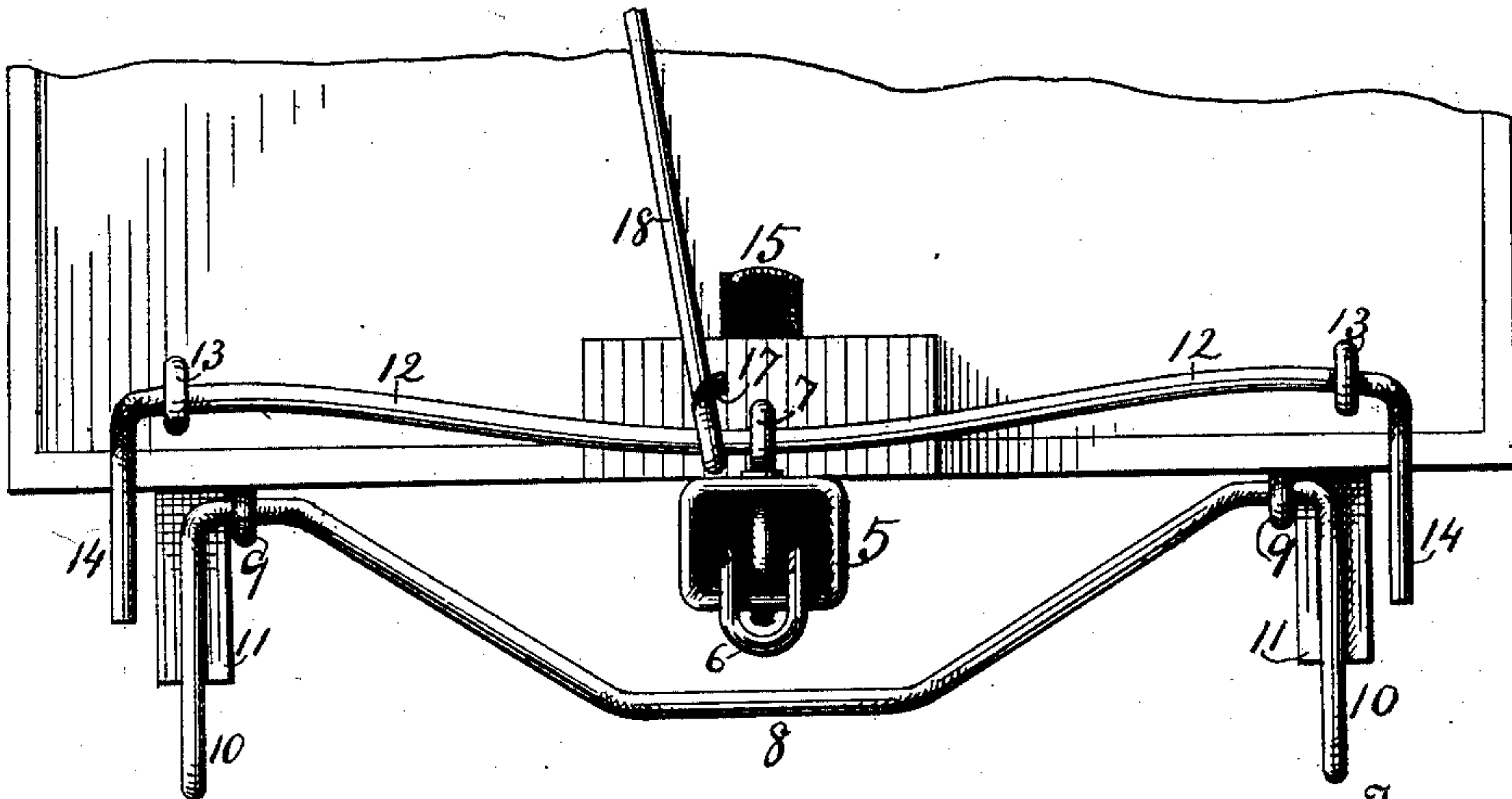
