

J. P. Molliere.

Boot & Shoe Mach.

N^o 13,095.

Patented Jun. 19, 1855.

Fig. 1.

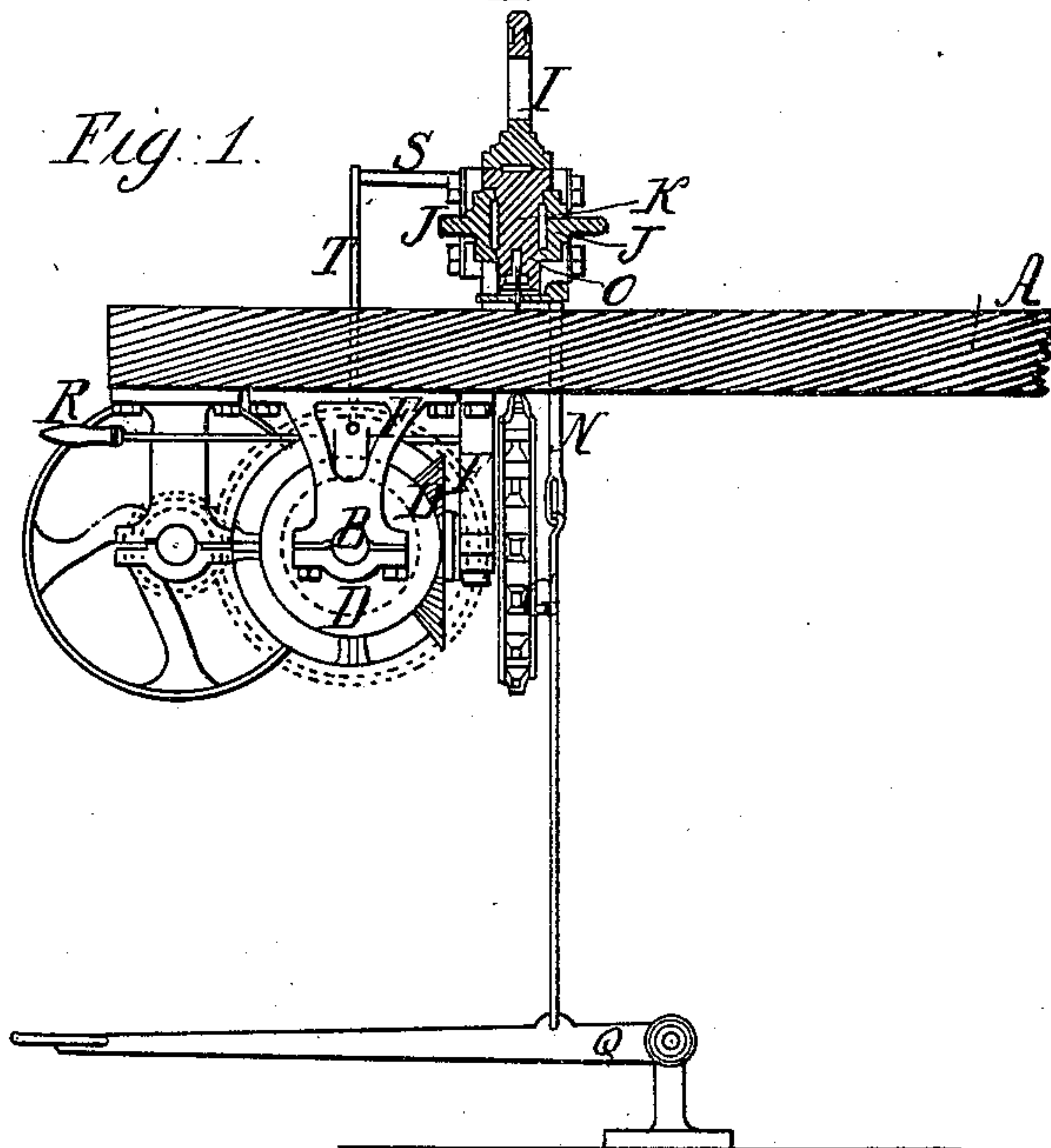
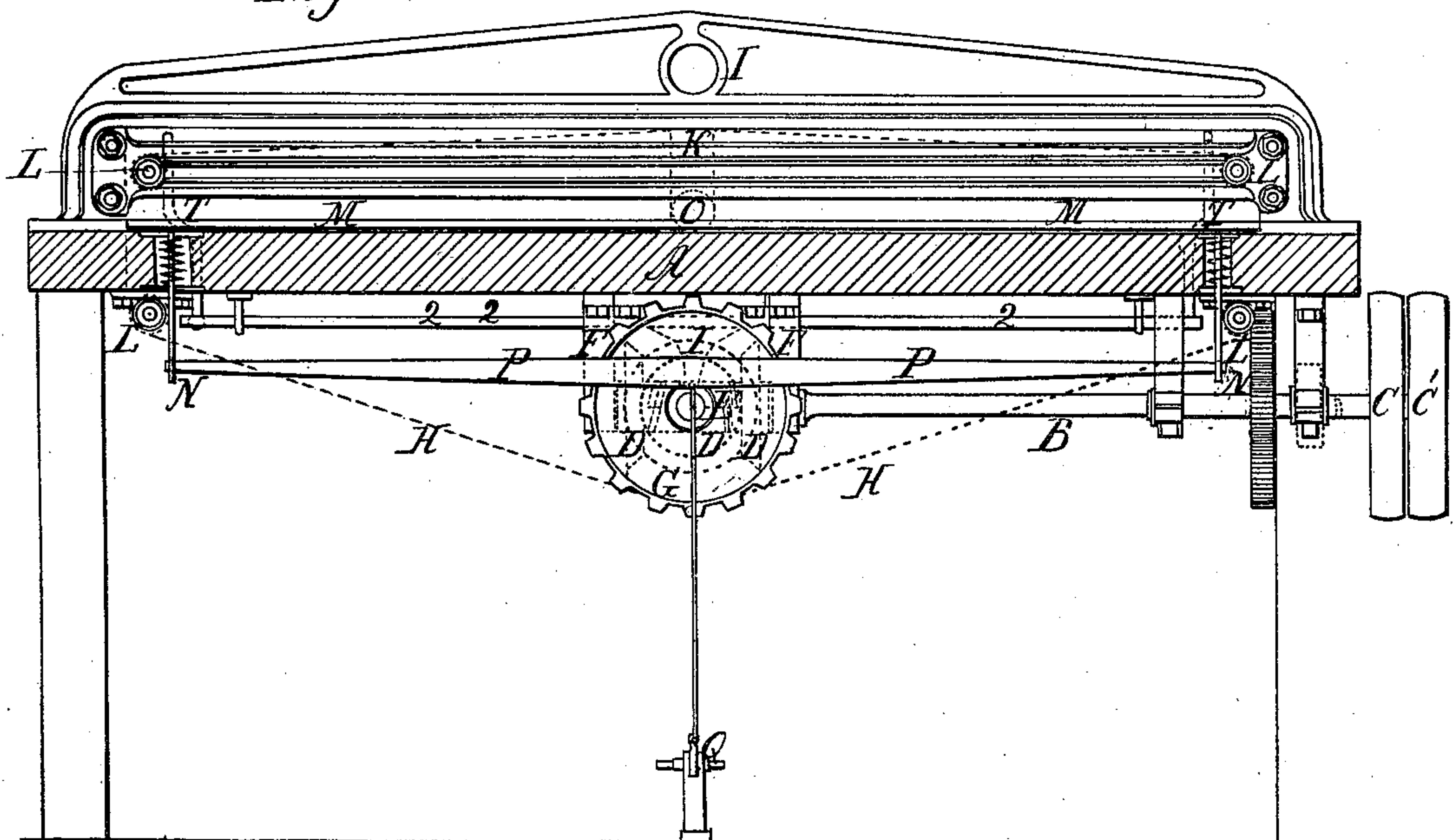


