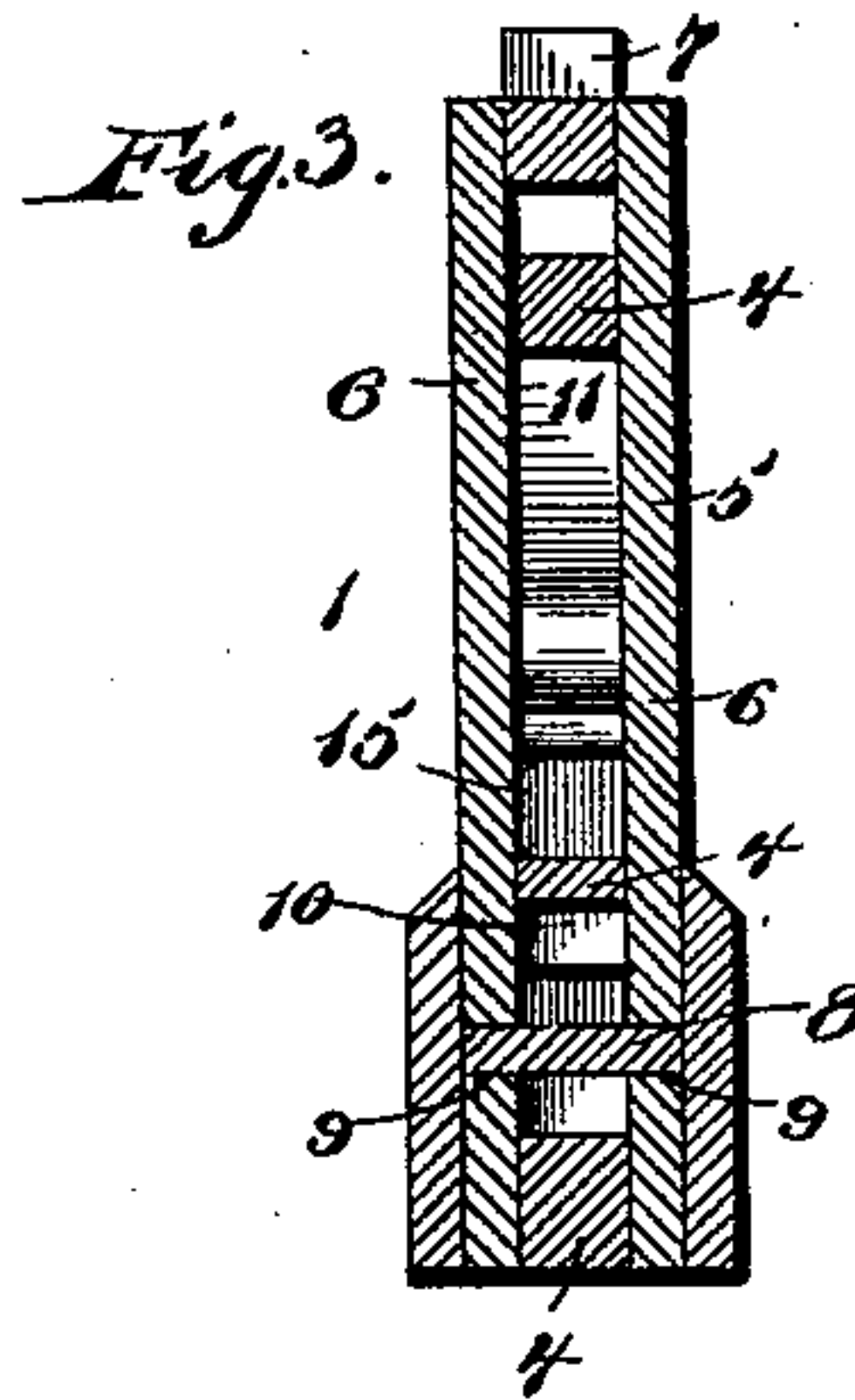