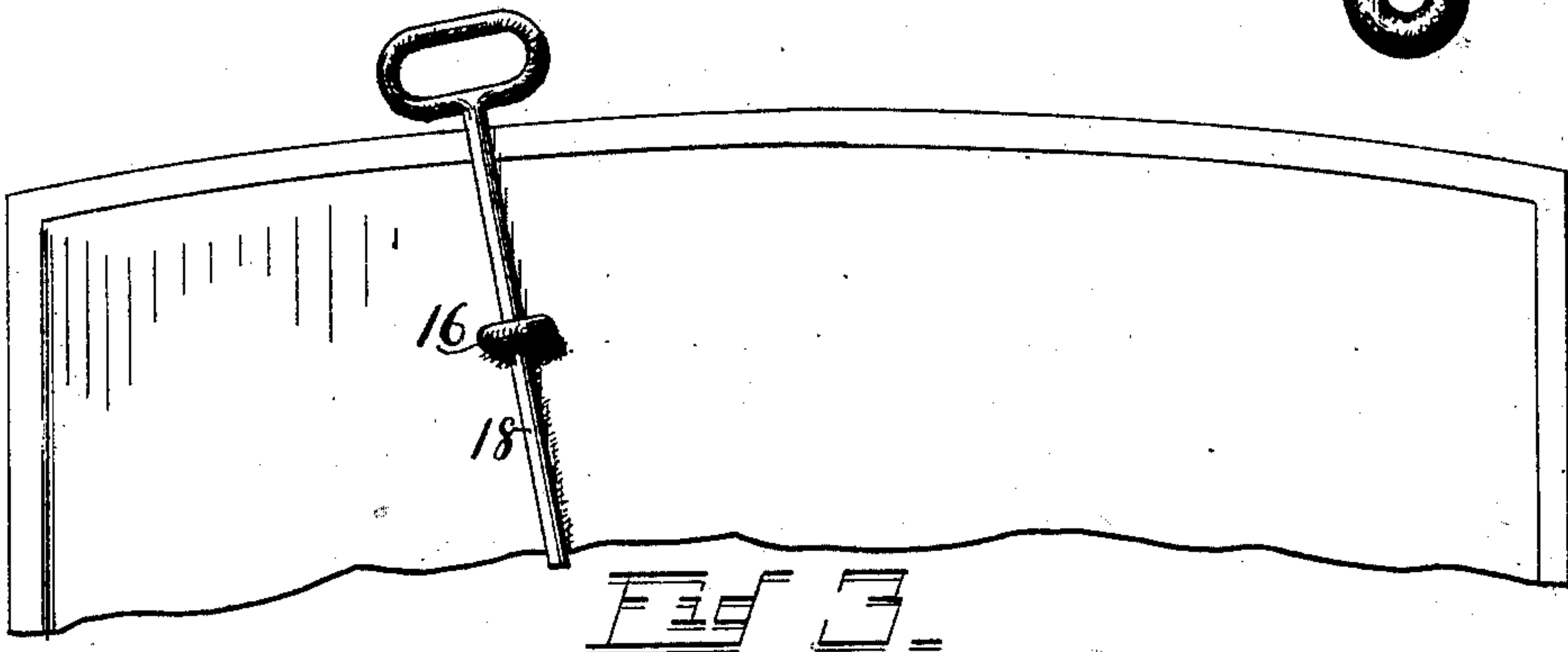
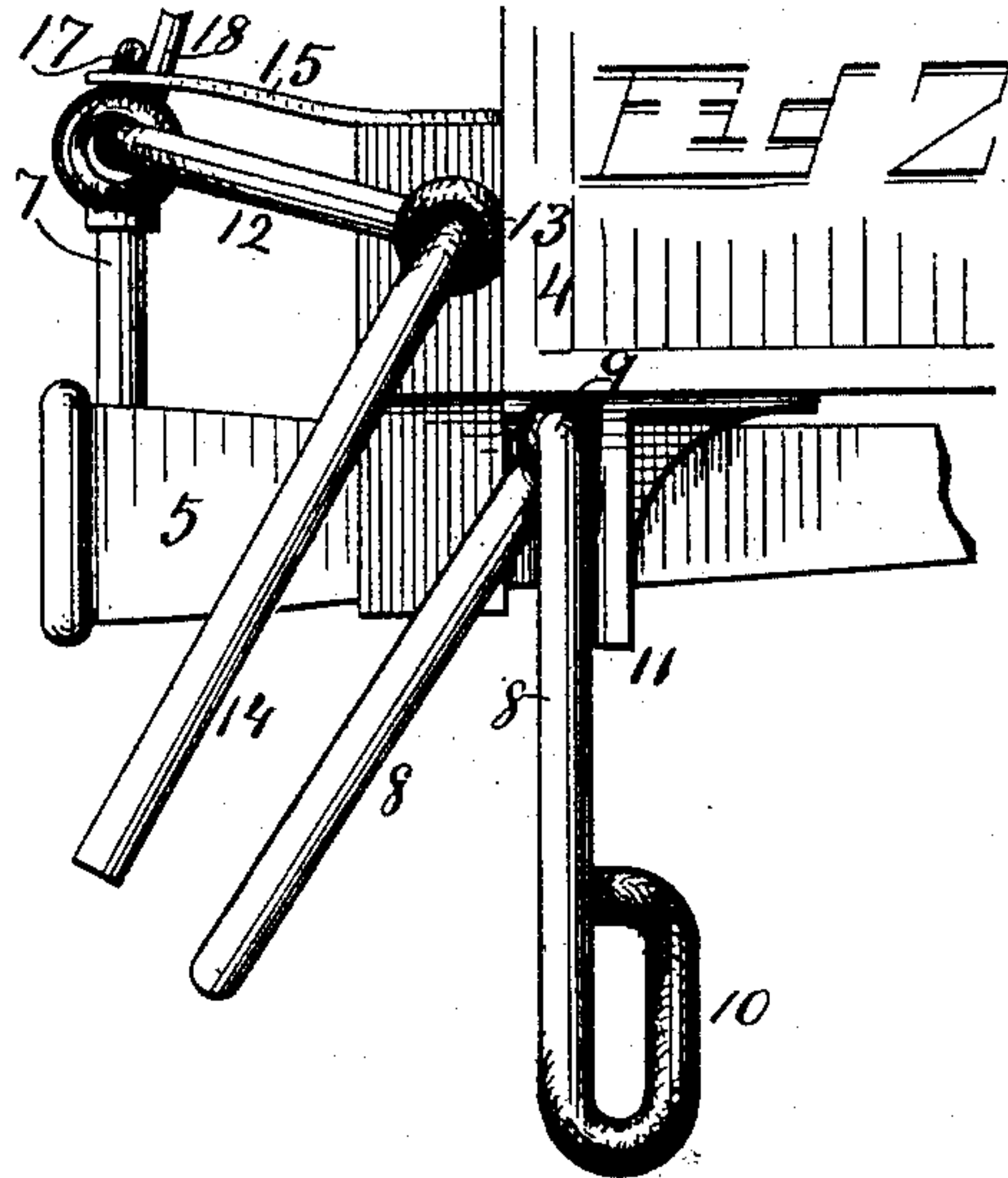
