

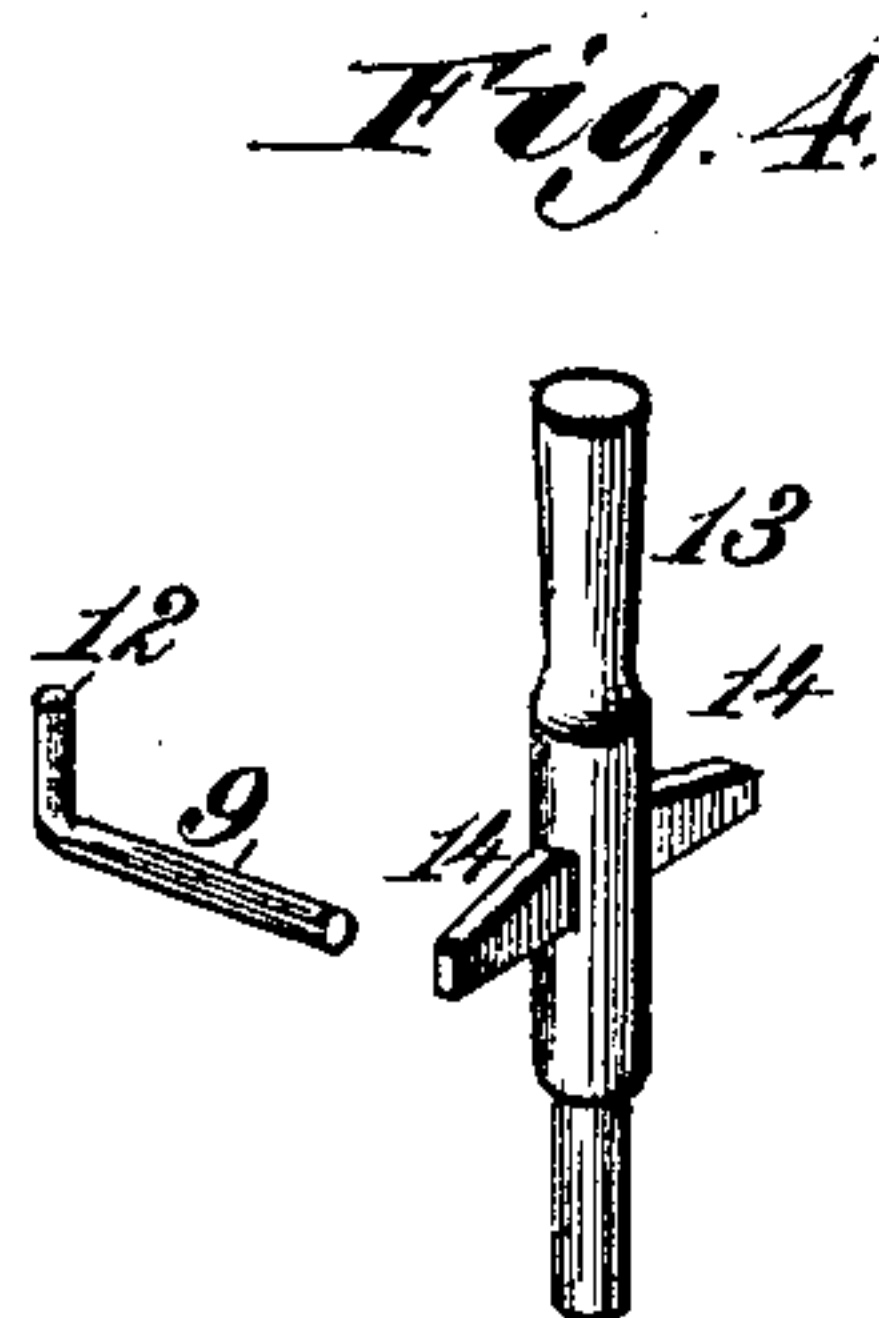
