

C. E. Rymes, Hydraulic Press.

N^o 68,117.

Patented Aug. 27, 1867.

Fig. 3

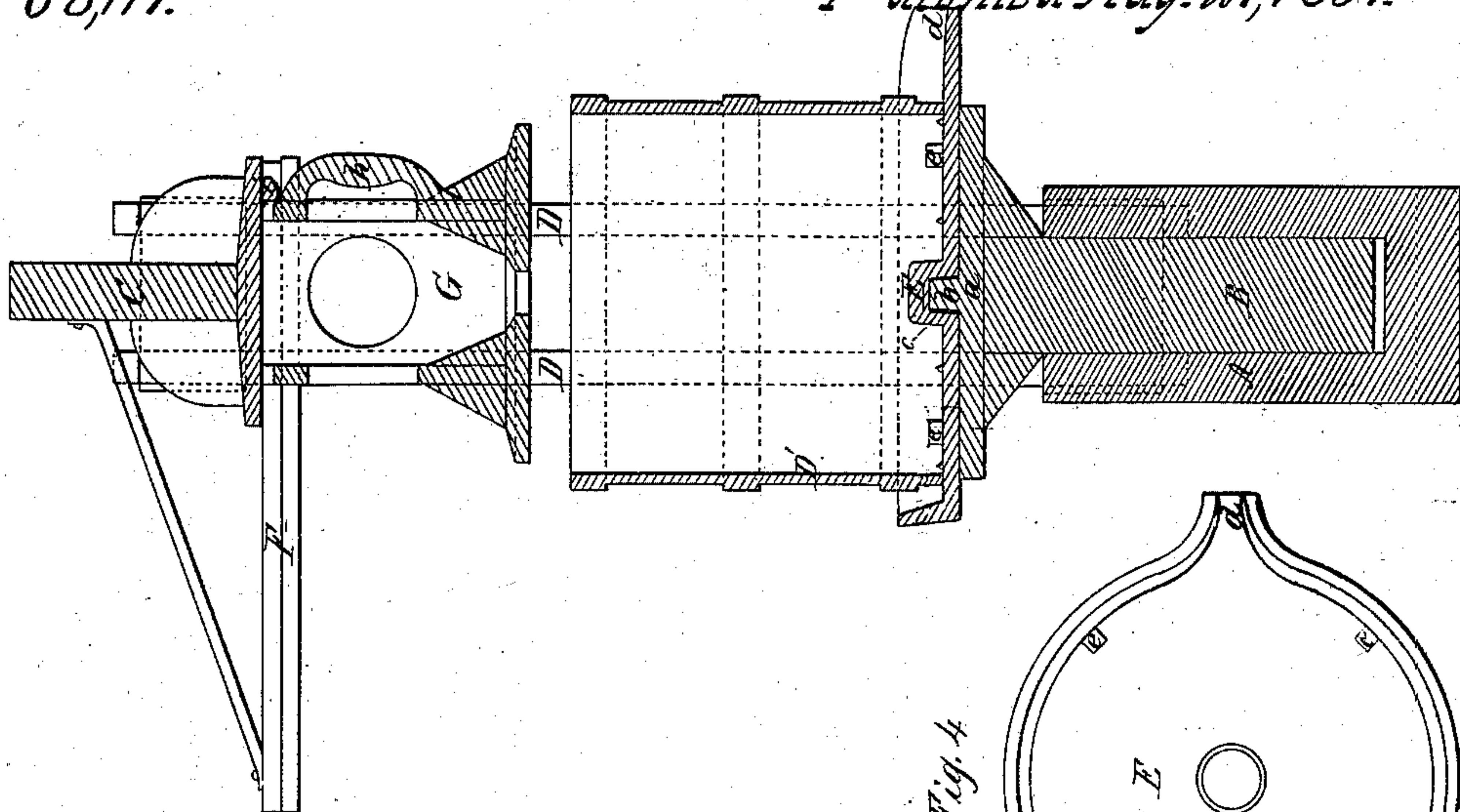


Fig. 4

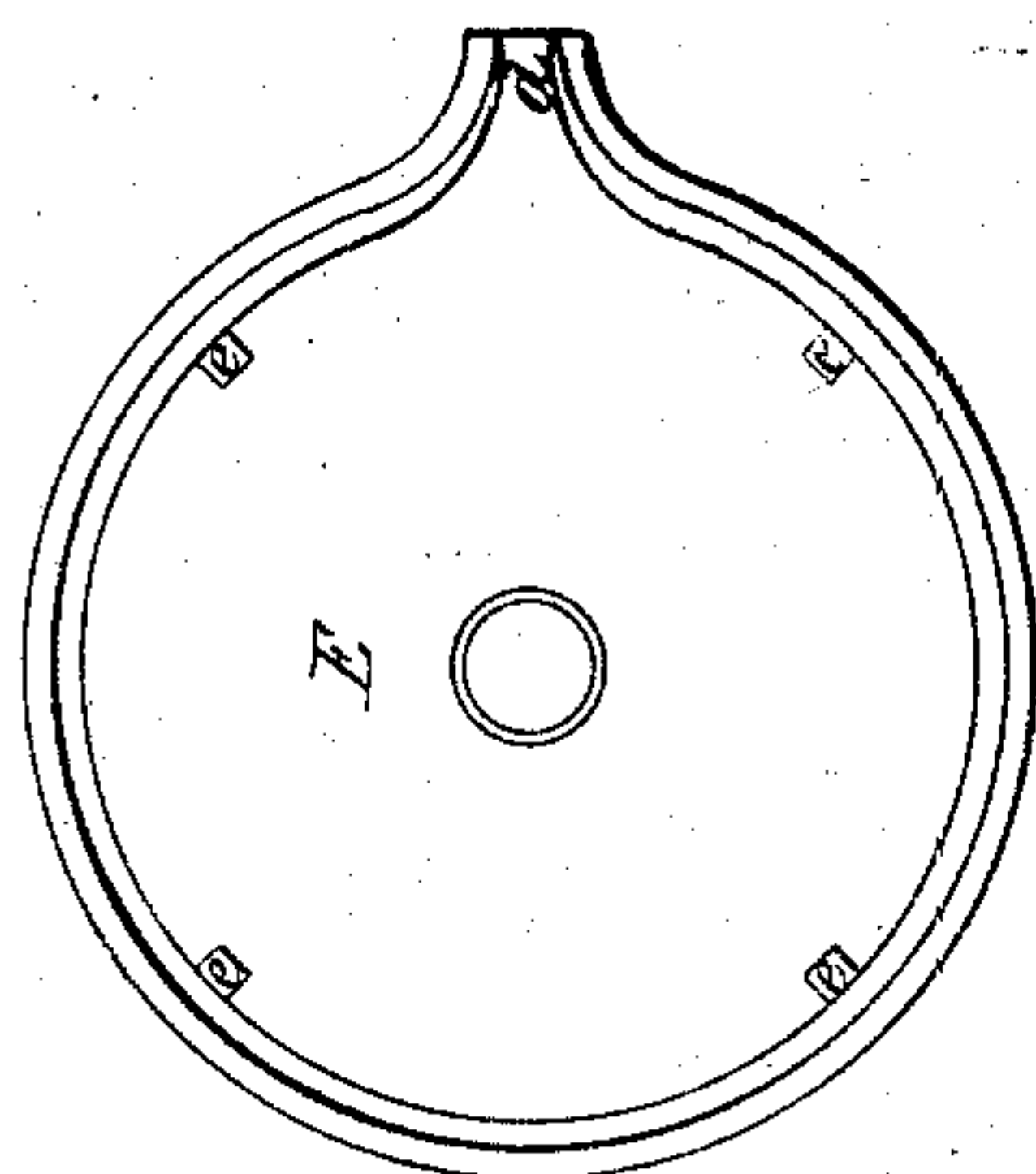


