

No. 763,020.

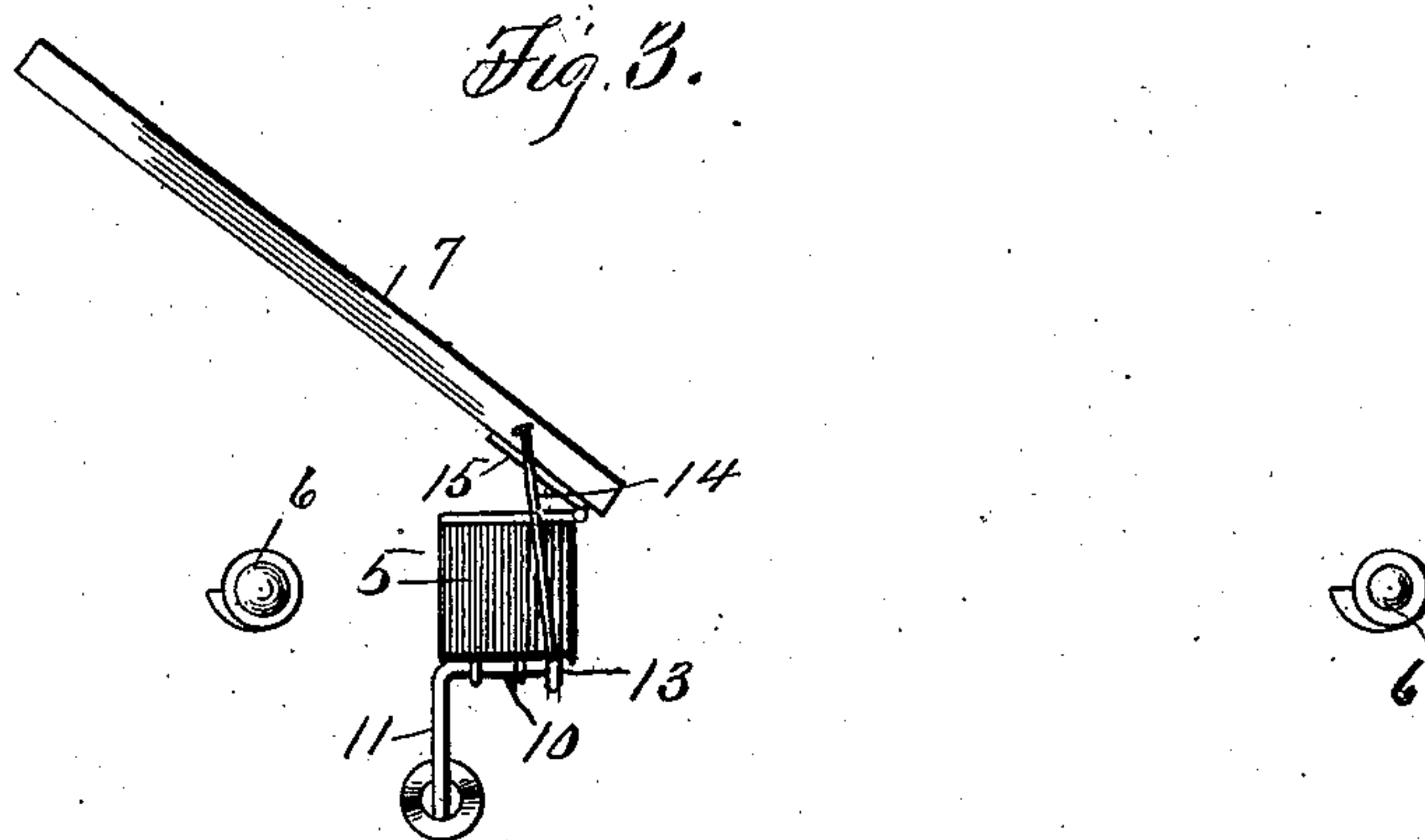
