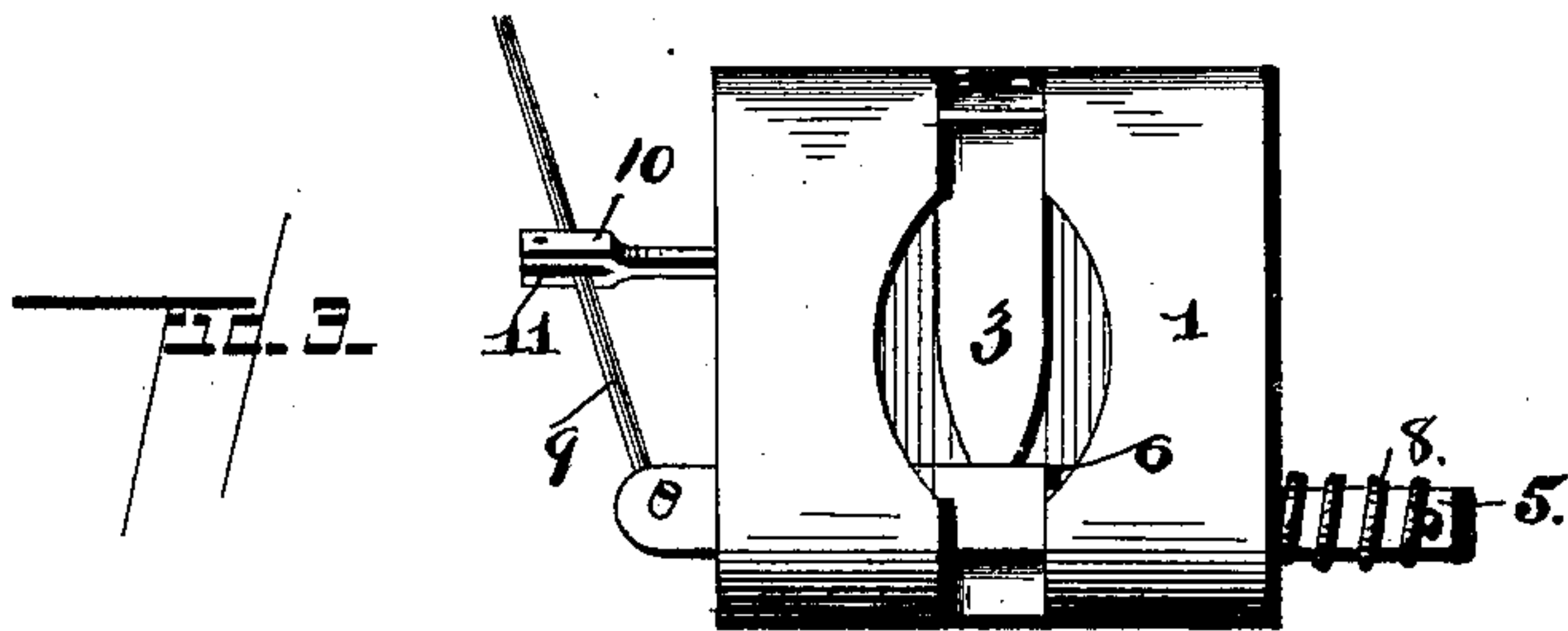
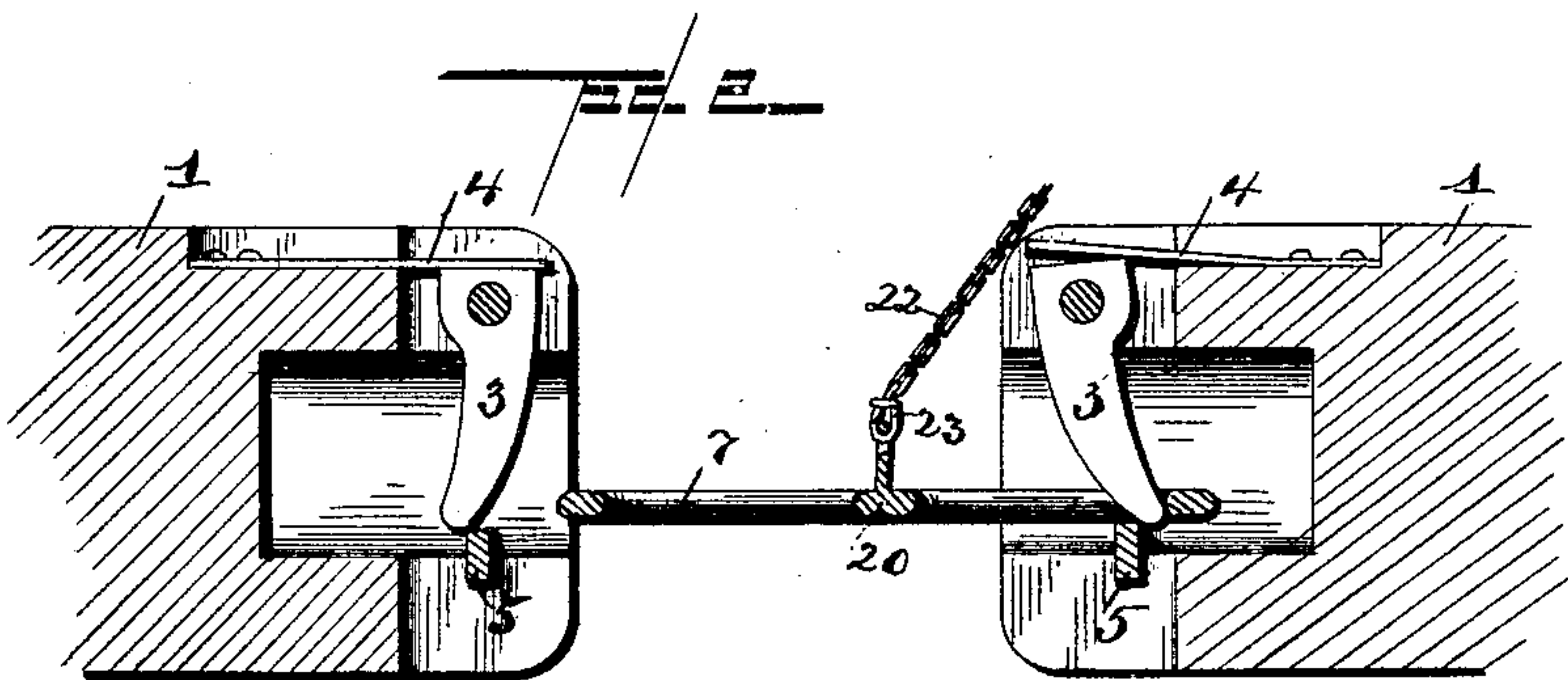
