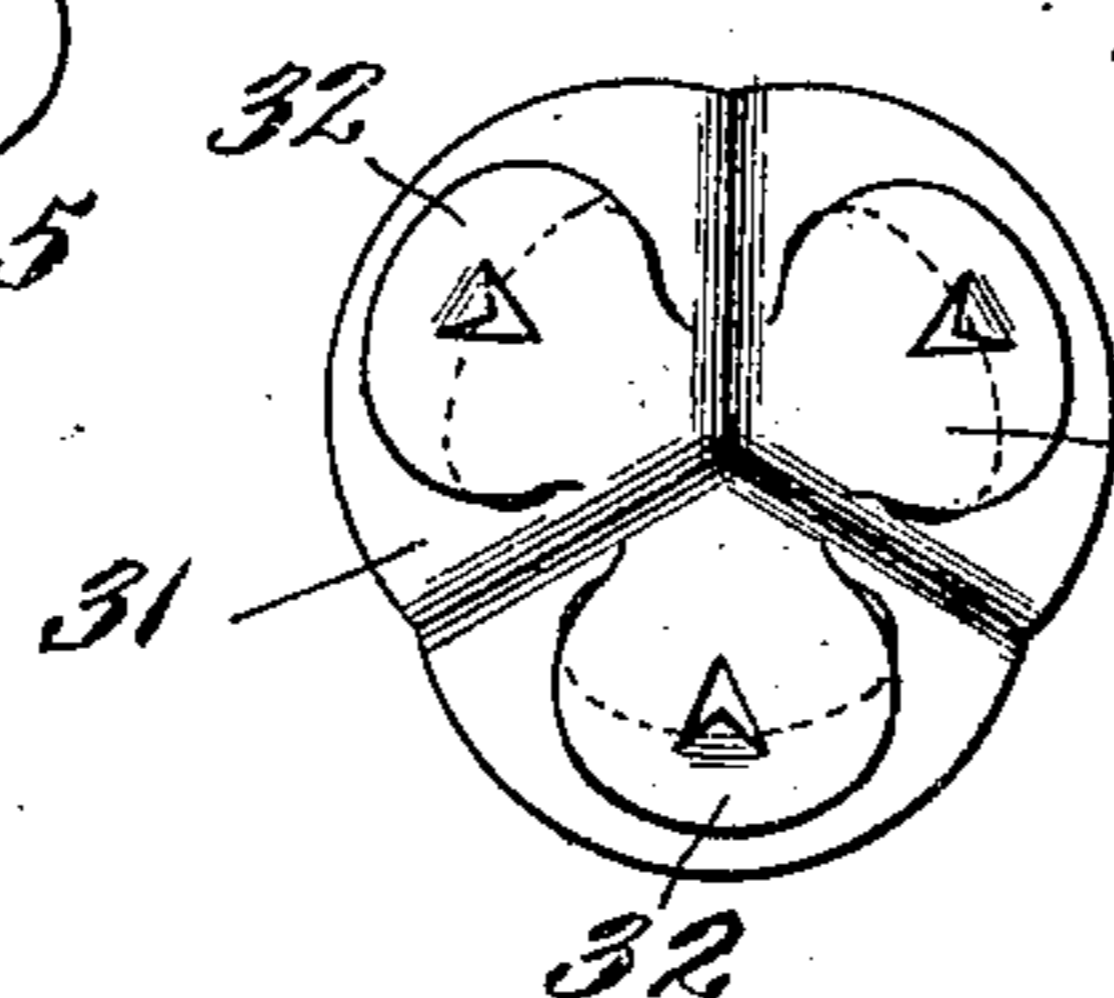