Fig. 2.



Witnesses;

L. Faguel
G. Yonin

Inventor;

Molliere

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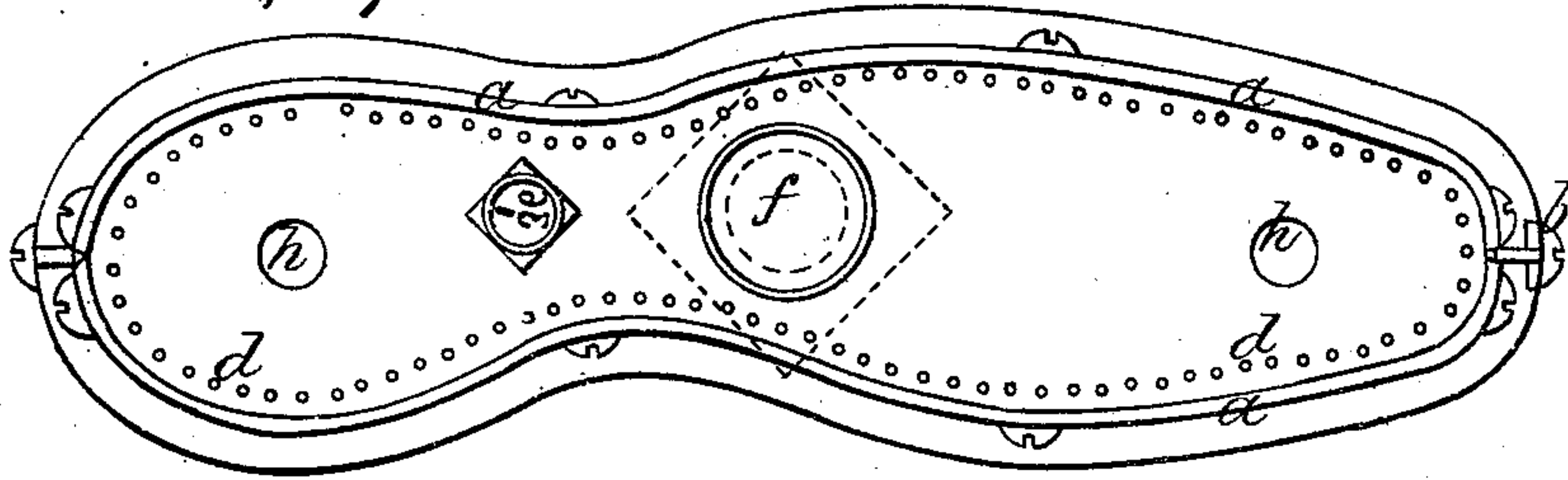


Fig. 4.