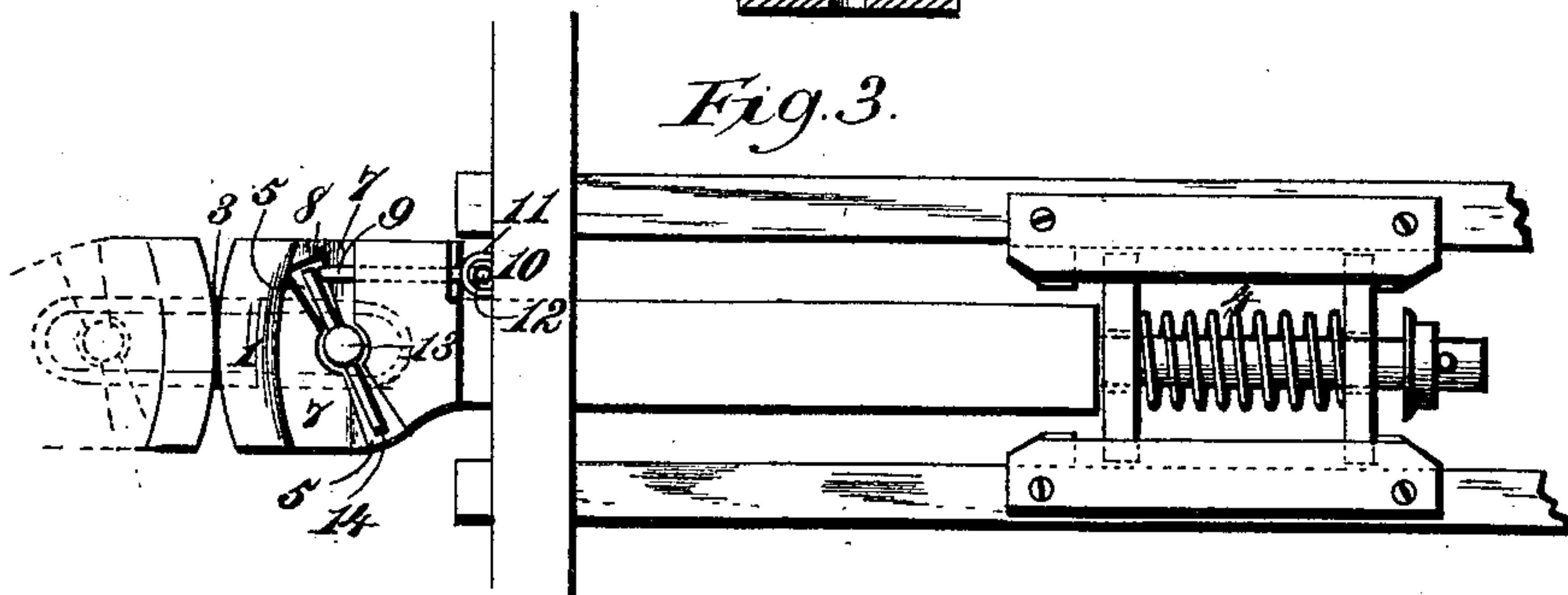
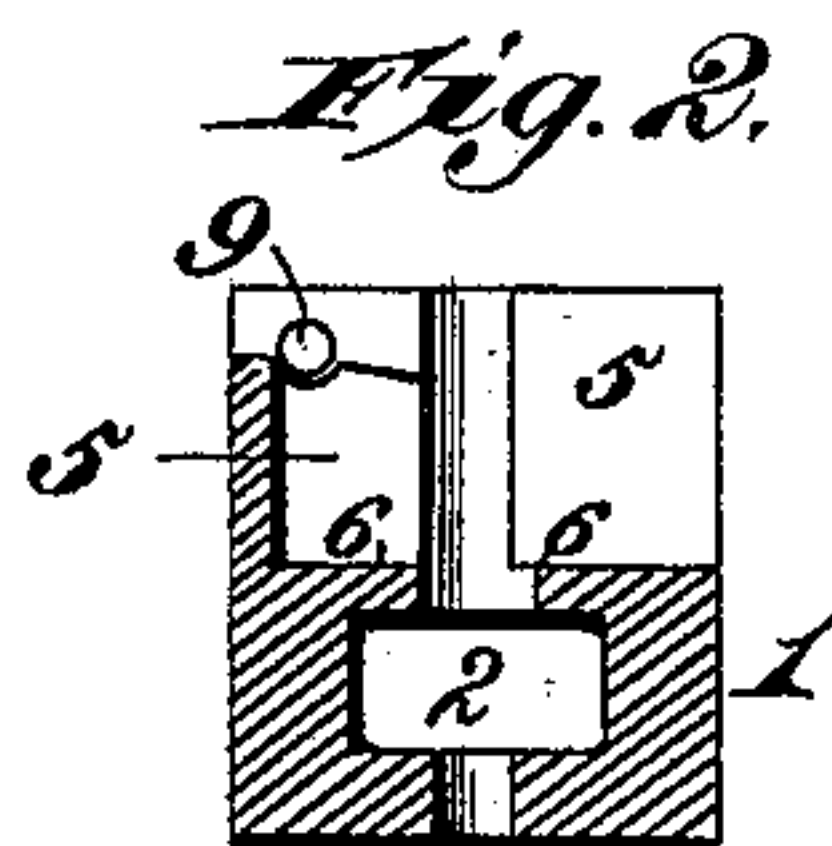
