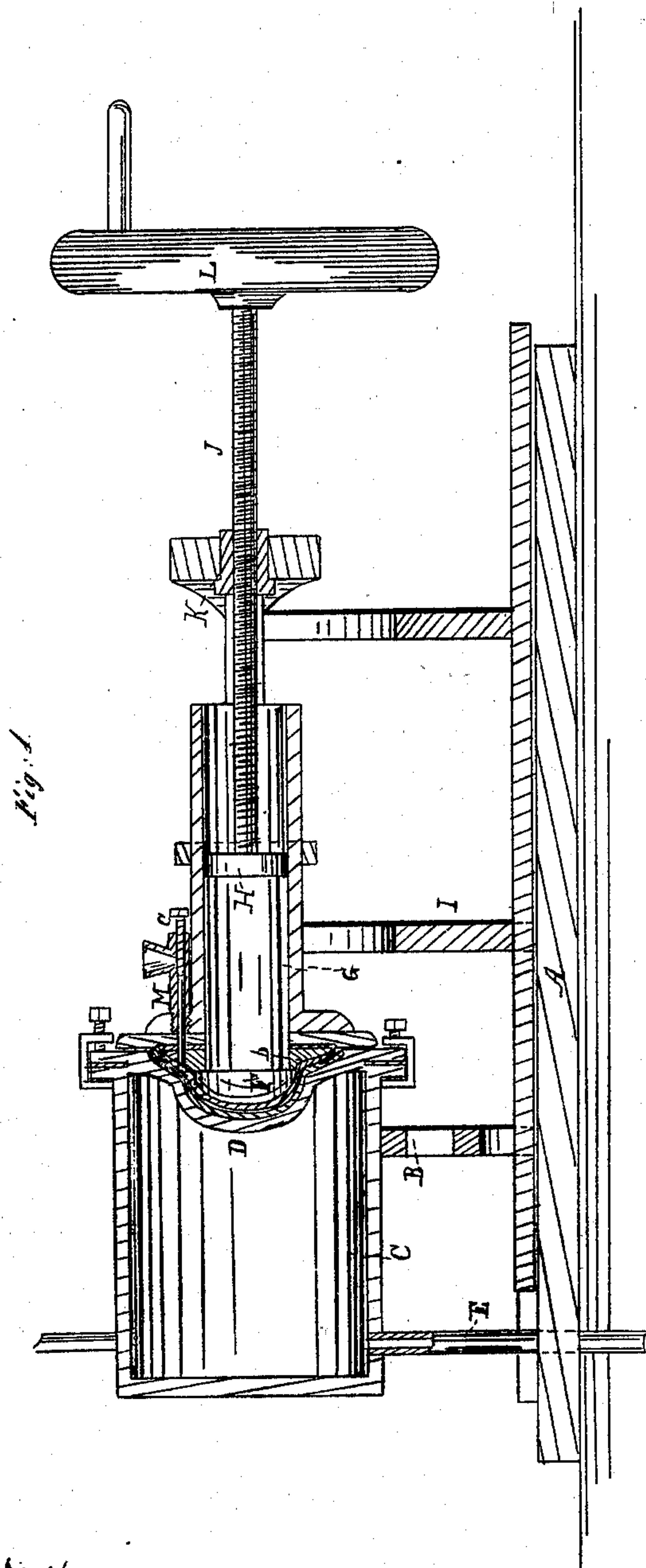


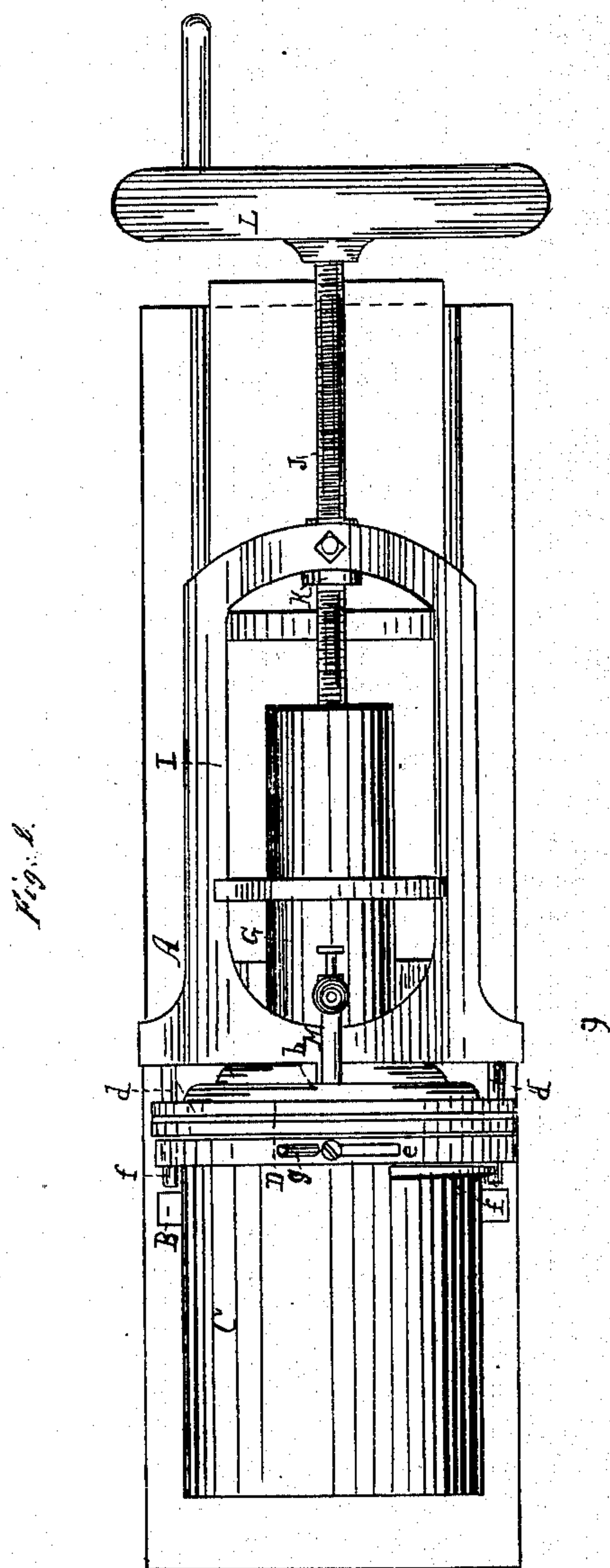
G. F. Thompson. Pressing.