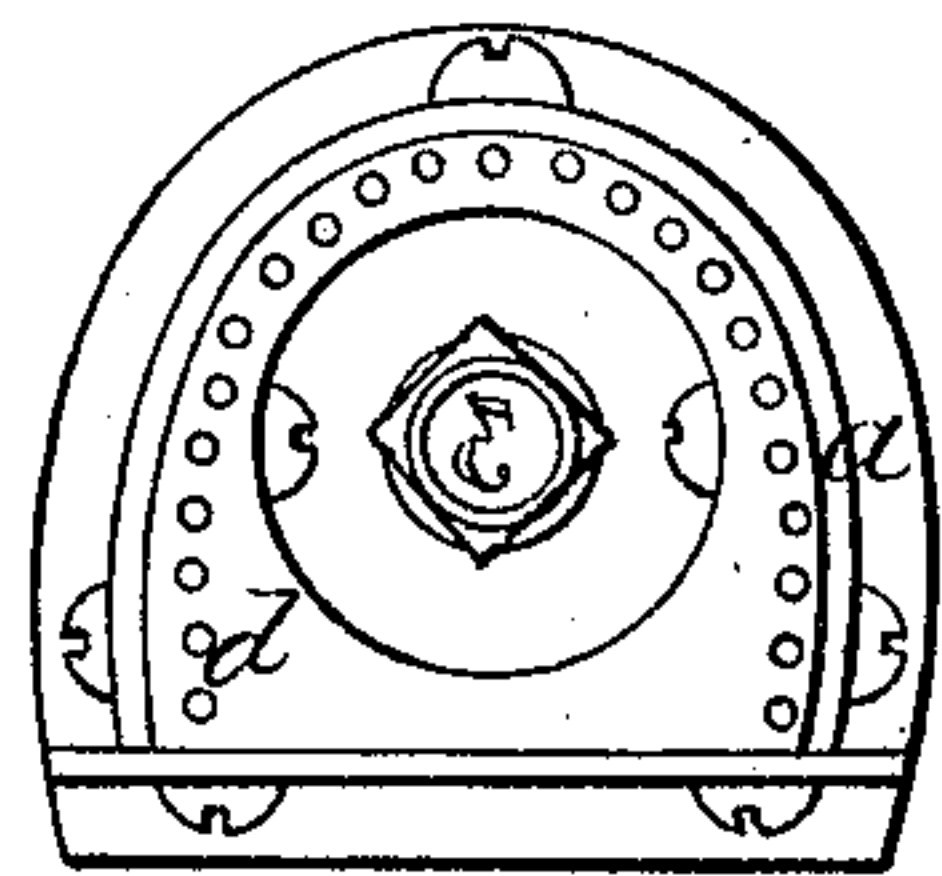
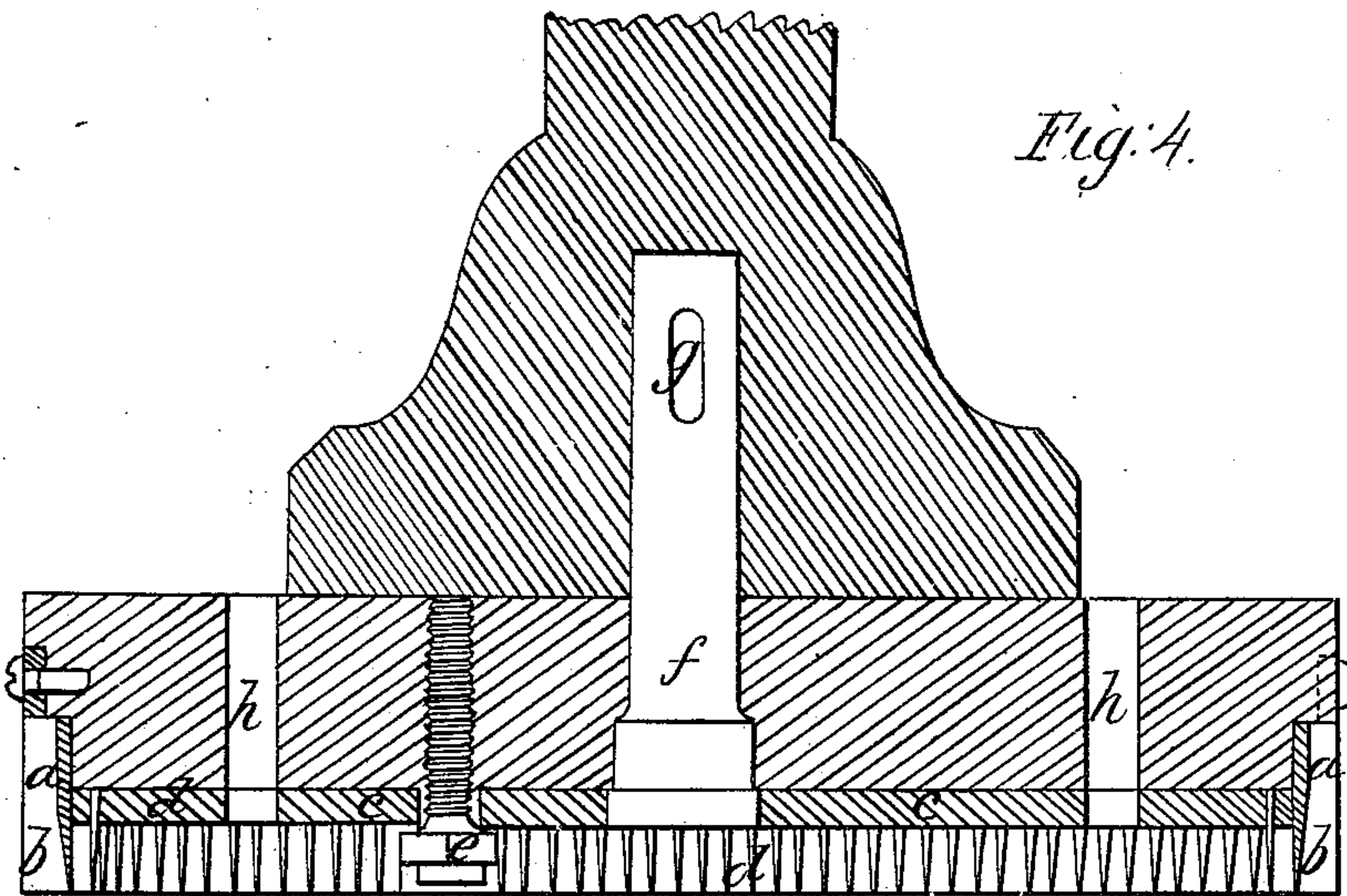


Fig. 5.

