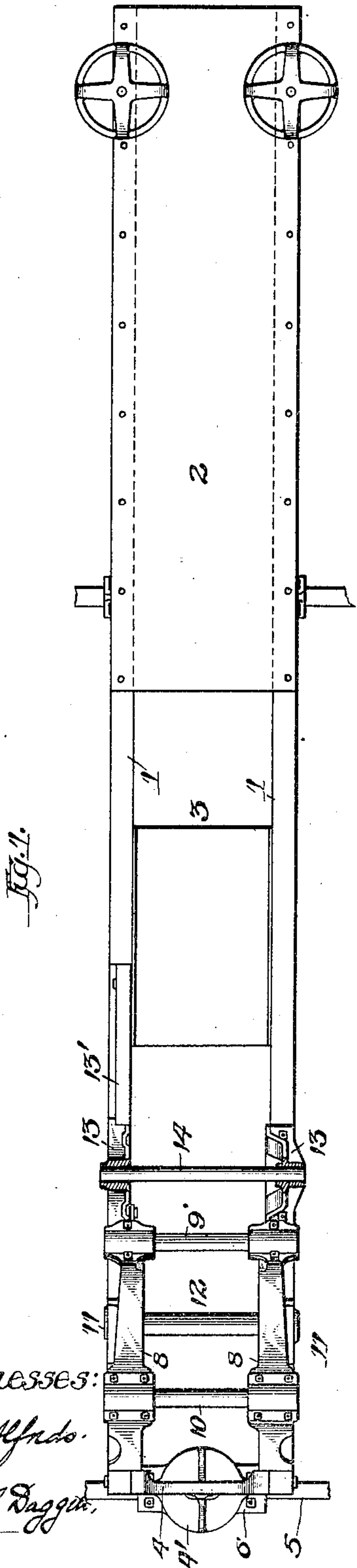


No. 794,379.