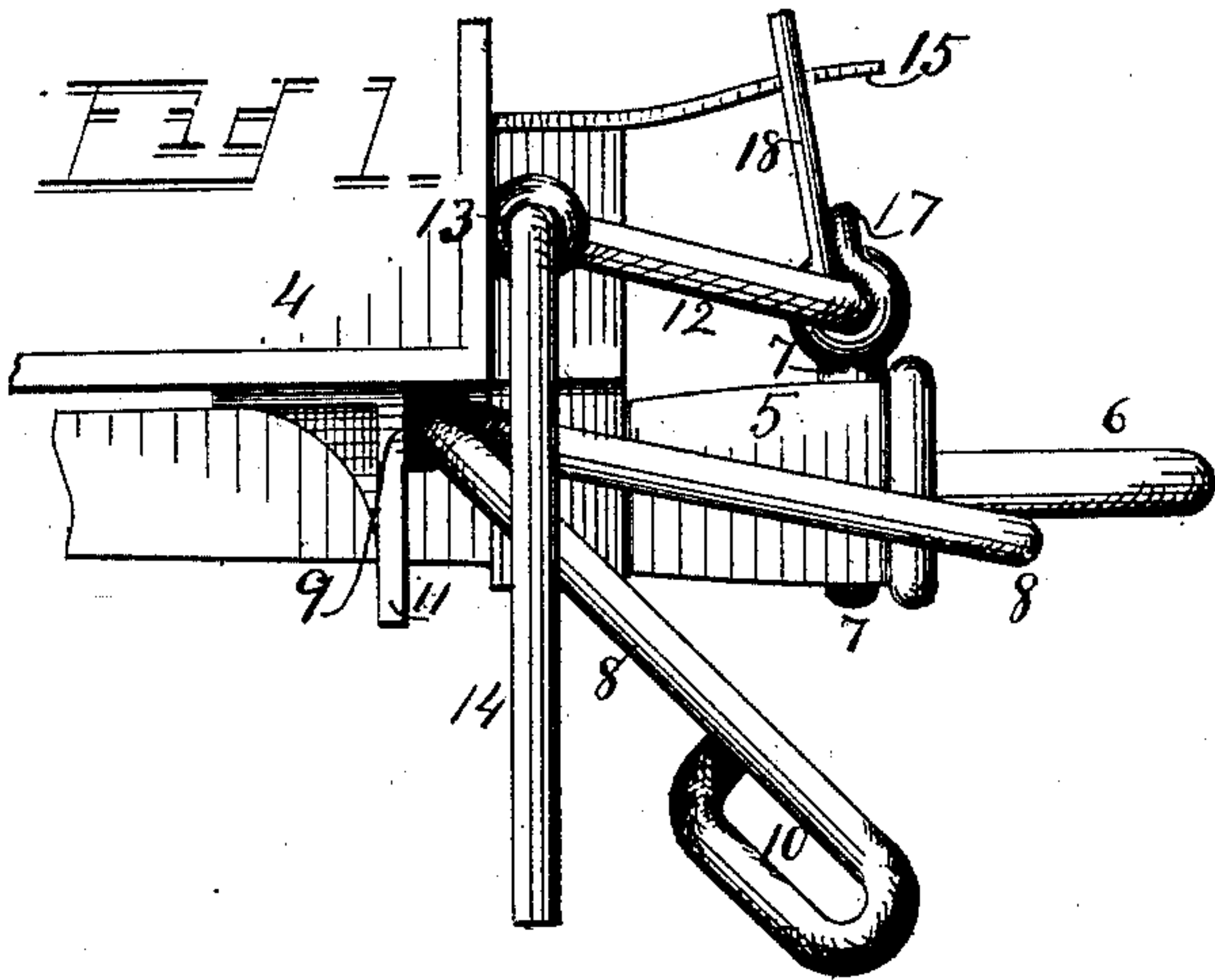


