

D. DENNIS.
Dies for Shaping Hats.

No. 153,191.

Patented July 21, 1874.

Fig. 1.

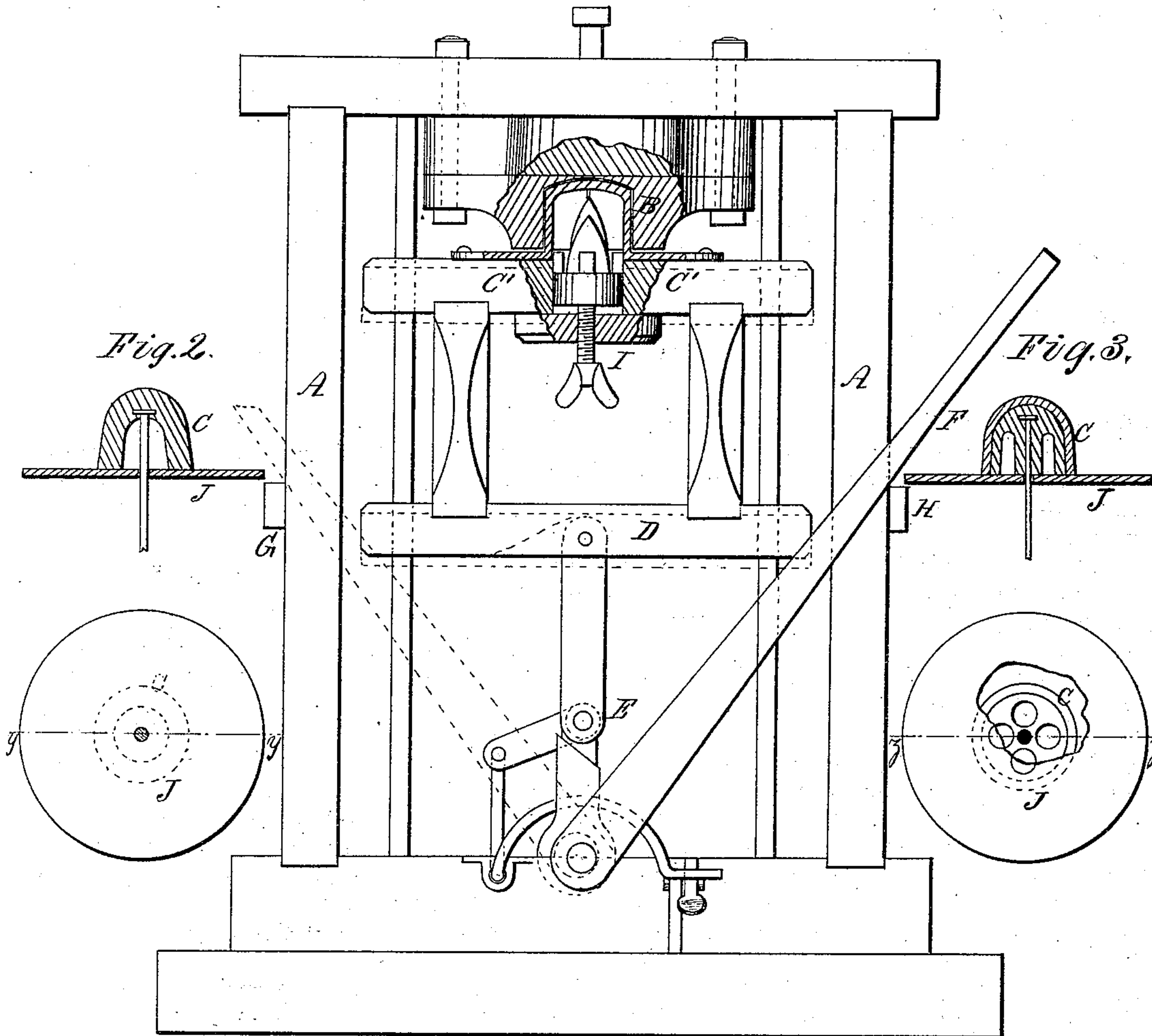
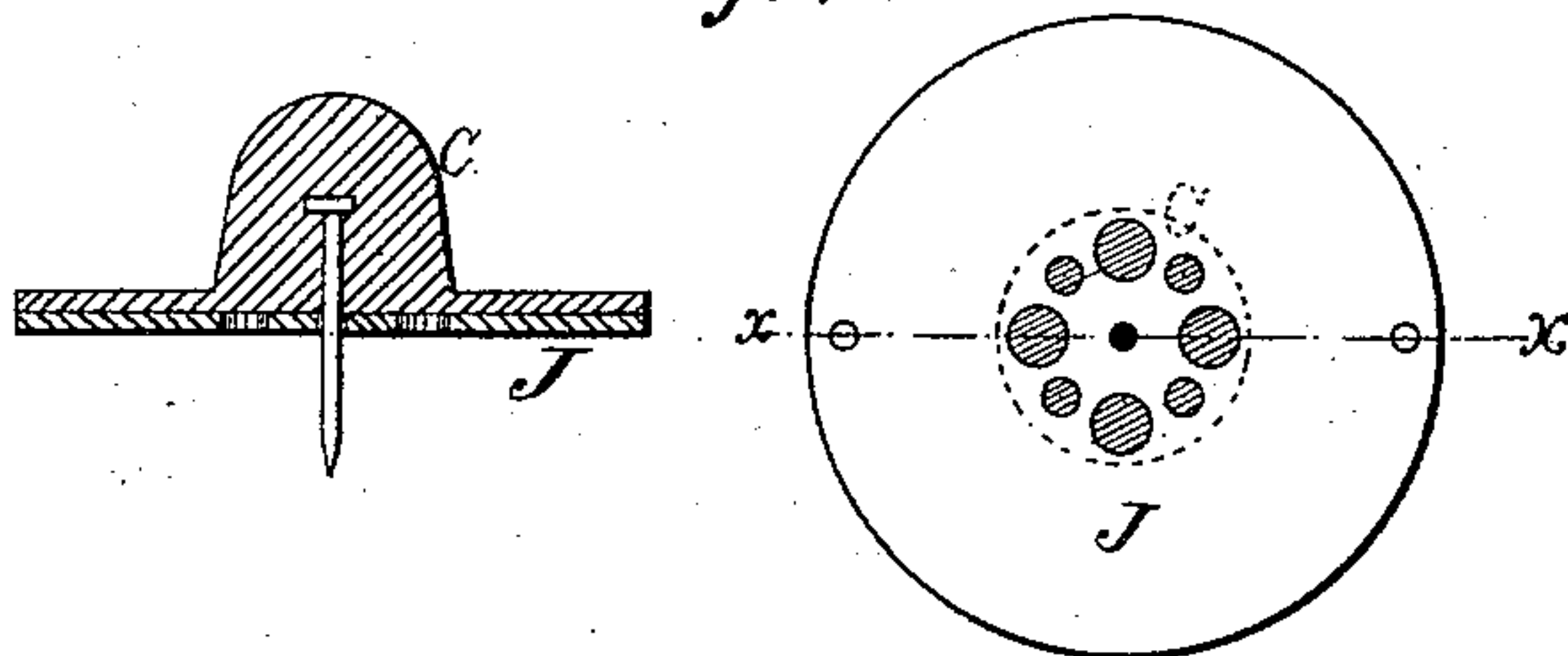