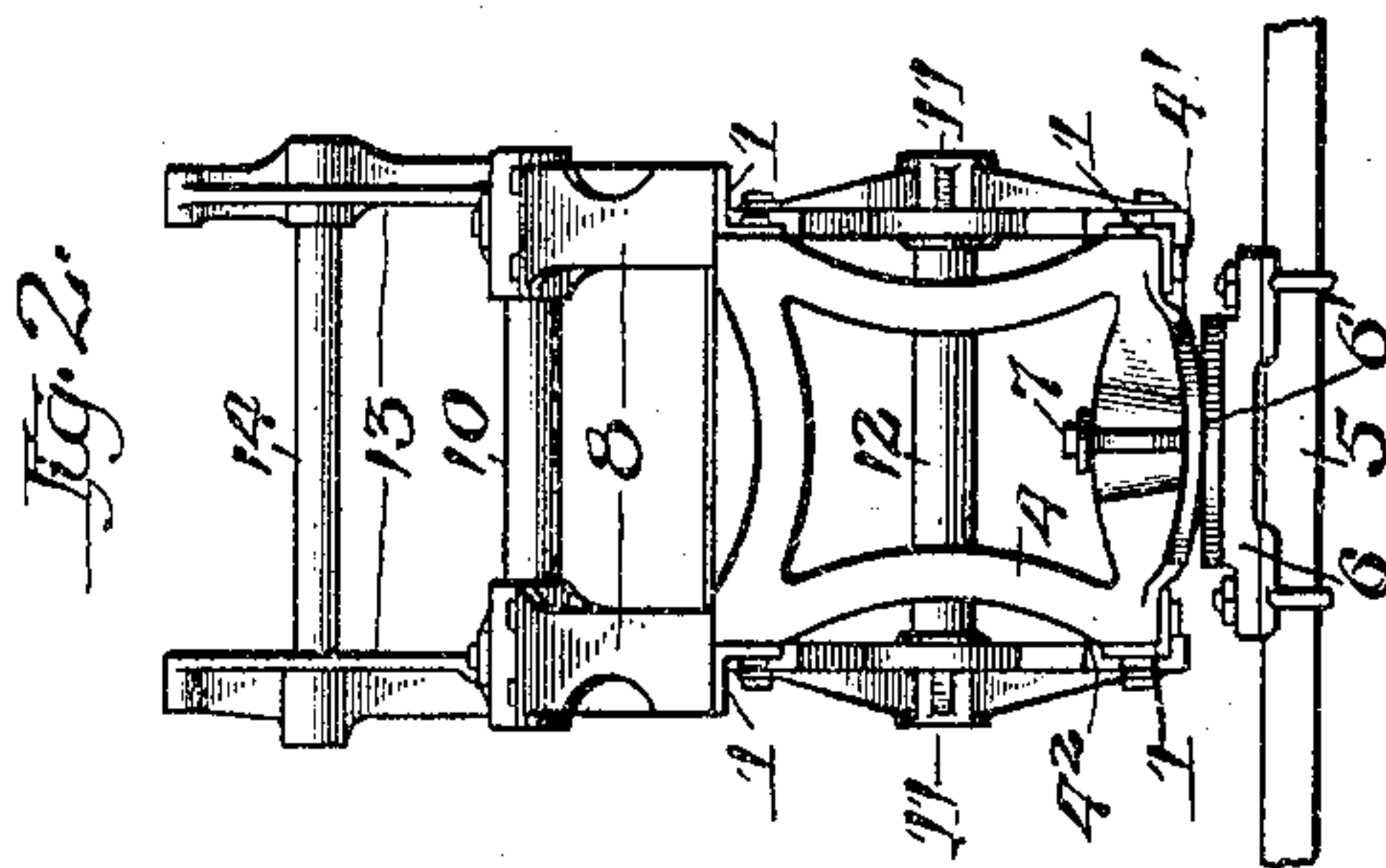
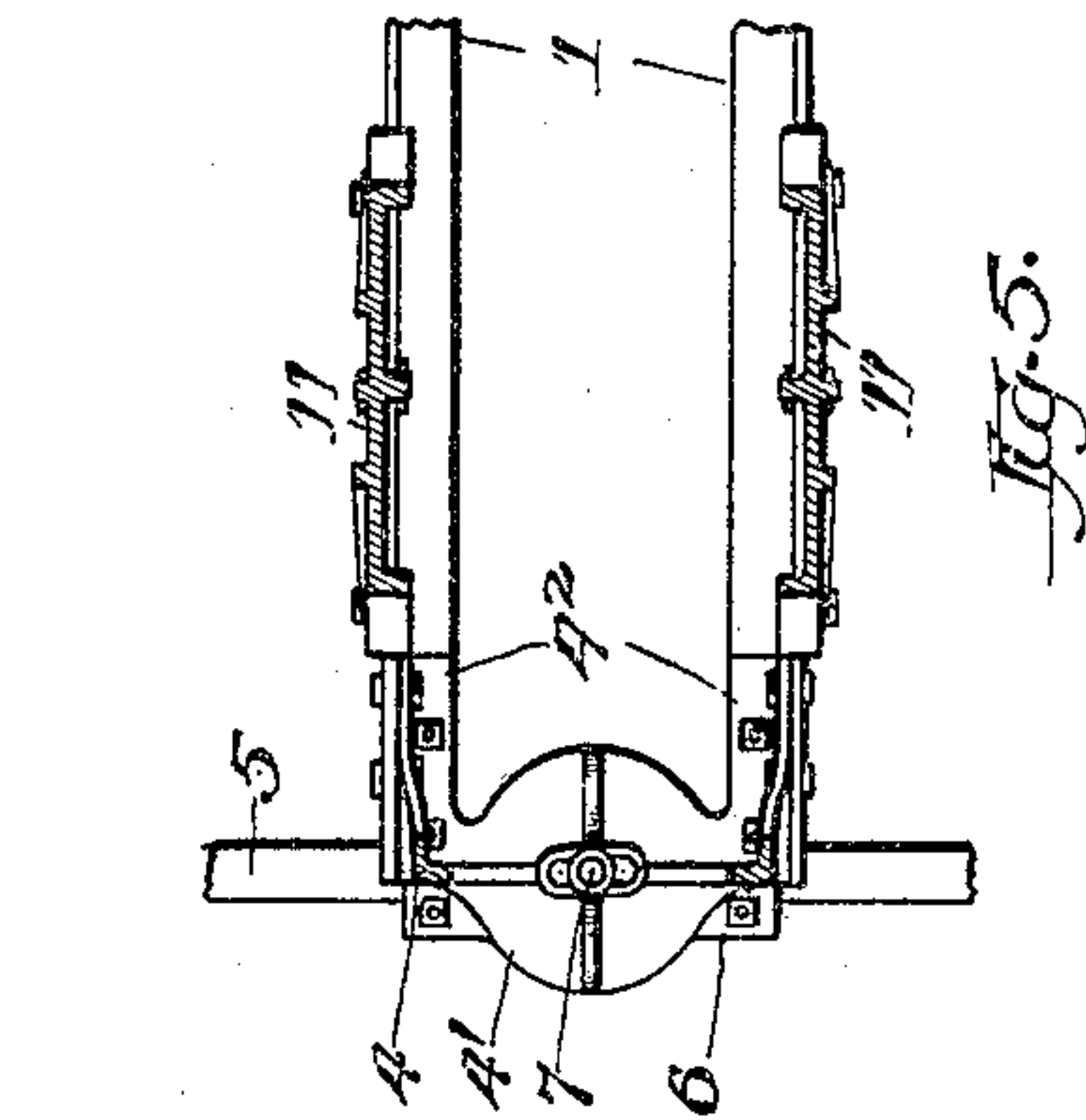
PATENTED JULY 11, 1905.

