

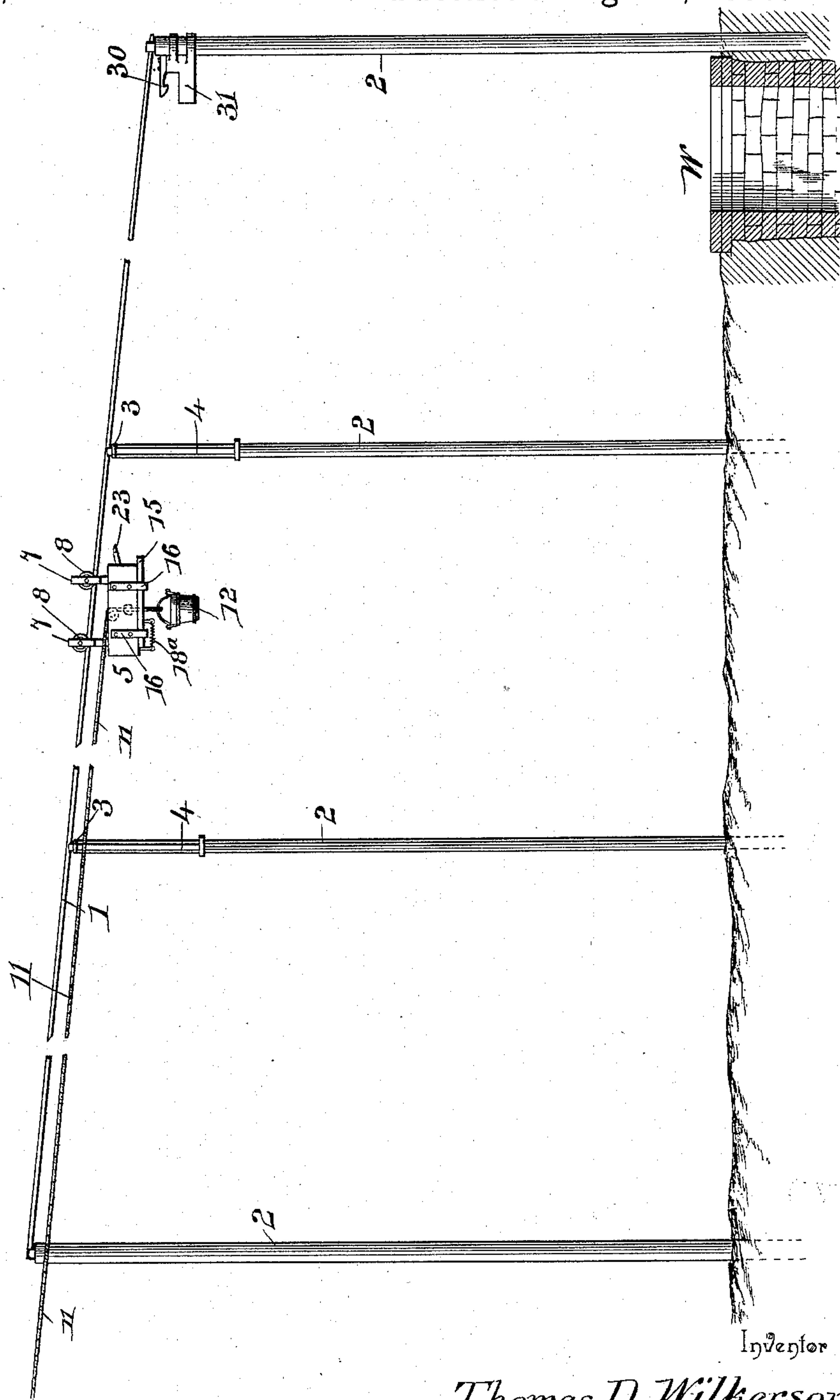
(No Model.)

2 Sheets—Sheet 1.

T. D. WILKERSON.
WATER ELEVATOR AND CARRIER.

No. 565,584.

Patented Aug. 11, 1896.



Witnesses

Jas. H. McCathran
S. P. Kohlhaas

By *His* Attorneys.

Thomas D. Wilkerson

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(No Model.)

2 Sheets—Sheet 2.

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FIG. 2.

