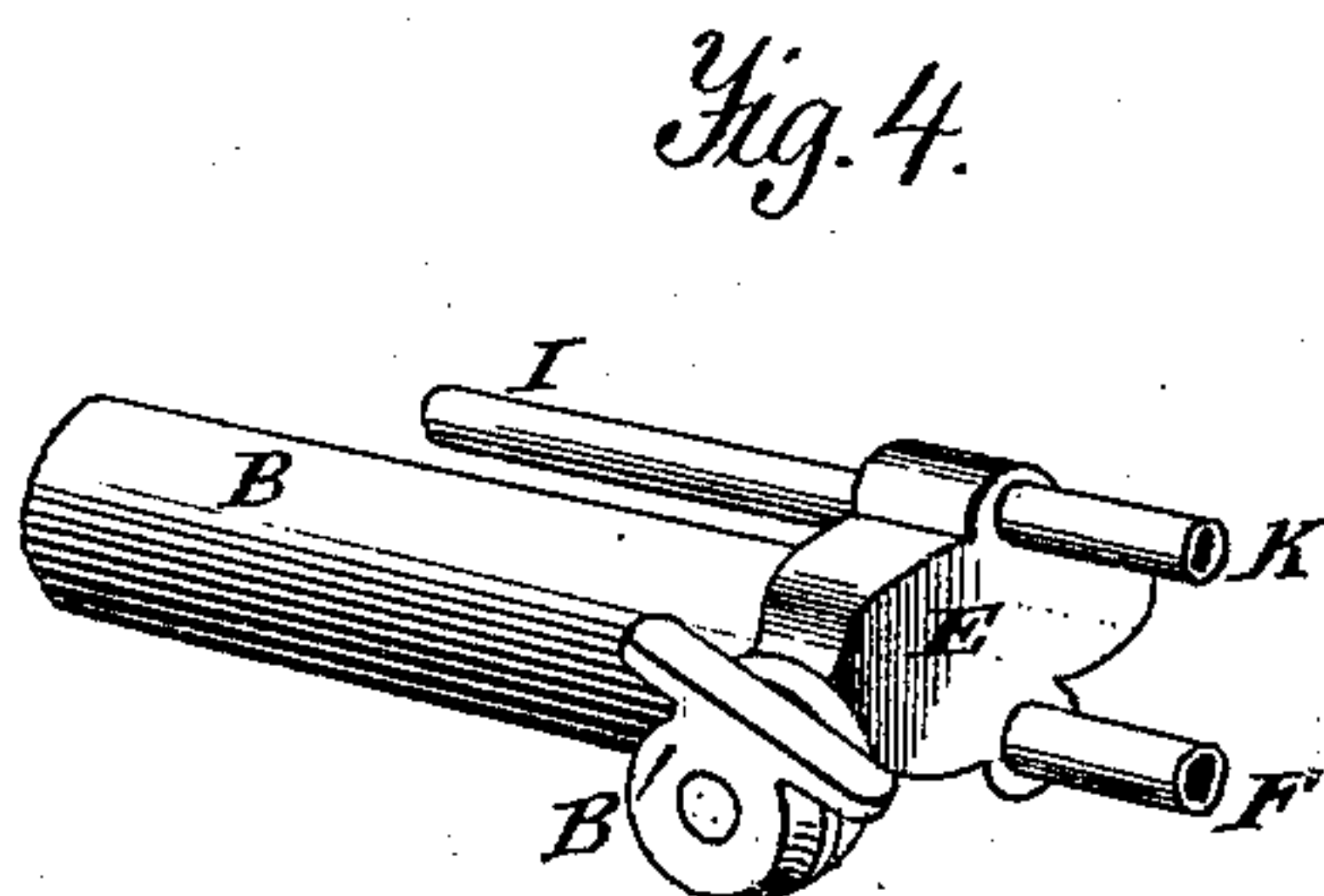
