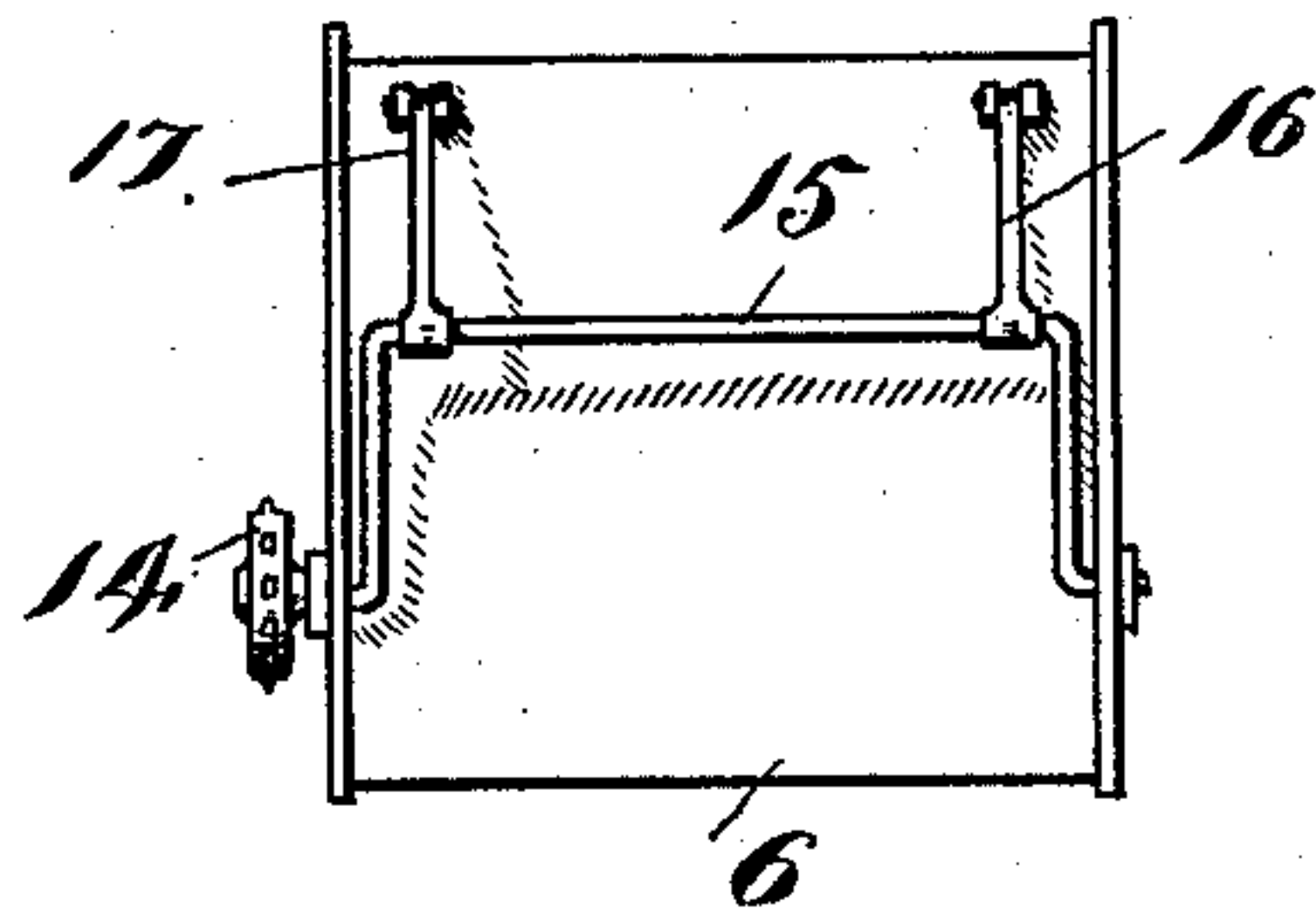
