

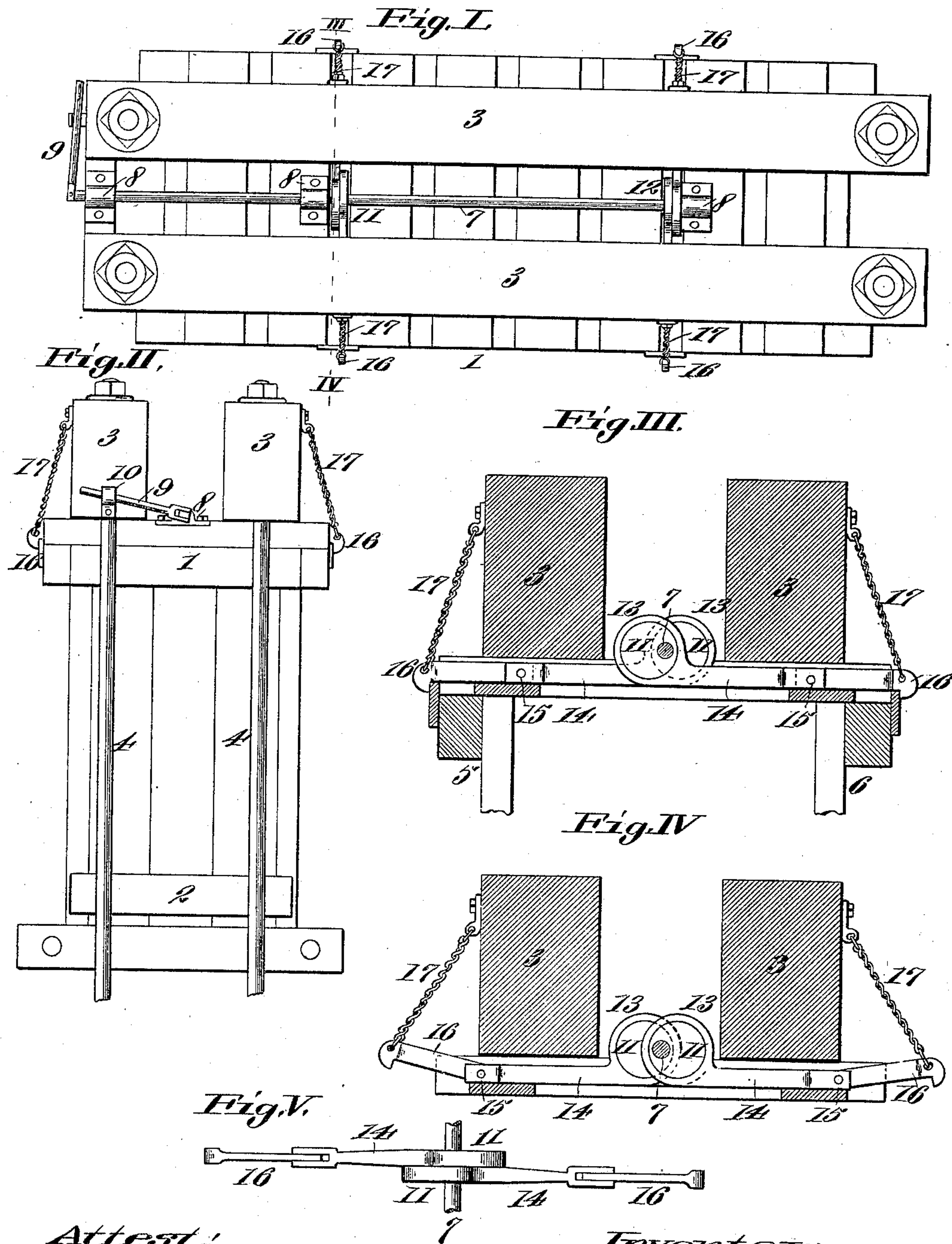
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Patented Oct. 25, 1898.

P. S. KINGSLAND.
DOOR CATCH FOR BALING PRESSES.

(Application filed Dec. 30, 1897.)

(No Model.)



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UNITED STATES PATENT OFFICE.

PHILIP S. KINGSLAND, OF ST. LOUIS, MISSOURI, ASSIGNOR TO KINGSLAND MANUFACTURING CO., OF SAME PLACE.

DOOR-CATCH FOR BALING-PRESSES.

SPECIFICATION forming part of Letters Patent No. 613,154, dated October 25, 1898.

Application filed December 30, 1897. Serial No. 664,579. (No model.)

