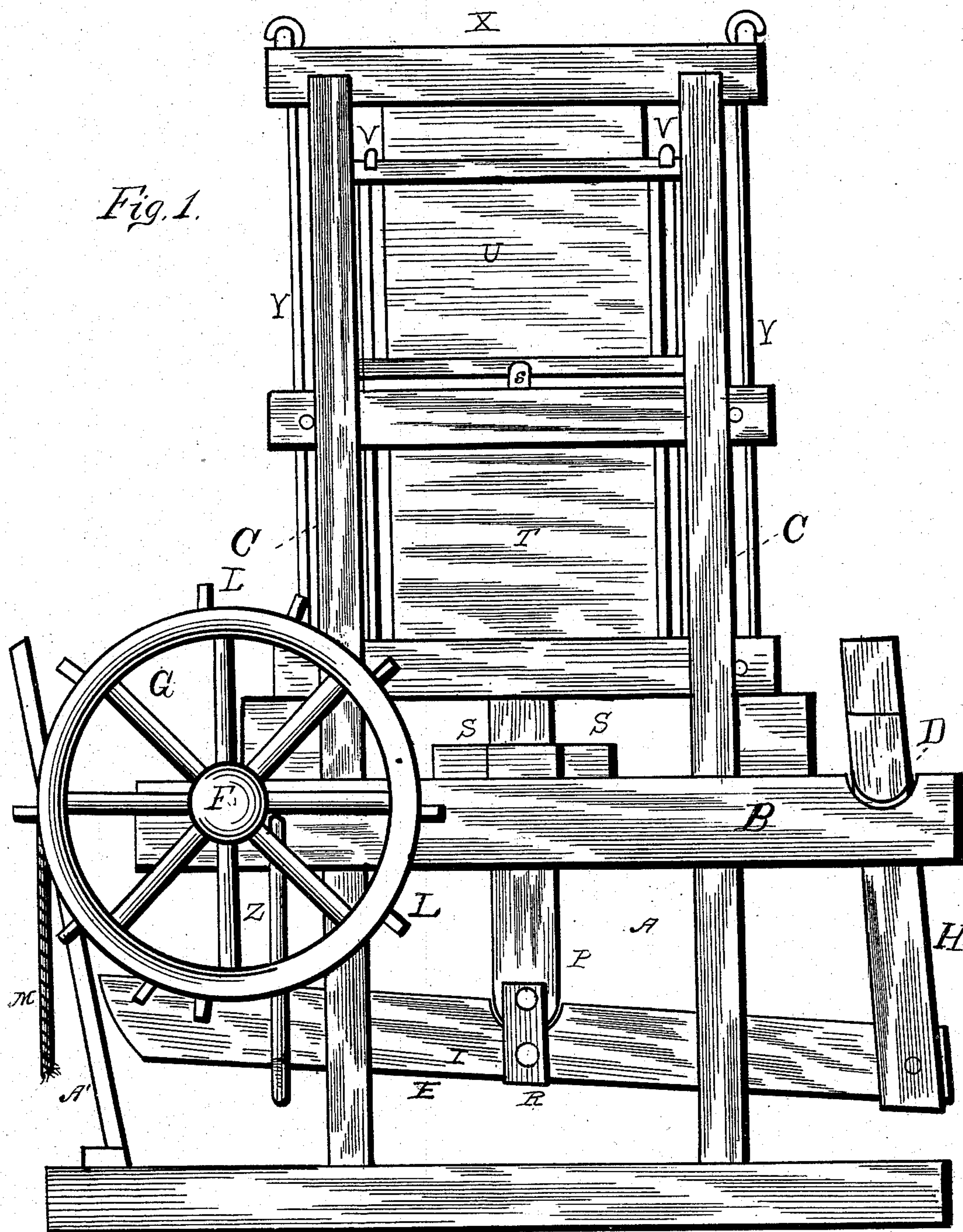


3 Sheets—Sheet 1.

BALING PRESS.

Patented Jan. 1, 1884.



INVENTORS.
Columbus C. Warren
Wm. H. Oliver
By Frank Sheehy. ATTORNEY

(No Model.)