Fig. 1

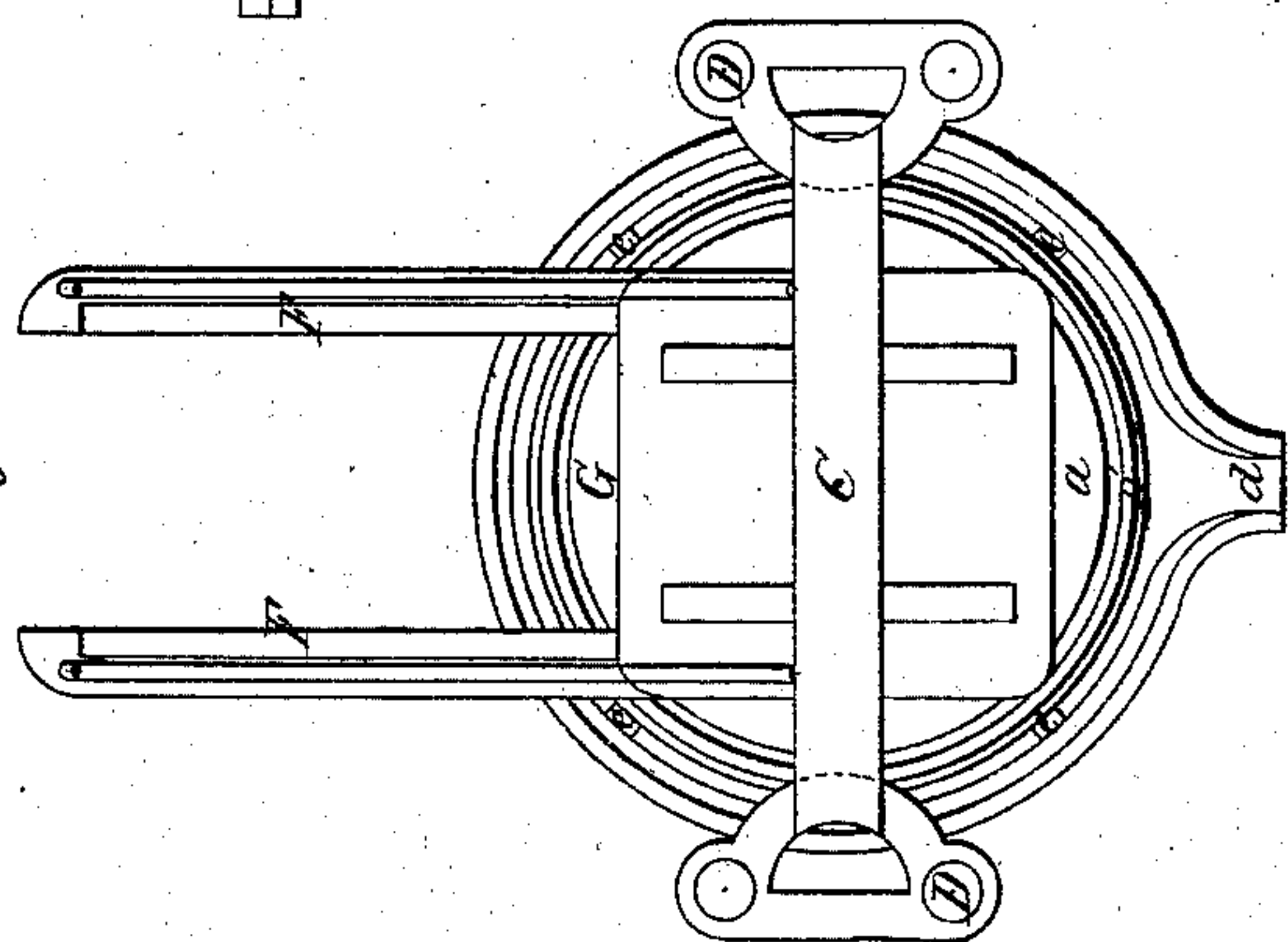
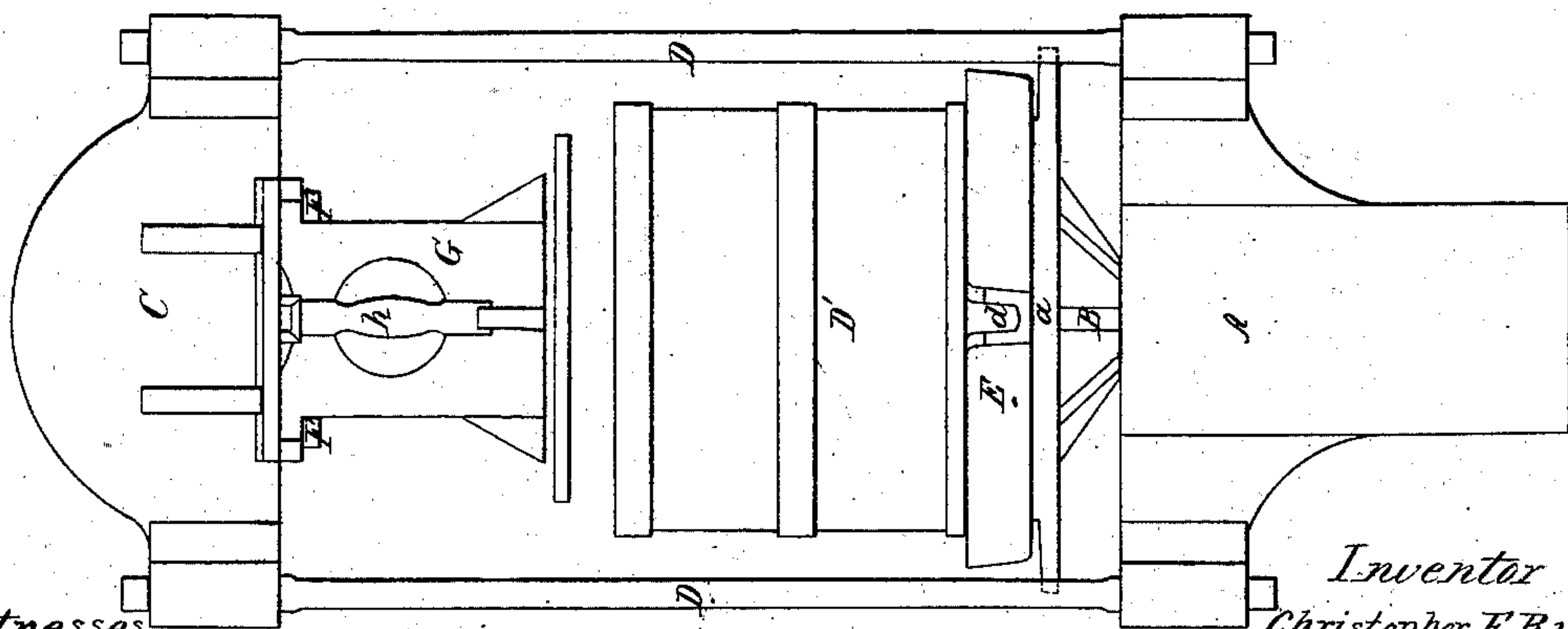