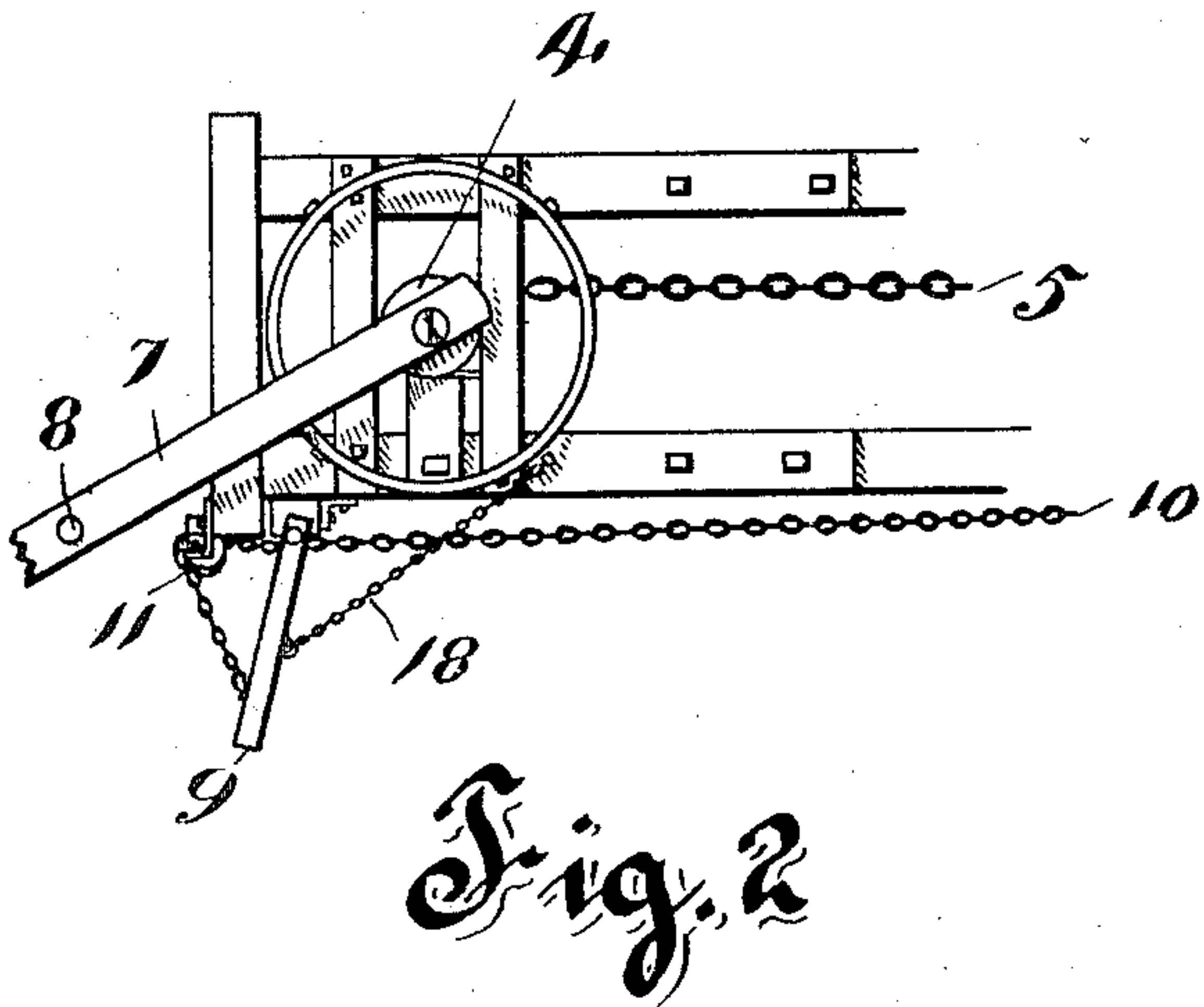