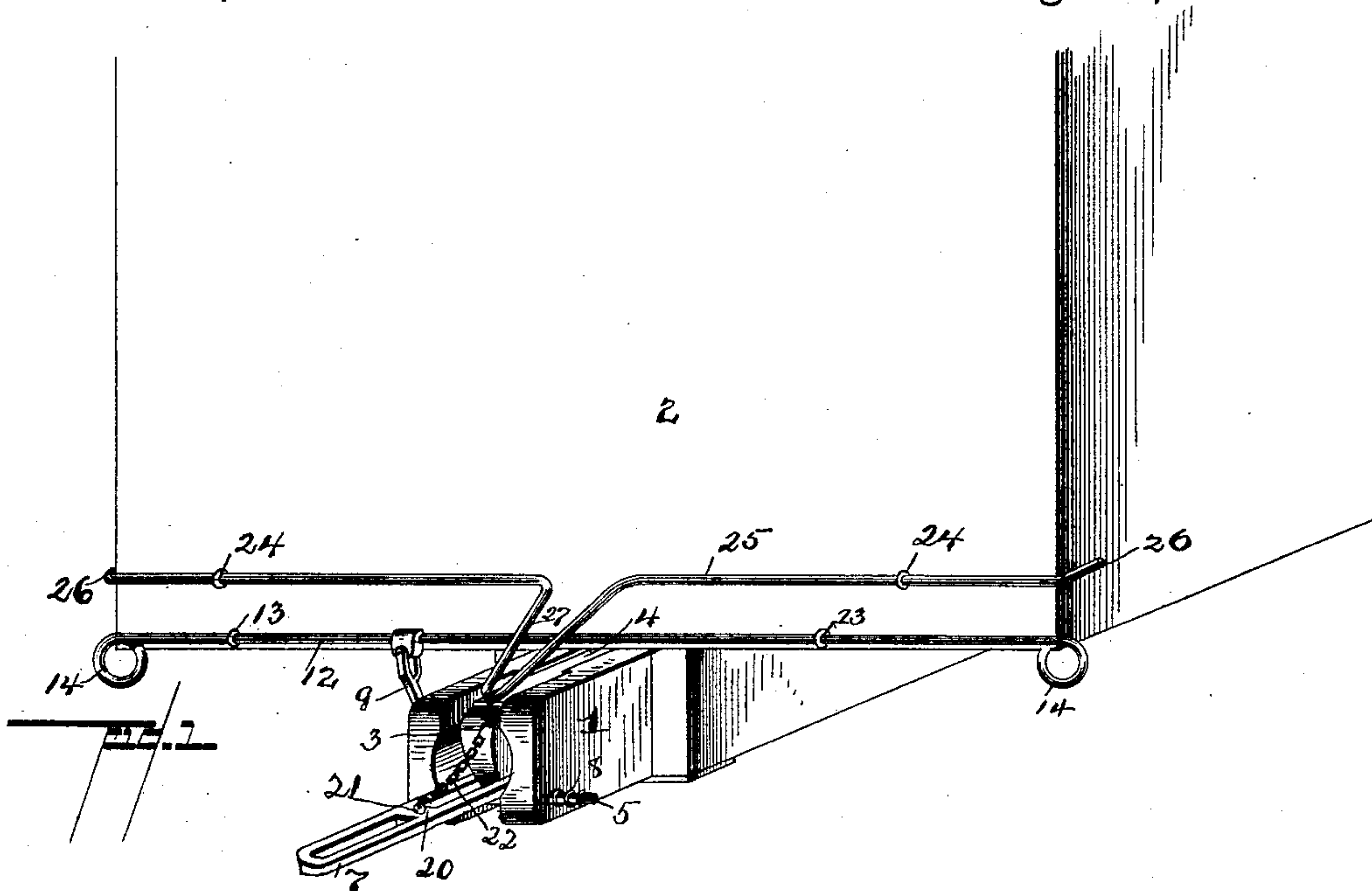