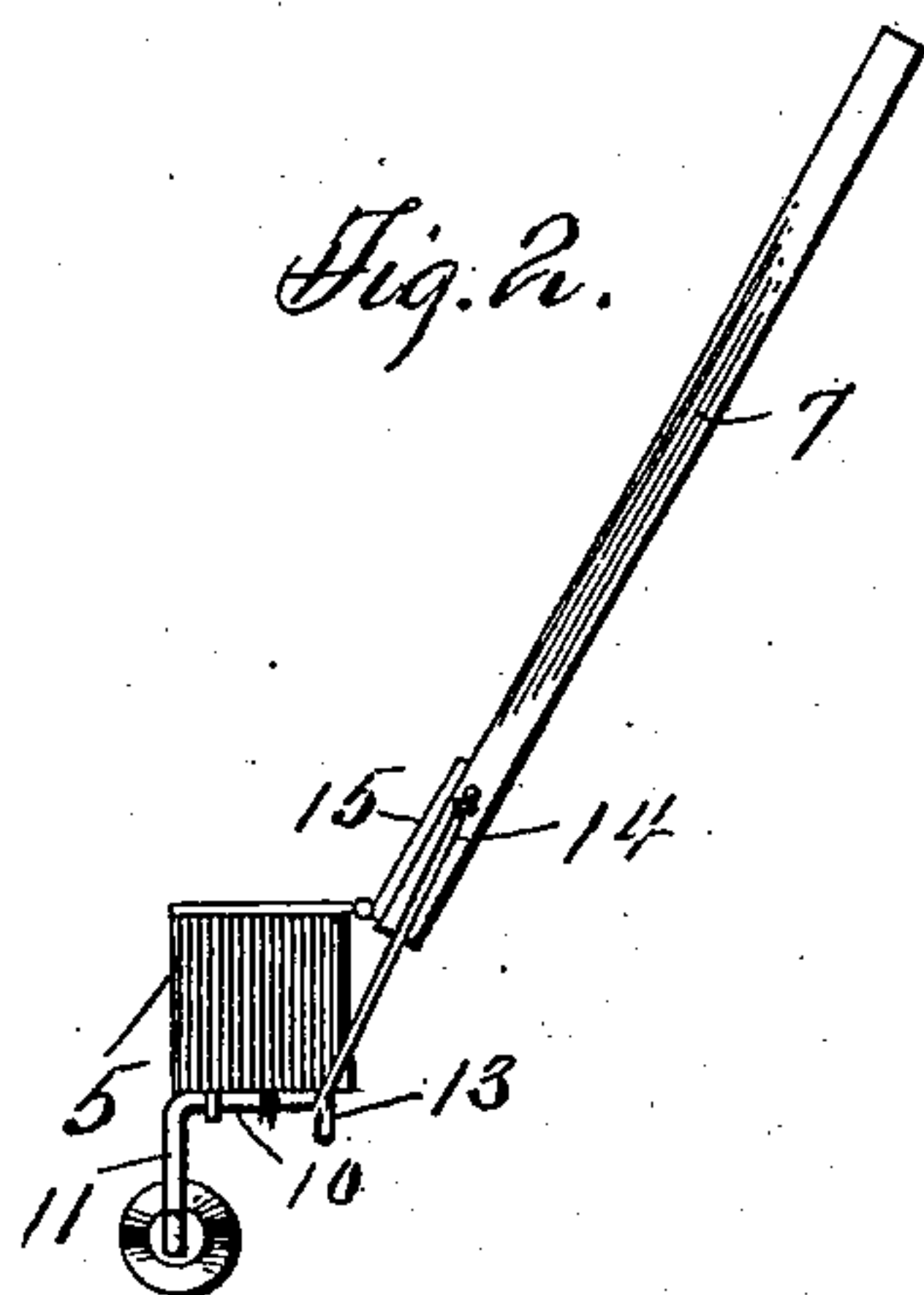