No. 60088.

Patented Nov. 27. 1866.



Witnesses.
Thos. Tusch
J. A. Service



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IMPROVEMENT IN MACHINES FOR PRESSING HATS.

G. L. THOMPSON, OF NEW YORK, N. Y.

Letters Patent No. 60,088, dated November 27, 1866.

SPECIFICATION.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, G. L. THOMPSON, of 40 Division street, in the city, county, and State of New York, have invented a new and useful Improvement in Pressing Hats, Bonnets, etc.; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a longitudinal vertical section of this invention.

Figure 2 is a plan or top view of the same.

Similar letters of reference indicate like parts.

This invention relates to an improvement in that class of machines in which the operation of pressing hats, bonnets, or other similar articles is effected by means of steam or other fluid at a suitable pressure acting upon a flexible diaphragm or core applied to one side of the article to be pressed, while the other side is supported by a rigid block or form. By combining with said flexible diaphragm or core, a piston which works in a suitable barrel or cylinder, and which can be moved towards and from said flexible core, the pressure of the liquid or fluid can be increased or diminished at pleasure, and the operation of pressing hats, bonnets, or other similar articles, can be effected with the greatest ease and nicety.

A represents a bed-plate of iron or any other suitable material. From this bed-plate rises a standard, B, which supports the steam chamber, C. To the open end of this chamber is secured the form or die, D, suitable packing being interposed so as to produce a steam-tight joint, and by admitting steam to the chamber, C, through the pipe, E, the die can be heated to any desirable degree. In order to facilitate the operation of removing the die from the chamber and replacing another in its stead, simple screw clamps may be used to hold the die in position, or it may be fastened in any convenient manner. Said die is hollowed out to form a counterpart to the hat, bonnet, or other article to be pressed, and said article is forced in the die by the action of a core, F. This core is composed of a flexible diaphragm firmly clamped between suitable metal disks, *b*, which are secured to the end of a barrel, G, which is provided with a piston, H, and which communicates freely with the space under the diaphragm, as shown in fig. 1 of the drawing, so that water or other fluid contained in said barrel can be forced against the inner surface of the diaphragm. The barrel, G, is secured in a carriage, I, which moves back and forth in suitable guide-ways in the bed-plate, A, so that the core, F, can be conveniently moved towards or from the die, D; and from the piston, H, extends a screw-rod, J, which is tapped into a nut, K, secured in the end of the carriage, I. A hand-wheel, L, serves to impart to said screw-rod a revolving motion, and by these means the piston can be moved towards or from the diaphragm, F, and the liquid contained between said diaphragm and the piston can be compressed or forced up against said diaphragm with considerable force. A pipe, M, serves to introduce water or other liquid or fluid between the diaphragm and the piston, and the pipe is provided with a suitable plug or stop-valve, *c*, so that it can be closed while the operation of pressing is going on. From the carriage, I, extend two rods, *d*, through suitable holes in the flanges of the die and of the chamber C, and on said steam chamber is fitted a ring, *e*, which is provided with bolts or catches, *f*, and which can be turned on said chamber by means of a handle, *g*. If the carriage, I, with the core, F, is moved up to the die, and the ring, *e*, is turned, the bolts, *f*, catch in mortises in the ends of the rods, *d*, and the carriage is firmly locked and prevented from receding while the operation of pressing progresses. By the action of the fluid the diaphragm is forced into every part of the die, and one and the same core can be used for dies of different shapes, and by means of the piston and screw-rod the pressure can be regulated to any desired extent.

It is obvious that the screw-rod can be replaced by any suitable mechanism or contrivance capable of producing the requisite pressure on the piston, and I do not wish to confine myself, therefore, to the precise arrangement shown in the drawing, but reserve the right to change the same as may appear desirable.

I do not claim in my invention the flexible diaphragm, or core, in a machine for pressing hats, such being not new, but—

What I do claim as new, and desire to secure by Letters Patent, is—

The combination of the barrel G, and movable piston H, with the flexible or elastic core F, and die D, constructed and operating substantially as and for the purpose set forth.

G. L. THOMPSON.

Witnesses:

WM. F. McNAMARA,

W. HAUFF.