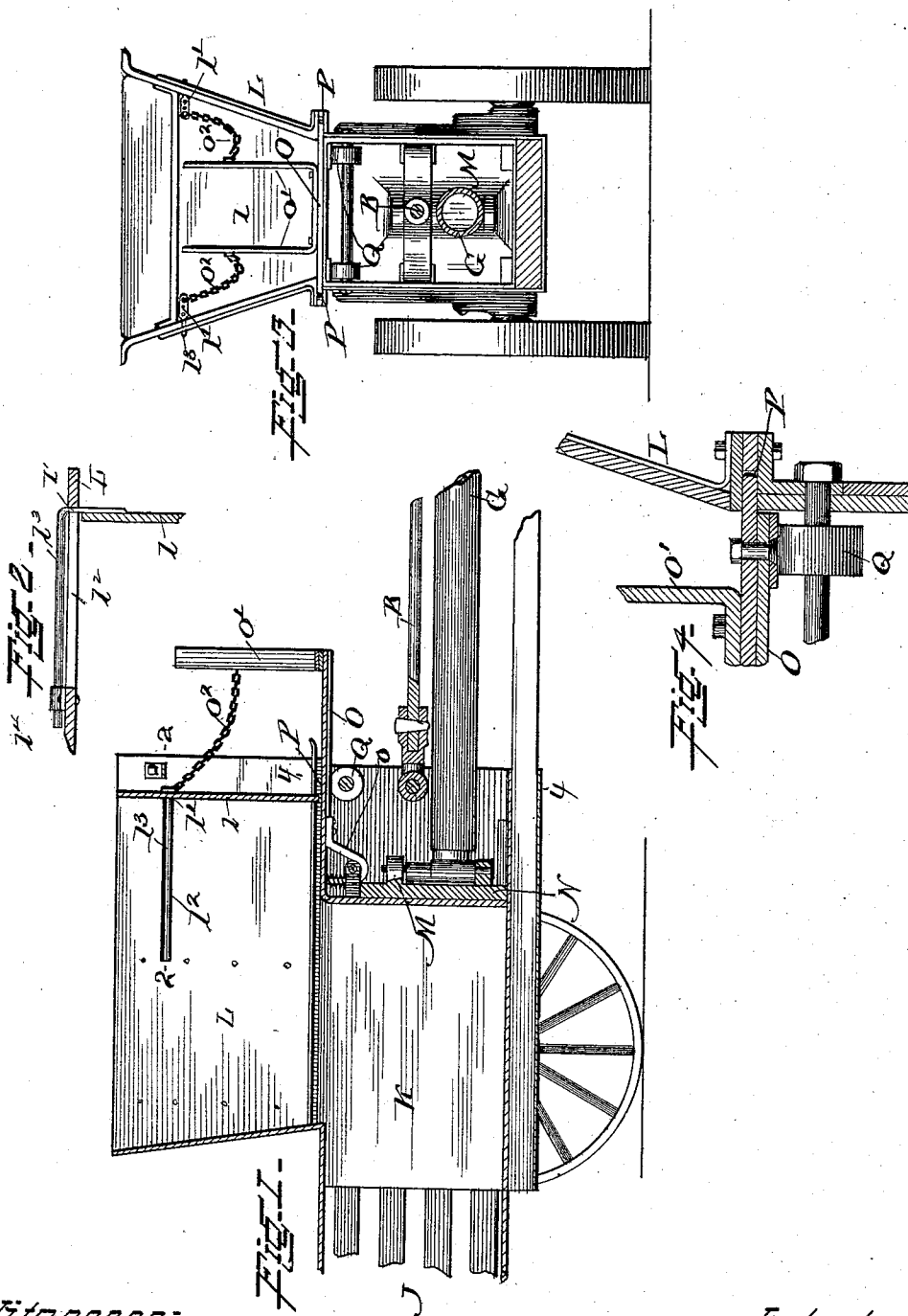


(No Model.)

A. WICKEY.  
BALING PRESS.

No. 486,997.

Patented Nov. 29, 1892.



Witnesses:

Chas. C. Skirrow  
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# UNITED STATES PATENT OFFICE.