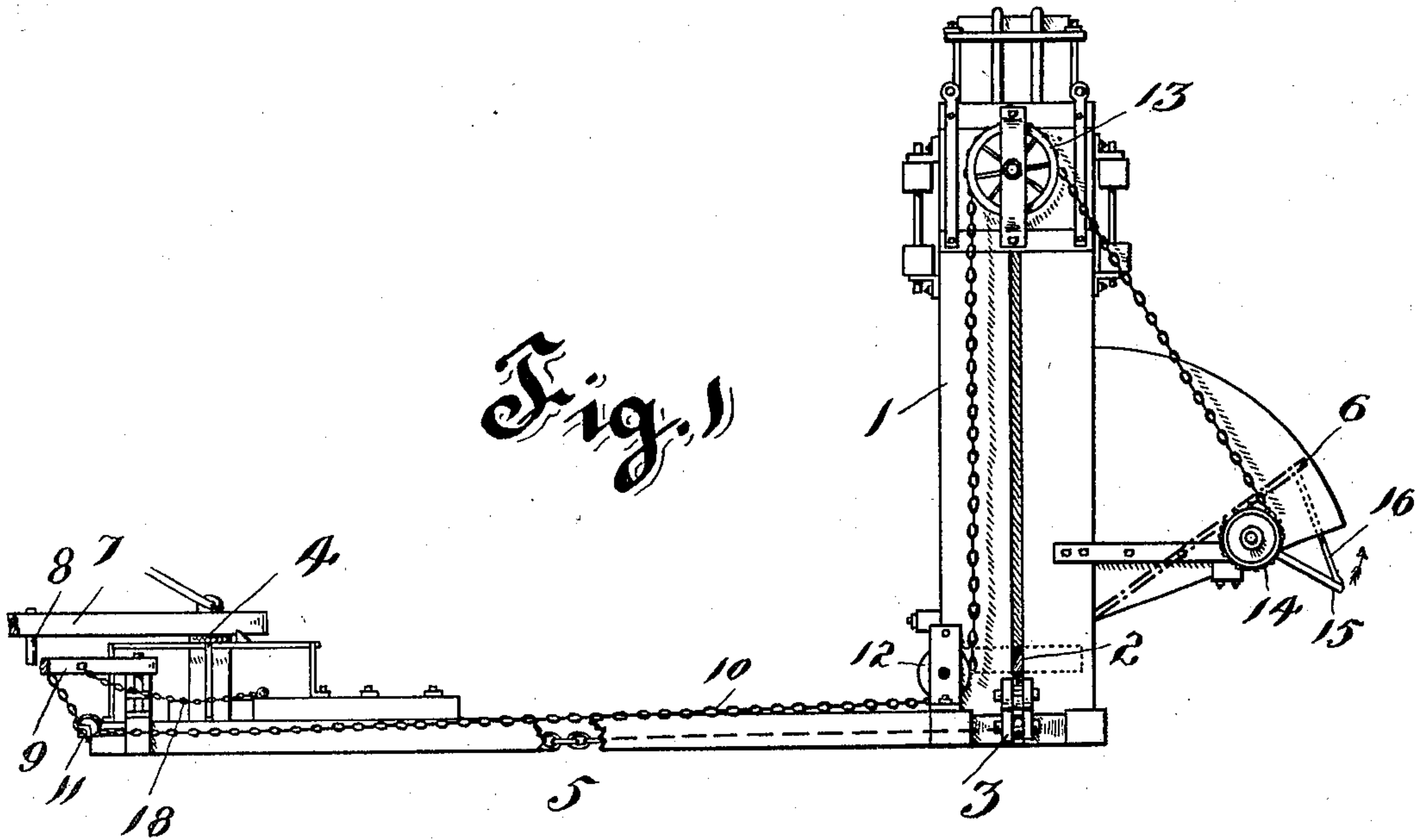