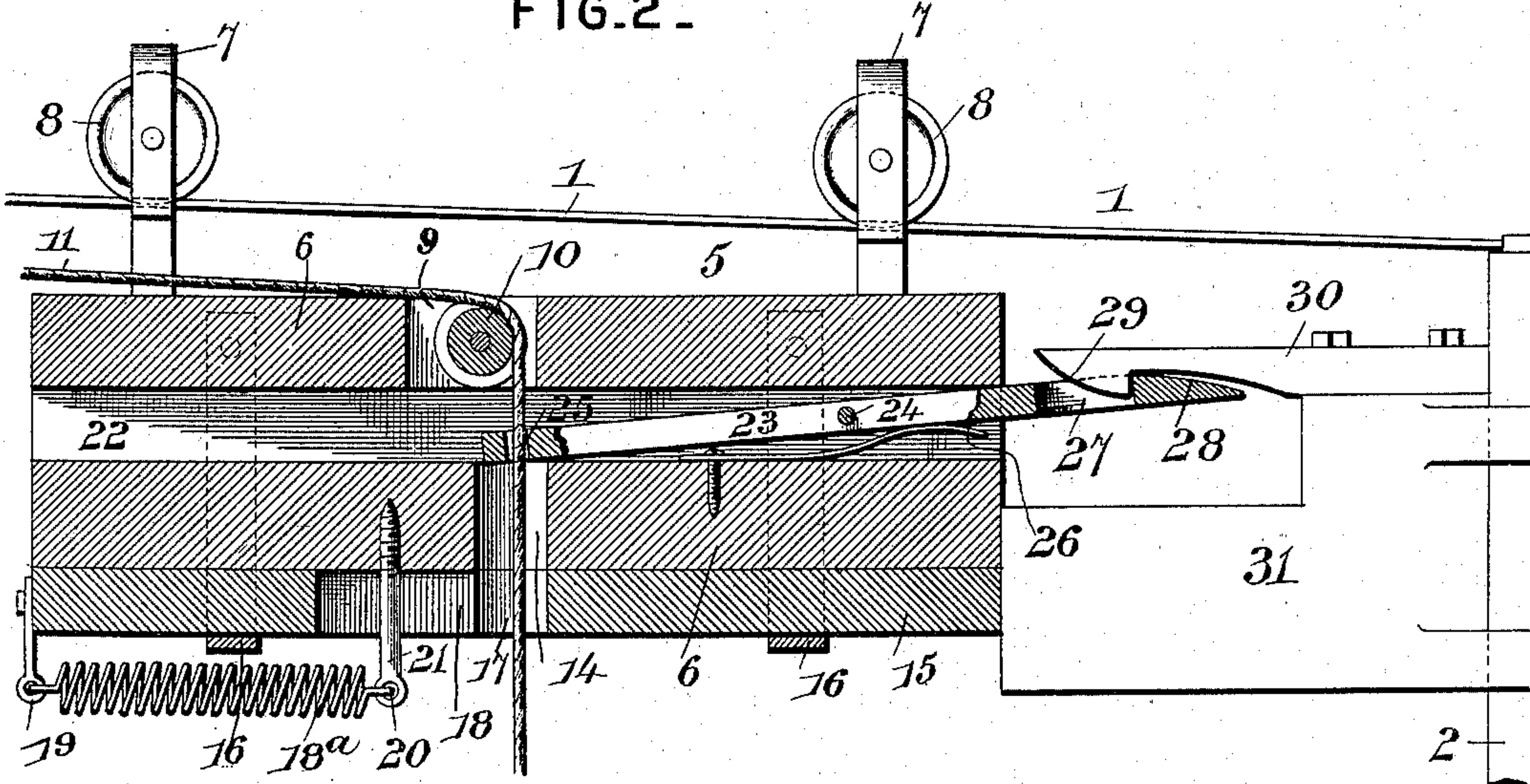


FIG. 3.

