(No Model.)

G. E. BRUSH.

FLEXIBLE POUNCING PAD.

No. 515,992. Patented Mar. 6, 1894.

Fig. 1.

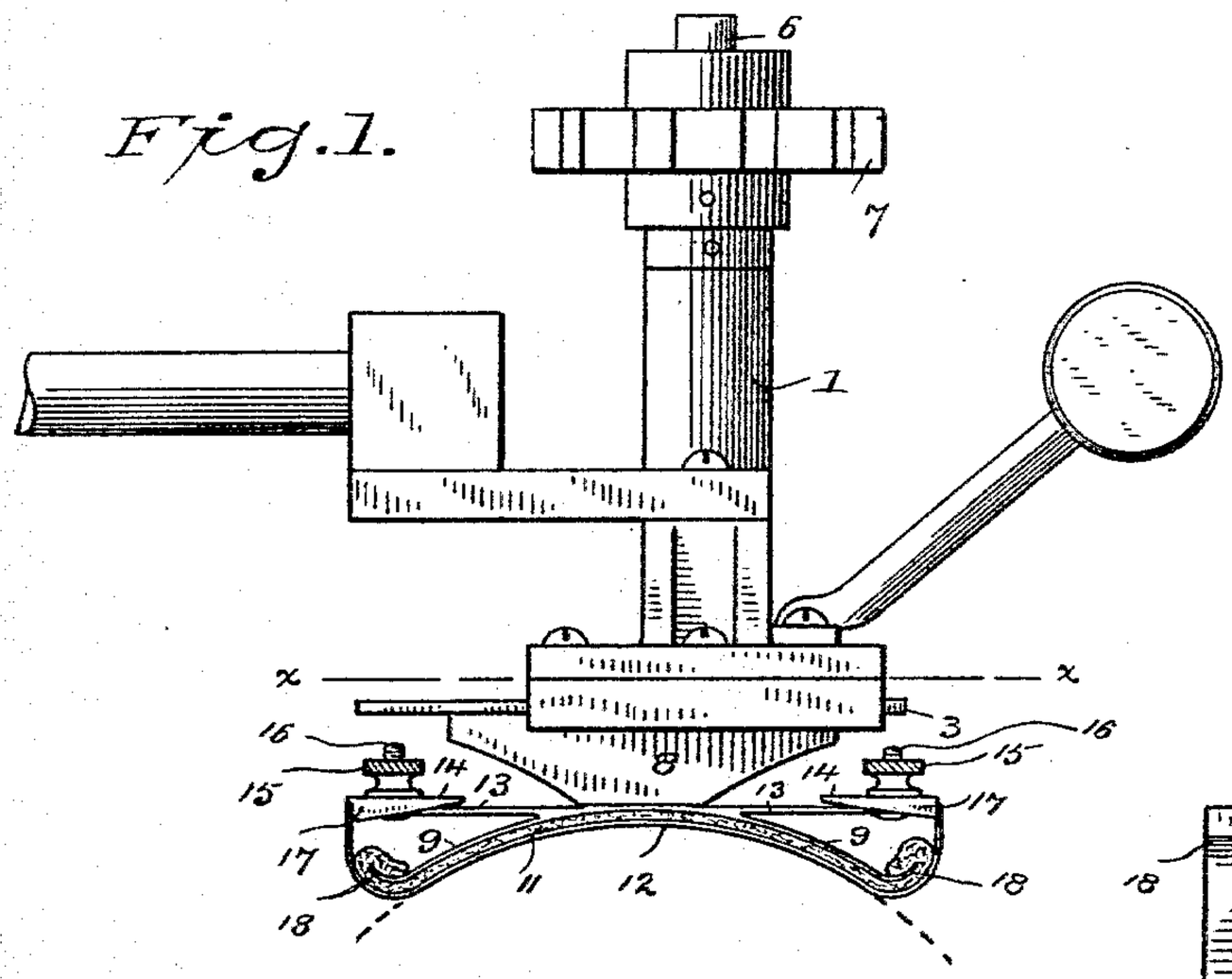


Fig. 2.

