

(No Model.)

2 Sheets—Sheet 1.

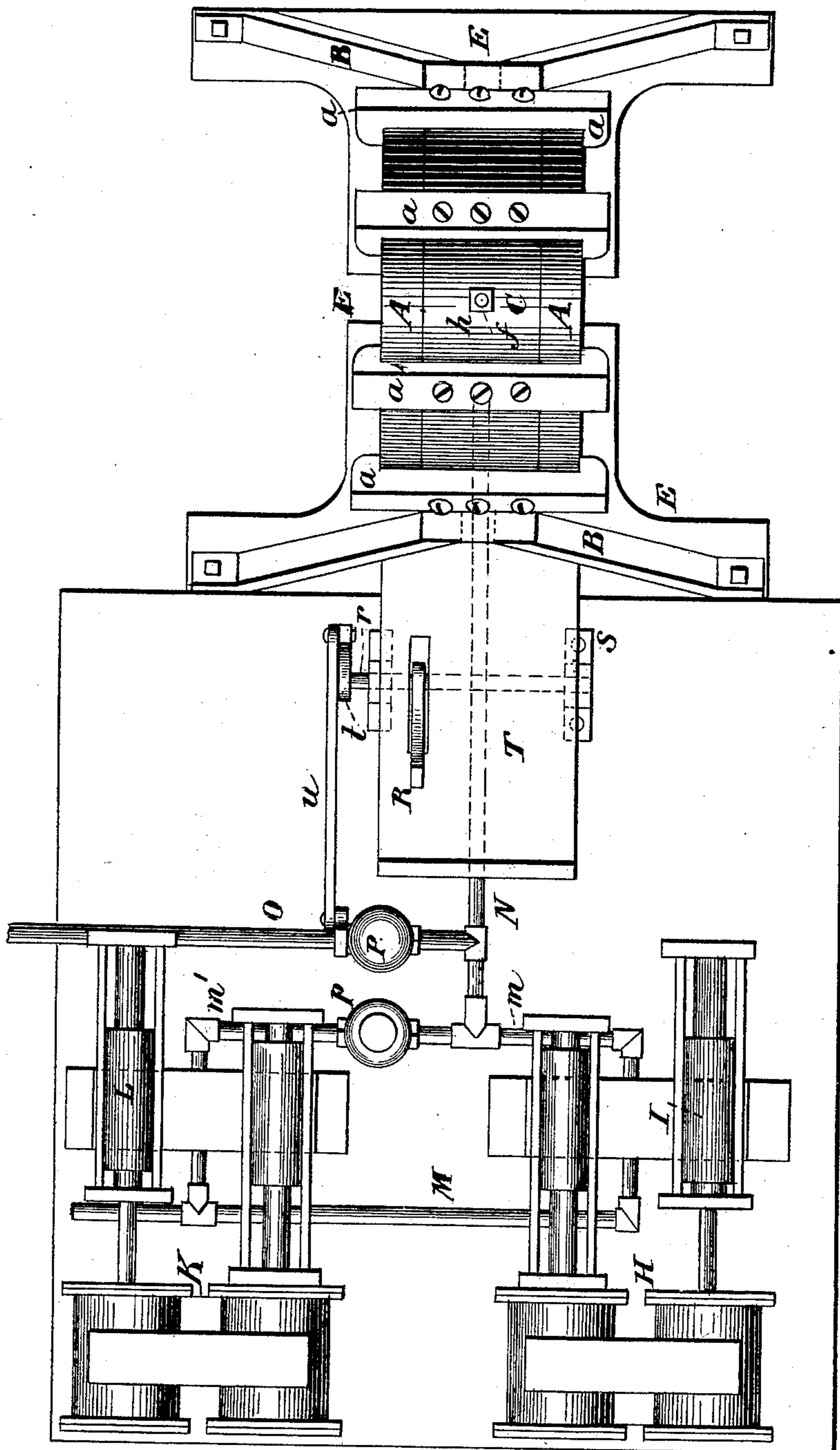
J. W. TURNPAUGH.

COTTON PRESS.

No. 412,807.

Patented Oct. 15, 1889.

Fig. 1.



Witnesses.
A. Ruppert.
H. A. Daniels

Inventor.
James W. Turnpaugh
Per
Thomas Simpson
Atty.