No. 754,853.

PATENTED MAR. 15, 1904.

E. DAVIS.  
DOOR CLOSER FOR BALING PRESSES.  
APPLICATION FILED OCT. 28, 1901.

NO MODEL.



WITNESSES:  
E. L. Kincaid  
W. S. Hoeman

INVENTOR  
**Edward Davis**  
BY  
*Kincaid & Co.*  
ATTORNEYS

# UNITED STATES PATENT OFFICE.

EDWARD DAVIS, OF WEST BERKELEY, CALIFORNIA.

## DOOR-CLOSER FOR BALING-PRESSES.

SPECIFICATION forming part of Letters Patent No. 754,853, dated March 15, 1904.

Application filed October 28, 1901. Serial No. 80,333. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD DAVIS, a citizen of the United States, residing at West Berkeley, in the county of Alameda and State of California, have invented certain new and useful Improvements in Door-Closers for Baling-Presses; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My present invention relates to certain improvements in devices for closing the doors of baling-presses; and it has for its objects to produce such a device which will possess the requisites of strength and durability and which will be simple in construction and efficient in operation.

The above objects I am enabled to accomplish by the means illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of an ordinary baling-press, showing the relative position of the several parts of my invention. Fig. 2 is a top view of the operating-reaches. Fig. 3 is a rear view of the parts of my invention immediately connected with the door of the press.

I will now refer to the several parts shown in the above drawings by numerals and simultaneously explain the operation of my invention.

The baling-chamber 1 is of usual construction with the vertically-reciprocating plunger 2, the latter being operated by means of the toggle-arms 3, revolving drum 4, and connecting-chain 5. The door 6, leading to the baling-chamber, is hinged in the usual manner.

As the main reach 7, which operates the drum 4, is caused to revolve, the plug 8, which is carried thereon, comes in contact with a shorter secondary reach 9, the latter being pivoted without the pivot of the main reach. Further revolution of reach 7 carries reach 9 along with it until the plug 8 finally slips from the end of the latter, when it is free to continue its revolution and compress the confined hay. Now during this short motion of the reach 9 the chain 10, which is fastened thereto, and after passing over the pulleys 11, 12, and 13, is finally wound around the sprocket-

wheel 14, consequently causes the latter to revolve.

The shaft on which the sprocket-wheel 14 is keyed is formed with an offset or yoke 15, which is secured to the free end of the door 6 by means of the short pivoted arms 16 and 17. From the description so far gone into it will be seen that as the wheel 14 is revolved, as set forth in the preceding paragraph, the yoke 15 and connected arms 16 and 17 will force the door closed, thereby accomplishing the end in view. After the hay has been compressed and the door released the latter will evidently spring open into the position shown in Fig. 1, and in so doing carry the reach 9 backward; but in order to guard against any further movement of parts and consequent slackening and displacement of chain 10 I have provided the short check-chain 18.

I do not wish to restrict myself to the employment of the exact description of sprocket wheel and chain shown, as I may find it advisable to employ some other form; but in this and other like substitutions I wish to be protected.

I am aware that other door-closers have been invented and that secondary reaches have been employed to operate them, so I do not claim such a device broadly; but

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

1. A device of the class described consisting of a suitable crank extending across the door of the hay-press, a wheel keyed to said crank, a secondary reach in the path of the main reach of the press, and a chain leading from said secondary reach and wound about said wheel, movement of said secondary reach being directed to revolve said wheel and force said door upward against said press for the purpose set forth.

2. In combination with a vertical baling-chamber, of hopper-wings extending outward from one vertical side of the chamber, a door hinged at its lower end to or near said vertical side and forming the bottom of the hopper, a crank journaled in said wings and connected to the underside of said door by means of a plurality of arms, a main reach, a secondary reach in the path of the main reach,



a wheel keyed to said crank and a chain leading from said secondary reach and adapted to revolve said wheel and force said door upward against said vertical side for the purpose set forth.

5 3. A device of the class described consisting of a suitable crank extending across the door of the hay-press, a wheel keyed to said crank, a secondary reach in the path of the main reach of the press, a chain leading from said secondary reach and connected to said wheel, and a plurality of arms pivoted to said crank and connected to said door, movement of said secondary reach being directed to revolve said wheel and force said door upward against said press substantially as and for the purpose set forth.

15 4. A device of the class described consisting

of a suitable crank extending across and connected with the door of the hay-press, a secondary reach in the path of the main reach of the press, a pulley forward of said secondary reach, a chain leading from said secondary reach forward to and over said pulley and then backward and connected with said crank by suitable connections, backward movement of said secondary reach being directed to operate said crank and force said door upward against said press for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD DAVIS.

Witnesses:

GEORGE PATTISON,  
ELIZ. KINCAID.