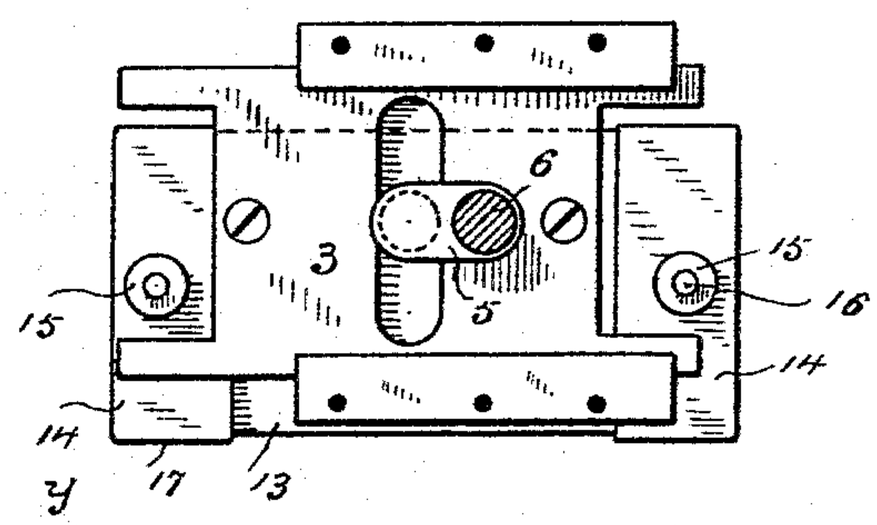


Fig. 5.

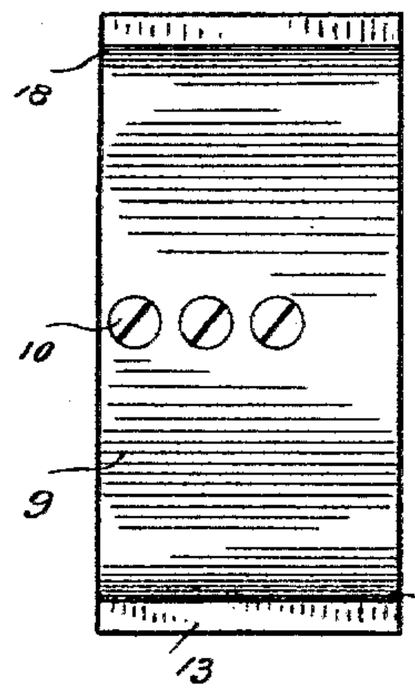


Fig. 3.

