

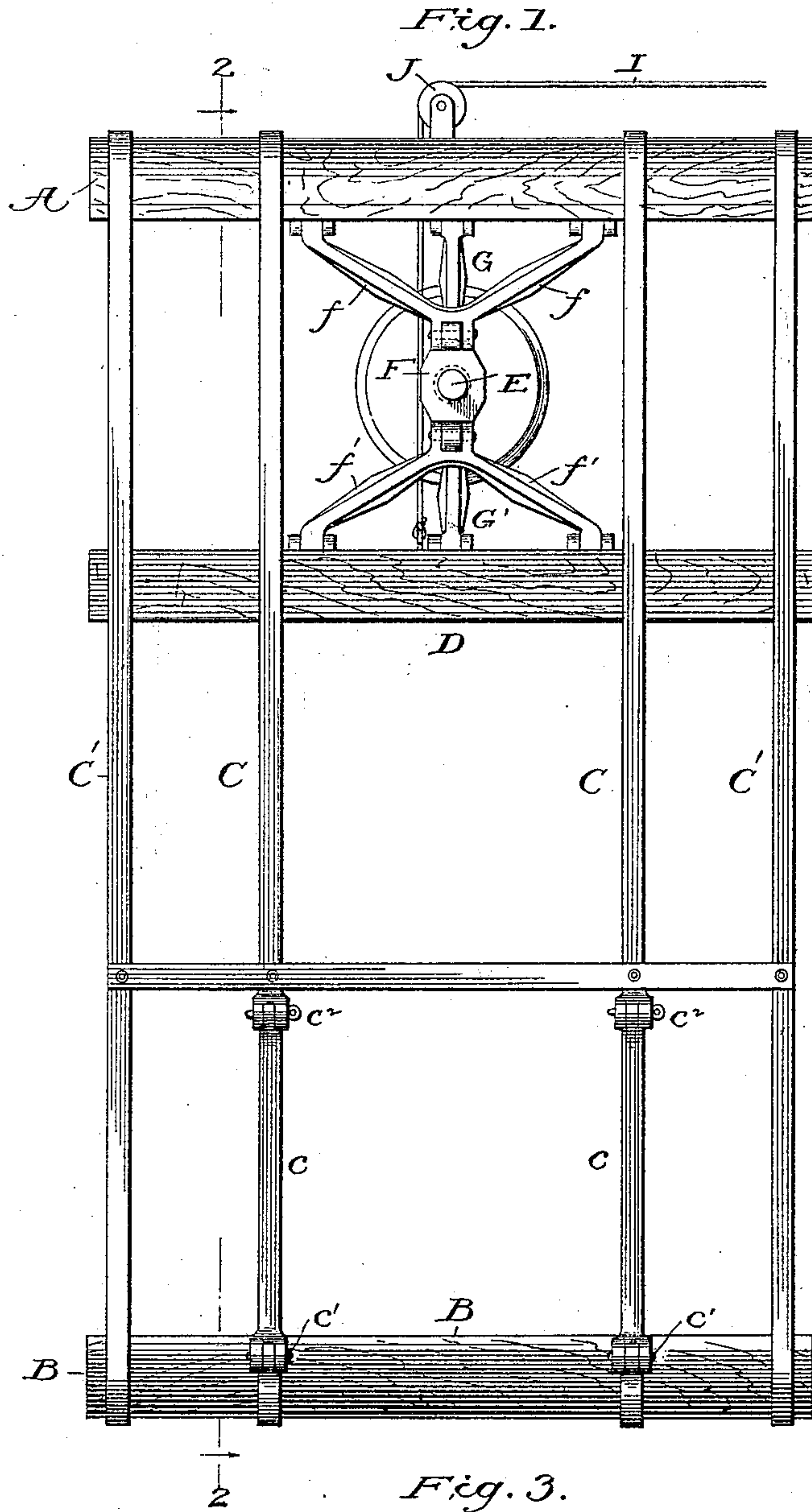
(No Model.)