(No Model.)

2 Sheets—Sheet 2.

J. W. TURNPAUGH.

COTTON PRESS.

No. 412,807.

Patented Oct. 15, 1889.

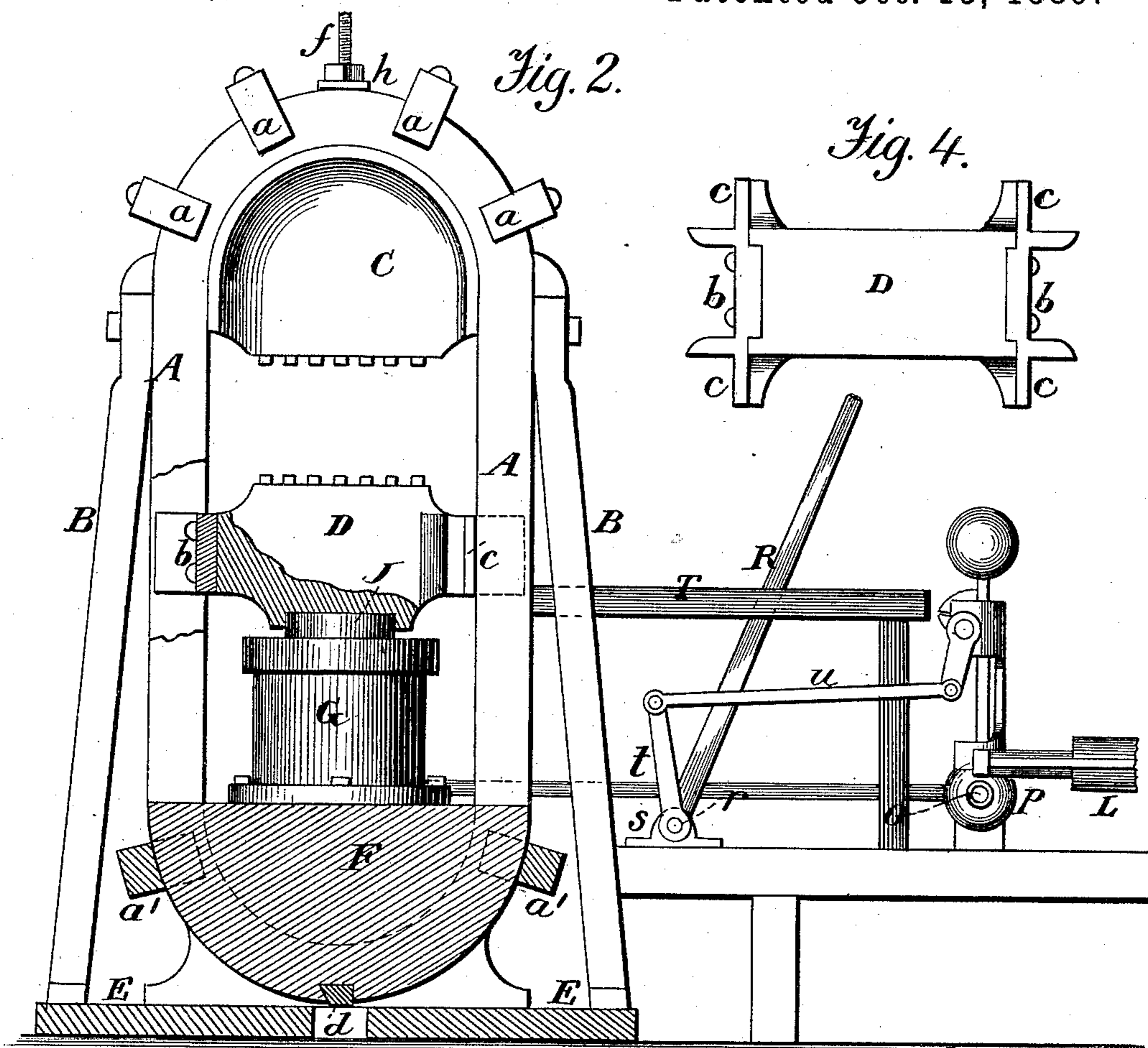
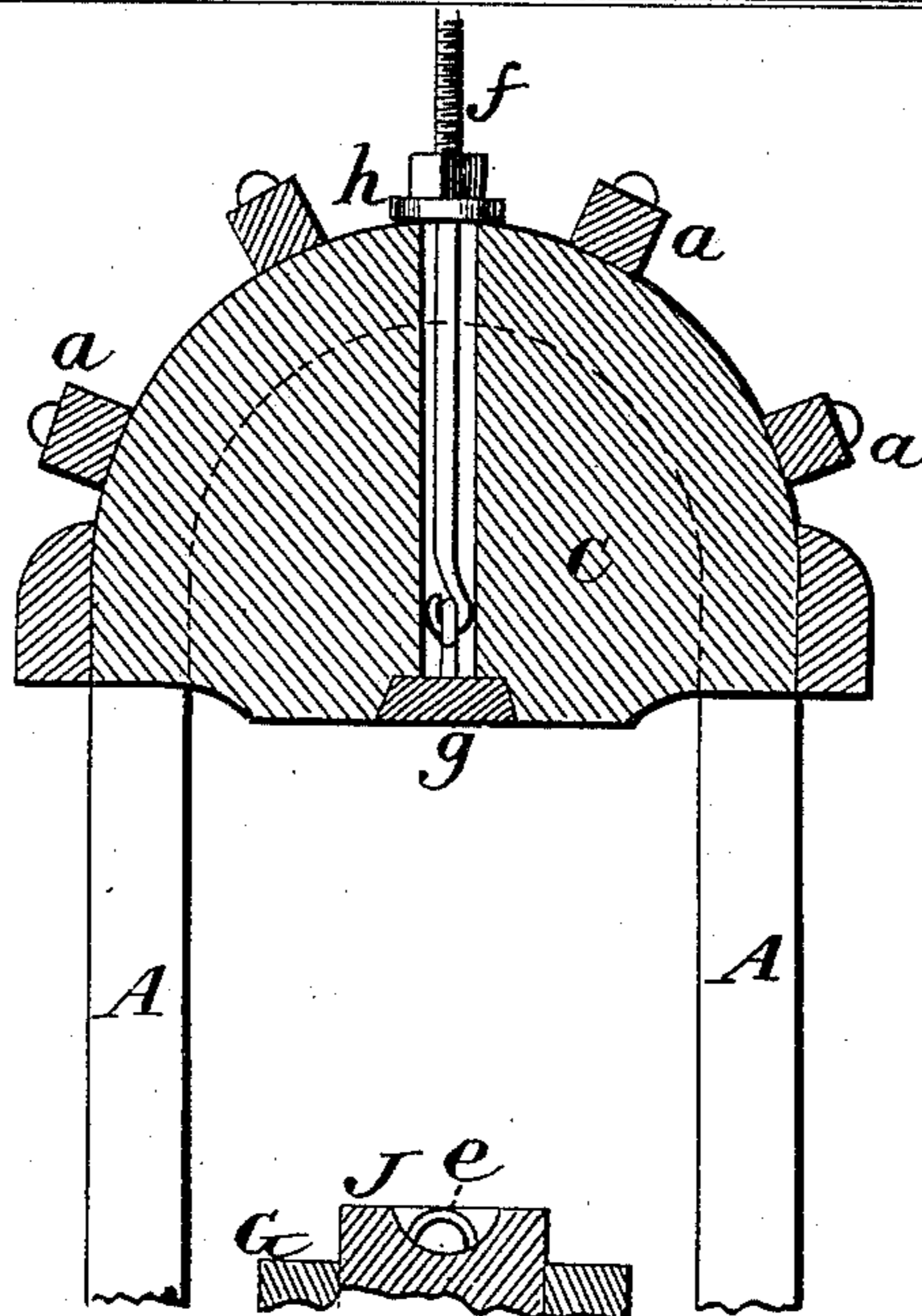