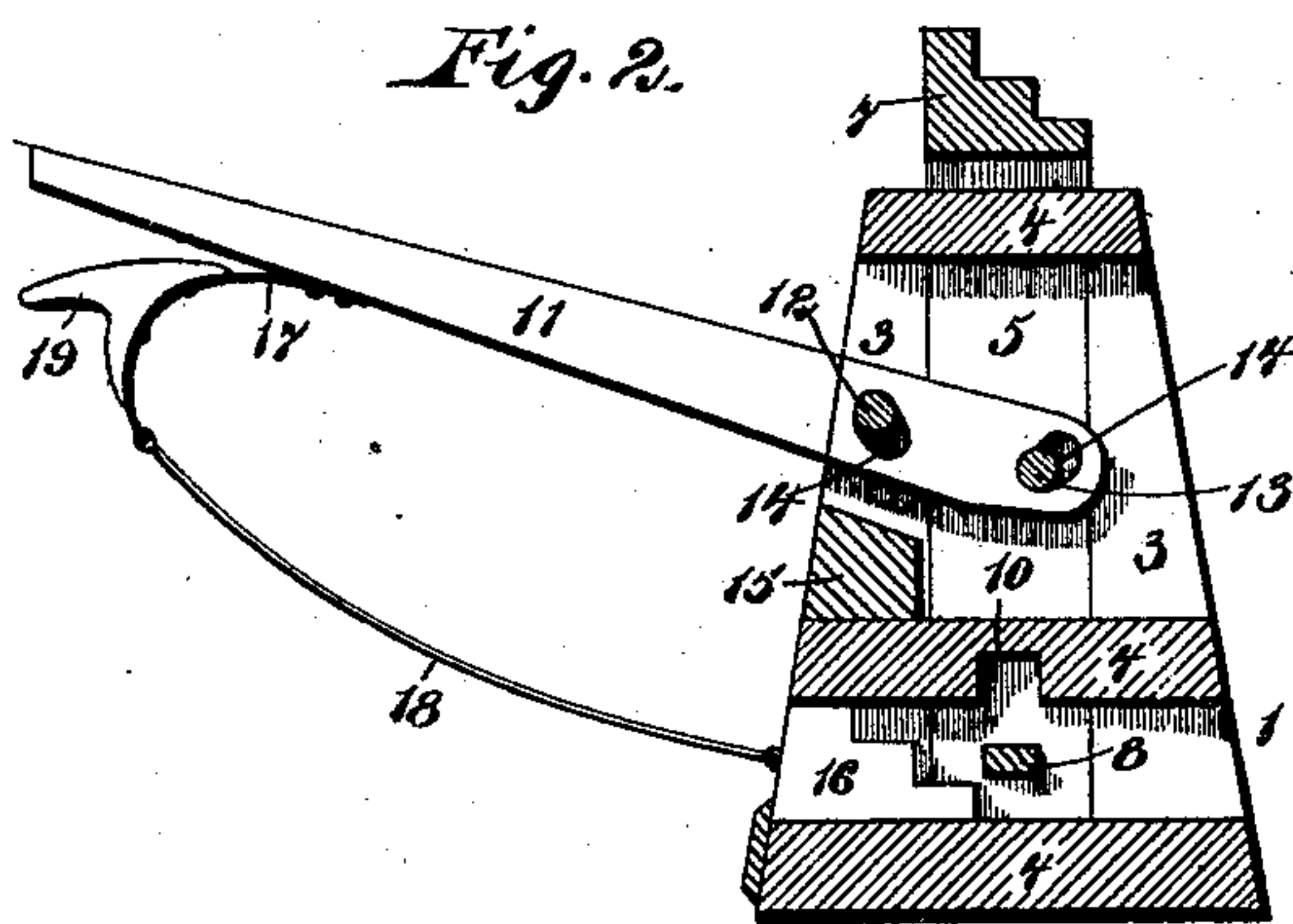