2 Sheets—Sheet 1.

J. G. GOLDTHWAITE.  
BALING PRESS.

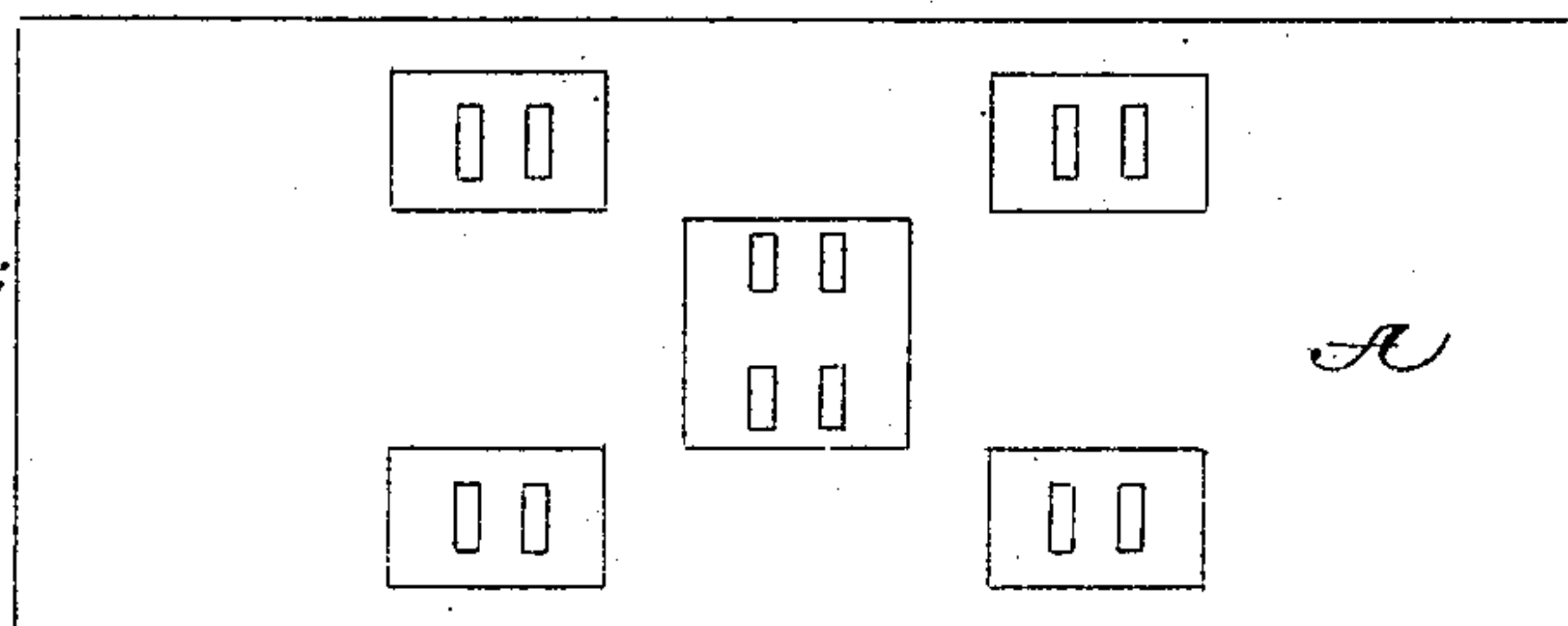
No. 460,009.

Patented Sept. 22, 1891.



Witnesses:

*A. R. Kennedy*  
*m. m. m. m. m. m. m.*



*Inventor.*  
*J. G. Goldthwaite*  
*By his Atty.*  
*Chas. T. Dodge*

(No Model.)