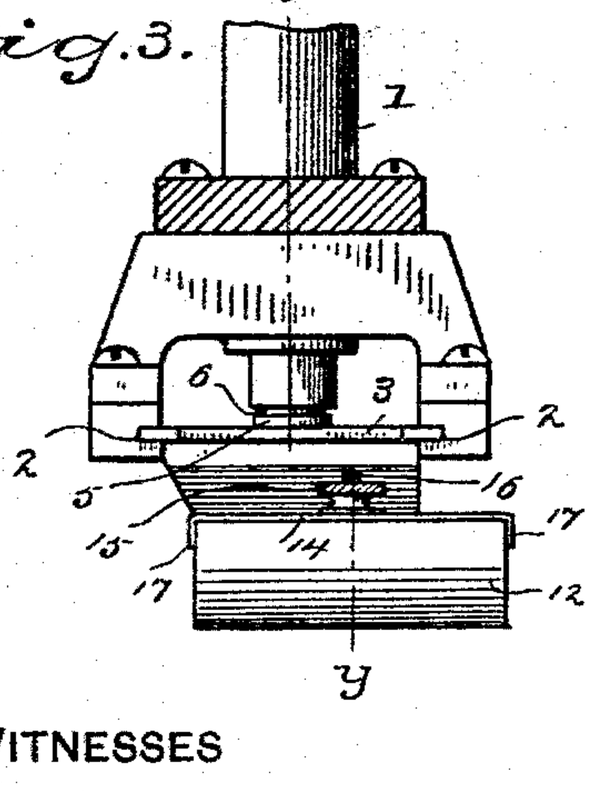
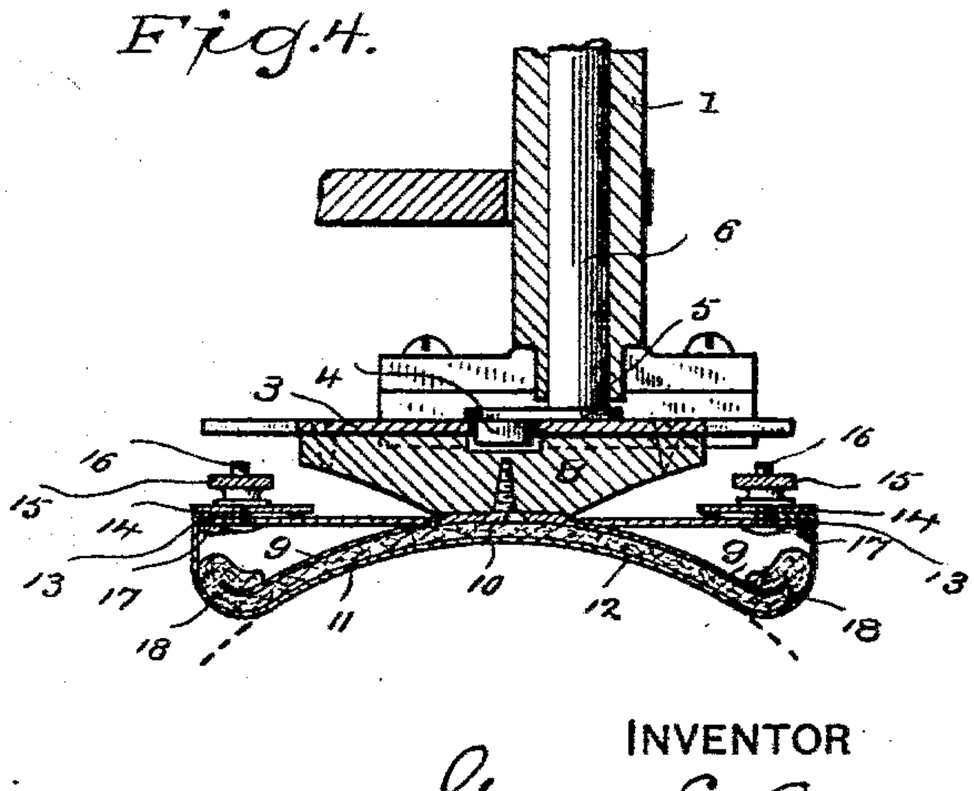


Fig. 4.



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GEORGE E. BRUSH, OF DANBURY, CONNECTICUT.

FLEXIBLE POUNCING-PAD.

SPECIFICATION forming part of Letters Patent No. 515,992, dated March 6, 1894.

Application filed August 14, 1893. Serial No. 483,121. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. BRUSH, a citizen of the United States, residing at Danbury, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Flexible Pouncing-Pads; and I do hereby 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.

My invention has for its object to produce a pouncing pad adapted for general use in the manufacture of hats but more especially adapted for pouncing hat crowns.

My novel pad may be used upon any suitable hat pouncing machine, the manner in which the pad is carried and driven not being of the essence of my invention.

My novel pad however is especially adapted for use in connection with the improved machine for pouncing crowns and brims of hats which is described and claimed in my pending application, Serial No. 475,065, filed May 22, 1893.