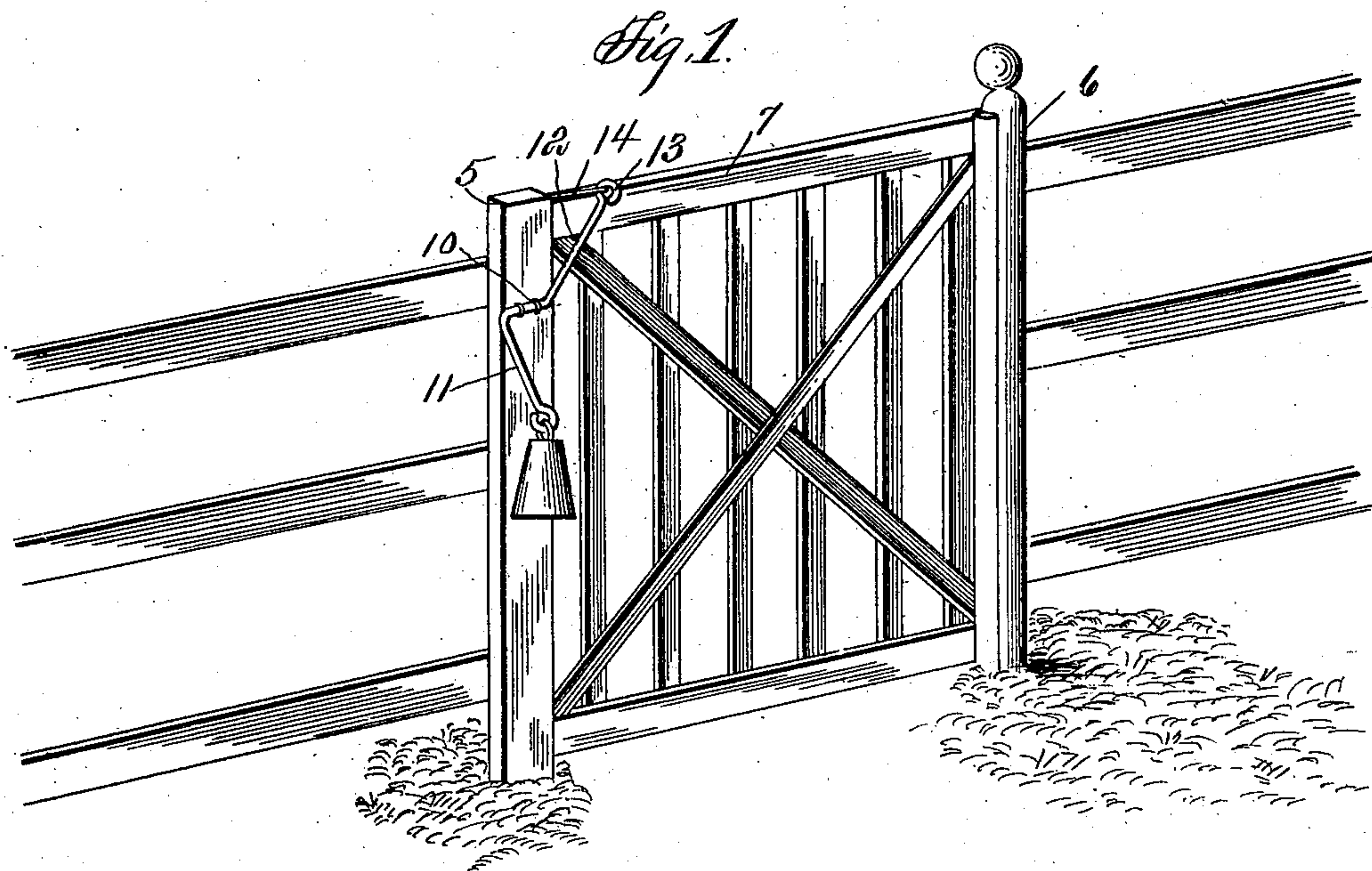
PATENTED JUNE 21, 1904.