2 Sheets—Sheet 2.

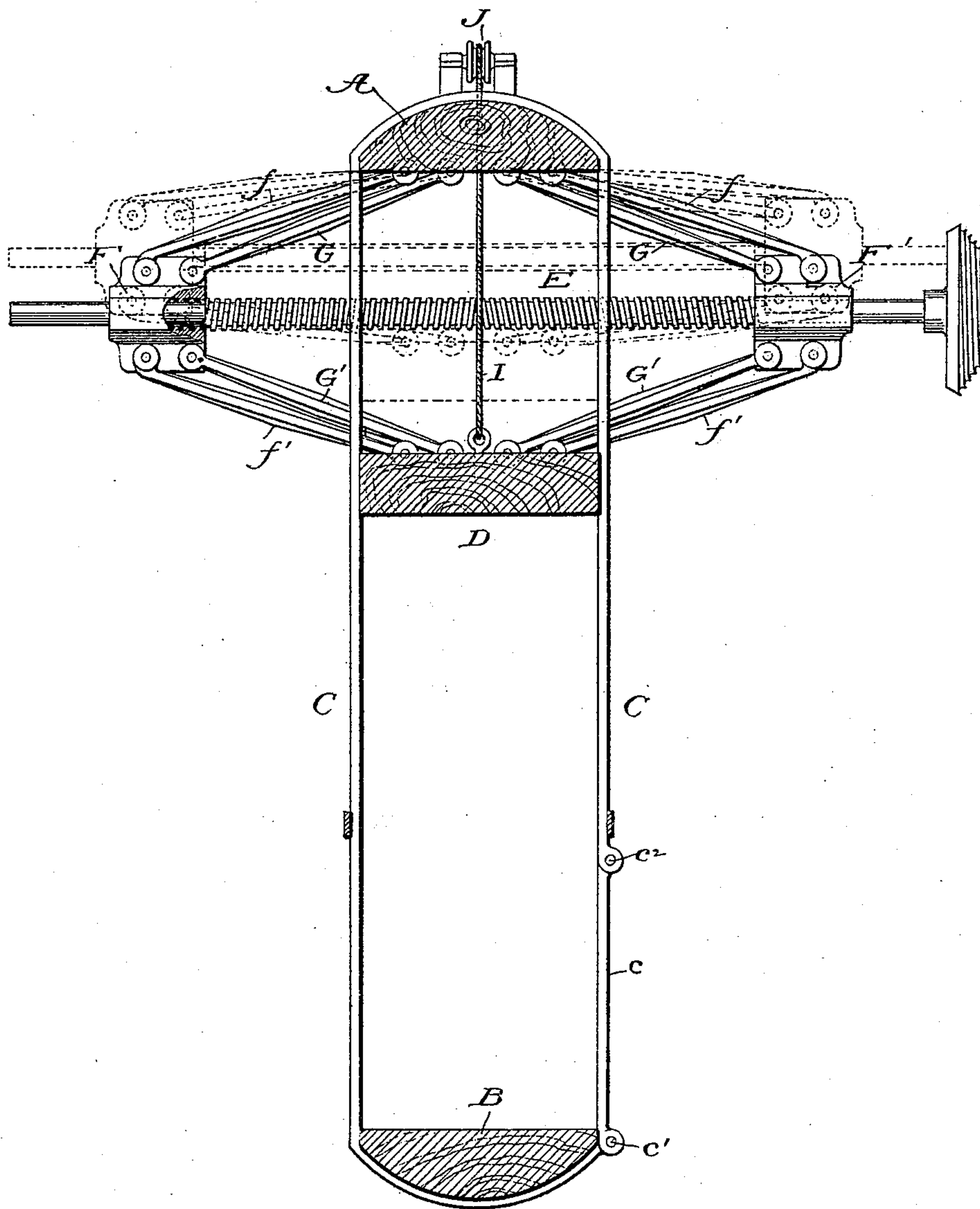
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*Fig. 2.*

*on line 2-2*



Witnesses:  
*W. M. Mortimer*  
*A. R. Kennedy*

Inventor:  
*J. G. Goldthwaite*  
*By his Atty*  
*Phil. T. Dodge*



# UNITED STATES PATENT OFFICE.

JOSEPH G. GOLDTHWAITE, OF GALVESTON, TEXAS, ASSIGNOR TO THE  
REMBERT ROLLER COMPRESS COMPANY, OF TEXAS.

## BALING-PRESS.

SPECIFICATION forming part of Letters Patent No. 460,009, dated September 22, 1891.

Application filed March 12, 1891. Serial No 384,745. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH G. GOLDTHWAITE, of Galveston, in the county of Galveston and State of Texas, have invented certain Improvements in Baling-Presses, of which the following is a specification.

My invention has reference to baling-presses of the toggle-joint type.

My press is intended mainly for applying a final pressure to a mass of cotton which has been accumulated or built up in the shape of a bale before introduction to the press, and for use is the so-called "Rembert system," which demands that the mass shall be introduced to the press at one point and removed at another.