J. H. PITKIN.  
FRAME FOR HAY BALERS.  
APPLICATION FILED MAY 4, 1905.

2 SHEETS—SHEET 1.



Witnesses:  
D. H. Alfords.  
T. W. Daggett.



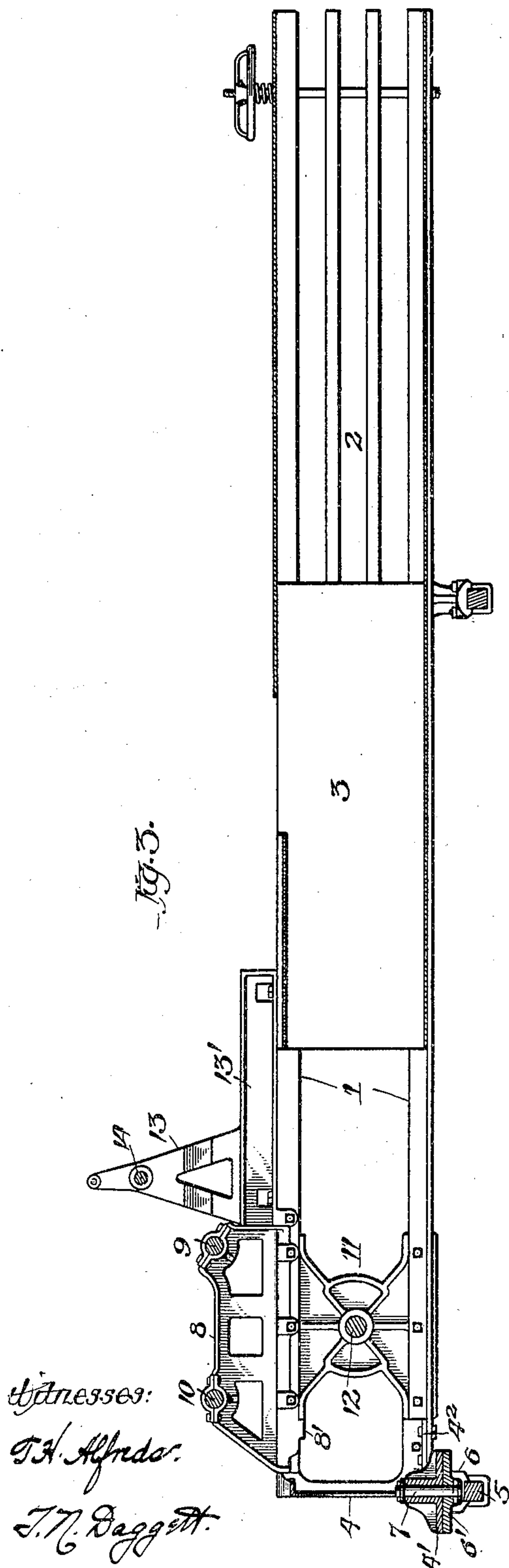
Inventor  
Julian H. Pitkin.  
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No. 794,379.