Fig. 4.



Witnesses.

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DEXTER DENNIS, OF BARRE, MASSACHUSETTS.

IMPROVEMENT IN DIES FOR SHAPING HATS.

Specification forming part of Letters Patent No. **153,191**, dated July 21, 1874; application filed August 9, 1873.

To all whom it may concern:

Be it known that I, DEXTER DENNIS, of Barre, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Dies for Shaping Hats; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification.

The invention will first be fully described, and then pointed out in the claims.

Figure 1 represents a front elevation of the press, showing the arrangement of the working lever, and also the mode of securing and adjusting the dies. Figs. 2, 3, and 4 represent plan and sectional views of the dies.

These dies are distinguished from the ordinary solid dies now in use for forming hats, by being made with one or more interior cavities, with or without adjustable plungers, or with orifices through the brim-plate J for regulating and controlling the expansion when the die is subjected to the high temperature of the socket or matrix.

A is the press-frame. B is the matrix, into which the die works. The hat is placed on the die C, as seen in Fig. 1, the die being placed on the die-bed C' of the sliding frame D. This frame D is forced upward, carrying the die and hat into the matrix by means of the knee-joint device E actuated by means of the foot of the operator.

The dies are heated in the operation, expand, and then produce too much pressure, while the hats not being of uniform thickness the pressure suitable for one would injure another. To provide for this extra pressure, I make one or more cavities opening from the bottom.

The dies are shown in the drawing in vertical section and in pairs, the brim-plate of each being represented directly beneath each die.

The dies are made of rubber, are more or less elastic, and when they are subjected to undue pressure the compression will force a portion of the material into the cavities or through orifices. When the pressure is removed the rubber thus forced into the cavity or cavities, or through orifices in the brim-plate, will return, and the die will assume its normal shape and condition.

What I claim as new is—

1. A rubber die, having orifices through the brim-plate J for the purpose of allowing expansion at the time and in the manner described.

2. An elastic die, C, having one or more interior cavities opening up from the bottom to admit of compression, in the manner set forth.

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Witnesses:

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