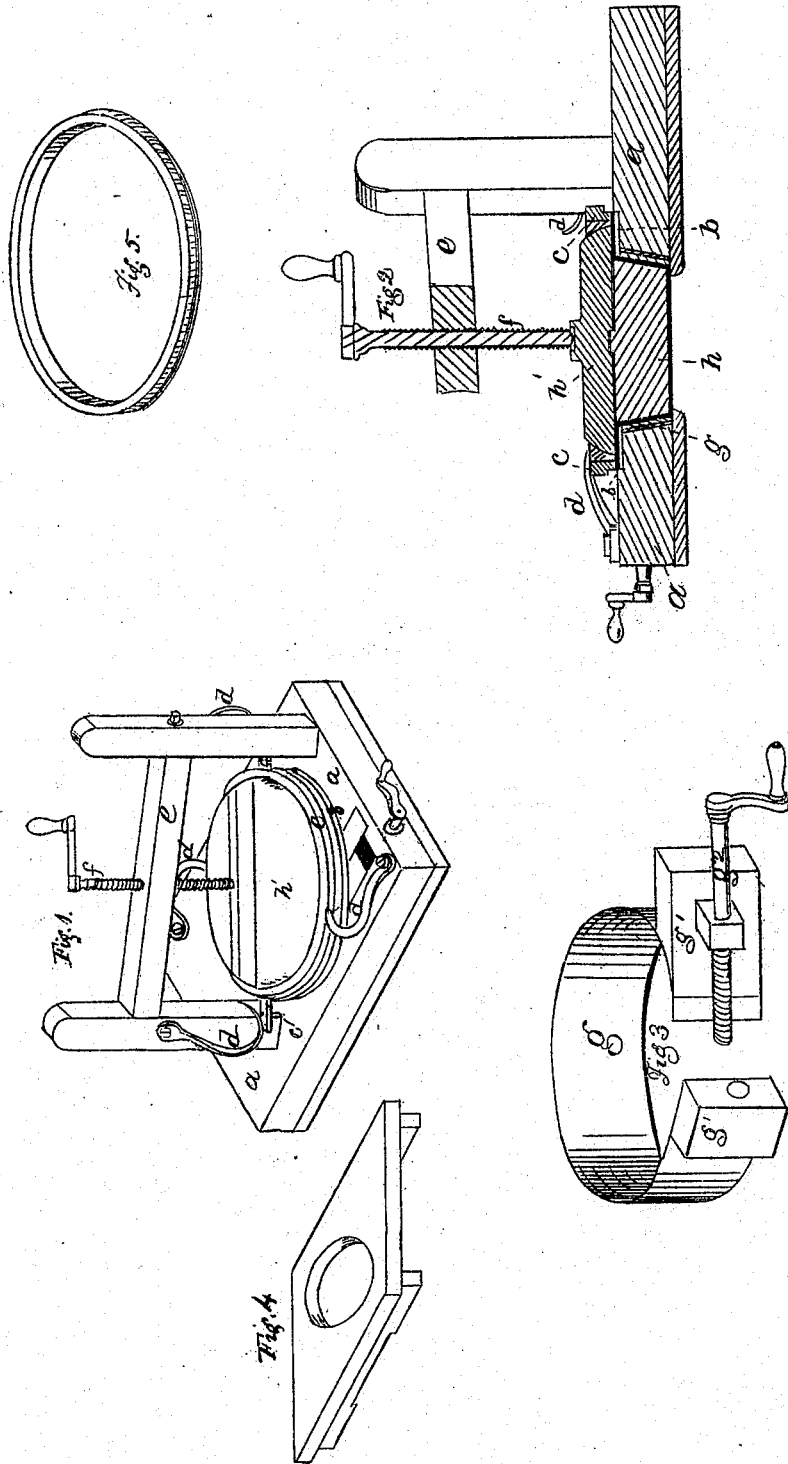


S. Gleason.
Pressing Hats.

No. 3357.

Patented Nov. 24, 1843



UNITED STATES PATENT OFFICE.