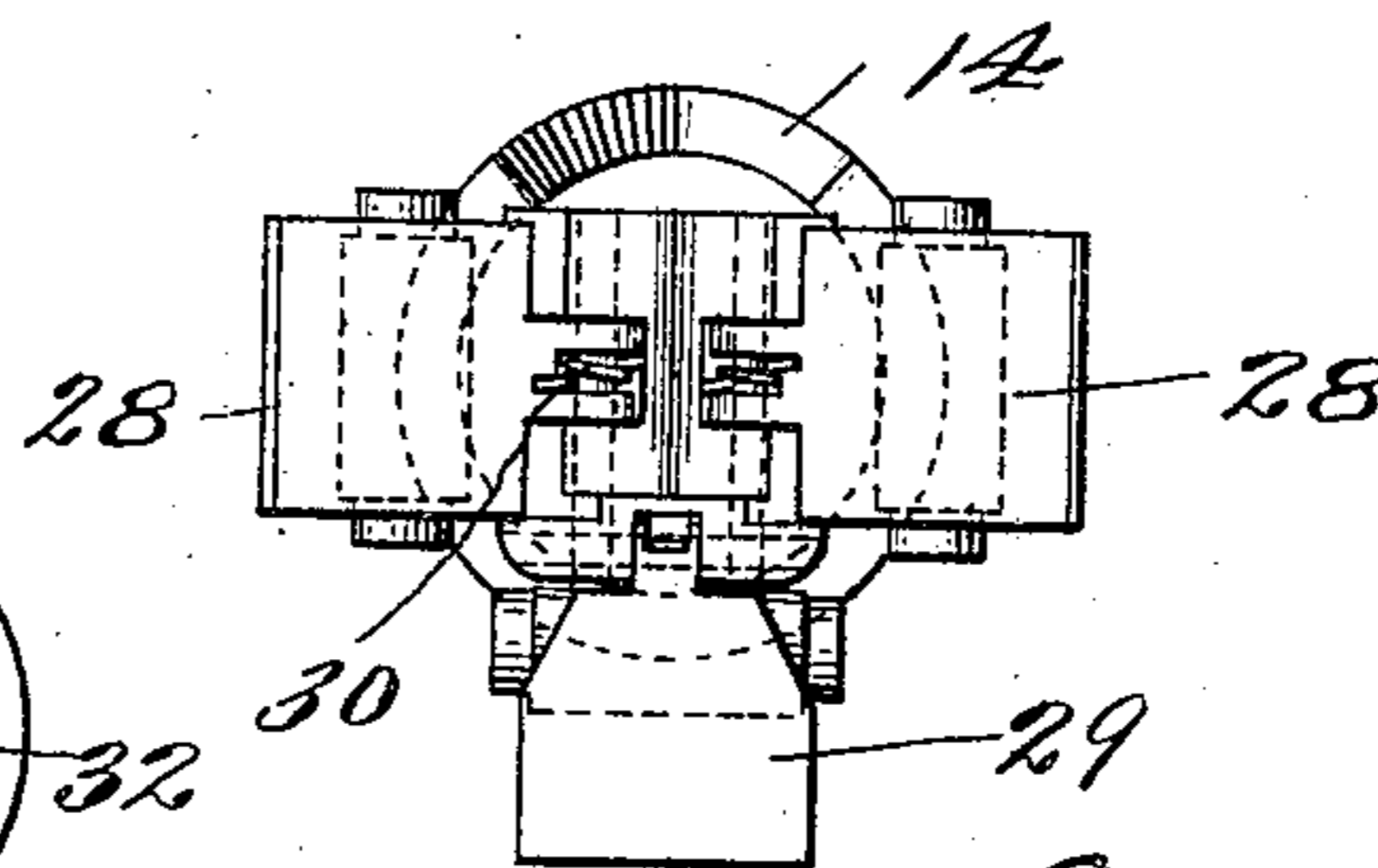