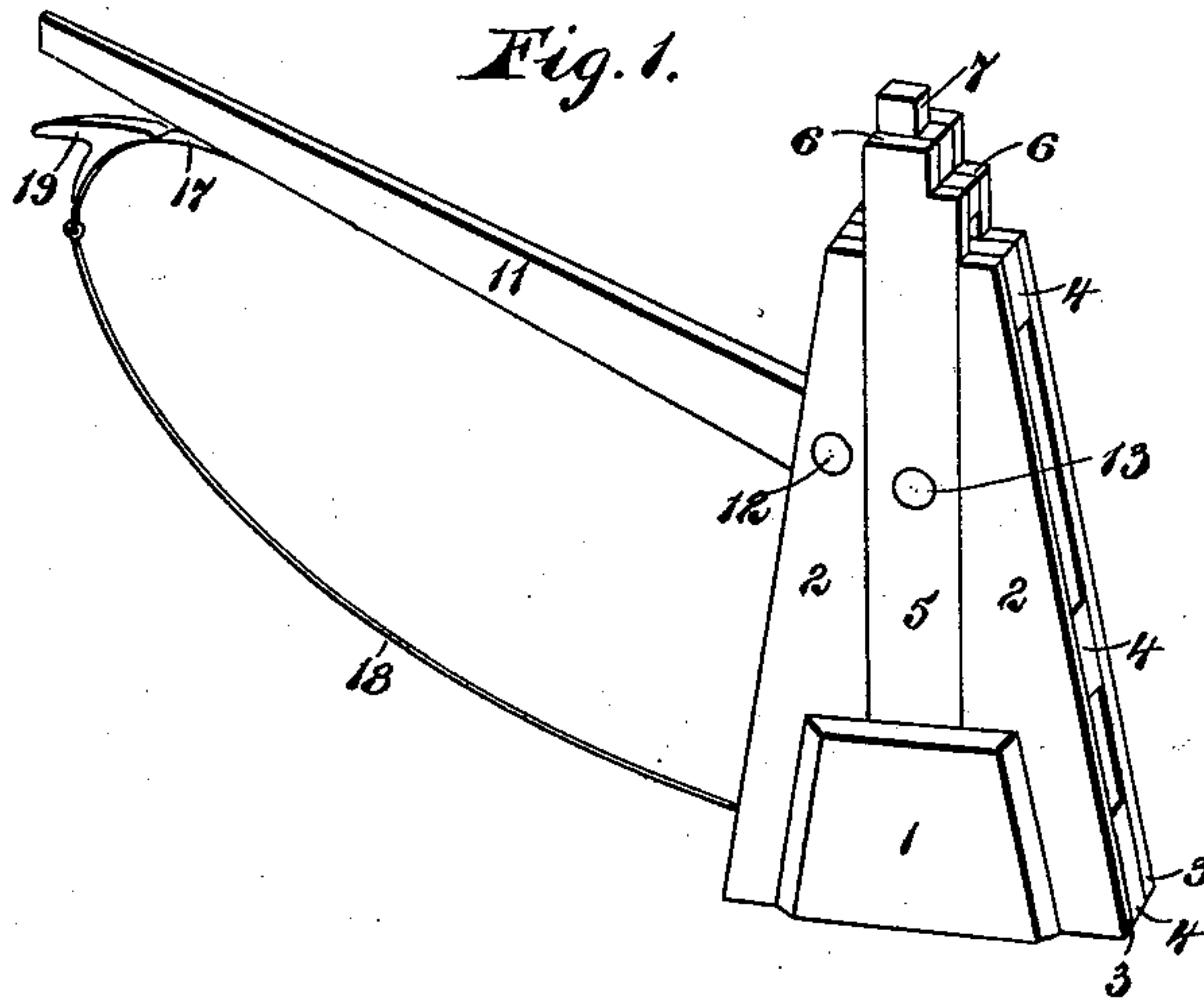


