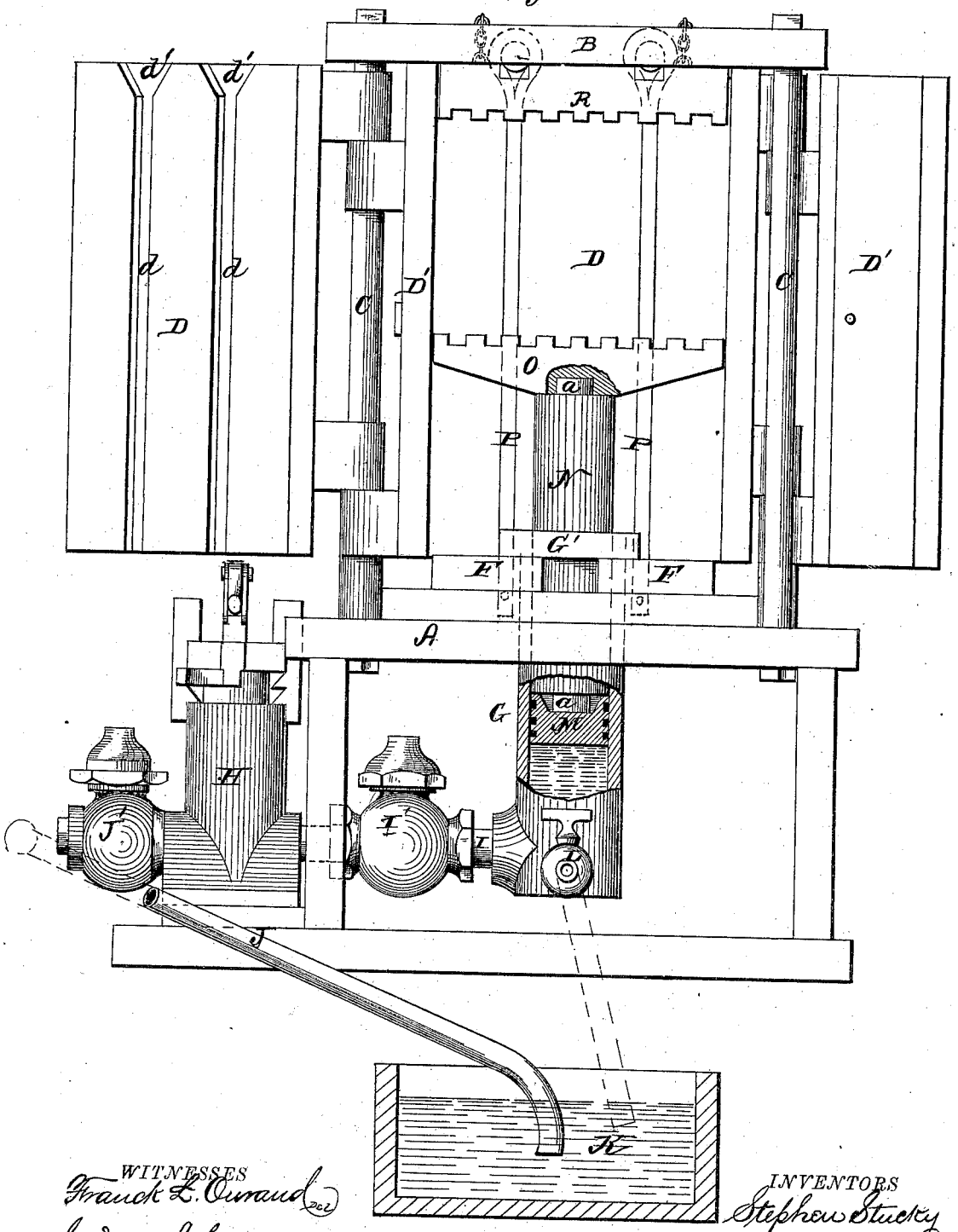
2 Sheets—Sheet 1.

S. STUCKY.
Baling-Press.

No. 212,823. Patented Mar. 4, 1879.

Fig. 1.