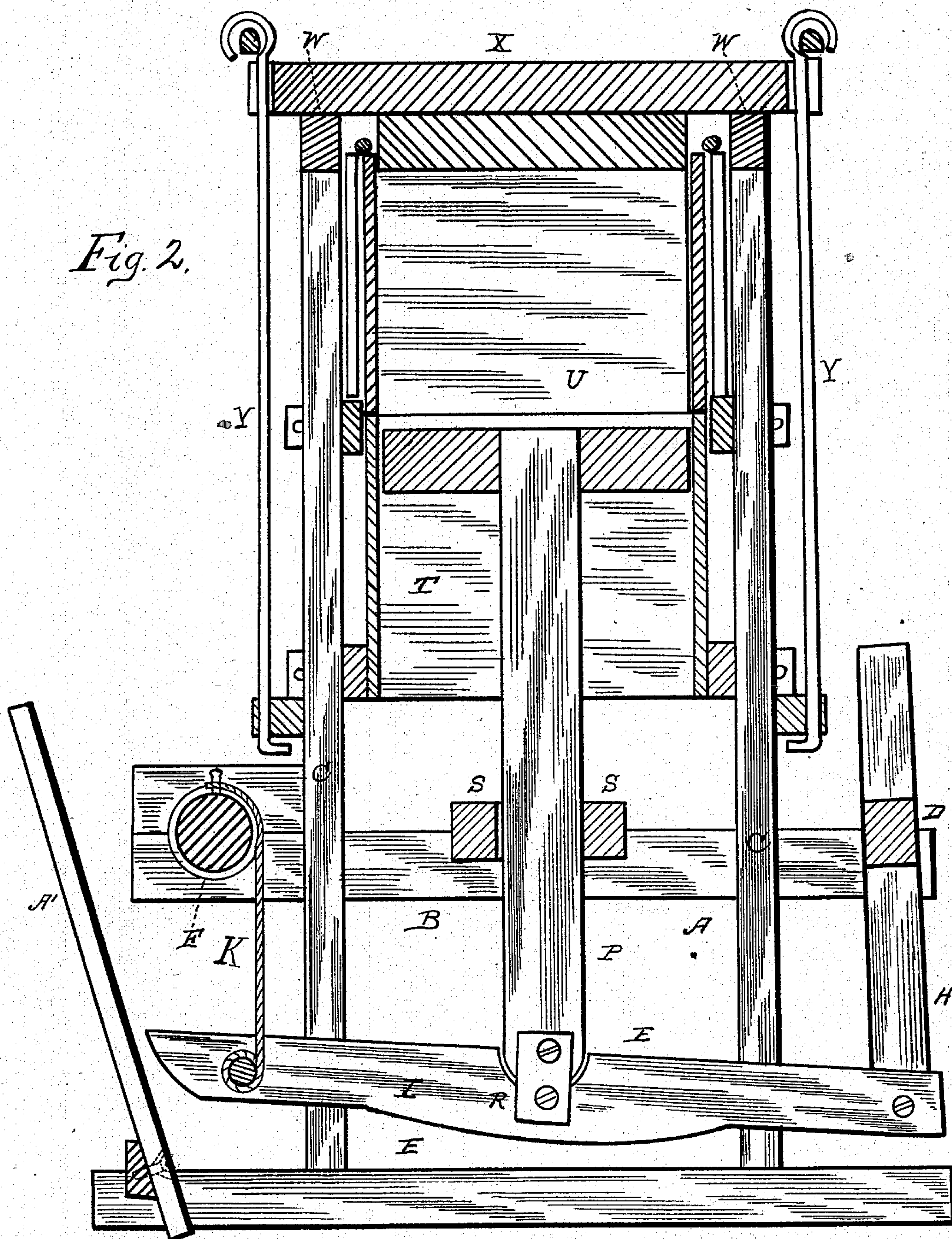
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C. C. WARREN & W. H. OLIVER.

BALING PRESS.

No. 291,439.

Patented Jan. 1, 1884.



WITNESSES
T. B. Jones
E. H. Bates,

INVENTORS
Columbus C. Warren.
Wm. H. Oliver.
By Frank Sheehy ATTORNEY

(No Model.)

