

(Model.)

B. J. WILSON.

BALING PRESS.

No. 250,699.

Patented Dec. 13, 1881.

Fig. 1.

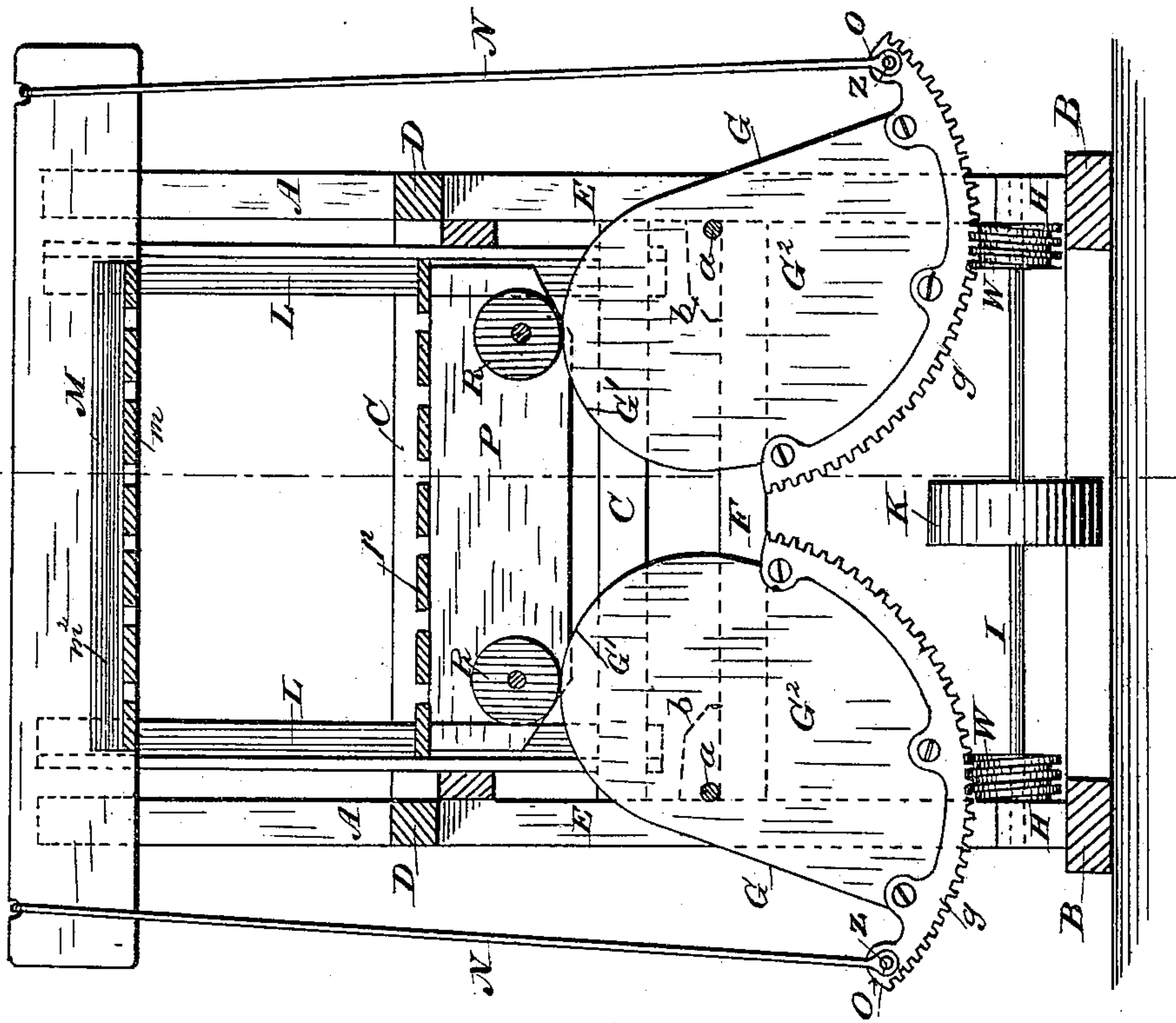
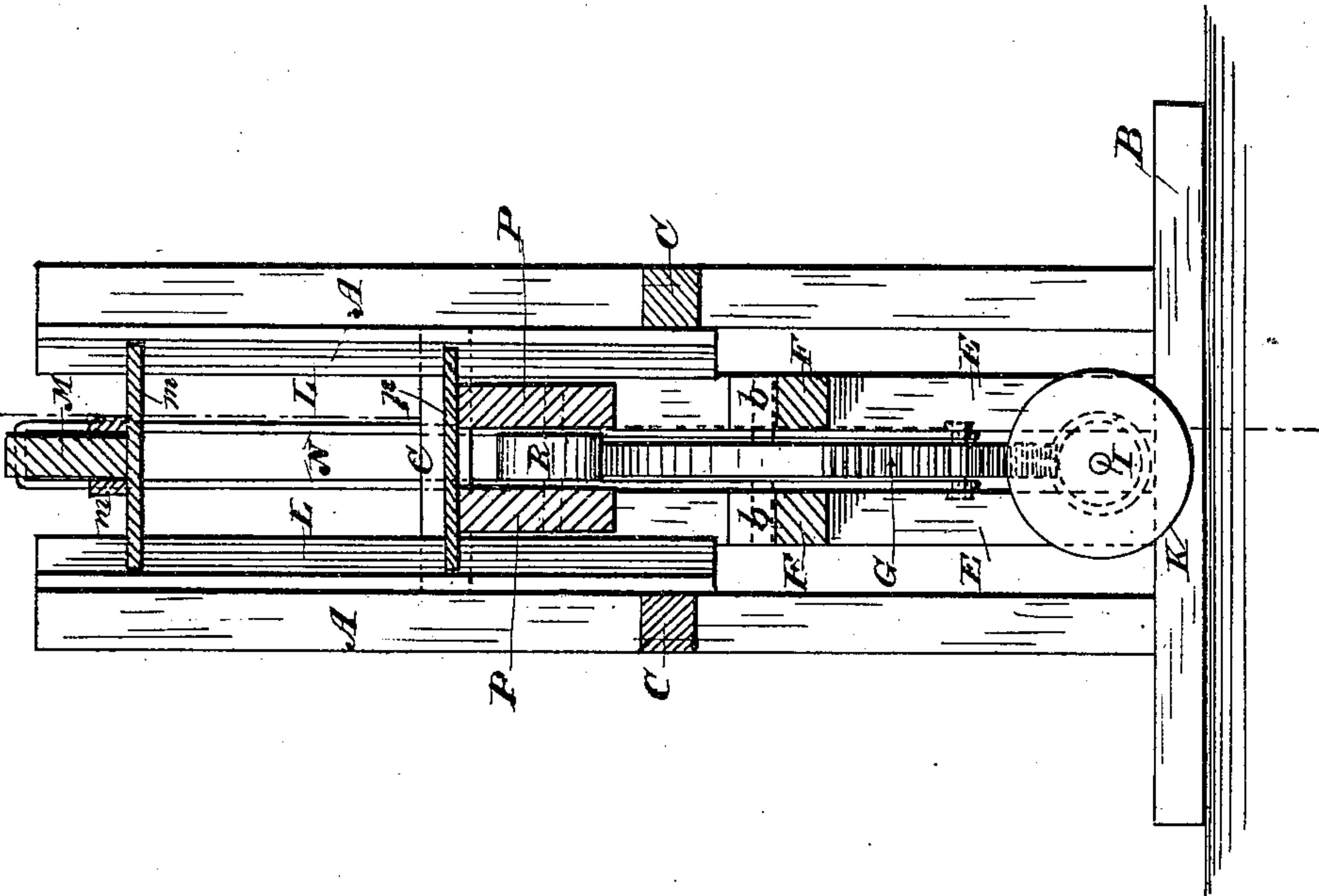