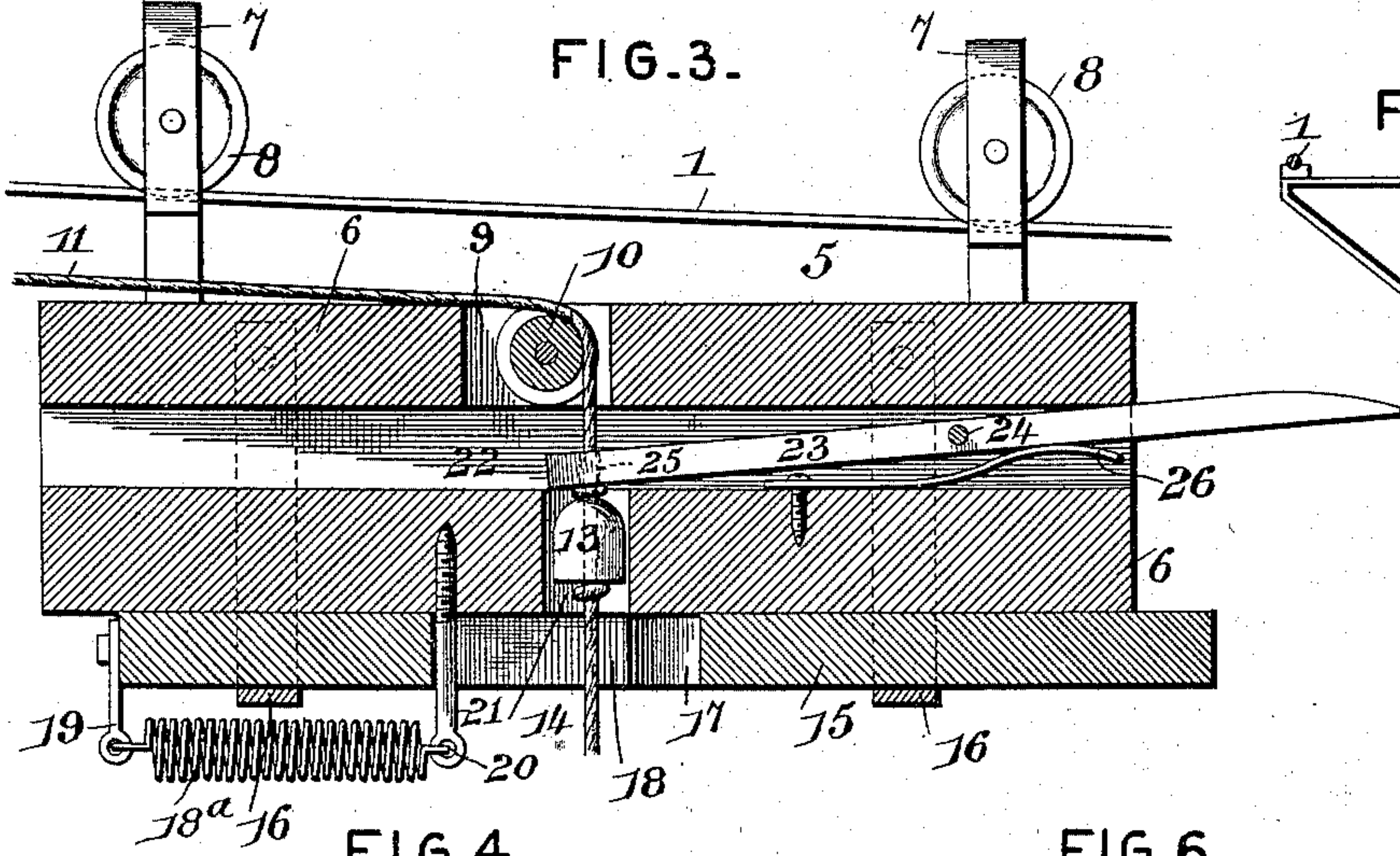


FIG. 4.

