C. H. Parshall,

Hydraulic Press,

No. 51,615. Patented Dec. 19, 1865.

Fig. 2

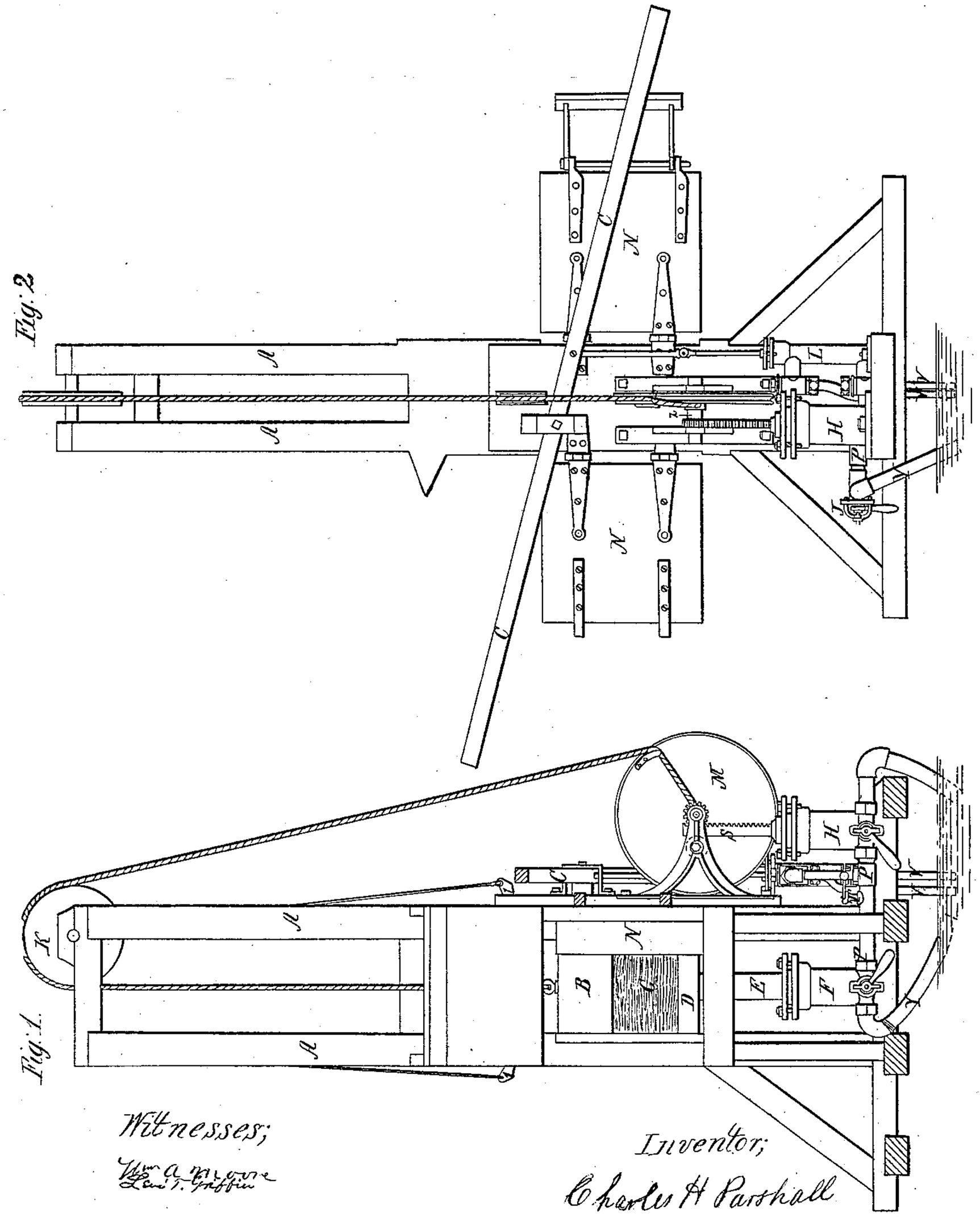

Fig. 1.

Witnesses;

Wm. A. Moore
Lewis T. Griffin

Inventor;

Charles H. Parshall

UNITED STATES PATENT OFFICE.

CHARLES H. PARSHALL, OF DETROIT, MICHIGAN.

IMPROVEMENT IN HAY AND COTTON PRESSES.

Specification forming part of Letters Patent No. **51,615**, dated December 19, 1865.

To all whom it may concern:

Be it known that I, CHARLES H. PARSHALL, of the city of Detroit, county of Wayne, and State of Michigan, have invented a new and Improved Mode of Pressing Hay, Cotton, or any other similar substance; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in applying the principle of hydraulic pressure for the purpose of raising the beater B and the bed-plate D.

Figure I represents the side view of the press with the door N open, exposing to view G, the substance to be pressed. Fig. II represents the end view of the press with the doors N N open.

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

I construct the frame, consisting of four upright posts, A A, of the required height, size, and strength.

The beater is of iron or other similar substance, made to fit and slide up and down between the posts.

The bed-plate D is made of any substance of suitable strength and firmness.

The rest of the machinery is of material ordinarily used for that purpose.

The manner of using the press is as follows: The doors N N are closed and fastened. By means of the double lever C C water is drawn from the water-tank X into the pump L and forced through pipe P into the receiver H, forcing the piston X′ up, which, by means of the gearing O S, revolves the wheel M, lifting, by the rope and the wheel K, the beater B to the top of the frame. The hay is then put into the press under the beater, and when sufficiently filled the three-way cock is turned, the water escapes from the receiver H through the pipe Y, the piston X falls, the wheel M revolves, and the beater descends. This operation is repeated till sufficient beating is attained. The dogs or catches I I are loosened, and, falling inside, rest upon the beater, holding it in place upon the hay. Then the three-way cock J under the press is opened, and by the pump water is forced into the receiver F, which forces upward the piston E and the bed-plate D. When the hay is thus sufficiently compressed the doors N N are thrown open and the bale is securely bound, the three-way cock J is opened, the water escapes, and the bed-plate falls, leaving the bale loose and ready to be removed.

To prevent undue pressure and strain on the machinery, a safety-valve, T, is attached to the pipe P, and for the purpose of keeping the gearing S in place a friction-roller, R, is placed behind and in contact with it.

I do not claim, and I hereby unqualifiedly disclaim, the original invention of any of the parts going to make up this original hay-press.

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

1. Operating the beater B and elevating the platen D by means of a hydraulic press, constructed substantially as set forth.

2. In combination with the beater B and platen D, as above described, the pawls I I and doors N N, secured and constructed as and for the purposes set forth.

3. In an apparatus for compressing hay or cotton, as described, the construction and arrangement of the various parts constituting the hydraulic press, as specified.

CHARLES H. PARSHALL.

Witnesses:

WM. A. MOORE,

LEVI T. GRIFFIN.