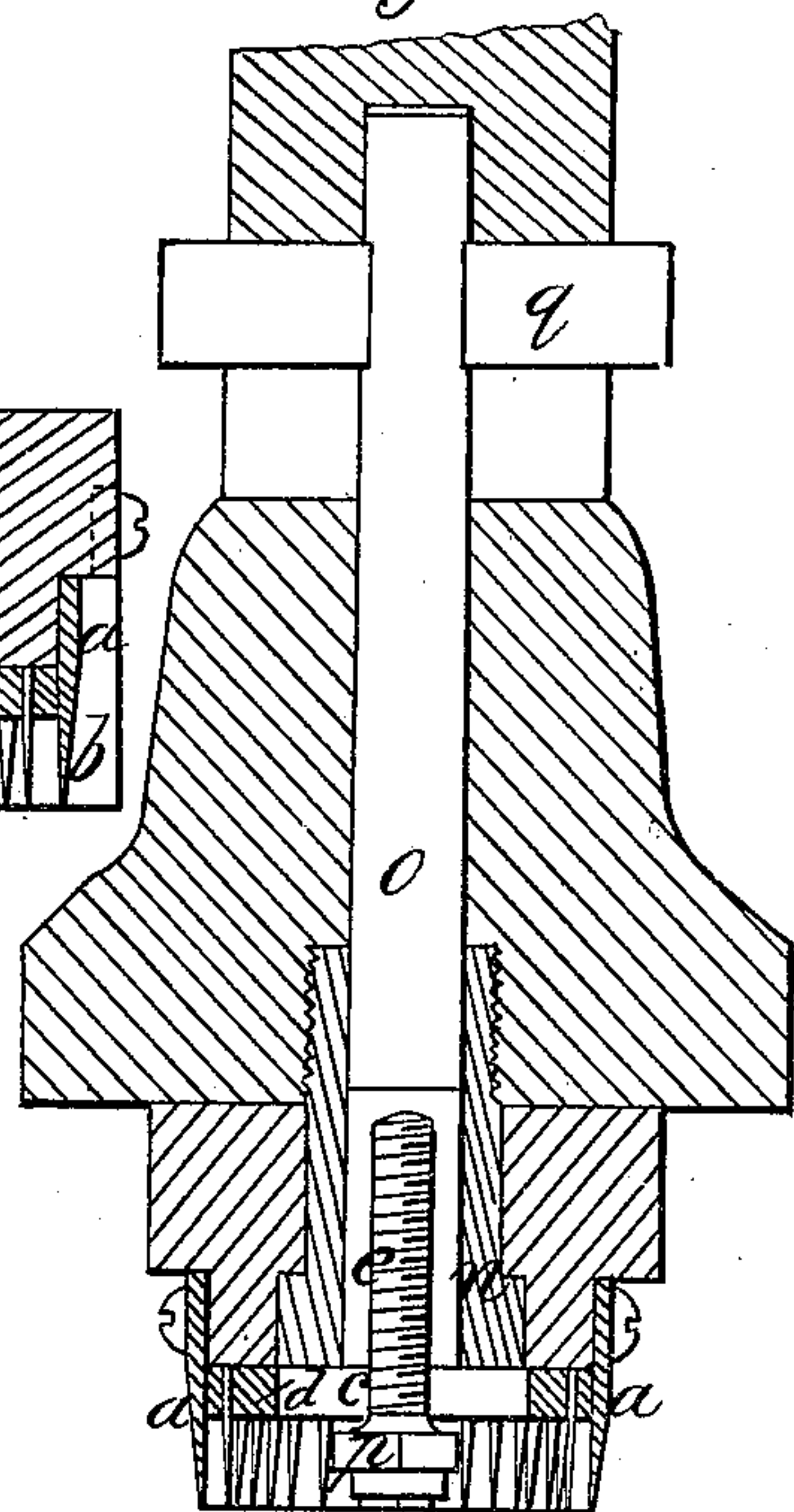