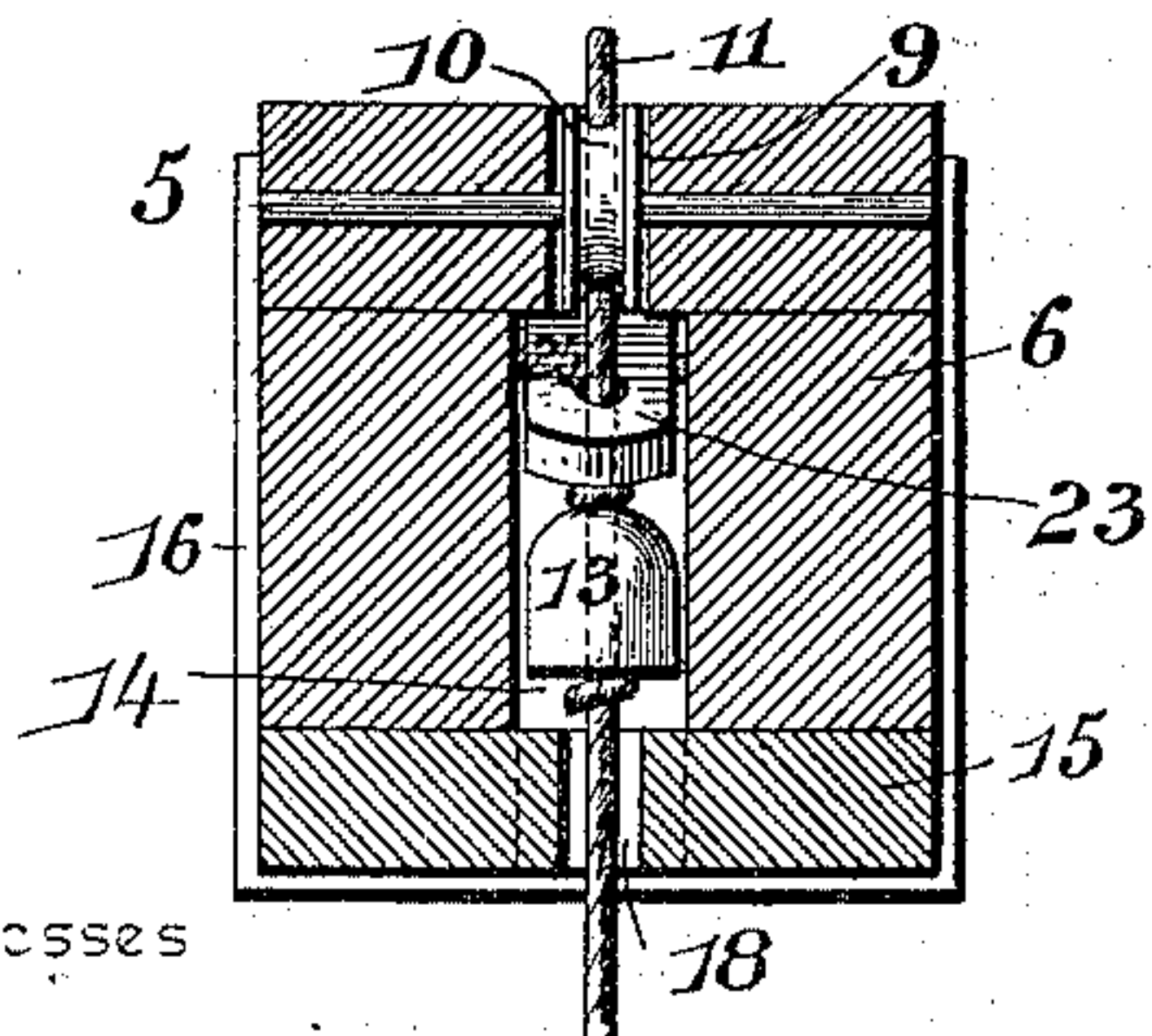
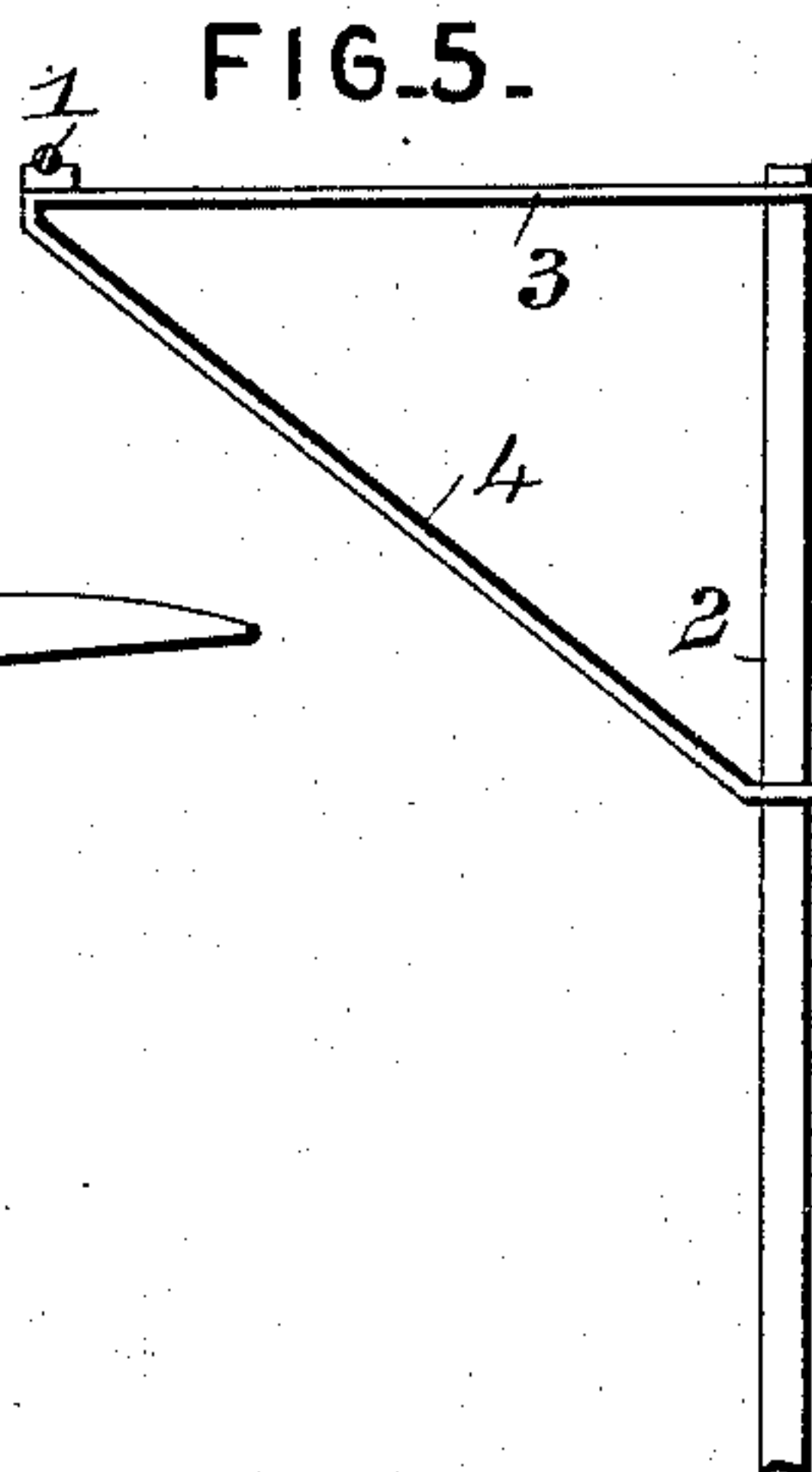
