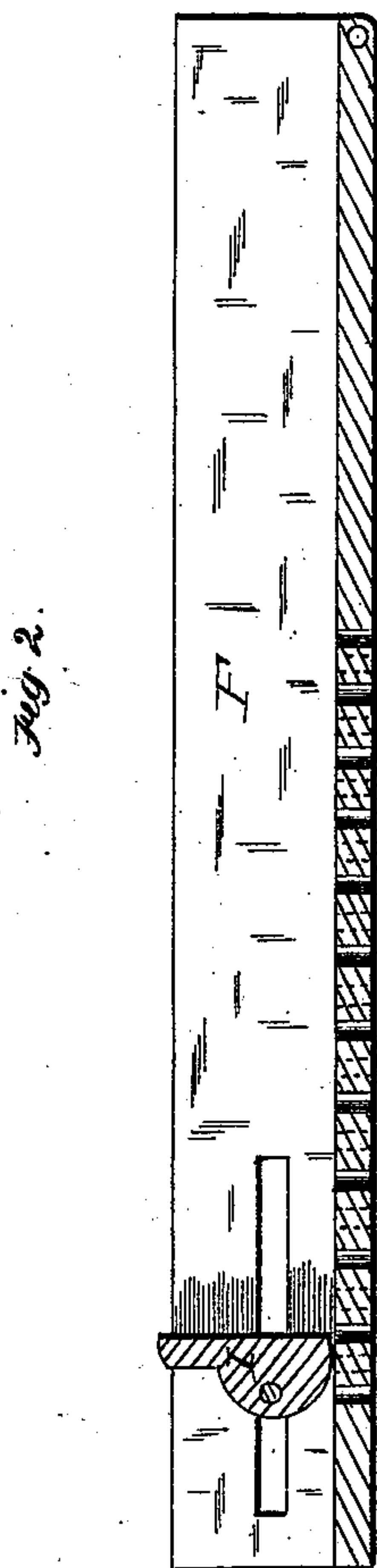
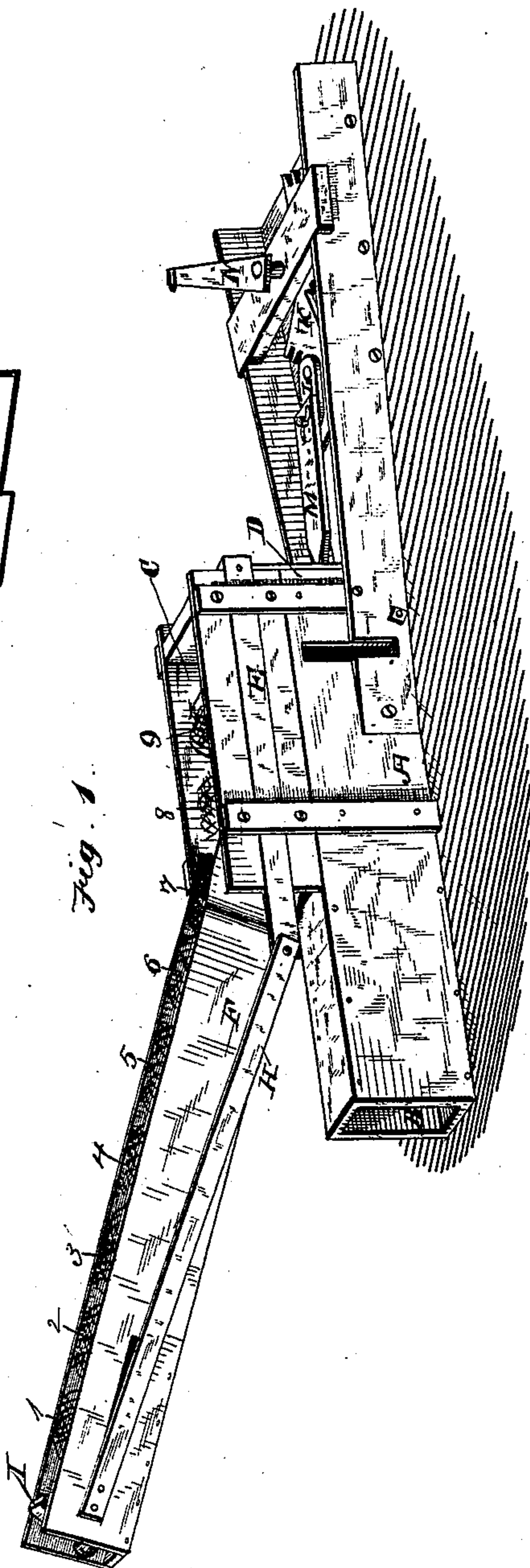