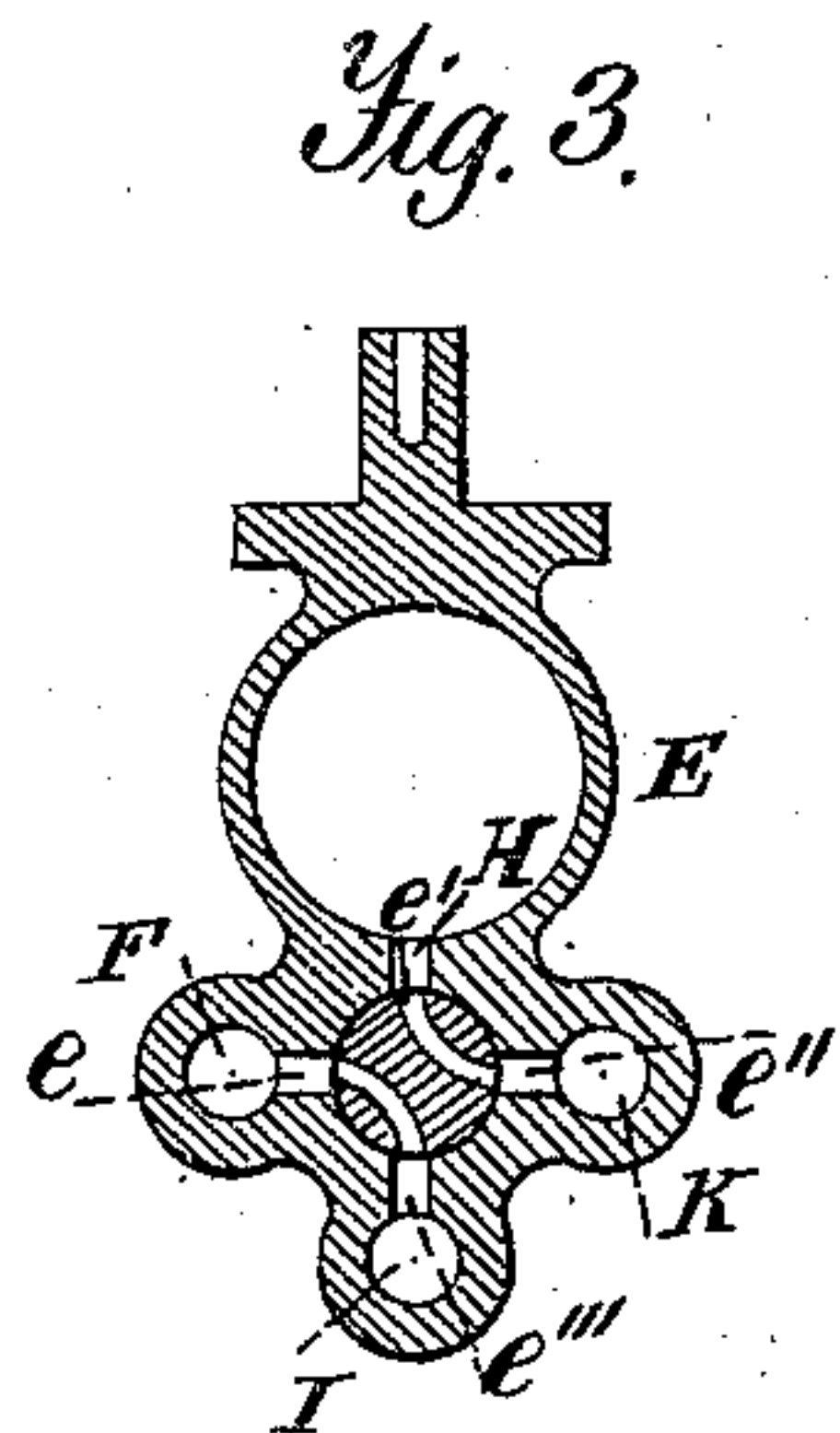
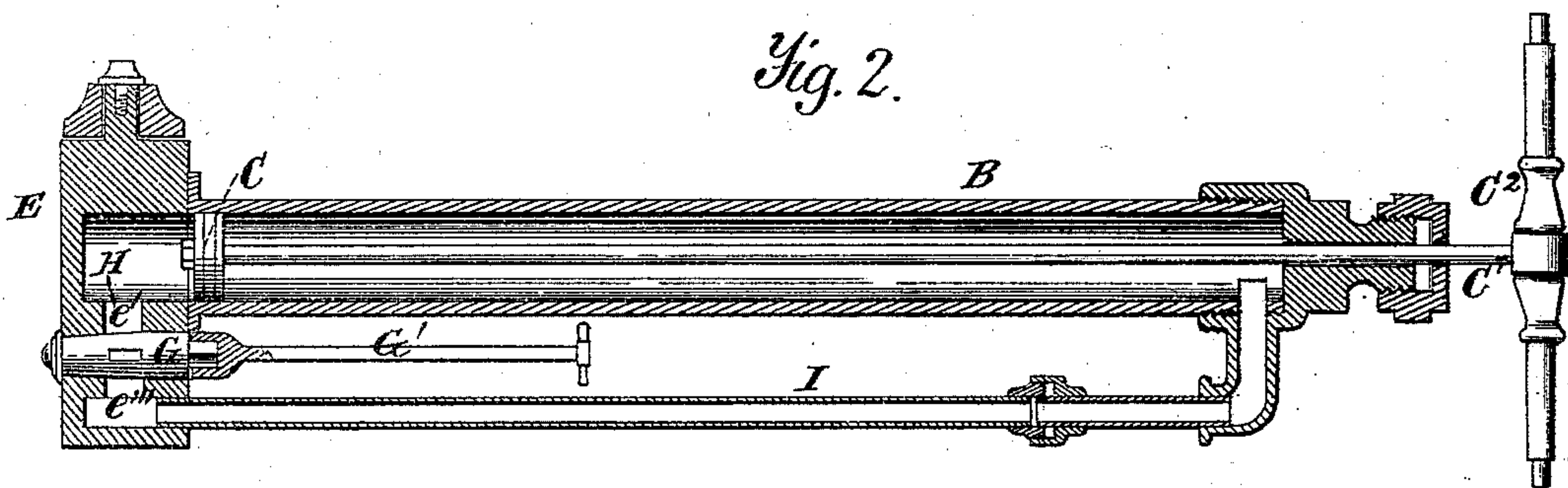