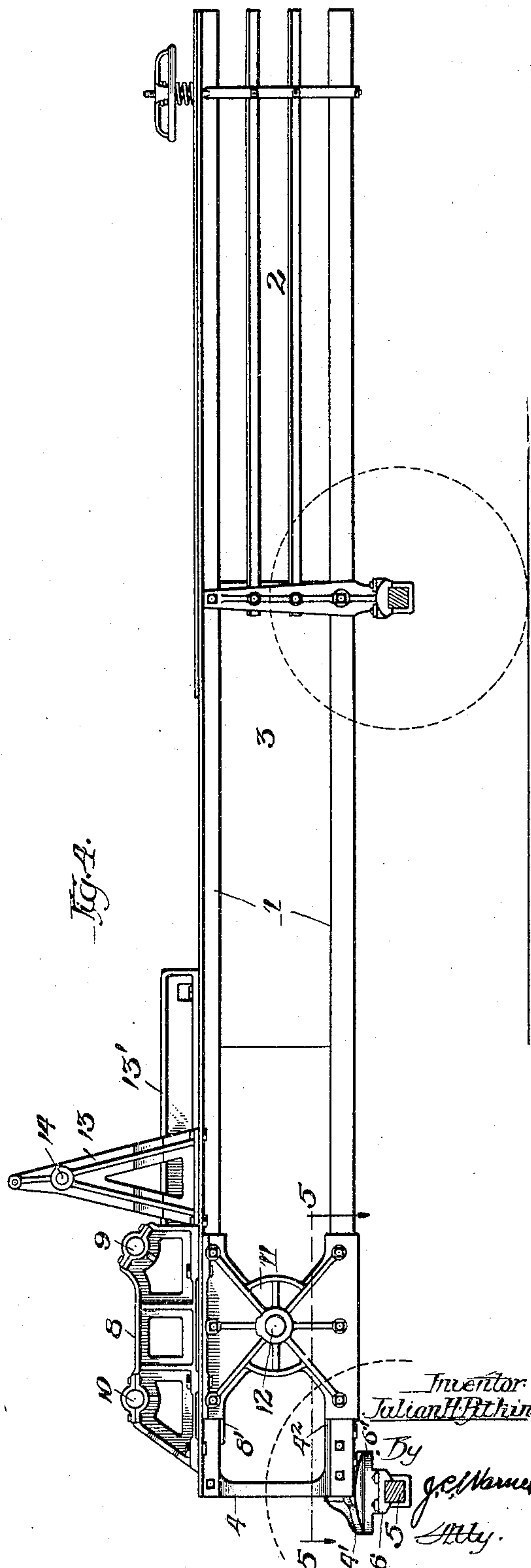
PATENTED JULY 11, 1905.

J. H. PITKIN.  
FRAME FOR HAY BALERS.  
APPLICATION FILED MAY 4, 1905.

2 SHEETS—SHEET 2.



Witnesses:  
J. A. Alford.  
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# UNITED STATES PATENT OFFICE.

JULIAN H. PITKIN, OF CHICAGO, ILLINOIS, ASSIGNOR TO INTERNATIONAL HARVESTER COMPANY, A CORPORATION OF NEW JERSEY.

## FRAME FOR HAY-BALERS.

SPECIFICATION forming part of Letters Patent No. 794,379, dated July 11, 1905.

Application filed May 4, 1905. Serial No. 258,774.

*To all whom it may concern:*

Be it known that I, JULIAN H. PITKIN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Frames for Hay-Balers, of which the following is a complete specification.

Heretofore in power-balers more or less difficulty has been met in preserving the proper distances between the bearings of the heavy driving-gears owing to the excessive strains to which they are subjected incident to driving the plunger and feed-lever.

The object of this invention is to provide a special construction of supporting-frame for the journals of the heavy driving-gears of a power-baler and to so arrange the several members of said frame by interlocking and abutting with each other as to cause the strains set up in each to be taken up and counteracted by the one adjacent thereto, thus greatly relieving the strain on the fastenings of the several members. The entire gear-frame in the front end of the baler is thus rendered as rigid as if made of a single piece and all possibility of the journals being strained or moved out of position is made impossible.

Referring to the accompanying drawings, Figure 1 represents a plan of the frame of a baler in which is embodied my invention. Fig. 2 is a front end elevation of same. Fig. 3 is a longitudinal section of the frame of the baler, illustrating the manner in which the various castings thereof abut and interlock with each other; and Fig. 4 is a corresponding side elevation of same. Fig. 5 represents a plan section of the forward end of the frame, taken as indicated by the line 5 5 in Fig. 4.