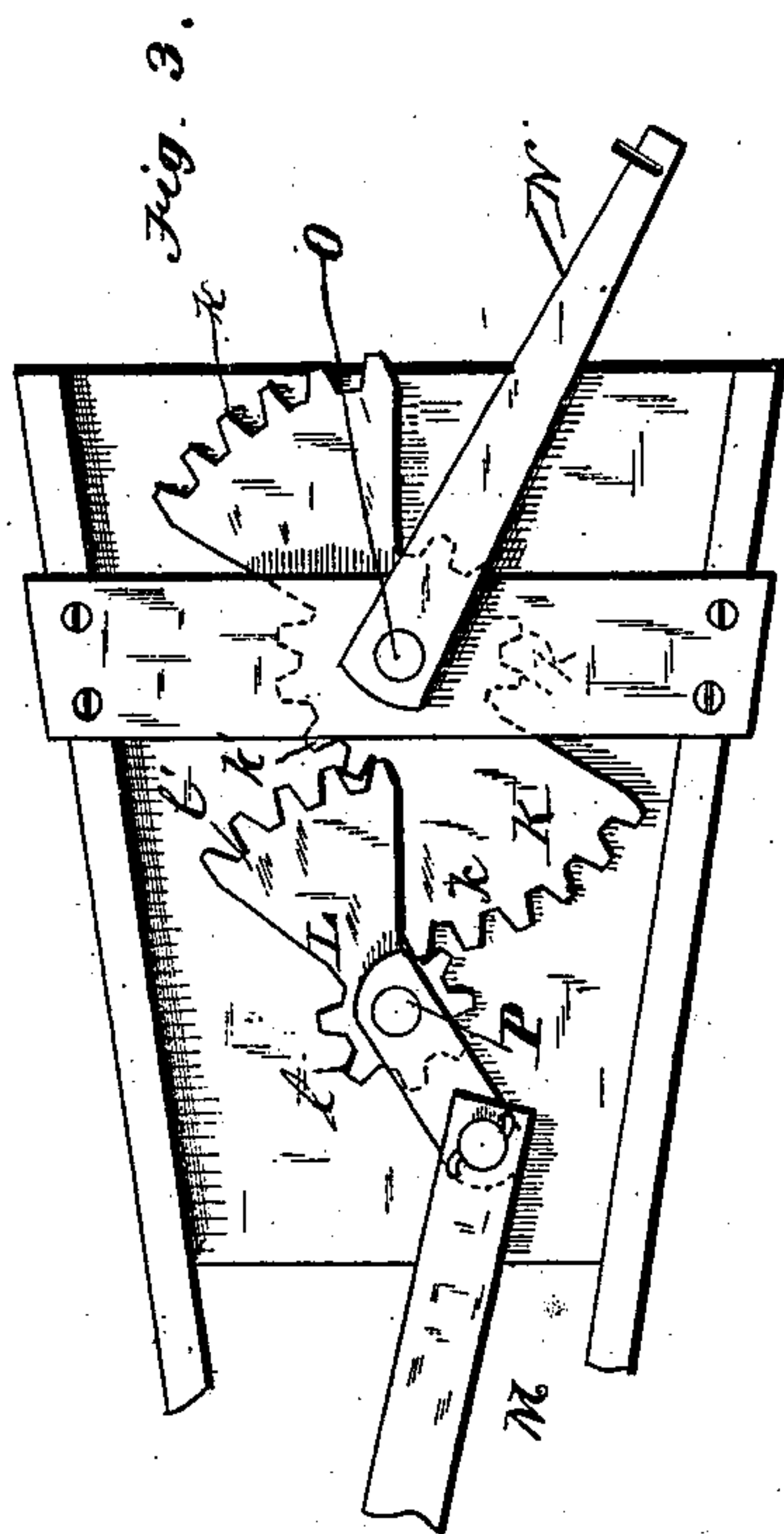