WITNESSES
Franck L. Durand
C. M. Alexander

By

INVENTORS
Stephen Stucky
Alexander Masson
Attorneys

2 Sheets—Sheet 2.

S. STUCKY.
Baling-Press.

No. 212,823. **Patented Mar. 4, 1879.**

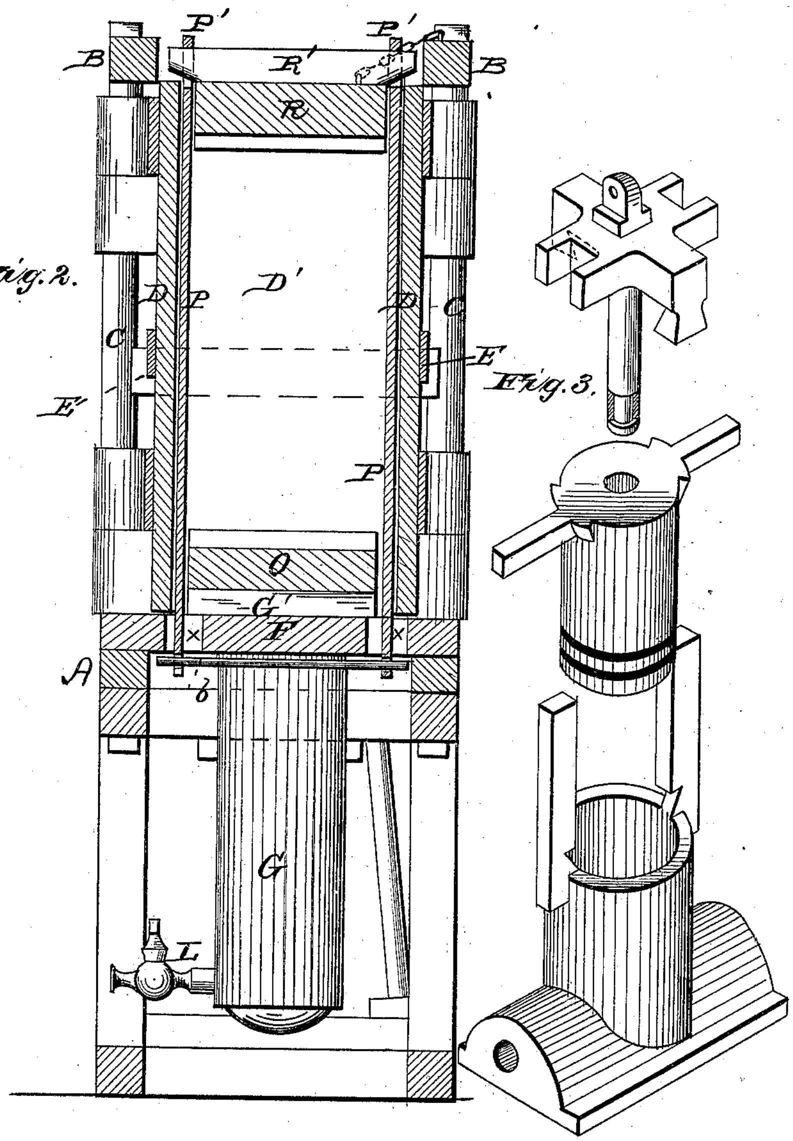


Fig. 2.

Fig. 3.

WITNESSES
Franck L. Ourand
C. M. Alexander

INVENTORS
Stephen Stucky
By
Alexander & Mason
Attorneys

UNITED STATES PATENT OFFICE.

STEPHEN STUCKY, OF LINCOLN, ALABAMA.

IMPROVEMENT IN BALING-PRESSES.

Specification forming part of Letters Patent No. **212,823**, dated March 4, 1879; application filed January 14, 1879.

To all whom it may concern:

Be it known that I, STEPHEN STUCKY, of Lincoln, in the county of Talladega, and in the State of Alabama, have invented certain new and useful Improvements in Baling-Presses; and do hereby declare that the following is a full, clear, and exact description of the invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a cotton-press, to be operated by hydraulic pressure, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a side elevation of my press with one side and one end door thrown open. Fig. 2 is a transverse vertical section of the same. Fig. 3 is a detail view of the pump used with my press.