FIG. 4.



WITNESSES:

C. H. Davies
M. E. Moore

Simon Grossman

INVENTOR

By M. E. Moore
 Atty

UNITED STATES PATENT OFFICE.

SIMON GROSSMAN, OF PITTSBURG, PENNSYLVANIA.

MECHANISM FOR APPLYING CORNER-PIECES TO SUIT-CASES AND BAGS.

969,471.

Specification of Letters Patent.

Patented Sept. 6, 1910.

Application filed January 4, 1910. Serial No. 536,377.

To all whom it may concern:

Be it known that I, SIMON GROSSMAN, a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Mechanism for Applying Corner-Pieces to Suit-Cases and Bags, of which the following is a specification.

My invention relates to improvements in mechanism for applying corner pieces to suit cases and bags, and has particular reference to a machine for applying the peculiar construction of corner piece described in my divisional application filed March 11, 1910, #548,657.

The leading object of my invention is the provision of a machine of cheap, simple, durable and practical construction which will quickly and neatly secure a metal corner on a suit case without in the slightest marring or damaging either the case or metal corner.

Another object of the invention is the provision of a corner applying machine which shall insure the correct positioning of the corner and shall retain it in said position and clampingly retain it there, the machine having additional means for permanently securing the corner in place.

With these objects in view, my invention consists of a machine for applying metal corner pieces particularly adapted for use in conjunction with my improved form of metal corner described in my co-pending application, said machine comprising a supporting anvil, a plunger portion adapted to clampingly secure the corner and case on the anvil, and means carried by the plunger for forcing the barbs of the corner into the case when the parts are so secured.

In order that the peculiar and novel construction of my applying mechanism may be fully understood and appreciated, I have illustrated in the accompanying drawings a machine and corner piece constructed in accordance with and embodying my invention.

Figure 1 represents a front elevation of my machine for applying metal corner pieces. Fig. 2 represents a view showing the plunger or former of my machine in section and a corner piece in elevation in position for application to the corner of a suit case. Fig. 3 represents a sectional view showing

the parts of the machine in the position they assume or occupy after the corner piece has been applied. Fig. 4 represents a top plan view of the forming plates or leaves carried by the plunger, three being shown, to engage the three wings constituting the corner piece. Fig. 5 represents a plan view of one form of my corner piece, and Fig. 6 represents a plan view of another form, and what is known in the art as a solid corner.

Referring by numerals to the drawings: The numeral 1 designates a portion of the supporting structure or frame of my machine, formed with the anvil support 2 upon which is mounted the anvil 3 of angular shape to fit the corner of the case or bag, and the anvil is secured in place by means of a screw 4. Above the anvil is secured to the frame the vertical guide plates 5 in which are mounted the ribs 6 formed on the plunger 7, said plunger being given a vertical reciprocation through the medium of the link 8 and connection 9 with the shaft 10, and the plunger is further provided in its lower portion with a socket 11 to receive the sleeve 12 of what I term the corner piece forming and attaching means which I will now proceed to describe. The sleeve or barrel 12 is secured in place in the plunger by means of the set screw 13, which permits ready application and removal, and the sleeve is formed with a head 14 of hollow or cup-like configuration to which is secured the brackets 15 in which are mounted the friction rollers 16, there being one pair of alining rollers and a single roller arranged at a right angle and below the pair of alining rollers. In the barrel or sleeve 12 is mounted the vertically movable stem 17 formed with the enlarged lower end 18, and around the stem is placed a coil spring 19 bearing at one end against the sleeve or barrel and at its other end against the enlarged lower portion of the stem, the spring serving to return the stem which with the enlarged portion forms a follower, and the enlarged portion of the follower is formed with a head 20 provided with a curved seat or depression 21 adapted to engage the bulged or raised portion 22 on the corner piece, said corner piece being also formed with the pair of wings 23 and the single wing 24, the pair of wings and the single wing being each formed with a barb or prong 25. The follower adjacent the corner receiving portion thereof

is provided with recesses 26 in which are placed studs 27 on which are mounted the alining leaves or wings 28 and the single side wing 29, springs 30 being wound around the studs and connected to the wings for returning the wings to normal position.