In my present pouncing pad the solid convex body heretofore used is dispensed with and in lieu thereof I use a concave plate made of spring metal so that the entire surface of the pad can be utilized in pouncing hat crowns and the pouncing surface will, through the flexibility of the plate adapt itself to the varying curvature of hat crowns. With these ends in view I have devised the flexible concave pouncing pad which I will now describe referring by numbers to the accompanying drawings forming part of this specification in which—

Figure 1 is a side elevation of my novel pad as in use; Fig. 2 a section on the line *x x* in Fig. 1 looking down; Fig. 3 an end elevation a portion of the carrier being in section; Fig. 4 a vertical section on the line *y y* in Fig. 3, and Fig. 5 is an inverted plan view of the flexible plate with the felt and paper removed.

1 denotes a carrier which may be of any ordinary or preferred construction and is provided with ways 2 which receive the base plate 3 of the pad. Reciprocatory motion is imparted to this plate which carries the pouncing surface by means of a pin or roller 4 on a crank 5 at the lower end of a shaft 6 which is journaled in the carrier. Rotary motion is imparted to the shaft in any ordinary or preferred manner as for example by a sprocket chain, not shown, passing over a sprocket wheel 7 carried by the shaft.

8 denotes a block preferably of wood which is secured to the base plate.

9 denotes the flexible concave plate which is secured to block 8 by screws or in any suitable manner. The outer ends of plate 9 are curved upward as at 18 for a purpose presently to be explained. Under plate 9 is a strip 11 of some soft yielding material, for example felt, the ends of which are curved over the upturned ends of plate 9 so as to present a soft smooth surface thereby rendering it impossible for the pad to scrape or mar a hat body in any way.

12 denotes the usual pouncing strip, ordinarily of sand paper which lies in the curved inner side of the pad and the ends of which pass upward and then inward and are clamped between plates 13 and 14 by means of thumb screws 15 which engage threaded rods 16 and bear upon the upper plates 14. The lower clamping plates 13 may be made separately and riveted or soldered to plate 9, or a single plate extending clear across may be used if preferred. One set of plates, the upper plates 14 in the present instance are provided with side flanges 17 which overlap the sides of plates 13 and prevent the ends of the strip of sand paper from slipping out sidewise. It will of course be understood that the exact construction and arrangement of the parts is not of the essence of my invention. It is essential however to so arrange the clamping plates that they will not interfere with the flexibility of plate 9.

It will of course be understood by those familiar with the art that hats are pounced while they are upon blocks, the blocks being rotated in any suitable manner. While the block with the hat thereon is being rotated the pouncing pad is applied to the surface of the hat the movement of the pad being from the brim to crown or vice-versa. It will thus be seen that there are three independent and dissimilar motions in the operation of pouncing a hat, first the rotary motion of the hat that is being operated upon, second the slow oscillatory movement of the pad from brim

to crown or vice-versa, and third the rapid reciprocatory movement of the pad while it is being oscillated.

It will be apparent at a glance that the use of my flexible concave pad enables me to place the entire inner surface of the pad in contact with a hat crown, the flexibility of plate 9 permitting the pad to yield and then return to place so as to conform at all times to the curvature of the hat.

Having thus described my invention, I claim—

1. A pouncing pad consisting essentially of a flexible concave plate, a pouncing strip, and a strip of yielding material interposed between the pouncing strip and the flexible concave plate.

2. A pouncing pad consisting essentially of a flexible concave plate having upwardly curved ends 18, a strip of soft yielding material the ends of which are curved over the ends of the flexible plate, a suitable pouncing strip, and clamping plates by which the ends of the pouncing strip are held.

3. A pouncing pad consisting essentially of a reciprocating base plate, a block 8 secured thereto, a flexible concave plate secured to said block, a pouncing strip, a soft yielding strip interposed between the pouncing strip and the flexible plate, and clamping plates by which the ends of the pouncing strip are held, one of said plates being provided with side flanges to retain the pouncing strip in place.

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

GEORGE E. BRUSH.

Witnesses:

JABEZ AMSBURY,

JOSEPH E. PLATT.