(No Model.)

W. C. WALKER.
LIFTING JACK.

No. 601,293.

Patented Mar. 29, 1898.



WITNESSES

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LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 601,293, dated March 29, 1898.

Application filed March 16, 1897. Serial No. 627,793. (No model.)

To all whom it may concern:

Be it known that I, WARD C. WALKER, a citizen of the United States, residing at Athens, in the county of Calhoun and State of Michigan, have invented certain new and useful Improvements in Lifting-Jacks; 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 improvements in lifting-jacks.

The object of the invention is to provide a device of the character mentioned which is simple and efficient and one which is adapted to elevate with ease and despatch the wheels of a vehicle from the ground by the employment of only one hand, and, further, the invention aims to provide in the construction of a lifting-jack an improved means for retaining the lifting-bar thereof locked in elevated position.

With these objects in view the invention consists, substantially, in the construction, combination, and arrangement of parts, as will be hereinafter fully illustrated, described, and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a lifting-jack constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view thereof. Fig. 3 is a transverse sectional view taken through the lifting-bar.

Similar numerals of reference designate corresponding parts in all the figures of the drawings.

Referring to the drawings, 1 designates a pedestal which comprises a pair of spaced uprights 2, each of the latter being formed of parallel strips 3 of any suitable material, and for the purpose of connecting the uprights 2 ribs 4 are placed at the upper and lower ends of said uprights and also intermediate said ends, the ribs 4 extending throughout the length of the pedestal 1.

Arranged between the uprights 2 and adapted to fit snugly therein is a vertically-slidable lifting-bar 5, the latter comprising parallel strips 6, spaced a distance from each other corresponding to the space between the parallel strips 3 of the uprights 2, so that the sides of the lifting-bar 5 are flush with the

sides of the uprights 2. Between the upper ends of the strips 6 a stepped rest-block 7 is secured in any suitable manner, and at the lower end of the lifting-bar 5 a transverse connecting-bar 8 is also secured, the ends of said connecting-bar being disposed in notches 9, formed in the lower ends of the parallel strips 6, and said transverse connecting-bar 8 is adapted to enter a notch 10, formed in the lower side of the rib 4, which is arranged intermediate the ribs at the ends of the uprights 2. By reason of this intermediate rib 4 it will be seen that the upward movement of the lifting-bar 5 is limited.

For the purpose of operating the lifting-bar 5 a lever 11 is pivoted between the parallel strips 3 of one of the uprights 2 by means of a pin 12, extending transversely of said upright, and the inner end of the lever 11 is similarly connected to the lifting-bar 5 by a pin 13, the pin 12 forming a fulcrum for the lever 11, so as to permit the same being readily moved in order that the lifting-bar 5 may be capable of a vertically-slidable movement. The pins 12 and 13 pass through spaced reversely-inclined elongated slots 14, which slots are formed adjacent to the inner end of the lever 11 and permit a free movement of said lever on the pins 12 and 13, and for limiting the downward swing of the lever 11 a block 15 is secured in the upright 2 immediately below the fulcrum-pin 12 and above the intermediate rib 4.

In order that the lifting-bar 5 may be locked in the position to which it is elevated, a slidable supporting-block 16 is arranged upon the lower rib 4 and is adapted to move longitudinally thereon, said supporting-block being provided with a series of steps, upon which the connecting-bar 8 is adapted to rest, the particular one of said steps being determined by the height to which it is desired to elevate the lifting-bar 5, and for operating the supporting-block 16 a spring-strip 17 is secured to the lever 11 by any desired means adjacent to the outer end of such lever. Connected to the free end of the spring-strip 17 is one end of a connecting-link 18, the other end of said link 18 being secured to the sliding supporting-block 16, so that upon operation of the lever 11 the sliding block 16 is moved along the lower rib 4 through the medium of the con-

necting-link 18, a handle 19 being mounted upon the spring-strip 17 for the operation of the latter.

The advantages of the herein-described lifting-jack will be readily understood by those familiar with such devices. When it is desired to elevate the wheels of a vehicle above the ground for the purpose of greasing the same or other similar objects, the herein-described jack is placed beneath the axle of the wheels, so that such axle may rest upon one of the steps of the rest-block 7. By depressing the outer end of the lever 11 the inner end of such lever will be elevated, carrying with it the lifting-bar 5, and consequently raising the wheels from the ground. During the upward sliding movement of the lifting-bar 5 a space is being formed between the lower end thereof and the lower rib 4, and by reason of the outer end of the lever 11 being depressed the spring-strip 17 is carried therewith, and through the medium of the connecting-link 18 a sliding movement is imparted to the supporting-block 16, which movement causes said block to slide forwardly into the space formed by the rise of the lower end of the lifting-bar 5. This sliding movement of the supporting-block 16 causes the same to pass beneath the lower end of the lifting-bar 5, and when the latter has been elevated to the desired extent further depression of the lever 11 is stopped, when the connecting-bar 8 may rest upon one of the steps of the supporting-block 16. In this position it will be noted that the lifting-bar 5 is locked, so that descent of the same is entirely prevented. To lower the lifting-bar, it is first necessary to depress the outer end of the lever 11 slightly in order to remove the weight of the vehicle from the supporting-block 16, when by grasping the handle 19 on the spring-strip 17 and pressing said handle toward the lever 11 a rearward movement of the free end of the spring-strip 17 is effected. This movement of the spring-strip 17, together with the elevation of the outer end of the lever 11, will cause the sliding supporting-block 16 being withdrawn from beneath the lower end of the lifting-bar 5 and at a sufficient rate of speed to remove the same out of the downward path of the lifting-bar 5, the latter movement being accomplished by reason of the outer end of the lever 11 being elevated, so that the vehicle-wheels may return to the ground.

