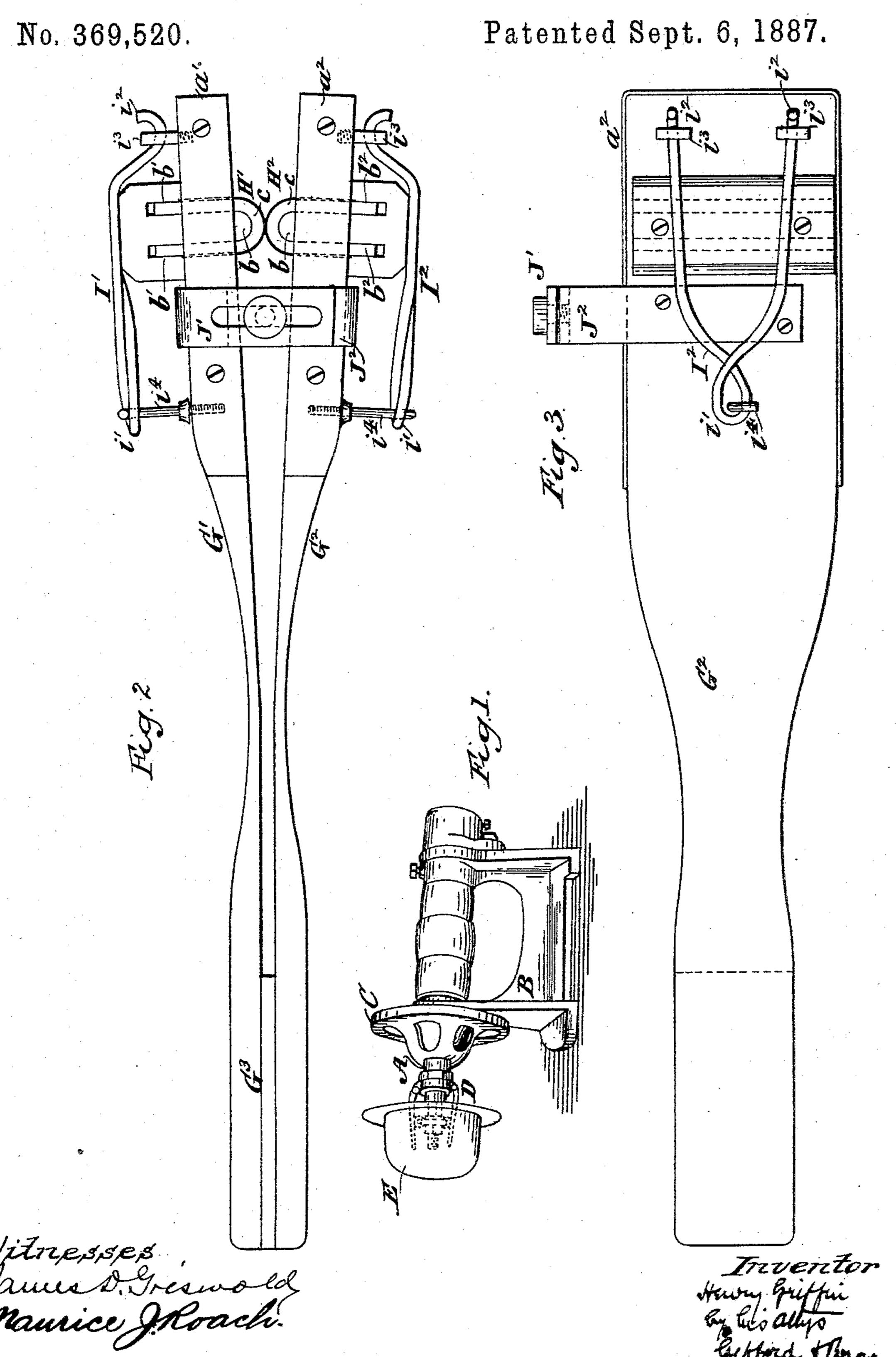
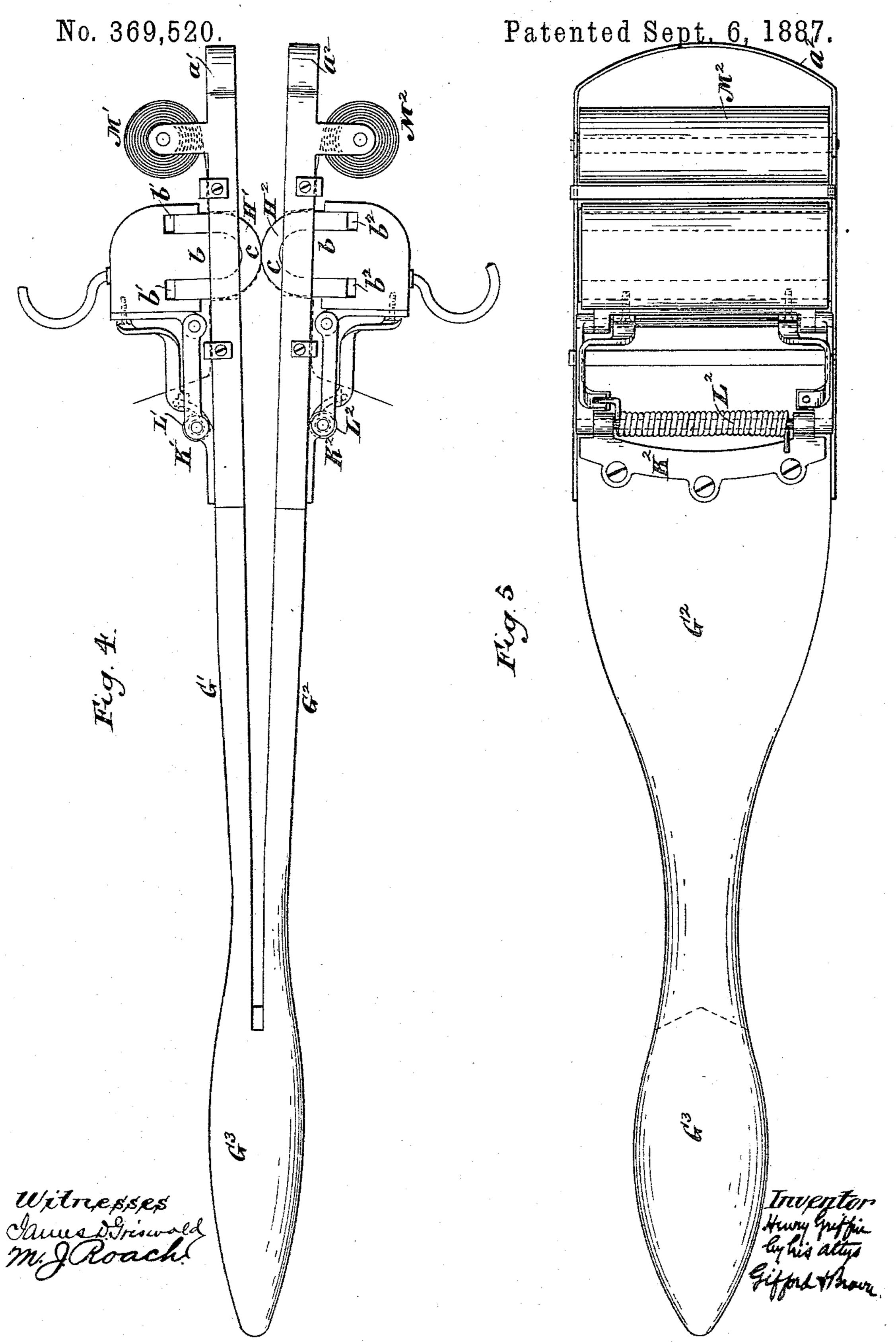
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United States Patent Office.