A represents the ground-floor of a gin-house, and B is the floor for the story above, the gin being located to one side on this latter floor. The two floors A B are connected by four vertical rods, C, which form the corner-posts of the press. To two of these rods, diagonally opposite each other, are hinged the side and end doors; but it is, of course, evident that, if desired, these doors may be hung one on each rod.

When the doors D D′ are closed they form the bale-box, and are held firmly by means of interlocking bars E E.

On the floor A are firmly secured two plates, F F, placed a suitable distance apart, and formed in their inner edges with central concavities, through which passes a cylinder, G, said cylinder being at its upper end provided with an exterior projecting flange, G′, to rest upon said plates F F, the cylinder being thus suspended from the plates below the ground-floor of the gin-house, out of the way.

The cylinder G is open at the top and closed at the bottom. Near the bottom it connects by a pipe, I, with a pump, H, and this pump connects by a pipe, J, with a water tank or reservoir, K, the two pipes I and J being provided, respectively, with suitable check-valves I′ and J′.

The cylinder G is, further, at the bottom provided with a stop-cock, L, to which a pipe is to be connected, to convey the water back to the tank K, or to any other desired place.

Within the cylinder G is placed a suitably-packed piston, M, upon which rests a piston-rod, N, formed with a tenon, *a*, at each end. The upper tenon of this rod fits in a corresponding recess in the bottom of the follower O, as shown in Fig. 1.

Through slots *x x* in the plates F F are passed bars P P—two at each side of the press; and the lower ends of the corresponding bars on the two sides are connected by rods *b b*, as shown in Fig. 2, which rods bear against the under sides of the plates F.

The upper ends of the bars P are formed with eyes P′, to receive the ends of cross-bars R′, which are secured on top of a block, R, said block forming the top of the bale-box, and is inserted through an opening in the top floor, B. The side doors, D D, are, on their inner sides, provided with vertical grooves *d*, with enlargements *d′* at the top to receive the bars P.

The construction of the pump H is shown in Fig. 3; but it is not necessary to describe the same here, as I have made the same the subject of a separate application.

The operation of my press is as follows: The doors D D′ are closed and fastened, as described, and the upper block, R, removed and laid to one side on the upper floor, B. From the cotton-gin I conduct a chute to the opening in the floor B, which forms the top of the bale-box, so that the cotton will be blown or conveyed directly from the gin into the press. It is, of course, understood that the follower O is run down as far as the piston M in the cylinder G will permit.

The cotton, being now deposited in the bale-box, will be packed by any suitable means until a sufficient quantity has been placed and packed in the box. The block R is now put in place on top of the cotton, and the upper ends of the bars P sprung outward, so as to allow the eyes P′ to slip over the ends of the cross-bars R′. By this means the upper block,

R, is held rigidly and firmly in place, and the strain is all transmitted to the bottom plates, F F.

By means of the pump H, which may be operated by hand or other power, water is pumped into the cylinder G, raising the piston M, and with it the follower O, compressing the cotton to the required size.

When the bale has attained the proper size, all the doors are thrown open, when the bale will be in open sight, to be tied and the bagging sewed in the usual manner. By now opening the stop-cock L the water in the cyl inder escapes, and the bale is released, so as to be taken away, when the operation may be again repeated.

It will be seen that the pump and connecting-pipes are on the same level with the lower end of the suspended cylinder; hence, by such arrangement the use of bent pipes is obviated, and less friction of water and more power are attained.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a cotton-press, of the cylinder G, suspended from the bottom plates, F F, the piston M, rod N, and follower O, with the pump and connecting-pipes, with check-valves on the same level with the lower end of the suspended cylinder, substantially as herein set forth.

2. The combination of the removable upper block, R, with cross-bars R′, the bars P, having eyes P′, connecting-rods *b*, and plates F, substantially as and for the purposes herein set forth.

3. In a cotton-press, the combination, with the floors A B, of the rods C, hinged side doors, D D, hinged end doors, D′ D′, and interlocking bars E E, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 6th day of March, 1878.

STEPHEN STUCKY.

Witnesses:
J. M. MASON,
FRANK GALT.