ANDREW WICKEY, OF CHICAGO, ILLINOIS.

## BALING-PRESS.

SPECIFICATION forming part of Letters Patent No. 486,997, dated November 29, 1892.

Application filed October 1, 1891. Serial No. 407,379. (No model.)

*To all whom it may concern:*

Be it known that I, ANDREW WICKEY, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Baling-Presses, of which the following is a specification.

My invention relates to certain improvements in baling-presses which are particularly applied to the bale-chamber, to the plunger-head, and to the hopper or feed-box.

The improvements are illustrated in the drawings by means of four figures, in which—

Figure 1 is a vertical longitudinal section of the bale-chamber in line 1 1 of Fig. 3. Fig. 2 is a horizontal detail section in line 2 2 of Fig. 1. Fig. 3 is a vertical transverse section in line 3 3 of Fig. 1 and looking toward the bale-chamber, and Fig. 4 is a transverse vertical detail section in line 4 4 of Fig. 1.

My invention has two principal objects, the first of which is to shorten the bale end of the press to reduce the great length necessary when press and power are united, and the second to provide means for slightly compressing the material before it is dropped into the bale-chamber. The means by which I accomplish these purposes are shown in said figures.

Referring to Fig. 1, the bale-chamber is broken away at J and the compression-chamber shown at K. Above this chamber K is the hopper or feed box L, and the plunger is marked M. It is obvious that at each stroke the face of the plunger must pass entirely through the compression-chamber and at the back stroke must be drawn back clear of the same, so that when the full back stroke is accomplished the entire plunger will be withdrawn from the press and its full length must be provided for in order that it may be out of the way of the horses. It should also be noticed that the top of the plunger must be as long as the hopper or feed-box in order that none of the material to be baled shall drop behind the plunger when the same is forced into the bale-chamber.

The means which I have devised to save room consists, essentially, in a feed box or hopper having a movable end, in combination

with means for crowding this end inward at the forward stroke of the plunger, so that when the plunger is at its extreme inner limit the length of the hopper is considerably decreased, and consequently the necessary length of the plunger is lessened.

In the drawings the plunger-head is shown at N, the face M being preferably a steel plate, and the top of the plunger being also, preferably, a steel plate O, extending down over the face of the plunger and connected therewith by a bracket o. This plate O slides in ways or grooves P, let into the sides of the compression-chamber, and the plate is also supported by means of rollers Q. The hopper L has a loose end l, adapted to slide back and forth and bearing pins l', guided by slots l<sup>2</sup> in the side of the hopper, and preferably held in a vertical position by means of rods l<sup>3</sup>, forming extensions of the pin l', and guided by eyes l<sup>4</sup> upon the side of the hopper. The pins l' being rigidly attached to the end piece l and their bent continuations l<sup>3</sup> being guided at a point considerably forward of the place where the pins pass through the slot, the end l will be retained in a practically-vertical position. This is not essential, although it is very desirable, as the end piece might be allowed to swing back and forth. To crowd the end piece in as the plunger moves forward, the top plate O of the latter bears vertical posts o', which engage with the end piece and carry it along with the plunger after the latter has advanced as far as desired into the compression-chamber. A chain o<sup>2</sup> connects these posts with the movable end l and draws the latter back to the limit of its motion at the back stroke of the plunger.

I claim as new and desire to secure by Letters Patent—

1. In a baling-press, the combination, with the frame, of the plunger M, having the top O, carried in guides P and bearing a post or posts O', and a hopper L, having a movable end l, guided by means of pins l', moving in slots l<sup>2</sup> in the side of the hopper and bent forward to pass through eyes l<sup>4</sup>, attached to the same, substantially as described.

2. In a baling-press, the combination, with a frame, of a hopper having a movable end

and a plunger having a top shorter when drawn back than the opening from the hopper into the compression-chamber and provided with means of engagement with the movable  
5 end, whereby the latter is moved inward at the forward stroke of the plunger to contract the opening in the bottom of the hopper and

enable the top of the plunger to entirely close the same, substantially as described.

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Witnesses:

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