From the foregoing description it is obvious that I have provided a lifting-jack which, while simple in its construction, is very effective in its operation and one in which the elevation of the wheels of a vehicle above the ground may be accomplished by the employment of but one hand, and it is further apparent that the supporting-block 16 provides efficient means for retaining the lifting-bar locked in its elevated position.

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

1. A lifting-jack, comprising a suitable pedestal, a lifting-bar carried thereby and adapted to slide therein, a lever fulcrumed to the pedestal and connected to the lifting-bar, a spring-strip secured to said lever, a sliding supporting-block disposed in the pedestal and adapted to support the lifting-bar in its elevated position, and suitable connections between the spring-strip and said supporting-block, substantially as set forth. 70 75

2. A lifting-jack, comprising a suitable pedestal, a lifting-bar carried thereby and adapted to slide therein, a lever provided with reversely-inclined slots and adapted to operate said lifting-bar, said slots being adapted to receive the means for connecting said lever to the pedestal and the lifting-bar, a slidable supporting-block disposed in the pedestal and adapted to lock the lifting-bar in its elevated position, a spring-strip secured to the lever, and suitable means for connecting said strip with the supporting-block, whereby the latter is adapted to slide at right angles to the lifting-bar when the operating-lever is operated, substantially as set forth. 80 85 90 95

3. A lifting-jack, comprising a suitable pedestal, a lifting-bar carried thereby and adapted to slide therein, a lever provided with reversely-inclined slots and adapted to operate said lifting-bar, said slots being adapted to receive the means for connecting said lever to the pedestal and the lifting-bar, a slidable supporting-block disposed in the pedestal and adapted to lock the lifting-bar in its elevated position, a spring-strip secured to the lever, a handle carried by said strip, and suitable means for connecting the strip with the supporting-block, whereby the latter is adapted to slide at right angles to the lifting-bar when the operating-lever is operated, substantially as set forth. 100 105

4. A lifting-jack, comprising a pedestal formed of a pair of spaced uprights each of which is formed of parallel strips, ribs arranged at the upper and lower ends of said uprights and intermediate of said ends, a lifting-bar carried by said pedestal and adapted to slide therein, said lifting-bar comprising parallel strips spaced from each other, whereby the sides of the lifting-bar are flush with the sides of the uprights of the pedestal, a stepped rest-block secured between the upper ends of said strips, a transverse connecting-bar arranged at the lower end of the lifting-bar, a lever provided with reversely-inclined slots and adapted to operate said lifting-bar, said slots being adapted to receive the means for connecting the said lever to the pedestal and the lifting-bar, a block secured in one of the uprights of the pedestal and adapted to limit the downward swing of the operating-lever, a slidable supporting-block disposed in the pedestal and adapted to lock the lifting-bar in its elevated position, said supporting-block being provided with a series of steps upon which the transverse connecting-bar of the lifting-bar rests when the 110 115 120 125 130

latter is in elevated position, a spring-strip
secured to the lever, a handle carried by said
spring-strip, and suitable means for connect-
ing the strip with the supporting block, where-
5 by the latter is adapted to slide at right an-
gles to the lifting-bar when the operating-le-
ver is operated, substantially as and for the
purpose set forth.

In testimony whereof I have signed this
specification in the presence of two subscrib- 10
ing witnesses.

WARD C. WALKER.

Witnesses:

W. H. LEWIS,
WM. W. BOUGHTON.