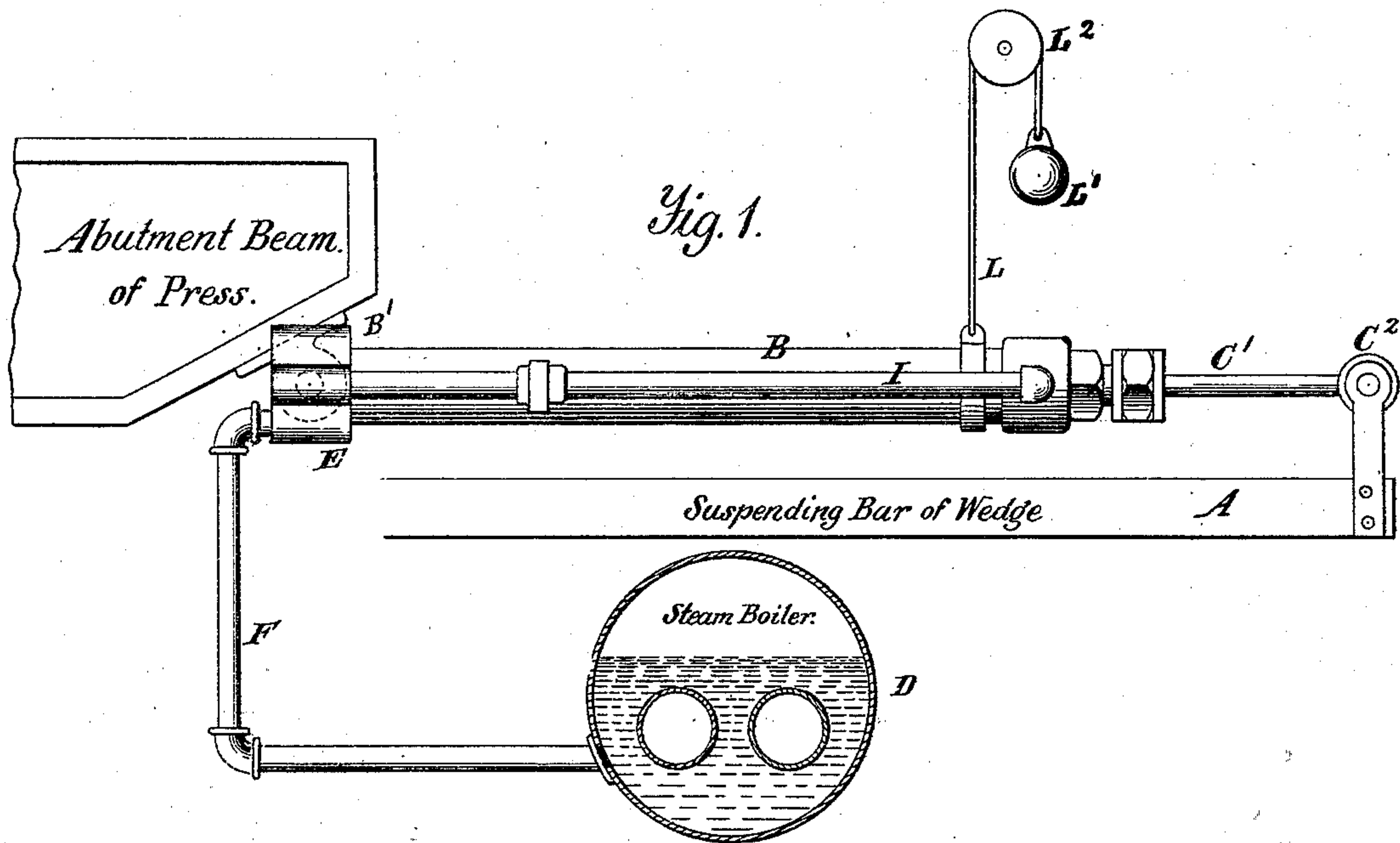