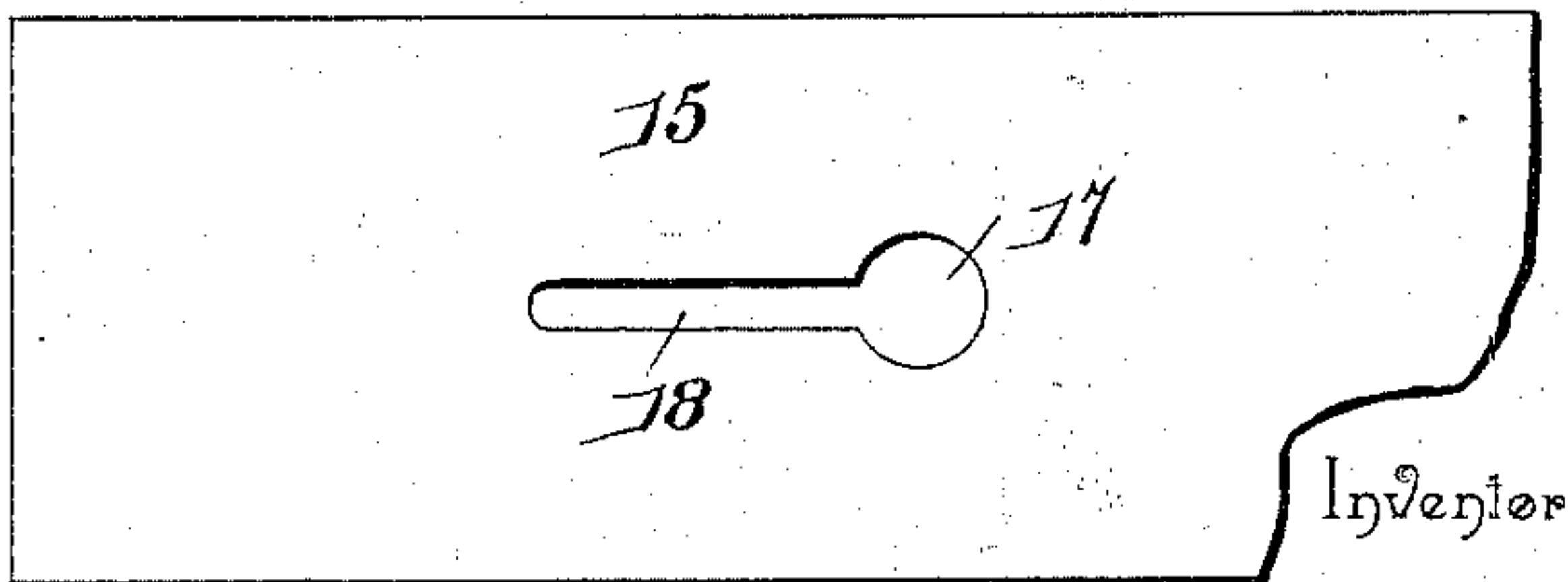