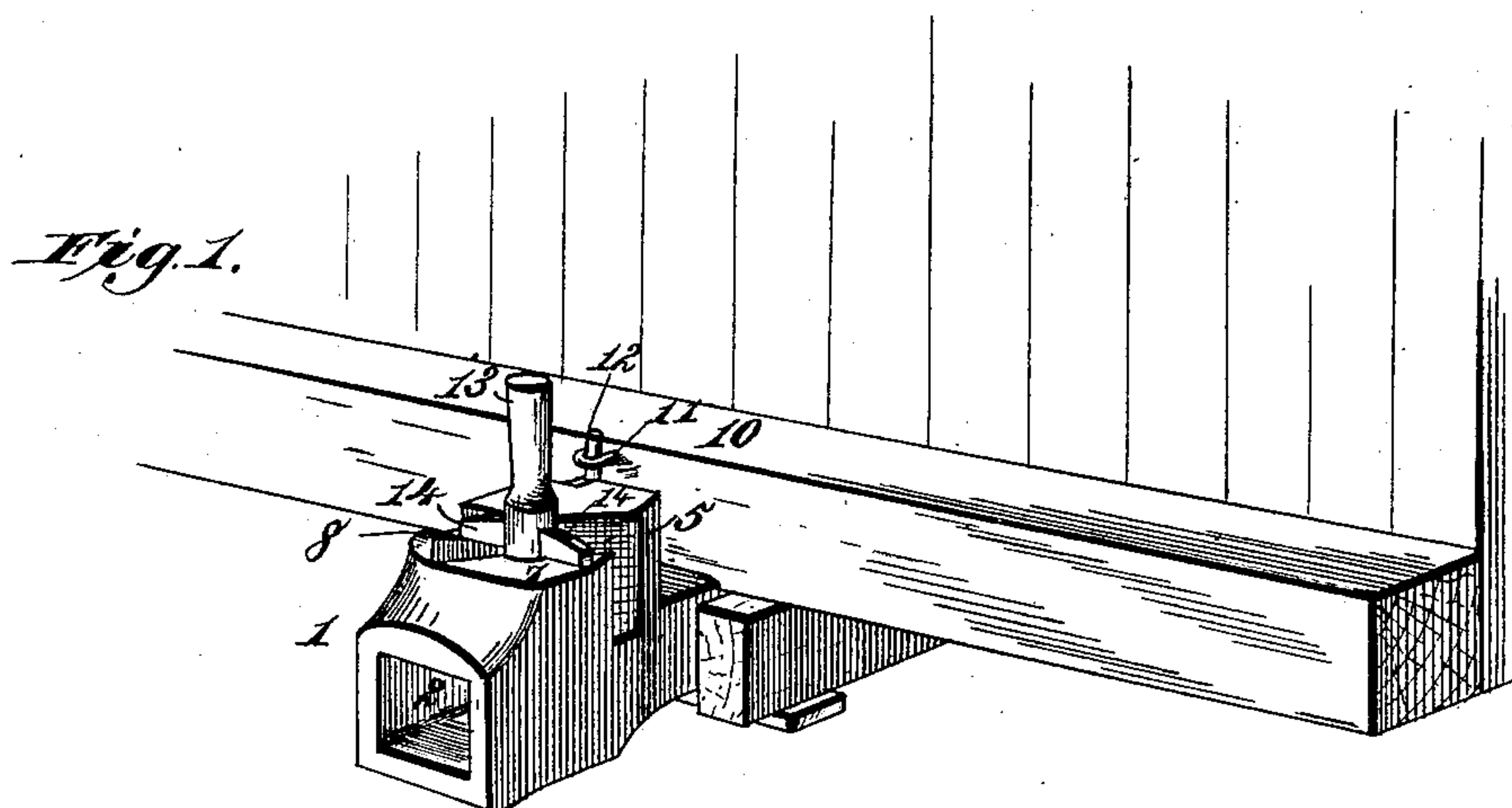
(No Model.)