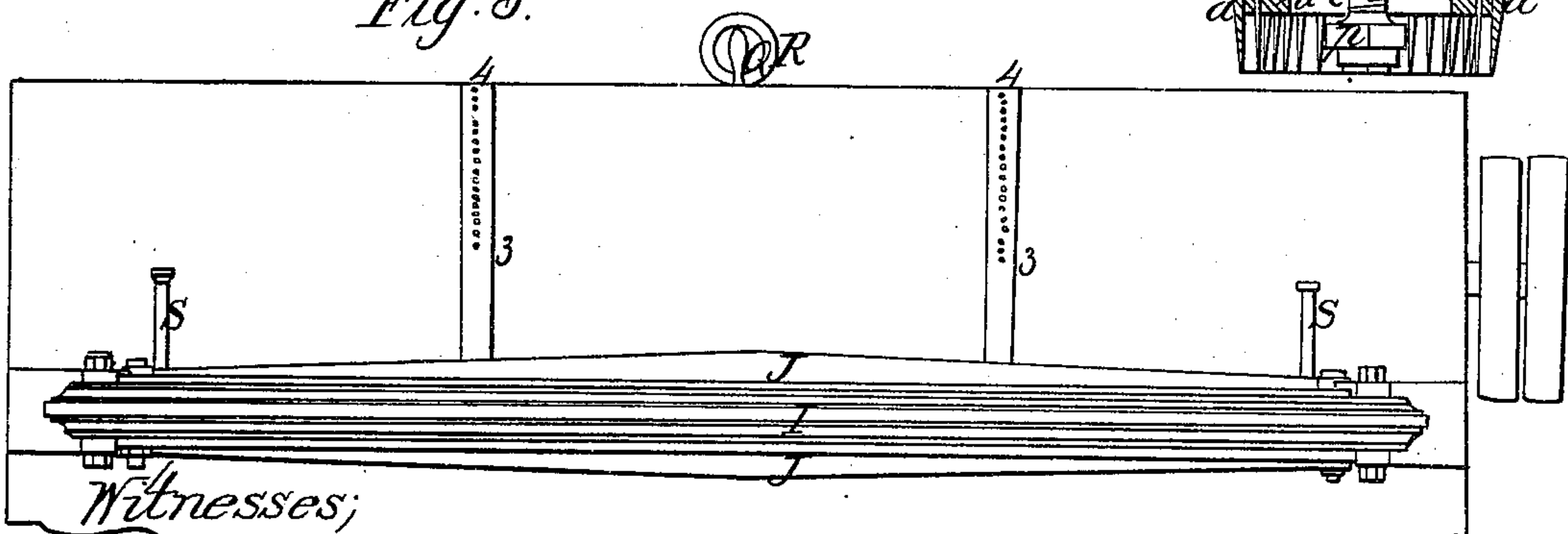