HENRY GRIFFIN, OF DANBURY, CONNECTICUT.

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SPECIFICATION forming part of Letters Patent No. 369,520, dated September 6, 1887.

Application filed March 21, 1887. Serial No. 231,669. (No model.)

To all whom it may concern:

Be it known that I, Henry Griffin, of Danbury, in the county of Fairfield and State of Connecticut, have invented a certain new and useful Improvement in Machines for Pouncing Hats, of which the following is a specification.

My improvement relates to machines which

are employed for pouncing hat-bodies.

The ordinary pouncing-machine only operates upon the crowns of the hat-bodies and not upon the brims.

The object of my improvement is to provide a simple and effective means whereby the brims of hat-bodies may also be pounced conveniently and economically.

I will describe a hat-pouncing machine embodying my improvement in detail, and then point out the novel features in claims.

In the accompanying drawings, Figure 1 is a side elevation of a hat-pouncing machine of an ordinary kind, and in connection with which an apparatus or appliance embodying my improvement may be used. Fig. 2 is a side elevation, partly sectional, of an apparatus embodying my improvement. Fig. 3 is a plan view of this apparatus. Fig. 4 is a side elevation, partly in section, of an apparatus embodying my improvement in a slightly-modified form.

3c Fig. 5 is a plan view of this last-referred-to apparatus.

Similar letters of reference designate corre-

sponding parts in all the figures.