Fig. 5



Fig. 2



Witnesses
Geo. H. Andrews
Attest J. P. Hale Jr.

Inventor
Christopher E. Rymes
by his attorney
R. W. Hildy

United States Patent Office.

CHRISTOPHER E. RYMES, OF SOMERVILLE, MASSACHUSETTS.

Letters Patent No. 68,117, dated August 27, 1867.

IMPROVEMENT IN PRESSES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL PERSONS TO WHOM THESE PRESENTS SHALL COME:

Be it known that I, CHRISTOPHER E. RYMES, of Somerville, in the county of Middlesex, and State of Massachusetts, have invented an Improved Press, to be used for pressing liquid from solid matters; 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 top view,

Figure 2 a front elevation, and

Figure 3 a transverse and vertical section of it.

Figure 4 is a top view, and

Figure 5 a transverse section of its fluid-discharging pan.

The press exhibited in such drawings is designed to be employed for expressing lard or an oleaginous matter from a solid substance containing the same.

In the drawings, A is the cylinder, B the piston, and C the arch of the press, the latter being connected with the cylinder by a series of vertical rods, D D. In all these respects the press is like others in common use. The upper part or head *a* of the piston is provided at its centre with a projection, *b*, having the form of a conic frustum, such projection being extended upward from the said head. The said projection is designed to enter a centralizing socket or cavity, *c*, formed in the bottom of a round and shallow pan, E, provided with a discharging mouth, as shown at *d* in the drawings. The cavity and projection are for centralizing the pan with respect to the piston-head, when the pan is placed therein. The said pan has four or any other suitable number of projections or abutments *e e e e* applied to its side and bottom, or elevated on the latter, and in the circumference of a circle concentric with the pan. These abutments are for centralizing a cylindrical drum or case, D', when placed end downward within the pan, and on its bottom, the abutments serving then to insure the formation about the drum of a circular channel leading to its spout. The lower edge of the said drum is to be notched, so as to allow the liquid material as it is expressed to run from the drum and into the said channel, from which it will be discharged by the spout. The lower part of the arch C of the frame is furnished with two parallel rails F F, which extend underneath and in rear of it, in manner as represented, they being to support a movable plunger, G, so applied to them as to be capable of being moved or slid either directly over or entirely in rear of the mouth of the drum D'. Instead of being so applied to the arch, the plunger may be supported by one or more arms to turn on one or more centres, the same being so as to enable the plunger to be turned directly over or back from the top or drum, as circumstances may require. The object of this application of the plunger to the frame of the press is to enable the plunger to be moved off the drum, for convenience of supplying the latter with the material to be pressed within it.

Previous to setting the piston in motion by water forced into the cylinder by a pump, an attendant should lay hold of the handle *h* of the plunger, and draw such plunger forward, up to a shoulder, *i*, made on the arch, the same being so as to bring the plunger directly over and concentric with the drum.

What I claim as my invention, is—

The improved hydraulic press, constructed with the plunger so affixed to its frame as to be capable of being moved laterally with respect to its drum and piston, substantially as and for the purpose specified.

I also claim the combination of the centralizing pin and cavity, or the equivalent thereof, with the piston and discharging-pan of the hydraulic press.

I also claim the discharging-pan, as made with the abutments arranged within it, as and for the purpose specified.

CHRISTOPHER E. RYMES.

Witnesses:

R. H. EDDY,

F. P. HALE, Jr.