W. GOLDING.
COTTON-PRESS.

No. 182,110.

Patented Sept. 12, 1876.



Witnesses:
A. Ruppert.
W. E. Chaffee

Wm. Golding
Inventor.
by C. E. Bils
att'y

UNITED STATES PATENT OFFICE.

WILLIAM GOLDING, OF NEW ORLEANS, LOUISIANA.

IMPROVEMENT IN COTTON-PRESSES.

Specification forming part of Letters Patent No. 182,110, dated September 12, 1876; application filed July 15, 1876.

To all whom it may concern:

Be it known that I, WILLIAM GOLDING, of New Orleans, in the parish of Orleans and State of Louisiana, have invented a certain Improvement in Cotton-Presses, of which the following is a specification:

My invention, relating to cotton-presses in which a running wedge is used for adjusting the upper platen with reference to the lower platen, consists of the combination, with such running wedge, of a hydraulic engine for operating said wedge, the engine being fed from the boiler which supplies the steam for the engine actuating the movable lower platen of the press, and having its piston-rod directly connected to the running wedge, which is made practicable, notwithstanding the alignment between the hydraulic engine and the running wedge be disturbed from any cause, by mounting the engine on a pivot.

In the annexed drawings, Figure 1 is a side elevation of the hydraulic engine, showing its connection to the boiler and to the running wedge. Fig. 2 is a sectional plan of the same. Figs. 3 and 4 are detail views.

The same letters of reference are used in all the figures in the designation of identical parts.

The drawing shows only that end of the running wedge A to which the cross-head C² of the piston-rod C¹ is secured or pivoted. The cylinder B of the hydraulic engine is made of the proper length and cross-sectional area, to provide for a sufficiently-powerful piston, C, and the required stroke of the same. The piston-rod is packed by a stuffing-box, where it passes through the head of the cylinder. The water from the boiler D is conducted into the case or chest E, at one end of the cylinder, by a pipe, F, and its flow from the chest E is, in this instance, controlled by a four-way cock, G, which governs the ports *e e' e'' e'''* of the chest.

A passage, H, leads from the port *e'* to one end of the cylinder; an external pipe, I, con-

nects the port *e'''* with the other end of the cylinder; the induction-pipe F covers the port *e*, and the port *e''* registers with the exhaust-pipe K.

By a proper manipulation of the four-way cock, the piston may be held steady at any point in the cylinder, or driven in one direction or the other, to run the wedge in or out, as may be required. Of course, other known valves, adapted to accomplish the result spoken of, may be substituted for the four-way cock without departing from the principle of my invention.

The four-way cock is provided with a handle, G', or other external means for operating it.

The piston-rod is directly connected, by its cross-head, to the running wedge. To provide against disturbances of the alignment of the parts, I pivot the cylinder on its support. In the example shown, it is pivoted thus at its extreme end, as at B', the axis of the pivot being parallel to the axis of the cross-head. To relieve the piston-rod of the weight of the cylinder thus pivoted, I employ a counterweight, L¹, attached to a rope or chain, L, which is connected to the free end of the cylinder, and reeves over a pulley, L², as clearly shown in Fig. 1.

It should be understood that the running wedge requires adjustment only when there is any marked difference in the sizes of the bales to be repressed, so that it needs to be moved only periodically. It would, therefore, be rather impracticable to use steam as the motor for actuating the hereinbefore-described engine, because condensation would materially interfere with its practical use in this instance. Besides, the expansive nature of steam renders its use here objectionable, because the movement of the wedge could not be well controlled without providing a more complicated steam-supply valve mechanism. Water, on the other hand, is not liable to the objections against the use

of steam for this purpose, and its use enables me to employ the very simple engine described.

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

1. The combination, substantially as specified, with the running wedge of a cotton-press, of a pivoted hydraulic engine, the piston-rod of which is directly connected to said wedge.
2. The combination, substantially as specified, with the running wedge of a cotton-press,

of a pivoted hydraulic engine, the piston-rod of which is directly connected to said wedge, and the means, substantially as described, for balancing the cylinder.

In testimony whereof I have signed my name to the foregoing specification in the presence of two subscribing witnesses.

WM. GOLDING.

Witnesses:

CONRAD GREEN,
E. L. STREAM.