I will first describe the hat-pouncing ma-35 chine which I have represented in Fig. 1, premising, however, that my improvement is not confined in its application to this type of hat-pouncing machine. This machine consists of a spindle, A, journaled in a frame, B, 40 which may be securely fastened by screw-bolts or other means to any approved support. The spindle is provided with pulleys adapted to receive a belt. One of the pulleys is fast on the spindle, and when it receives a belt 45 rotary motion may be transmitted from the belt to the spindle. The spindle is provided with a hand - wheel, C, whereby it may be rotated when desirable. At one end the spindle is also provided with a chuck, D, serv-5c ing as a means for securing to the spindle a block adapted to receive snugly upon it the

body or crown portion of a hat. I have shown in Fig. 1 a hat, E, placed upon a block secured to the spindle. The spindle, when rotated, carries the hat with it, and the workman 55 applies to the exterior surface of the hat as it rotates pouncing material of any suitable description in a well-known manner. This machine is so constituted that in rotating the hat it will compensate for the oval of the hat-60 block.

It has been difficult if not impossible with the appliances hitherto in common use to effect the pouncing of the brim of a hat-body or hat. This difficulty is obviated by my im- 65 provement, which I will now proceed to describe.

My improvement involves the use of a support for sustaining one side of the hat-brim and an arm with a pouncing material or a 70 pouncing surface for simultaneously acting upon the other side of the hat-brim while the hat is rotated. The part which I have referred to as a support may be provided with pouncing material or a pouncing-surface as 75 well as the arm whenever it is desirable to effect the pouncing of both sides of a hat-brim simultaneously.

Usually the apparatus will be so made as to be adapted to operate to pounce both sides so of the hat-brim at one and the same time, and the apparatus which I have represented embodying my improvement is shown as adapted for such operation.

G' G² represent two arms or bars shown as 85 united to form a common stock or hand-piece, G³. Either of these arms or bars may be regarded as the support previously referred to, and the other as the arm which I have also mentioned.

As shown, the two arms or bars G'G' are intended to be made of wood, preferably a strong, tough, resilient wood, and they are shown as reduced in thickness and in width between the heads or outer ends of the arms or bars and the stock or hand-piece. The heads or outer ends of the arms or bars are shown as bound around with strips of metal, a' a'; but these strips are not absolutely essential, their principal function being to protect the edges. The ends of the arms or bars which form the stock or hand-piece are either

fastened directly together or to an intermediate block, and preferably by means of screws or like devices.

The arms or bars G' G² are shown as pro-5 vided at their opposite surfaces with projections H'H2, which have pouncing-surfaces. While these pouncing-surfaces may be made in any suitable way, and may even consist of files or other cutting material, yet I deem it to desirable to make them of blocks of indiarubber or analogous yielding material faced with pouncing-paper. I have illustrated them as made in the manner last described, and they are shown as projecting through slots in the 15 heads or outer end portions of the arms or bars. The india-rubber, c, in each of the projections consists of a strip which is bent over a tongue-piece, b, which may be made of wood and inserted at the ends in grooves b' b^2 , pro-20 vided in a block of which the tongue-piece forms part. The part of the block provided with the grooves, being wider than the tonguepiece, forms shoulders. The tongue-piece, with the strip of rubber around it, projects through 25 a slot in the head or outer end portion of the arm or bar with which it is used. The shoulders of the block of which the tongue-piece forms part extend over the outer surface of the arm or bar, overlapping the end portions 30 of the slot. The blocks may be secured in the arms or bars in any suitable manner. I have shown them in the example of my improvement represented by Figs. 2 and 3 as secured in place by rods I' I'. These rods are sever-35 ally bent at about the middle, so as to form a loop, i', and at the ends, so as to form hooks i^2 . The hooks engage with eyes i^3 , which are secured to the arm or bar, and the loop engages with a hook, i^4 , also secured to the arm or bar. 40 This hook can be rotated, so as to disengage it from the loop, whereupon the rod previously engaged by the hook can be swung up out of the way, so as to enable the removal of the block to which the rubber or analogous mate-45 rial is secured.

The pouncing-surface of the projections H' H² may be made of short pieces of paper, which will be secured firmly in place between the projections and the slots of the arms or bars through which such projections extend. If the projections fit tightly in such slots, the paper will be gripped and held very firmly by reason of the elastic character of the indiarubber or like material forming part of the projections.

The resilience of the arms or bars is such as to cause the projections to be pressed toward each other, and this pressure may be varied by the grasp of the operator. These projections will therefore be held upon the brim of a hat-body or hat with a firm but yielding force, which will be productive of the pressure desired for the pouncing operation.

I have shown the arms or bars near their the manner described, they outer ends as provided with stops J' J², whereby together at the ends forming their motion from one another will be limited. These stops consist of bars, one of which is made independent of them.

provided with a pin and the other of which has a slot through which the pin protrudes.