3 Sheets—Sheet 3.

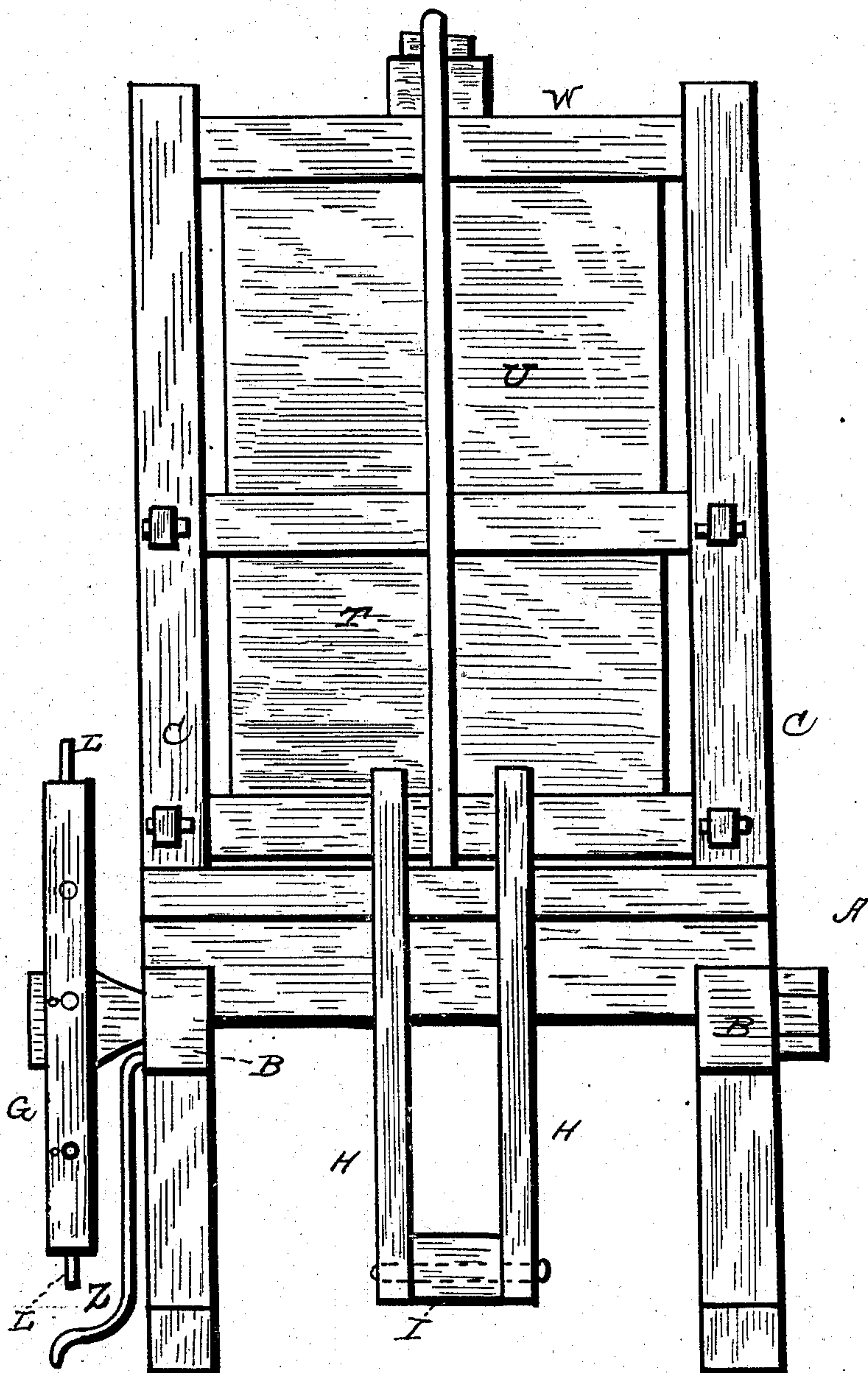
C. C. WARREN & W. H. OLIVER.

BALING PRESS.

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Patented Jan. 1, 1884.

Fig. 3.



WITNESSES
T. B. Jones
E. H. Bates

INVENTORS
Columbus C. Warren
Wm. H. Oliver
By *Frank Sheehy*, ATTORNEY

UNITED STATES PATENT OFFICE.

COLUMBUS C. WARREN AND WILLIAM H. OLIVER, OF BEAUREGARD, MISS.

BALING-PRESS.

SPECIFICATION forming part of Letters Patent No. 291,439, dated January 1, 1884.