FIG. 6.



Witnesses

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UNITED STATES PATENT OFFICE.

THOMAS D. WILKERSON, OF PEORIA, TEXAS.

WATER ELEVATOR AND CARRIER.

SPECIFICATION forming part of Letters Patent No. 565,584, dated August 11, 1896.

Application filed November 30, 1895. Serial No. 570,689. (No model.)

To all whom it may concern:

Be it known that I, THOMAS D. WILKERSON, a citizen of the United States, residing at Peoria, in the county of Hill and State of Texas, have invented a new and useful Water Elevator and Carrier, of which the following is a specification.

This invention relates to water elevating and carrying apparatus; and it has for its object to provide a simple and efficient apparatus of this character whereby water may be quickly and readily drawn from a well, spring, or cistern at a point distant from the operator or house and quickly conveyed to the point of use, while at the same time providing means whereby an empty bucket can be conveyed to the well, spring, or cistern and automatically lowered and filled, thereby providing an apparatus entirely under the control of a person at a house or other distant point from the source of water supply.

With these and other objects in view, which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts hereinafter more fully described, illustrated, and claimed.

In the drawings, Figure 1 is a side elevation of a complete water elevating and carrying apparatus constructed in accordance with this invention. Fig. 2 is an enlarged central longitudinal sectional view of the carrier shown in its locked position at the well. Fig. 3 is a similar view of the carrier, showing the normal position of its parts while the bucket is being conveyed to or from the house or other point distant from the well. Fig. 4 is a central transverse sectional view of the carrier. Fig. 5 is a side elevation of one of the intermediate supporting-posts for the inclined track-wire. Fig. 6 is a plan view of the slide.

Referring to the accompanying drawings, the numeral 1 designates an inclined track-wire, which is tightly stretched over a series of supporting-posts 2, the intermediate of which posts, between the terminals of the wire track, are preferably provided at their upper ends with the horizontal supporting-arms 3, braced in position by inclined braces 4, connected thereto and also to the posts, and said arms 3 have the track-wire 1 suit-

ably attached to their outer extremities, so as not to interfere with the travel of the carrier of the apparatus. The tightly-stretched track-wire 1 declines toward the well or other source of water supply located at one terminal of the track-wire, and the supporting-post 2 for this terminal of the track-wire is located directly at one side of the well or source of water supply W to provide for the automatic raising and lowering of the water-bucket in the well, and the wire 1 leads from the well or source of supply W to a house or any other distant point to which it is desired to convey water.