Turning now to the example of my improve- 70 ment which is shown in Figs. 4 and 5, it will be seen that this apparatus is substantially like the other which I have already described, except that the blocks of which the projections H' H² form parts are connected by hinges K' 75 K2 to the arms or bars, and are therefore free to swing, so that the projections may recede or protrude more or less through the slots of the arms or bars. Combined with the hinges K' K2 are springs L' L2, which act upon said 80 hinges in such manner as to force the projections farther through the slots. Preferably the leaves of the hinges K' K2, which are connected to the blocks of which the projections form parts, are connected to the ends of said 85 blocks, because when thus made and applied to the blocks they afford provision for using continuous strips of paper for the pouncingsurfaces and drawing the same over the projections whenever a new surface of paper is 90 needed as a facing for the projections. The advantage afforded by the peculiar construction and connection of the hinges with the said blocks is due to the fact that the leaves of the hinges, when connected to the ends of 95 the blocks, will be beyond the slots through which the projections work, and hence will not interfere with the passage of a strip of paper through the slots. I have shown in this example of my improvement rolls of pouncing- 100 paper, M' M2, journaled in bearings affixed to the arms or bars near their outer ends. The strips of paper from these rolls may pass into the slots over the projections H'H2, then back through the slots at the other sides of the pro- 105 jections and through the leaves of the hinges which are connected to the blocks of which the projections form parts, where they may be either rolled upon other rollers or torn off. I have represented the apparatus as lacking 110 such take-up rollers; hence the paper may be torn off. As it is useless after having passed the projections, there is no object in saving it. The paper may be secured against movement during the pouncing in the same 115 manner as in the apparatus first described namely, by being gripped between the projections and the slots in which such projections fit. If, however, the springs which are combined with the hinges are so used as to afford 12C to the projections a capacity for yielding additional to that afforded by the yielding of the arms or bars themselves, then the paper will need to be gripped by some other means, because otherwise the yielding of the projec- 125 tions through the slots would release the paper. Any clamp could be used in such case for securing the paper against movement. If the arms or bars require greater flexure than that afforded by making and uniting them in 130 the manner described, they might be hinged together at the ends forming the stock or handpiece and drawn toward each other by springs

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An apparatus embodying my improvement may be a hand apparatus—I mean an apparatus unconnected with the pouncing-machine and adapted to be held in the hand of the operator and supported solely in that manner—or it may have its stock or hand-piece secured to a support forming part of or arranged adjacent to the pouncing-machine.

By the use of an apparatus embodying my io improvement much labor will be saved in the pouncing of the brims of hat-bodies or hats, and this work may be done much more expeditiously than when done in the ordinary man-

ner.

What I claim as my invention, and desire to

secure by Letters Patent, is—

1. The combination, with a hat-pouncing machine provided with a rotary spindle and a block for receiving the crown of a hat, of a support for sustaining one side of the hat-brim while being rotated, and a non-rotating appliance provided with pouncing material, adapted to bear upon the opposite side of the hat-brim, substantially as specified.

25 2. A hand-tool comprising two arms or bars adapted to be grasped by hand, a support for sustaining one side of the hat-brim, and an appliance provided with pouncing material, adapted to bear upon the opposite side of the

30 hat-brim, substantially as specified.

3. A hand-tool comprising two arms or bars adapted to be grasped by hand, and having pouncing material or pouncing-surfaces, and adapted to embrace a hat-brim, substantially

35 as specified.

4. The combination of a support for sustaining one side of a hat-brim and an appliance provided with a projection having pouncing material or a pouncing-surface adapted to bear upon the opposite side of the hat-brim with a yielding pressure, substantially as specified.

5. The combination of two arms or bars, each provided with two arms or projections arranged opposite each other, and having pouncing material or pouncing-surfaces, and adapted to embrace a hat-brim, so as to pounce both surfaces thereof, substantially as specified.

6. The combination of a support for sustaining one side of a hat-brim, an appliance for 50 bearing against the opposite side of the hat-brim, and a resilient connection between the same, whereby they will be caused to press upon opposite sides of the hat-brim, each with a yielding pressure, substantially as specified. 55

7. The combination of two arms or bars elastically connected together, and provided with projections having pouncing surfaces or

material, substantially as specified.

8. The combination of two arms or bars and 60 projections having pouncing material or pouncing-surfaces and forming parts of blocks made independent of the arms or bars and fitted therein, substantially as specified.

9. The combination of two arms or bars pro- 65 vided at opposite points with pouncing material or surfaces, and elastically connected together, and stops for limiting the motion of said arms or bars away from one another, substantially as specified.

10. The combination, with an arm or bar, of a projection covered with india-rubber or analogous yielding material and faced with

paper, substantially as specified.

11. The combination of an arm or bar, a 75 projection upon one side thereof, and a roller from which paper or like pouncing material may be taken and passed across the said projection, substantially as specified.

HENRY GRIFFIN.

Witnesses:

THOMAS A. LOUNSBURY, ALBERT M. STEELE.