Fig. 2.



WITNESSES

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BALING-PRESS.

SPECIFICATION forming part of Letters Patent No. 250,699, dated December 13, 1881.

Application filed August 26, 1881. (Model.)

To all whom it may concern:

Be it known that I, BENJAMIN J. WILSON, a subject of Her Majesty the Queen of Great Britain, residing at Atlanta, in the county of Fulton and State of Georgia, have invented a new and useful Baling-Press, (for which I have obtained no foreign patent,) of which the following is a specification.

The object of this invention is to produce a hay, seed, fruit, or cotton press or compressor which shall be simple in construction, yet powerful in operation; and it consists in certain combinations and parts hereinafter described, and pointed out in the claim.

Figure 1 represents a section on the line xx , Fig. 2; and Fig. 2 represents a section on the line yy , Fig. 1.

A represents the four corner-posts of the press, which are connected by foot-beams B, side beams, C, and cross-beams D. These cross-beams D and foot-beams B are connected by the uprights E, which support the bearing-bars F. I do not confine myself to this form of frame, as any frame adapted to withstand the great strain to which these presses or compressors are subject may be used. The cam-sectors G, which may be any shape desired, have axles or gudgeons a , which are supported in suitable bearings, b , on the bearing-bars F, or other part of the frame, and partially revolve in a vertical plane between the uprights E. About one-half of each of the sectors G (marked G') have cam-faces, which extend between the beams C and force up the follow-block or platen when proper power is applied, while the other half (marked G^2) is provided with cogs g .

Arranged below the cam-sectors, and supported in suitable bearings, H, held in the frame, is the power-shaft I. This shaft has a pulley, K, by which power is communicated to the compressor. Instead of a pulley, a crank, gear-wheel, or any other suitable device may be used at each end. The shaft I has a worm or screw, W, which meshes with the cogs on the cam-sectors.

Within the general frame-work are fastened in any suitable manner the guides L for the two platens. The upper platen is shown as constructed of a large beam, M, and cross-slats m , braced by a corner-bar, m^2 , all well secured

together. A strong connecting-rod, N, is fastened to each end of the beam or of the platen, and extends down to a projection, O, on each of the cam-sectors, or it may be connected directly to the sectors, if made of the form shown in drawings. This rod is shown as attached at each end to the pins Z in the projection O, and with the loop extending over the end of the beam M, where it is properly fastened. It may, however, be a single rod, in which case the projections O prevent the rod interfering with the cam-sectors, as it would otherwise do by striking them when at the lowest part of its stroke. The lower platen is shown as made of two beams, P, to which are firmly secured the slats p . There is a space between the two beams P, in which are anti-friction wheels R, having bearings in said beams P. These anti-friction rollers rest on the cam-sectors and support the platen.

The operation is as follows: Power being applied to the shaft I, the worms or screws cause the cam-sectors to move the platens together or apart, depending on the direction they are rotated. Supposing the upper platen has been moved to its greatest height, there will be sufficient space above the frame to put the bale to be compressed on the lower platen. The cam-sectors are then moved by the worm or screw, so that the rods will draw the upper platen down, which is directed into the guides. As it moves down, the beam moves between the corner-posts, and is allowed to descend by reason of the cross-bars D being quite low down, instead of at the top of the press on a level with the side beams. At the same time the cam-faces push up the lower platen. This motion is continued until the compression is sufficient, when it is reversed and the bale removed, to make room for another, which is treated in the same way.

Instead of running the platen up beyond the frame to allow the insertion of the bale, the frame may be so constructed that the bale can be put in through the sides or ends, or the platen may be made to tilt up, or the guides be extended above the frame, for the same purpose. If this press be used for pressing cotton, in the first instance, a box of the usual or preferred form will be necessary, instead of the open frame shown. All the parts of the press may

be made of wood or metal, or both, or any other suitable material, the object being to secure strength by the best of means and construction. The cam-sectors may be made in one piece, 5 or the cogs may be made on a separate piece or pieces and attached thereto by bolts or rivets, or in any suitable manner. The anti-friction rollers may be omitted or changed in form. The cam-sectors may be operated by gear- 10 wheels instead of the screws. The upper or lower platen may, if desired, be stationary, and the other operated as shown. The platen may also be changed in structure, all without departing from the spirit of my invention. 15 The friction-rollers may be on the cam in-

stead of the platen. In some cases one sector only need be used.

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

The combination of the cam-sectors, having 20 the toothed racks *g*, and extensions *O*, pivoted to the frame beneath the lower platen, and operating the latter through the medium of the friction-rollers, with the movable platens, connecting-rods, cross-beam, and the operating 25 mechanism, substantially as described.

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Witnesses:

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