Application filed June 22, 1883. (No model.)

To all whom it may concern:

Be it known that we, COLUMBUS C. WARREN and WILLIAM H. OLIVER, citizens of the United States, residing at Beauregard, in the county of Copiah and State of Mississippi, have invented certain new and useful Improvements in Baling-Presses, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain improvements in presses for baling hay, cotton, moss, or other balable material or fiber; and it has for its objects to provide a press which will be portable, easily constructed, light, and economical, and which will be very compact, so as to occupy very small space.

The above-mentioned objects we attain by the means illustrated in the accompanying drawings, in which—

20 Figure 1 represents a side elevation of the improved press; Fig. 2, a longitudinal vertical sectional view of the same; and Fig. 3 is an end view of the press, showing the means of pivoting the operating lever.

25 The letter A indicates the frame of the press, which is constructed of wood or other suitable material.

30 The letter B indicates two longitudinal parallel sills forming part of the frame, and projecting at each end beyond the vertical beams C of the frame, for the purpose more fully hereinafter explained. These sills are located some distance above the base of the press, as indicated, in order to give the lever room to work. The sills at one end are provided with bearings for the fulcrum-beam D of the compound lever E, and at the opposite end with bearings for the shaft F of a driving-wheel, G.

40 To the fulcrum-shaft above mentioned are secured two parallel vertical arms, H, between the lower ends of which is pivoted one end of a beam, I, the whole constituting the compound lever E. The other end of said beam is connected to the shaft F by means of a rope or chain, K, by means of which the lever may be operated. The driving-wheel is provided with hand-levers L, by which it may be operated by hand, and a rope, M, held to the periphery by the hand-levers, and a series of pins secured to one side. Midway between the ends of the beam on the upper side

is formed a semicircular bearing for the rounded lower end of a vertical rod or beam, P, which is secured to the beam I by means of a metallic strap, R, to which the said lower end of the beam P is pivoted. The beam P works between guides S, secured to the sills, and its upper end is secured to the lower side of a follower working in the press-box T, located between the vertical sills of the press, and securely confined by means of suitable cross-sills, as usual. Above the press-box is located the bale-box U, which is constructed with removable sides, as usual, and also with the ordinary removable ends, the sides and ends setting in a recess at the upper edge of the press-box, and the top being held together by hooked clamp-rods V. The cap-block is pivoted or hinged near one edge between the two upper side cross-sills, W, and is provided with a beam, X, on top, which projects at each end sufficiently to clear the sills, the ends being slotted, as indicated, to receive the ends of the brace-rods Y, which hold said cap-block down when the bale is being pressed. The driving-wheel is provided with a brake-bar, Z, which is pivoted to the frame in such position that its bent portion may be applied to the periphery of the wheel to hold it, when desired.

80 The letter A' indicates an inclined bar, in the present instance secured to the base of the press, which forms a guide for the end of the beam of the lever; but in practice this will be extended down into a pit or room, over which the press will be placed, it being provided with an inclined guide-rod communicating with the lint-room.

85 We have described one system of gearing by which power may be applied to the lever; but it is evident that other systems—such as cog, chain, or compound gearing—may be substituted, which may be operated by hand or horse, water, steam, or other power, without departing from the spirit of our invention.

90 The operation of our invention will be apparent from the above description.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

100 1. The combination, in a baling-press, of the compound lever consisting of the beam I

and arms H, the latter being provided with a transverse fulcrum-beam, D, which is seated in the longitudinal sills B, as shown, and the vertical beam P, attached to the follower and
5 secured at its lower end in a bearing in the said lever I, with mechanism for operating the same, substantially as specified.

2. In a baling-press, the compound lever E, vertical beam P, and follower, constructed
10 and arranged as described, in combination with the driving wheel and shaft and connecting rope or chain for operating the lever, substantially as specified.

3. The combination, in a baling-press having a hinged cap-block, of the beam attached
15 to the upper face thereof, and slotted at its ends to receive the side rods, adapted to hold the said block and beam down, substantially as shown and described.

In testimony whereof we affix our signatures
20 in presence of two witnesses.

COLUMBUS C. WARREN.

WILLIAM H. OLIVER.

Witnesses:

J. L. MIKELL,

BEN. G. LARKIN.