(No Model.)

W. H. DAVIS.
CAR COUPLING.

No. 480,866.

Patented Aug. 16, 1892.



Witnesses

H. G. Scitz

A. J. Collamer

Inventor

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UNITED STATES PATENT OFFICE.

WILLIAM HAYWOOD DAVIS, OF CHAPEL HILL, TEXAS, ASSIGNOR OF ONE-HALF TO WILLIAM T. ARMSTRONG AND MILLER F. ARMSTRONG, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 480,866, dated August 16, 1892.

Application filed October 10, 1891. Serial No. 408,289. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HAYWOOD DAVIS, a citizen of the United States, residing at Chapel Hill, in the county of Washington and State of Texas, have invented a new and useful Car-Coupling, of which the following is a specification.

This invention relates to car-couplings, more especially of that class known as "hook-and-link;" and the object of the same is to effect certain improvements in devices of this character.

To this end the invention consists in the construction hereinafter more fully described and claimed, and as illustrated on the accompanying sheet of drawings, wherein—

Figure 1 is a perspective view of the end of a car with my coupling attached, taken slightly from the upper and left side of the draw-head. Fig. 2 is a central longitudinal section of two draw-heads embodying my improvements, a link being shown as coupled into the right draw-head and supported by a link-lifter. Fig. 3 is a front elevation of one draw-head.

Referring to the said drawings, 1 designates the draw-head, which is suitably supported beneath the car-body 2, and in the upper side of whose open mouth is pivoted a depending hook 3, a spring 4 holding the hook normally vertical, as shown.