The inclined track-wire 1 supports for travel thereon a carrier 5, essentially consisting of an elongated carrier-block 6, [having fitted to the upper side thereof and near its opposite ends the sheave-frames 7, in which are journaled grooved traveler-wheels 8, which ride on top of the track-wire 1 to permit the carrier to freely travel from one terminal of said wire to the other. The carrier-block 6 is provided in its upper side with a slot 6, in which is journaled a grooved guide-pulley 10, over which passes the hoisting-rope 11. The hoisting-rope 11 is guided through one of the sheave-frames 7 over the wheel therein, and is of a sufficient length so as to extend from one terminal of the wire track 1 to the other, whereby the operator at a distant point can readily control the apparatus, and the said hoisting-rope carries at one end a water-bucket 12, designed to work below the carrier and to be lowered and elevated in the well when the carrier is disposed directly thereabove.

The hoisting-rope 11, which carries at one end below the carrier a water-bucket 12, is provided at a point directly above and adjacent to said bucket with a catch-button 13, designed to work into the button-opening 14, formed in the lower side of the carrier-block 6 directly below the guide-pulley 10, mounted within the top portion of said carrier-block. Normally when the catch-button 13 of the hoisting-rope is disposed within the button-opening 14 of the block 6 the said button is confined or locked within said opening by means of a lock-slide 15, mounted to slide flat against the under side of the block 6 and working loosely in the slide-loops 16, con-

sisting of metal straps fastened at their ends to opposite sides of the block 6 and extending transversely under said block to form loops to receive and guide the lock-slide 15 in its movement.

The lock-slide 15 is provided therein at a point intermediate of its ends with a button-opening 17 of a size to allow the button 13 to freely pass therethrough and with a narrow slot 18, leading off from one side of said button-opening 17. The button-opening 17 is normally held out of alinement with the button-opening 14 in the bottom of the block 6 by means of a retractile spring 18^a, arranged below the slide 15. The spring 18^a is suitably connected at one end, as at 19, to one end of the slide 15, and is connected at its other end to the lower perforated end 20 of the stop arm 21, fitted in the lower side of the block 6 and projecting through and below the slot 18 to provide a fixed point of attachment for one end of the spring 18^a and also to form a stop which limits the movement of the slide in one direction. Normally the spring 18^a causes one end of the slide 15 to project beyond one end of the block 6, and in this position the openings 14 and 17 are out of alinement, so that the hoisting-rope 11 extends through the slot 18, and the button 13 is held confined within the opening 14, so as to hold the bucket 12 supported in an elevated position directly under the carrier-block.

The carrier-block 6 is provided with a longitudinal recess 22, within which is arranged a latch-lever 23. The latch-lever 23 is pivoted intermediate of its ends, as at 24, within the recess of the carrier-block, and is provided in its inner end with a rope-opening 25, through which the hoisting-rope 11 passes, and it will be noted that the inner perforated end of the said latch-lever is disposed at a point directly above the button-opening 14 in the bottom of the carrier-block, so that when the button 13 is drawn into the opening 14 a continued pull on the rope 11 will carry the button against the inner end of the lever 23 and thereby depress the outer end thereof, which is normally held in an elevated position by means of a spring 26, arranged within one end of the block 6 and bearing under and against the lever 23, near its outer end. The outer end of the lever 23 projects beyond one end of the box 6, and is provided therein with a catch-opening 27 and with an outer beveled tip 28, leading up to the catch-opening 27 and adapted to ride under the beveled end 29 of a fixed catch-hook 30.

The fixed catch-hook 30 is suitably fastened in position on a strike-block 31, suitably attached to the wire-supporting post 2, directly adjacent to the well or source of water supply from which the water is to be taken. The outer end of the strike-block 31 is disposed below and projects beyond the outer beveled end of the catch-hook, so as to be struck by the normally-projected end of the slide 15

before the outer perforated end of the latch-lever becomes engaged with the hook 30 in order that the button 13 will be released about simultaneously with the engagement of the latch-lever of the carrier with said catch-hook.