SEWALL GLEASON, OF NEW YORK, N. Y.

MACHINE FOR MAKING HATS OF LEATHER, INDIA-RUBBER, &c.

Specification of Letters Patent No. 3,357, dated November 24, 1843.

To all whom it may concern:

Be it known that I, SEWALL GLEASON, of the city, county, and State of New York, have invented a new and useful Improvement in Making Hats from India-Rubber Cloth, Leather, or other Suitable Materials; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, which forms a part of this specification, in which—

Figure 1 is an isometrical view; Fig. 2, a vertical section; Fig. 3, elastic metal hoop detached; Fig. 4, apparatus on which the rim is pressed; Fig. 5, elastic metal band.

The nature of my invention consists in an apparatus by which a piece of leather india rubber cloth or other suitable material is pressed into the form of a hat by one operation.

The machine is of the following construction, viz: an oblong bed piece (*a*) formed of wood and of a thickness sufficient for the height of the crown of a hat has a circular hole cut through its center of a sufficient size to admit the hat to be made; around the edge of this hole is a metal ring or flanch (*b*) attached to the upper face of the bed and as wide as the rim of a hat; a stout ring of metal (*c*) sets onto the outer edge of ring (*b*), and has an ear (*c'*) projecting from each side of it with holes in them through which steady pins attached to the bed pass this ring (*c*) is held down by springs (*d*) which are screwed at one end to the bed and posts and the other rests on the ring. A frame formed of two upright posts and a cross beam (*e*) which runs diagonally and horizontally across the bed over the center of the hole is affixed to said bed there being a screw (*f*) turned by a crank above, passing down vertically through the beam over the center of the hole for a purpose hereafter described.

An elastic metallic hoop (*g*) as broad as the depth, of the hole in the bed piece, is placed within it; the ends of the hoop being unconnected, and lapping over each other; they have blocks (*g'*) attached to them, and a screw (*g²*) connected with one, takes into a screw in the other, and expands or contracts the hoop as required. Into the hole in the bed, a hat block (*h*) of usual construction fits; this has a flat piece (*h'*) attached to it that extends out all around like a flanch, wide enough for the rim of the hat, but fitting inside the ring (*c*); across its top

there may be a brace in the center of which there is a cup or bearing of metal for the end of the screw (*f*) to turn in.

The operation of the machine so constructed as follows: a piece of leather or other suitable material out of which the hat is to be made is placed on the flanch (*b*) and the ring (*c*) put over it and held firmly down by the springs (*a*) the block (*h*) and cap (*h'*) are then put onto it, over the hole in the bed; the screw (*f*) is then turned down onto them, and forces them down till the cap (*h'*) meets the flanch (*b*), and the rim is pressed as hard as required; the screw (*g²*) is then turned till the elastic hoop (*g*) embraces the crown as tight as is required; the hat being thus completely formed is taken out and an elastic band, constructed as hereafter described, put onto it and set away to harden or dry. The band shown in Fig. 5 is a narrow strip of sheet metal, the edges of which are turned out; the ends of this strip overlap and around it a spiral spring is put and kept in place by the flanches, formed by the turned edges of the band, this spring draws up the band tightly around the hat, and keeps it in place while drying. For pressing the rim, a table, Fig. 4, of common construction having a hole through it can be used.

What I claim as my invention and desire to secure by Letters Patent is—

1. The combination of the bed piece (*a*), and elastic metal hoop (*g*), constructed and arranged, substantially in the manner, and for the purpose herein described. I also claim in combination with the above the block (*h*) cap (*h'*) and screw (*f*) for pressing the leather into the bed, as herein set forth.

2. I also claim the employment of the metal ring (*c*) held down by springs (*d*) in combination with the block for holding the leather to be pressed while the block forces it down, and the elastic hoop *g*, as herein specified.

3. Lastly I claim the elastic metallic band (Fig. 5,) formed of a metal ring, the ends of which overlap, and which is grooved on the outside in combination with a spiral spring which surrounds it as before explained.

SEWALL GLEASON.

Witnesses:

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