5 is a pin moving transversely across the draw-head near the bottom of its mouth and adapted to pass in front of and retain the lower free end of the hook 3 in place, and this pin has a notch 6 in its body, which permits the hook to swing forward and allow the link 7 to pull out when said notch is opposite the tip of the hook. The pin is drawn normally inward by a coiled spring 8 on the left side of the draw-head, and at the opposite side thereof a rod 9 is connected with the pin, passes through an eye 10, preferably having a roller 11, and is connected at its upper end with a slide-rod 12, moving through suitable guides 13 in the end of the car and having a handle 14 at each end. By this construction an operator standing at either side of the car can move the slide-rod in the proper direction to draw the pin out and bring the notch 6 opposite the tip of the hook, when the tension

on the link will cause it to draw out, and when the slide-rod is released the spring 8 will cause the pin to return to place and hold the hook in operative position.

The link 7 preferably has a transverse bar 20 at its center, in which is an eye 21, and 22 is a chain having a snap-hook 23 at its end adapted to detachably engage said eye. Journalled in bearings 24 in the rear end of the car is an oscillating rod 25, having handles 26 at its ends and a crank 27 at its center, to which the chain is connected. By this construction the operator standing at the side of the car can manipulate the handle 26 so as to lift the link and guide it into the mouth of an approaching draw-head. If the latter be of the construction above described, the free end of the link will bear the hook to the rear and pass under its tip, when the spring 4 will throw said tip down into the link and lock the latter in place; but it will be understood that the link may be locked into draw-heads of the usual construction, and this I claim as one of the special advantages of this device.

I do not limit myself to the use of a link-lifter, nor to the precise details of construction or the size or materials of parts, and various changes in and additions to this coupling may be made without departing from the spirit of my invention.

I claim as the salient features of this invention—

1. In a car-coupling, the combination of a draw-head, a depending hook pivotally mounted therein, a transverse pin arranged on the bottom of the mouth of the draw-head and provided intermediate its ends with a notch to permit the passage of the lower end of the hook, a spring for holding the notch away from the hook, and means for sliding the pin to bring the notch opposite the hook, substantially as described.

2. In a car-coupling, the combination, with the draw-head, a hook mounted on a transverse pivot in the upper part of the mouth of said draw-head, and a spring holding said hook normally vertical, of a transverse pin moving across the bottom of said mouth and having a notch in its body adapted to permit the outward passage of the tip of the hook, a slide-

rod guided in eyes in the end of the car, an eye in the side of the draw-head, and a rod connected at its ends to said pin and rod and passing intermediately through said eye.

5 3. In a car-coupling, the combination, with the draw-head, a hook mounted on a transverse pivot in the upper part of the mouth of said draw-head, and a spring holding said hook normally vertical, of a transverse pin
10 moving across the bottom of said mouth and having a notch in its body adapted to permit the outward passage of the tip of the hook, a coiled spring drawing said pin to bring its notch normally out of the line of said tip, a
15 link having a bar across its center carrying an eye, a chain having a snap-hook detachably engaging said eye, a link-lifter, to which said chain is connected at its upper end, and means for drawing the pin against the force
20 of said coiled spring.

4. In a car-coupling, the combination, with the draw-head, a hook mounted on a transverse pivot in the upper part of the mouth of

said draw-head, and a spring holding said hook normally vertical, of a transverse pin moving 25 across the bottom of said mouth and having a notch in its body adapted to permit the outward passage of the tip of the hook, a coiled spring drawing said pin to bring its notch normally out of the line of said tip, a link 30 having a bar across its center carrying an eye, a chain having a snap-hook detachably engaging said eye, a link-lifter, to which said chain is connected at its upper end, a slide-rod guided in eyes in the end of the car, an eye 35 in the side of the draw-head, and a rod connected at its ends to said pin and rod and passing intermediately through said eye.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 40 presence of two witnesses.

WILLIAM HAYWOOD DAVIS.

Witnesses:

S. A. HILL, Jr.,

H. MATTHEWS.