To all whom it may concern:

Be it known that I, PHILIP S. KINGSLAND, a citizen of the United States, residing in the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Door-Catches for Baling-Presses, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

The object of my invention is to construct a catch or lock for holding the doors of a baling-press in their closed position, the catch being so constructed as to provide for a slight opening of the doors without entirely releasing them before the final pressure is given to the bale, this being considered advisable in practice.

My improved catch is especially adapted for use on presses for baling cotton, although it may be used on other presses.

My invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a top plan view of a cotton-press provided with my improved catch. Fig. II is an end view of the upper part of the press. Figs. III and IV are enlarged detail vertical sections taken on line III IV, Fig. I, Fig. III showing the doors closed and engaged by the catch, and Fig. IV showing the catch raised into the position it occupies when the doors are released. Fig. V is a top plan view showing part of the rock-shaft and one pair of the dogs of the catch.

1 represents the upper platen of a cotton-press; 2, the lower platen; 3, the stay-rod timbers on top of the press, and 4 the stay-rods.

5 represents one of the doors of the press, and 6 the other door. The press in itself, which includes the parts thus far mentioned, is of any ordinary construction, my invention relating solely to the catch for holding the doors in their closed and nearly-closed positions.

7 represents a shaft journaled in suitable boxes 8, by which it is secured to the upper side of the platen 1. At one end of the shaft is a lever 9, by which the shaft may be rocked and the free end of which lies in a keeper 10

when the shaft is turned to bring the dogs of the catch to their inner or operative position.

On the shaft 7 are two pairs of eccentric cams 11 and 12, the cams of each pair being arranged to project, respectively, to opposite sides of the shaft, as shown in Figs. III and IV. Surrounding each cam is a strap 13, having an extended arm 15, and pivoted to each arm at 15 is a dog 16. The outer ends of the dogs are connected by chains 17 to the timbers 3. When the shaft is turned to move the cams to the position shown in Fig. III, the dogs are drawn inwardly, and in this position they engage the doors when closed, as shown in Fig. III, and hold the doors firmly in their closed position during the forming of the bale. Just before the final pressure is given to the bale it is customary to relieve the doors slightly, and this is readily accomplished with my invention by a partial turning of the shaft 7. After the final pressure is given to the bale a further rotation of the shaft 7, which effects an outward movement of the dogs 16, releases the doors, the outer ends of the dogs being raised up out of the path of the doors as they swing open by means of the chains 17, as illustrated in Fig. IV. After the bale has been tied and removed the shaft 7 is turned back to its original position, which brings the dogs to the position shown in Fig. III, and then the doors may be closed, the outer ends of the dogs moving upwardly as they are engaged by the doors and then falling and catching the doors, as will be readily understood.

The device is simple in construction and operation, is not liable to get out of order, and is well adapted for the purpose for which it is intended.

I have shown my catch applied to a press having two doors, and therefore there is one dog of each pair on each side of the shaft 7. It is evident, however, that if the press has only one door then there would be no necessity for a dog for the side of the press not having a door. It is also evident that with narrow presses a single pair of dogs centrally located might be sufficient, instead of two pair, as shown in Fig. I.

While I prefer to use the chains 17 to lift

the outer ends of the dogs when the latter are thrust outwardly, yet they might be dispensed with if the outward throw of the dogs is sufficient to clear the doors as they swing open.

I claim as my invention—

1. A catch for holding the doors of a baling-press, consisting of a shaft, dogs connected to the shaft so as to be moved longitudinally thereby, and chains connecting the dogs to a fixed point providing a center so as to cause the outer ends of the dogs to be raised out of the path of the doors as the outer ends of the chains are moved outward in the arc of a circle, substantially as set forth.

2. A catch for holding doors of a baling-press, consisting of a shaft, eccentric cams on the shaft, straps having arms and sur-

rounding the cams, dogs pivoted to the arms, and chains connecting the dogs to a fixed point; substantially as set forth.

3. A catch for holding the doors of a baling-press, consisting of a shaft, eccentric cams secured to the shaft, straps surrounding the cams and provided with extended arms, and dogs pivoted to said arms, substantially as set forth.

4. A catch for holding the doors of a baling-press, consisting of a shaft, eccentric cams on the shaft, and dogs connected to the cams and adapted to be moved thereby when the shaft is turned; substantially as set forth.

PHILIP S. KINGSLAND.

In presence of—

E. S. KNIGHT,

N. V. ALEXANDER.