Fig. 3.



Witnesses;

L. Fugard
P. Yonin

Inventor;
Molliere

UNITED STATES PATENT OFFICE.

JEAN PIERRE MOLLIÈRE, OF LYON, FRANCE.

MACHINE FOR CUTTING LEATHER INTO STRIPS FOR BOOT AND SHOE SOLES AND HEELS.

Specification of Letters Patent No. 13,095, dated June 19, 1855.

To all whom it may concern:

Be it known that I, JEAN PIERRE MOLLIÈRE, of Lyon, France, have invented a new and useful mechanical apparatus for preparing leather intended for manufacture into boots and shoes by cutting up the sides into strips of such width as may be required to be cut up into heels and soles; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figures 1, 2, and 3 of Plate 1 are sections and views of the apparatus, and in which the letters referring to the separate parts of this apparatus are sufficiently explained in the following description of the construction and operation thereof to need repetition here.

To enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation.

Machine for cutting up into strips, (see Plate 1, Figs. 1, 2, and 3.)—This machine is intended to cut up the leather into strips of a width determined by the size of the heel or sole of the shoe or boot which is to be made. It consists of a table A built firm enough to resist the action of the motive power, which is connected with it, of a driving shaft B provided at one extremity with the two pulleys C, C', one for setting it in motion and the other for stopping it, both receiving their movement from the principal motive power. Upon this shaft are mounted two pinions or small beveled wheels D, D', which can turn freely thereupon, when they are not connected in their movement by any other agent. The movement of these two pinions is reciprocated by a third pinion D'' perpendicular to the first two, in such a way, that the pinion D does not make a movement either to the right or to the left without having its movement transmitted in a contrary direction by the pinion D'' to the pinion D'. Movement is given to these pinions by a gear muff E keyed upon the driving shaft, so as to slide upon it, and be made to fall into gear with and put in motion, first the pinion D and then the pinion D', or else to be stopped between these two pinions, without catching them, and so leave them at rest. The sliding movement of

this muff upon the shaft B is given to it by the fork 1 attached to the rod 2. The working frame of these three pinions, as well as the shaft B is supported by the bearers F, F, fastened to the table underneath it. Upon the same axis as that of the pinion D'' is fixed a tooth wheel G, on which plays a Vaucanson chain H, whose use will be presently explained. This wheel G follows the same movement as that of the pinion D'', a movement alternating from right to left, or from left to right, according as the muff E is geared with the pinion D or with the pinion D'.

The apparatus for cutting out is fastened upon the table. It consists of a light cast iron frame I and a guide way for the traveler K, which is made of the cheek pieces J attached to it, at its extremities. In the guide way formed by these three pieces, slides the cast iron traveler K. This traveler carries under it a round steel plate O, which traverses the wood of the table, and cuts the leather, when it is driven forward by the traveler K, which is itself carried along in the guide way by the Vaucanson chain H, which has its ends fastened to each one of the traveler's sides, and is stretched and governed by the four rollers L, L. The leather being placed upon the table, you slip it under the frame, for the traveler being at one of the extremities of the apparatus does not hinder this being done. Begin by cutting the edge of the leather straight. To do this, the leather after it is adjusted, must be kept in its position by means of the ruler M. This ruler is a piece of iron with a longitudinal groove or slit in it, in which plays the round steel chisel O, when the ruler is kept down, and at each end of this groove, it is provided with an opening into which the traveler K can pass. This ruler is governed by two spring rods N, buried in the thickness of the table and whose springs always tend to keep it raised; these rods are connected together under the table by the yoke P, which is attached the foot lever Q. The handle R can move to the right and to the left the rod 2 and the fork 1 which is attached to it and by a necessary consequence the gearing muff E. The workman places himself at the end of the table, within reach of the pedal Q and the handle R. When the leather is pushed under the rule, he puts his

foot upon the pedal, which acting upon the yoke P, forces the springs N to give way, and presses down the rule, which keeps the leather firmly in its place. He then seizes
5 the handle and throwing into gear the muff E, he sets in motion, by the pinions D the Vaucauson chain which drives the traveler K, and so cuts the leather by the round steel chisel O which slides in the groove of
10 the ruler M. Arrived at the end of its journey the traveler encounters one of the fingers S attached by the levers T to the rod 2, forces it forward, throws out of gear the catch E, and instantly the course of the
15 traveler is arrested. The workman then lets up the pedal, the ruler M is thrown up by the two springs N, so as to let the leather pass, which is cut straight, and which the workman takes hold of and pulls toward
20 him, until its smooth or cut edge comes up to the two pins 3 placed upon the scales 4, graduated according to the different breadths of strips wanted. When the leather is stopped by these pins, the work-
25 man placing his foot upon the pedal, repeats the same process as at first, and in this way cuts up the leather into strips.

The ruler M may be constructed without a groove in it for the chisel O to play in, in which case it plays in a groove in the 30 wood of the table, and the inner edge thereof is made to approach as near as possible to the chisel, so as to hold the leather firmly. The adjusting pins 3, 3, are inserted in holes made in the table, through the cross lines of 35 the scale of widths drawn thereon.

What I claim as my invention and desire to secure by Letters Patent of even date with the French Letters Patent for the same invention, is— 40

The cutting up of the sides of leather into sole and heel strips of any required breadth, by means of the self-arresting curved knife blade O, driven alternately to the right and to the left by the Vaucauson chain H, while 45 the leather is held in its place against the adjustable pins 3 by the spring ruler M, the whole constructed and operated substantially as herein described.

J. P. MOLLIÈRE.

Witnesses:

T. BONIN, Aîné

L. FESQUET.