The objects of the invention are to simplify and strengthen the frame and operating parts, to secure a better distribution of the strains between the operating parts and the frame, and to increase the speed at which the press may be operated by permitting the platen to rise and fall to a limited extent independent of the power mechanism, so that after the loose fiber is introduced the platen may be dropped instantly a portion of the distance to effect a partial compression of the charge by its weight before bringing the power mechanism into play.

In the accompanying drawings, Figure 1 is a front elevation of my improved press. Fig. 2 is a vertical cross-section of the same on the line 2 2. Fig. 3 is an under face view of the top of the press.

The frame of my press consists of the top and bottom pressure-blocks A and B, strongly connected by the upright encircling-bands C and C', the outer faces of the blocks being rounded in cross-section, as shown, whereby the strain and pressure are more evenly distributed within the bands and the liability of the blocks to crack or lose their shape under the pressure avoided. The outer bands C' at the ends of the blocks are endless or unbroken; but each of the inner bands C C' is provided with a movable section c, secured at one end by a hinge-pin c', and at the opposite end by a removable fastening-pin c<sup>2</sup> or equivalent fastening device, which admits of the section being unfastened and drawn outward to permit the removal of the bound bale through the

front of the frame. It will be observed that the end of the press is entirely open, so that the mass to be compressed may be introduced without opening the front.

D represents the platen or follower arranged to slide upward and downward inside of the vertical bands by which it is guided in order to effect the compression of the cotton between the platen and the lower pressure-block B.

E represents a right and left hand screw, carrying at its opposite ends the nuts F and F', each of which is connected by forked levers f to the pressure-block A, and by a similar lever f' to the platen D, the levers being jointed at the middle to the nut, and at their extremities to the block and the platen, as shown, in order the better to distribute or equalize the strains. I also connect each nut by two straight links or levers G and G' with the block A and platen D, respectively, at their middle. When the screw is turned in the proper direction to urge the nuts inward, the toggle-levers are caused to approach upright positions, and in so doing to depress the platen D with increasing pressure in the manner familiar to every mechanic. By making use of both the forked levers and the straight levers, as shown, I am enabled to distribute the pressure over the surfaces of the block A and platen D in such manner as to avoid danger of their being forced out of shape.

As the weight of the platen and the connected parts will be sufficient to effect a partial compression of the cotton without the assistance of the screw, I terminate the threads of the screw at their outer ends at such point that the nuts run beyond them before the platen reaches its highest position, as shown in Fig. 2. When, therefore, the platen is lifted by the power mechanism to the position shown in Fig. 2, the nuts leave the threads, and the platen is free to rise the remainder of the distance. In order to effect the remaining elevation I attach to the platen a rope or chain I, which is passed upward over a suitable pulley J, so that it may be operated by hand by a winding drum or otherwise to quickly elevate the platen to the position shown in dotted lines in order to afford space for the introduction of the loose charge thereunder. After the charge is introduced it is only necessary



to release the rope, whereupon the platen will descend by gravity to the position shown in Fig. 2, thereby effecting the preliminary compression of the charge and at the same time drawing the nuts inward in position to engage the screw, which is then operated to complete the compression. The screw may be operated by any suitable means, but I recommend the employment, as shown, of a spirally-grooved wheel on its end to receive the operating-line, so that as the line is drawn therefrom it will wind outward toward the periphery, and thus apply the moving power with increasing effect.

The press constructed as above may be mounted or sustained in any suitable manner.

In place of the cord or chain, a rod or other device for the speedy lifting of the platen may be used.

Having thus described my invention, what I claim is—

1. In a baling-press, the combination of the platen, toggle-levers, and nuts, the right and left screws having their threads so terminated as to release the nuts when the platen is raised

to an intermediate position, and an independent means, as a cord, for quickly raising the platen the remainder of the distance, whereby the primary compression of the charge may be quickly effected by the weight of the platen before bringing the power mechanism into action.

2. In a baling-press, the combination of the head A, the platen D, the actuating-screw and its nuts, and the two pairs of toggle-levers *f f'* and *G G'*, the former forked and connected to the platen near its edges and the latter connected to the platen near its middle, whereby the strain and pressure upon the platen are distributed and equalized and its tendency to rock resisted.

In testimony whereof I have hereunto set my hand, this 6th day of March, 1891, in the presence of two attesting witnesses.

JOSEPH G. GOLDTHWAITE.

Witnesses:

C. P. DRURY,

W. R. KENNEDY.