Fig. 3.



Witnesses.
A. Ruppert.
H. A. Daniels

Inventor.
James Turnpaugh
Per
Thomas P. Simpson
attly

UNITED STATES PATENT OFFICE.

JAMES WILLIAM TURNPAUGH, OF FORT WORTH, TEXAS.

COTTON-PRESS.

SPECIFICATION forming part of Letters Patent No. 412,807, dated October 15, 1889.

Application filed June 5, 1889. Serial No. 313,123. (No model.)

To all whom it may concern:

Be it known that I, JAMES WILLIAM TURNPAUGH, a citizen of the United States, residing at Fort Worth, in the county of Tarrant and State of Texas, have invented certain new and useful Improvements in Cotton-Presses; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to that class of presses in which steam is employed; and it consists in certain improvements in the construction of such presses, as hereinafter described and claimed, my improvements being more especially adapted to cotton-presses.

In the accompanying drawings, Figure 1 represents a plan view of a cotton-press provided with my improvements. Fig. 2 is a partial side view of the same. Fig. 3 shows certain parts in section. Fig. 4 is a plan view of the lower platen.

The frame which supports the press proper is formed of two links, one being on each side, and each of said links being formed of two uprights A, with curved connections at the top and at the base, as shown. Within the said frame at the top and conforming thereto is placed the upper platen C, which is secured by the braces B and the binders *a*. The said binders extend across the top, lapping over the said links, and are made fast to the platen C.

D indicates the lower platen, which is provided with guides *c*, which fit against the uprights of the frame. The end pieces *b* of the platen D are made detachable, so that the platen may be removed and the plunger may be taken out for the purpose of inserting packing-rings in the cylinder.

The frame rests on the bed-plates E, and within said frame at the base is placed a semi-circular block F, which forms a base for the cylinder G, which is firmly secured to said block. A key-seat is formed in the bottom of the frame and in the block F, in which is driven a key *d*, and the parts are further secured by binders *a'*, which are made fast to the block F and embrace the frame.

The plunger J fits in the mouth of the cylinder G and is in position to rise to the platen D, the lower surface of which is recessed to receive the plunger. The said plunger is recessed and provided with a loop *e* at the top for the attachment of a hooked rod, as hereinafter stated. A screw-rod *f* is placed in an aperture through the top or upper platen C and is hooked to a block *g*, which fits in a recess in the platen and is retained therein by a nut *h* on the screw-rod. When it is desired to remove the plunger from the cylinder G, the end pieces *b* of the platen D are detached and the platen is removed. The rod *f* is then let down, the nut *h* being turned and the block *g* taken off, and the rod is hooked to the loop *e* of the plunger, when the latter may be raised and retained in its raised position by means of the nut *h*.

Hydraulic-pressure pumps are employed to operate the press, said pumps being driven by steam.

H indicates a set of high-pressure steam-cylinders, the piston-rods of which are connected with the plungers of the two pumps I, and K indicates a set of low-pressure cylinders, the piston-rods of which are connected with the plungers of the two pumps L.

M indicates a water-supply pipe, which is connected by branches with both sets of pumps I L, which are connected by pipes *m* and *m'* with a pipe N, which conducts water to the cylinder G. An exhaust-pipe O is connected with the pipe N, as shown. The pipe *m'* is provided with a check-valve *p*, which serves to guard the low-pressure pumps against the effect of the action of the high-pressure pumps. The exhaust-pipe O is provided with a balance check-valve P, which is used for lowering the press, said valve being opened or closed by means of a lever R, the lower end of which is fastened to a horizontal shaft *r*, which is mounted in suitable bearings *s*. On the extended end of shaft *r* is fixed an arm *t*, which is connected by a rod *u* with an arm of the valve P, so that by a movement of the lever R the said valve may be opened or closed.

The engineer being in position on the platform or floor T, after sufficient force has been

applied, can readily open the valve P by a movement of the lever R and thus lower the platen D of the press.

I claim—

5 1. In a press, the combination, with two links formed of uprights A, provided with curved connections at the top and at the base, of a fixed upper platen conforming to said links, binders *a*, which are made fast to said
10 upper platen and embrace said links, a semi-circular block fitting within said links at the base, a cylinder mounted on said block, said cylinder being provided with a plunger, and a
15 platen in position above the plunger to be operated thereby, substantially as and for the purposes described.

2. The combination, with the fixed upper platen of a press, said platen being perforated, of a screw-rod provided with a hook at its lower end and placed in the perfora- 20 tion, a nut *h* on said rod and resting on the platen, whereby the hook on the latter may be raised, and a plunger provided with a loop in position to connect with said hook on the rod, substantially as set forth and described. 25

In testimony whereof I have affixed my signature in presence of two witnesses.

JAMES WILLIAM TURNPAUGH.

Witnesses:

WALDO P. GOFF,
J. R. BLAIR.