E. B. RHODES.

GATE CLOSER.

APPLICATION FILED OCT. 25, 1900. RENEWED OCT. 8, 1903.

NO MODEL.



Witnesses  
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# UNITED STATES PATENT OFFICE.

EFFORD B. RHODES, OF ANDERSON, TEXAS.

## GATE-CLOSER.

SPECIFICATION forming part of Letters Patent No. 763,020, dated June 21, 1904.

Application filed October 25, 1900. Renewed October 8, 1903. Serial No. 176,312. (No model.)

*To all whom it may concern:*

Be it known that I, EFFORD B. RHODES, a citizen of the United States, residing at Anderson, in the county of Grimes, State of Texas, have invented certain new and useful Improvements in Gate-Closers; 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.

This invention relates to gates in general, and more particularly to the closers therefor, the object of the invention being to provide a construction wherein the gate when opened to a certain degree and released will automatically close and which when opened to its limit of movement will be held in such position.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a perspective view showing the gate in its closed position. Fig. 2 is a top plan view showing the gate in open position and the closing apparatus set to close the gate. Fig. 3 is a top plan view showing the gate in wide-open position with the apparatus set to hold the gate open.

Referring now to the drawings, 5 represents the hinge-post of a gateway, and 6 the latch-post, said posts being set any desired distance apart and having any suitable height and cross-sectional dimensions.

To the hinge-post 5 is hinged a gate 7 through the medium of any desired style of hinges, said gate being adapted to swing to lie with its outer edge against the latch-post 6 to close the gateway and when opened to its limit to lie against the outer face of the hinge-post and in a plane parallel with the plane in which it lies when closed. In order to close the gate after it has been swung through an arc of less than ninety degrees, a bell-crank lever, comprising a shaft 10 and arms 11 and 12, has its shaft portion rotatably mounted upon the face of the hinge-post opposite to that face against which the gate lies when wide open, the arms 11 and 12 being divergently disposed with reference to each other, as shown, and the upper

arm 12 being of such length that when moved to a vertical position its upper end will project slightly above the upper end of the hinge-post. This upper end of the arm 12 has an eye 13 formed therein, and with this eye is connected a link 14, the opposite end of which link is attached to a pin 15, engaged with the upper edge of the gate or secured thereto in any other suitable manner, this link being of such length as to permit the gate to be swung through an arc of one hundred and eighty degrees. The arm 12 has an oscillatory movement in a vertical plane, as will be understood, and when the gate is opened through the first ninety degrees the arm moves toward the gate-post, while during the latter portion of ninety degrees of the swing it moves away from the gate-post. Thus if the gate be released before it has moved through ninety degrees and the arm 11 be drawn downwardly the gate will be returned to its closed position. If the gate be not released until after it has passed through ninety degrees and the arm be drawn downwardly, then the gate will be moved to the limit of its outward movement to assume the wide-open position and will be held in such position. When the arm 12 moves to the vertical position, the arm 11 rises, and when the arm 12 drops forwardly the arm 11 drops, and thus in order to effect a down-pull on the arm 11 at the proper times it is only necessary to hang a weight thereon. For this purpose the arm 11 is provided with a terminal hook 16, with which is engaged a swinging weight 17, which maintains a constant downward pull upon the arm 11.

To prevent excessive swinging open of the gate under ordinary circumstances and which would insure the gate swinging to its limit when released, the link 14 is of such length that it tends to stop the gate just before it has moved through ninety degrees. The arm 12 is of spring or other material, however, and because of projecting above the post 5 this tendency to stop may be overcome by pushing with more force upon the gate, as will be readily understood.

In practice the specific construction and arrangement shown may be varied, and any

suitable materials and proportions may be used for the various parts without departing from the spirit of the invention.

What is claimed is—

- 5 The combination with a post of a gate hinged thereto and adapted to lie when open, against one face thereof, a bell-crank lever comprising a shaft portion journaled on the opposite face of the post, said lever comprising also  
10 an upper arm and a lower arm divergently disposed with reference to each other and for movement in vertical planes and the upper arm being adapted to project above the

post and being of spring material, a link connecting the upper end of the upper arm with  
15 the gate and of a length to place the arm of the lever under tension at a point of the movement of the gate, and a weight pivoted to the lower arm and adapted to hold the arms in  
20 their lowered positions.

In testimony whereof I hereunto set my hand in the presence of two witnesses.

EFFORD B. RHODES.

Witnesses:

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