(No Model.)

J. TYZICK.
CAR COUPLING.

No. 362,126.

Patented May 3, 1887.



Witnesses
L. E. C. Stevens
P. C. Stevens

Inventor
James Tyzick.

By his Attorney *W. Stevens.*

UNITED STATES PATENT OFFICE.

JAMES TYZICK, OF ST. JOHN, NEW BRUNSWICK, CANADA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 362,126, dated May 3, 1887.

Application filed September 23, 1886. Serial No. 214,476. (No model.)

To all whom it may concern:

Be it known that I, JAMES TYZICK, a citizen of Canada, residing at St. John, in the county of St. John and Province of New Brunswick, have invented certain new and useful Improvements in Hand Car-Couplers; 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 that class of devices by the aid of which a person standing at the side of a train of cars may guide the common link of one car to enter the draw-bar of the car approaching, and may at the same time hold the pin of the approaching car ready to drop into the said link when entered.

The invention consists in certain simple levers and stops constituting a hand car-coupler to be attached to cars, as hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of a portion of a car, showing my coupler in the act of guiding a coupling-link to enter an approaching draw-bar. Fig. 2 is a side elevation of a portion of the approaching car, showing my coupler in the act of holding the pin raised so that the link may enter the draw-bar; and Fig. 3 is an end elevation of portions of a car, showing my invention.