Assuming the button 13 to be locked within the opening 14 in the carrier-block, the operator at a distant point from the well, by simply paying out the hoisting-rope 11, will allow the carrier to run down the track to the terminal thereof directly adjacent to the well, and at this point the normally-projected end of the slide 15 engages against the slide-block 31 and the outer end of the latch-lever becomes automatically engaged with the catch-hook 30. When the slide 15 strikes the block 31, the opening 17 is thrown below and in alinement with the opening 14, thereby allowing the button 13 to pass out of the openings 14 and 17, so that the bucket will automatically lower into the well or source of water supply. When the bucket has been filled, a pull on the hoisting-rope will elevate the same and carries the button 13 through the opening 17 into the opening 14. A continued pull on the hoisting-rope carries the button 13 against the inner end of the latch-lever and thereby lowers the outer end of the latch-lever and disengages the same from the catch-hook 30, so that the carrier can be drawn away from the post adjacent the well, thereby allowing the spring 18^a to move the slide 15 in a direction to carry the opening 17 out of alinement with the opening 14 and confine the button 13 in said latter opening. A still further pulling of the rope 11 draws the carrier and the filled bucket to the house or other point of use.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

1. In a water elevating and carrying apparatus, the combination of an elevated track, a carrier-block provided at the top with traveler-wheels riding on said track, and in its lower side with a button-opening, a spring-actuated slide mounted on the lower side of said carrier-block and provided therein with a button-opening normally held out of alinement with the button-opening of the carrier-block, means for automatically adjusting the slide to bring its button-opening in alinement with that of the carrier-block, and a hoisting-rope passed through the carrier-block and slide and provided with a catch-button adapted to work through the opening in the slide and into the opening of the carrier-block, substantially as set forth.

2. In an apparatus of the class described, the elevated wire track, a carrier-block provided at the top with traveler-wheels riding on said track, and in its lower side with a but-

ton-opening, a lock-slide supported to slide against the lower side of the carrier-block and provided therein with a button-opening and a narrow slot leading off from said button-
 5 opening, a stop-arm fitted in the lower side of the carrier-block and projected through said slot, a retractile spring connected at one end to said stop-arm and its other end to one
 10 end of the lock-slide to normally adjust the button-opening thereof out of alinement with the button-opening in the carrier-block, means for automatically adjusting said slide in a direction opposite the adjustment of the
 15 spring, and a hoisting-rope passed through the carrier-block and slide and provided with a catch-button adapted to work through the opening in the slide and into the opening in the carrier-block, substantially as set forth.
 20 3. In an apparatus of the class described, the combination with an elevated track and a fixed catch-hook; of a wheeled carrier-block suspended from said track and provided in its lower side with a button-opening, a spring-
 25 actuated lock-slide mounted on the lower side of the carrier-block and provided therein with a button-opening normally out of alinement with the similar opening of the carrier-block, a latch-lever provided with a normally spring-
 30 elevated outer end adapted to automatically engage the said catch-hook, and with an inner perforated end disposed directly above the button-opening of the carrier-block, and a hoisting-rope passed through the carrier-

block and the inner perforated end of the latch-lever and provided with a catch-button 35 adapted to work through the opening in the slide and the carrier-block and also against the inner end of said latch-lever, substantially as set forth.

4. In a water elevating and carrying appa- 40 ratus, the elevated track, a fixed strike-block, a fixed catch-hook arranged directly above said strike-block, a wheeled carrier-block suspended from the track and provided in its lower side with a button-opening, a spring- 45 actuated lock-slide mounted on the lower side of the carrier-block and provided therein with a button-opening, said slide being normally projected at one end beyond one end of the carrier-block to engage against said strike-block, 50 a latch-lever provided with a normally spring-elevated outer end adapted to engage said catch-hook, and having its inner end disposed above the button-opening of the carrier-block, and a hoisting-rope having a catch-button 55 adapted to work through the button-openings of the slide and carrier-block and against the inner end of said latch-lever, substantially as set forth.

In testimony that I claim the foregoing as 60 my own I have hereto affixed my signature in the presence of two witnesses.

THOMAS D. WILKERSON.

Witnesses:

W. C. COLDWELL,
 THOS. JOHNSON.