In the form of corner piece shown in Fig. 6, which is what is termed in the trade a plain or solid metal corner I strike from the corner piece 31 the three leaves 32, and in use the corner piece rests flat upon the corner 33 of the case or bag with the three leaves upstanding, and upon the engagement of the leaves of the plunger with the three sections of the corner piece they are forced down and secured to the case or bag flush with the body of the plate.

From the foregoing description taken in connection with the drawings, the construction of my corner piece and the manner of applying will be readily understood and it will be understood that the anvil receives the corner of the bag or case, supporting the same from the inner side, and the corner piece is placed on the exterior of the corner, as most clearly shown in Fig. 2, and upon the descent of the plunger the follower has the engaging portion thereof contact with the bulge portion of the corner piece and the wings carried by the follower engage the wings or sections of the corner piece, the continued descent of the plunger causing the leaves through the medium of the friction rollers to be pressed smoothly and evenly against the leaves, forcing the barbs through the material of the bag or case, against the anvil, and upon reaching the lowest point of descent of the follower, as shown in Fig. 3, the corner piece is fitted snugly to the corner with the barbs crimped or turned under against the material of the bag or case.

The follower, it will be observed, is spring actuated and is allowed the proper movement in the sleeve or barrel by reason of the channel 34 and the stop or abutment 35, and it is of great importance that the corner piece should be formed with the bulged or cupped portion and that the leaves with securing barbs should be arranged in the form and relation shown, as this insures the reception of the corner piece by the former or follower and causes the former to press or force the barbs into engagement with the material of the case or bag and insure the securing of the three sections or leaves of the corner smoothly and evenly and without the liability of tearing the material.

It is evident that I provide a novel construction of corner piece and a machine operating in connection with said corner piece for attaching the corner piece, the machine and corner piece filling a long felt want in a perfect manner and which is an

entirely new departure from the present objectionable means of applying corner pieces.

I claim:

1. In a machine of the character described, the combination with a frame, of a supporting anvil carried thereby, a plunger supported by the frame above the anvil and adapted to be brought into clamping engagement therewith, laterally extending wings pivotally secured to the plunger, and means bearing against the upper surface of said wings to force them downward into clamping engagement with the anvil.

2. In a machine of the character described, the combination with a frame, of a supporting anvil carried thereby, a sleeve mounted thereabove, a plunger mounted in the sleeve, a spring for normally forcing said plunger outward, wings pivotally secured to the plunger, and means for moving the sleeve to bring the plunger into contact with the anvil and to force the wings into clamping engagement with the anvil.

3. In a machine of the character described, the combination with a spring pressed clamping member, of wings pivotally secured thereto, a sleeve surrounding the clamping member, and means for moving said sleeve to force it down over the wings to press them together.

4. In a machine of the character described, the combination with an anvil, of a reciprocally movable die member thereabove, said member comprising a sleeve, anti-friction rollers carried by the lower edge thereof, a spring mounted in the sleeve, a plunger mounted in and normally forced by the spring to project from the sleeve, said plunger being adapted to be forced into the sleeve by pressure applied to the bottom thereof, and wings carried by the plunger and adapted to contact with the rollers when the plunger is forced inward, said wings being forced by the rollers into clamping engagement with the anvil.

5. In a machine of the character described, the combination with an anvil, of a reciprocally movable die member thereabove, said member comprising a sleeve, anti-friction rollers carried by the lower edge thereof, and means mounted in and projecting from the sleeve and adapted to be forced into the sleeve by pressure applied to the bottom thereof, this movement into the sleeve bringing the said means into contact with the rollers which bear thereagainst and forcing said means to conform to the shape of and clampingly engage the anvil.

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

SIMON GROSSMAN.

Witnesses:

WM. N. MOORE,
JOHN E. MOORE.