4 represents a portion of a car. 5 is a draw-bar. 6 is a link, and 7 a coupling-pin. All of these parts may be of any usual construction.

8 represents my link-lifter, consisting of a bail-shaped lever journaled to the car at two points, 9, near the sides of the car, and provided with handles 10, which may be reached by a person at either side of the car. The central or bail portion of this lifter will swing up in front of the draw-bar, to raise the link to the proper level to enter the approaching draw-bar.

11 represents a stop, against which a portion of the handle 10 may rest when idle, so that it may always be found in a certain place. Were it not for this stop the handle would be frequently swung under the car and inconvenient to be reached in service.

12 represents the pin-lifter, which is a some-

what similarly-shaped bail, passing centrally through an eye in the head of the pin 7. This pin-lifter is also journaled at two points, 13, to the car, near its sides, and provided with depending handles 14, whereby a person at the side of the car may raise the pin out of a link to release the latter, or he may raise the pin to admit an incoming link.

In order that the pin may be quickly raised out of the way of the link, and be held ready to drop into the link as soon as it enters the draw-bar, I provide a stop, 15, against which the pin may be held raised, so that the pin cannot be drawn entirely out of place, even though the operator is in a hurry. In order that the operator may instantly distinguish the link-lifter handle from the pin-lifter handle, even in a dim light, I shape the two handles differently from each other; and in order that no effort of memory shall be required for this purpose I make the link-lifter handle 10 in the form of a link, and I leave the pin-lifter handle 14 straight like a pin. By this means each handle suggests the service which it performs. In order that the pin of a moving car may be drawn by a person on top of the car, I have provided a rod, 18, which is attached at its lower end to the pin-lifter and stands slanting away from the central vertical plane of the draw-bar, in which portion it is loosely held by an eyebolt, 16, in the end of the car. I provide a shoulder, 17, on the side of this rod 18, near its lower end, to engage the stop 15 when the pin is raised, whereby both the pin and rod may be set in a raised position and be so left at the will of the operator. The rod 18 is placed in a slanting position, in order that it may have a tendency to stay engaged with the stop 15 by the pressure of its weight.

The operation is as follows: A coupling-link is to be raised and held at the required height to enter the coming draw-bar by means of the lifter 8. Then when the handle 14 of the pin-lifter 12 comes within reach the operator seizes it and raises the coming pin to its full limit; then he has only to direct his attention to properly guiding the link, and the instant it fairly enters the coming draw-bar he drops both lifters, permitting the link-lifter to fall out of the way of the draw-bars and permitting the pin to drop and engage the link; or

the pin may have been raised by the rod 18 and held by the shoulder 17 and stop 15 until the link enters, and then the rod and pin may be released, so that the pin shall fall into the
5 link. In doing this the operator need not go between the cars, and the levers which he handles are not in position to strike anything, and are so free to swing that the operator is not in danger of being hurt in his usual duty.
10 This is not in any sense an automatic car-coupler. A person must be present to operate it; but it is inexpensive, efficient, and removes the operator from the line of danger. Either the link-lifter or the pin-lifter would
15 do its own duty without the aid of the other; but they are both needed to enable a person to successfully couple cars in safety.

What I claim as my invention, and desire to secure by Letters Patent, is—

20 1. The combination of the link-lifter 8, jour-

naled to the end of the car and provided with the link-shaped handles 10, and the pin-lifter 12, journaled to the end of the car and provided with pin-shaped handles 14, substantially as shown and described.

25 2. The combination of the bail-shaped pin-lifter 12, journaled to the end of the car, the pin 7, hung thereon, the stop-piece 15, fixed in the path of the pin, and the rod 18, loosely secured in a slanting posture to the end of the
30 car, connected at its lower end with the lifter 12, and provided with a shoulder, 17, adapted to engage the stop 15, substantially as shown and described.

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

JAMES TYZICK.

Witnesses:

CHARLES J. COSTER,
ROBT. JARVIS GILBERT.