In the drawings, 1 designates the longitudinally-extending bars, preferably angle-bars, which constitute the principal element of the body of the frame, 2 represents the baling-chamber, and 3 the compression-chamber. To the forward ends of the angle-bars 1 is secured the bolster-head 4, which has, generally speaking, an open rectangular form with the fifth-wheel extension 4' on the lower side thereof, the said extension being curved upwardly somewhat at its sides in order to permit of a

slight tipping of the press-body relative to the forward axle 5. The forward axle 5 (only the central portion thereof being shown) has secured to its upper side the casting 6, which has formed integral therewith the circular plate 6', corresponding in diameter with the fifth-wheel extension 4' on the bolster-head 4. The bolster-pin 7 forms the pivotal axis of movement between the axle 5 and said bolster-head 4.

On the upper side of the upper angle-bars 1, at the forward end thereof and abutting the upper corners of the bolster-head 4, are placed the pillow-blocks 8, forming bearings in which journal the driving-shaft 9 and the intermediate gear-shaft 10. Interposed between the upper and lower angle-bars 1 on each side of the frame are the side castings 11, in which journals the shaft 12 of the large plunger-driving gear.

For full details of the construction and arrangement of the driving-gears, the reciprocating feed-arm, and other parts to which allusion is made in the description, but which are not essential to a clear understanding of the present invention, reference is made to the former applications filed by me March 31, 1905, Serial Nos. 253,015 and 253,016, both relating to balers of the type to which this invention is applied. The upper forward corner of each of the side castings 11 abuts against the shoulder 8', which projects downwardly from near the forward end of the pillow-block and preferably on the inside of the angle-bars 1, as shown in Figs. 3 and 4. The lower edge of the side castings 11 lies against the rearwardly-projecting lugs 4<sup>2</sup> of the bolster-head 4, as clearly illustrated in Figs. 3 and 5. The several members are bolted to the angle-bars 1, but since they abut or interlock with each other the excessive mutual stresses set up in operation will be largely taken up by the abutting portion of their surfaces and not by their fastenings, thus preventing under-strain in the bolts with consequent loosening of the fastening. Secured also on top of the upper angle-bars 1 and in contact with the rear side of the pillow-blocks 8 are the standards 13, in which journals the



rock-shaft 14, carrying the feed-arm. (Not shown.) A channel extension 13' on the base of one of the standards constitutes a supplementary plunger-guide, the function of which  
 5 is specifically set forth in the second of the above-cited applications. The strains to which this standard is subjected in supporting the rock-shaft of the feed-arm are considerable, and the reason for having it rest solidly against the pillow-block is obvious.  
 10

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

1. A frame for power-balers, comprising the longitudinally-disposed bars, a rectangular-shaped bolster-head to which the forward  
 15 ends of the said bars are secured, pillow-blocks resting upon and secured to the upper bars, and side castings interposed between the corresponding upper and lower angle-bars, the said bolster-head, pillow-blocks and side castings being arranged to abut and interlock  
 20 with each other, substantially as and for the purpose specified.

2. A frame for power-balers, comprising  
 25 longitudinally-disposed angle-bars, a rectangular-shaped bolster-head to which the forward ends of the said bars are secured, pillow-blocks resting upon and secured to the

upper angle-bars, said pillow-blocks abutting the upper corners of the bolster-head, and side  
 30 castings interposed between the corresponding upper and lower angle-bars, each side casting interlocking above with the adjacent pillow-block and abutting below at its forward corner with the bolster-head, substantially  
 35 as and for the purpose specified.

3. A frame for power-balers, comprising longitudinally-disposed angle-bars, a rectangular-shaped bolster-head to which the forward  
 40 ends of the said bars are secured, pillow-blocks resting upon and secured to the upper angle-bars, said pillow-blocks abutting the upper corners of the bolster-head, side castings interposed between the corresponding  
 45 upper and lower angle-bars, each side casting interlocking above with the adjacent pillow-block and below at its forward corner abutting the said bolster-head, and an upwardly-extending standard secured on each  
 50 side to the angle-bars and contacting the rear ends of the said pillow-blocks, substantially as and for the purpose specified.

JULIAN H. PITKIN.

Witnesses:

S. W. NICHOLLS,  
 A. B. HANSON.