K. L. POWER.

CAR COUPLING.

No. 366,873.

Patented July 19, 1887.



Witnesses,
Robert Everett,
J. A. Rutherford.

Inventor:
Kelsey L. Power.
By *James L. Norris*
Atty.

UNITED STATES PATENT OFFICE.

KELSEY L. POWER, OF MOODY, TEXAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 366,873, dated July 19, 1887.

Application filed March 30, 1887. Serial No. 231,003. (No model.)

To all whom it may concern:

Be it known that I, KELSEY L. POWER, a citizen of the United States, residing at Moody, in the county of McLennan and State of Texas, have invented new and useful Improvements in Car-Couplings, of which the following is a specification.

This invention has for its object to provide a novel car-coupling pin and means for operating the same to automatically couple cars through the medium of ordinary links without the use of triggers located within the draw-head and struck by the entering link to release the coupling-pin.

The invention consists, essentially, in a vertically-movable coupling-pin adapted to rotate axially in the pin-hole of the draw-head, and having a wing or lug for supporting it in its elevated position, combined with a yielding draw-head having a vertical slot to receive the wing or lug and a shoulder to support the same, and means operated by the yielding draw-head for acting on the wing or lug to rotate the pin and bring said wing or lug in coincidence with the vertical slot, whereby the pin will automatically drop into engagement with the coupling link.

The invention consists in other features, which will be hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1 is a perspective view of a car-coupling embodying my invention, showing the coupling-pin supported in its elevated position for automatically coupling cars; Fig. 2, a vertical sectional view taken centrally through the diagonal slot in the draw-head; Fig. 3, a plan view showing the position of the parts when the draw-head has come in contact with the draw-head of an adjacent car and the coupling-pin has been rotated to automatically drop; Fig. 4, a detail perspective view of the coupling-pin and the slide used for rotating it.

In order to enable those skilled in the art to make and use my invention, I will now describe the same in detail, referring to the drawings, where—

The numeral 1 indicates a draw-head having the usual mouth, 2, for the entrance of the coupling-link 3 and acting upon a spring, 4,

at its rear in any suitable manner, so that it can yield longitudinally both forward and backward. The manner of employing a spring to permit a draw-head to yield is well known, and therefore requires no further explanation, especially as I do not confine myself to any special means for accomplishing that purpose.

The draw-head is provided with a diagonal or oblique vertical slot, 5, terminating at its lower end in shoulders 6, and at the top the draw-head is recessed to provide flat seats 7 and an elevation, 8, having a cylindrical or other suitably-shaped orifice, in which is located a slide-rod, 9, the rear end of which is connected with a stationary part, 10, of the car platform or frame, as by means of a loop, 11, with which the bent end 12 of the rod loosely engages.

The coupling-pin 13 is cylindrical, and, as shown, is provided with two lateral wings or lugs, 14, that rest upon the seats 7 when the pin is raised and turned into proper position for this purpose, thereby holding the pin elevated until the draw-heads of the cars come together, when they will yield and thereby cause the slide-rod 9 to act by its front end upon one of the wings or lugs of the coupling-pin, and turn or rotate the latter, so that said wings are brought into coincidence with the oblique slot 5, when the pin will drop and engage the coupling-link. The pin in its descent is arrested by the wings 14 coming in contact with the shoulders 6 at the lower end of the slot 5. I do not confine myself to two wings on the pin, as obviously one wing can be used and accomplish the desired result; but two wings are desirable, in that they support the pin in a true perpendicular position, so that it is not liable to catch or bind in the pin-hole.

After the draw-head has yielded rearwardly and the slide-rod is caused to protrude from its seat in the elevation 8 and the cars are coupled the draft of the train will cause the draw-head to move forward, thereby restoring the slide-rod to its normal position. This is effected, as shown, by the engagement of the slide-rod with the loop on a fixed part of the car-frame; but obviously the same result could be accomplished by other means without engaging the slide-rod with a loop—as, for instance, by a spring to retract the slide-rod after it has been

thrust forward by contact with the fixed part 10 of the car-frame when the draw-head yields rearwardly.

5 The slot in the draw-head need not necessarily extend diagonally across the draw-head; but other arrangements of the slot will readily suggest themselves, and provision may be made for lifting the pin to uncouple without entering between the cars, as is ordinarily 10 practiced.

Having thus described my invention, what I claim is—

1. The combination, with a yielding draw-head having a vertical slot and pin-holes, of a 15 coupling-pin having a lateral wing or wings adapted to rest upon a seat on the draw-head out of coincidence with the slot, and means for rotating the pin when the draw-head yields rearwardly to place said wing or wings in line 20 with the slot, substantially as and for the purpose described.

2. The combination, with a draw-head having a vertical slot, a pin-hole, and a seat at its top, of a coupling-pin having a lateral wing or 25 wings adapted to rest upon said seat on the draw-head out of line with the slot therein,

and means for rotating the pin when two draw-heads come together for placing said wing or wings in line with the slot, substantially as and for the purpose described. 30

3. The combination, with a draw-head having a vertical slot and pin-hole, of a laterally-winged coupling-pin adapted to rest on the draw-head, with its wing out of line with the slot therein, and a slide-rod on the draw-head 35 for acting on the wing to rotate the pin; and thereby place said wing in line with the slot, substantially as and for the purpose described.

4. The combination, with a car platform or frame and a yielding draw-head having a vertical slot and a pin-hole, of a laterally-winged 40 coupling-pin, a slide-rod for acting on the winged part of the pin to rotate the latter, and a loop on the car platform or frame with which the slide-rod engages, substantially as and for 45 the purpose described.

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

KELSEY L. POWER.

Witnesses:

J. H. PRICE,

J. A. WEATHERSBEE.