P. K. DEDERICK.
Baling-Press.

No. 227,617.

Patented May 18, 1880.



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UNITED STATES PATENT OFFICE.

PETER K. DEDERICK, OF ALBANY, NEW YORK.

BALING-PRESS.

SPECIFICATION forming part of Letters Patent No. 227,617, dated May 18, 1880.

Application filed January 9, 1880.

To all whom it may concern:

Be it known that I, PETER K. DEDERICK, of Albany, in the county of Albany and State of New York, have invented certain new and useful Improvements in Baling-Presses; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of a continuous baling-press, showing the application of my improvements thereto. Fig. 2 is a longitudinal section of the conveyer, and Fig. 3 a plan view of the power-gears.

Similar letters of reference in the several figures denote the same parts.

The present invention relates to improvements in that class of baling-presses known as "continuous" or "perpetual" presses, and covered by Letters Patent Nos. 132,566 and 132,639, granted to me October 29, 1872, and by various other patents granted to me since that date.

The invention consists, first, in an improved conveyer for feeding the material to the press-box, and, secondly, in a novel construction of the power-gears, all as I will now proceed to describe.

In the drawings, A represents the press-box of the press, B the bale-chamber, C the feeding-hopper, and D the traverser or platen, all of substantially the usual construction.

F is a conveyer, adjustably connected to the feeding-hopper or to the press-box, so that its outer end may be elevated to the top of a stack or mow, or lowered or depressed into a horizontal position. Within the conveyer is arranged a traverser or slide, I, having lateral arms or journals, which project through guide-slots in the sides of the conveyer, and serve for the attachment of rods or bars H, which connect the conveyer-traverser to slides E, secured to the reciprocating traverser D of the press proper. The chief usefulness of the conveyer is to save the expense and labor of pitching and handling the hay several times, and also to secure a more regular delivery of the hay to the press than heretofore.

Its operation is as follows: The press being moved up to the stack or mow from

which the hay for the bales is to be taken, the outer end of the conveyer is elevated to the top of the stack or mow and the power of the press set in motion. A forkful of hay is pitched into the conveyer, and as the traverser or platen of the press recedes the traverser I of the conveyer moves forward and moves the forkful along toward the press. Upon the forward movement of the press-traverser the conveyer-traverser moves back again and another forkful is pitched in front of it, and is in turn moved forward by the next stroke, forcing the preceding forkful still farther along. This operation is repeated until the conveyer is filled with forkfuls 1 2 3 4 5 6 7 8 9, as shown in Fig. 1, when each new forkful introduced at the upper end of the conveyer will cause one of the lower forkfuls or charges to be carried into the hopper over the feed-orifice of the press-box, whereupon it is forced down into the press-box by a man with a fork, or by an automatic feeder, such as shown in Letters Patent granted me June 16, 1874, No. 152,084, and December 14, 1875, No. 170,997. By this mode of feeding the press a single man on the stack or mow can keep the press supplied where an automatic feeder is used, or two men, one on the stack and another at the hopper, where such feeder is not used, without the necessity of pitching the hay more than once.

The conveyer may be connected to the side of the press-box, if preferred, and its traverser may be operated by means other than those here described. It may also be provided with a screen-bottom, as shown, to admit of the escape of the seed and dirt from the hay, and it may be wholly or partially closed at the top, with a feed-opening near the end, and varied in size and form to adapt it to circumstances.

Used in connection with cotton-presses, the conveyer may take the cotton directly from the gin, and without cost of labor deposit it into the press-box of the press to be baled. Detached from the press, the conveyer may be operated by any suitable power to elevate hay, cotton, or other like material into mows or store-houses; but when the elevation is great, shoulders or other retainers will be required to prevent the material from falling back.

K and L are the power-gears—the former

fixed to the shaft O of the horse-lever N and the latter to a shaft, P, which carries the crank that operates the pitman M of the traverser. The gear K is provided with two long toothed arms, *k*, and two short toothed arms, *k'*, and the gear L is provided with a single short toothed arm, *l*, adapted to engage alternately with the long toothed arms of the gear K, and with a long toothed arm, *l'*, adapted to engage alternately with the short toothed arms of said gear K. At the time when the pressing is being done one of the short arms of the gear K and the long arm of L are engaged, greater power though less speed resulting; but at the time when the traverser is moving back one of the long arms of gear K and the short arm of gear L are engaged, which produces greater speed, though less power. A single turn of the horse-lever gives two strokes of the traverser.

In one of my former patents—viz., No. 134,592, dated January 7, 1873—a pair of gears are shown which operate to increase the power and lessen the speed when the pressing takes place; but they differ from the present gears in this, that they increase the power gradually up to a given point, and then immediately gradually decrease it, whereas in the present form of gears the power is increased instantly at the time required, maintained uniformly for a considerable period at the increased rate,

and then instantly decreased, thus furnishing the working power a longer period.

The working power may be increased or lessened by a change in the location of the centers of the gears, and, if desired, the sections of cogs in the gears may be varied from a true circle to the form of a cam.

I claim as my invention—

1. The combination, with a continuous balancing-press, of a conveyer adjustably connected to the press, so that it can be elevated to a mow or stack, and having means for forcing the material to the feed-opening of the press-box, substantially as described.

2. The combination, with a continuous balancing-press, of a conveyer adjustably connected to the press, so as to discharge into the feed-opening of the press-box, and a reciprocating traverser within the conveyer, operated from the traverser of the press proper, substantially as described.

3. The gear K, having the two long and two short toothed arms, in combination with the gear L, having the long and short tooth-arms, arranged and operating substantially as described.

P. K. DEDERICK.

Witnesses:

R. J. VAN SCHOONHOVEN,
C. R. DEDERICK.

82