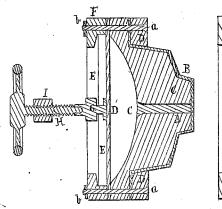
M. Mouse, Pressing

Mo.53,083,

Patented. Mar. 6.1866.

Fig.1.



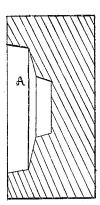
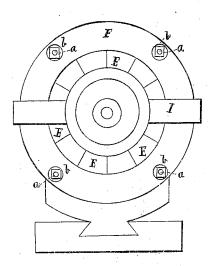


Fig 2.



Frederick Emilis Gr. H. Warshburn Murroe Morse.

By his attorney. R. Holdy

UNITED STATES PATENT OFFICE.

MONROE MORSE, OF FRANKLIN, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND AARON H. MORSE, OF SAME PLACE.

IMPROVEMENT IN APPARATUS FOR PRESSING HATS.

Specification forming part of Letters Patent No. 53,083, dated March 6, 1866.

To all whom it may concern:

Be it known that I, Monroe Morse, of Franklin, in the county of Norfolk and State of Massachusetts, have invented an Improved Machine or Improvement in Machinery for Pressing Straw Hats or Bonnets, or other Articles of Like Character; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a vertical section, and Fig. 2 a

rear elevation, of the machine.

My invention is an improvement on that described in the United States Patent No. 20,837, granted July 6, 1858, to Hiram E. West; and therefore 1 do not claim as my invention the principle of such patented machine.

On account of the great length of time required to operate the machine when made as exhibited in the specification of the said West, such machine has not been deemed of much practical value, and other machines since in-

vented have taken its place.

Instead of employing a pump to inflate or operate the flexile presser, I make use of a chamber provided with a flexile head, a series of circular sectors, and a mechanism for moving such sectors.

In the drawings, A represents the mold into which the hat is to be passed for being shaped, such mold having applied to it, when

in use, a means of heating it.

B is the flexile presser, which is an elastic sheet of vulcanized rubber or other proper water proof material, covering a block or presser, C, and being secured thereto by an annulus, D, and sundry screw-bolts a a a a, provided with nuts b b b b. There is a chamber, c, in the block C, and there is also one or more passages, d, leading out of such chamber and through the block and to the flexile presser B.

There is an elastic sheet or head, D', to the chamber c, and in the rear of such head, and against it, there is arranged a series of sectors, E E, held in place by a cap-ring, F, and a grooved cylinder, G, which are disposed concentrically and with respect to the sectors, in manner as shown in the drawings, the ring F

being confined to the block C by the screwbolts a a a a.

A screw, H, screwed into an arched bracket, I, fastened to the ring F, should be so connected with the cylinder G that while the screw may be revolved in either direction it shall move the cylinder in the direction of its axis, and so as to move the sectors E E, the ring F and the cylinder G being so made as to allow of such movement of the sectors. When the said sectors are moved against the elastic head D' they will force it out into the space or chamber c, so as to expel from such chamber and through the passage or passages d and against the flexile presser B a portion of the liquid which may be in the said chamber, it being understood that such chamber is to be filled with liquid.

In using the machine a hat or bonnet to be pressed is to be put on the flexile presser covering the projecting part of the block C, after which the said part of the block C and the flexile presser and the hat on them are to be introduced into the pressing-cavity of the mold, and the mold should be locked to the block C. This having been done, we have only to turn the screw H so as to force the block C toward the chamber c and the sectors against the elastic head D until the flexile presser may have been inflated or stretched within the hat in various directions sufficiently to press it completely against the molding-surface.

I have contemplated the construction of the portion C, in whole or in part, of an elastic material—such as a composition of glue and molasses, for instance, to rest directly against the flexile presser, and to be subject to being so moved by the series of sectors when they are pressed inward upon it as to force out the flexile presser in a manner to cause it to perform its office of crowding the hat into the mold.

I also contemplate the use of a flexile presser made in the form of a block, and of indiarubber or other elastic material capable of being crowded forward by the sectors, and so as to be driven into the mold.

All these changes are substitutions for the chamber containing a liquid and operating

with the flexile presser and the series of screw H, as applied to the chambered block C sectors, and the mechanism for moving such of the flexile presser B, substantially in man-

What I claim as my invention or improve-

ment is-

The construction and arrangement of the elastic head D', the series of sectors E, the grooved cylinder D, or its equivalent, and the

ner and so as to operate as specified.

MONROE MORSE.

Witnesses:

F. P. HALE, Jr., FREDERICK CURTIS.