

(No Model.)

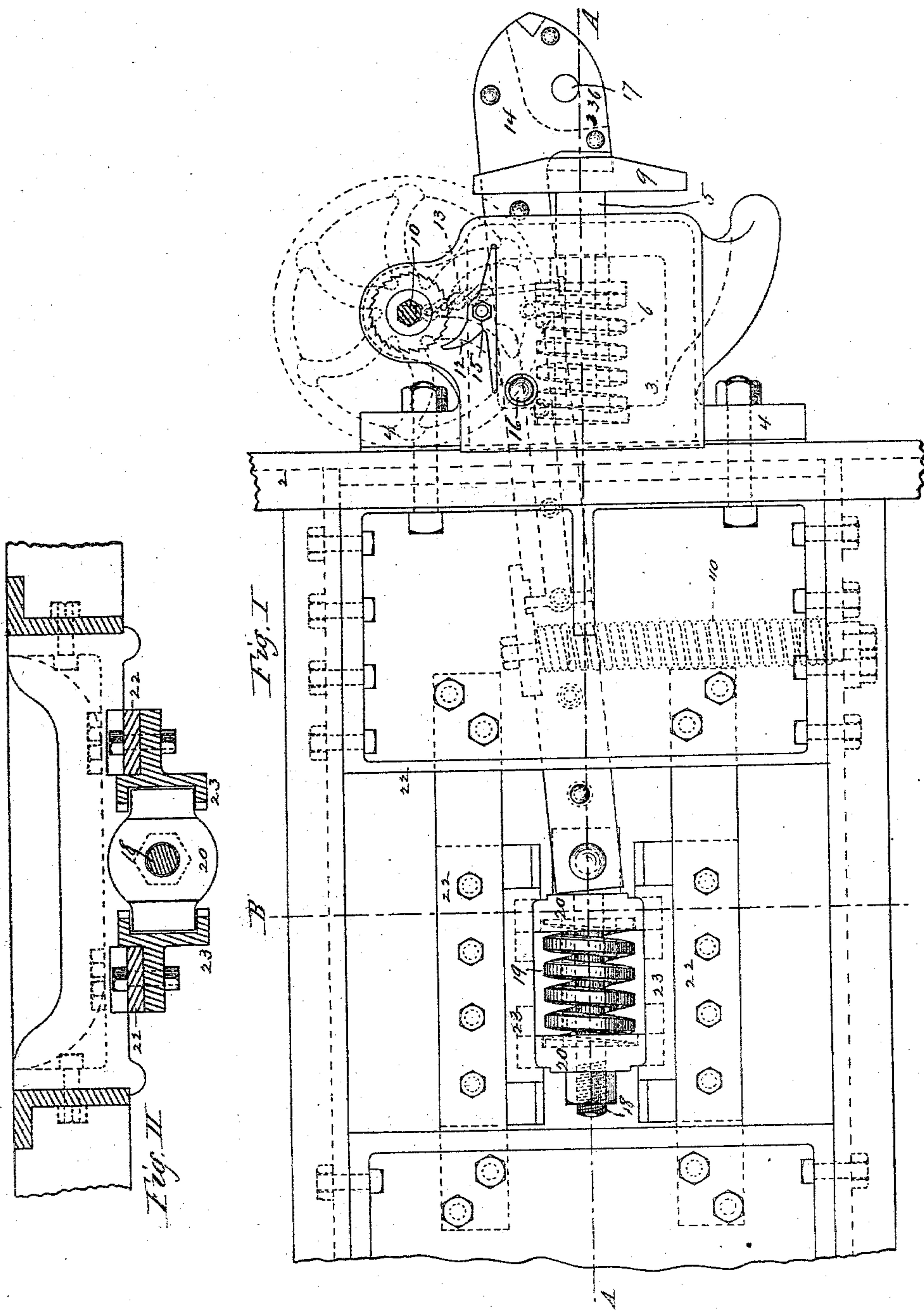
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G. H. COLBY.

COUPLING ATTACHMENT FOR LOCOMOTIVE TENDERS.

No. 288,209.

Patented Nov. 13, 1883.



Witnesses.
Chas. H. Wood.
C. C. Curtis.

Inventor.
George H. Colby.
By T. A. Curtis,
his atty.

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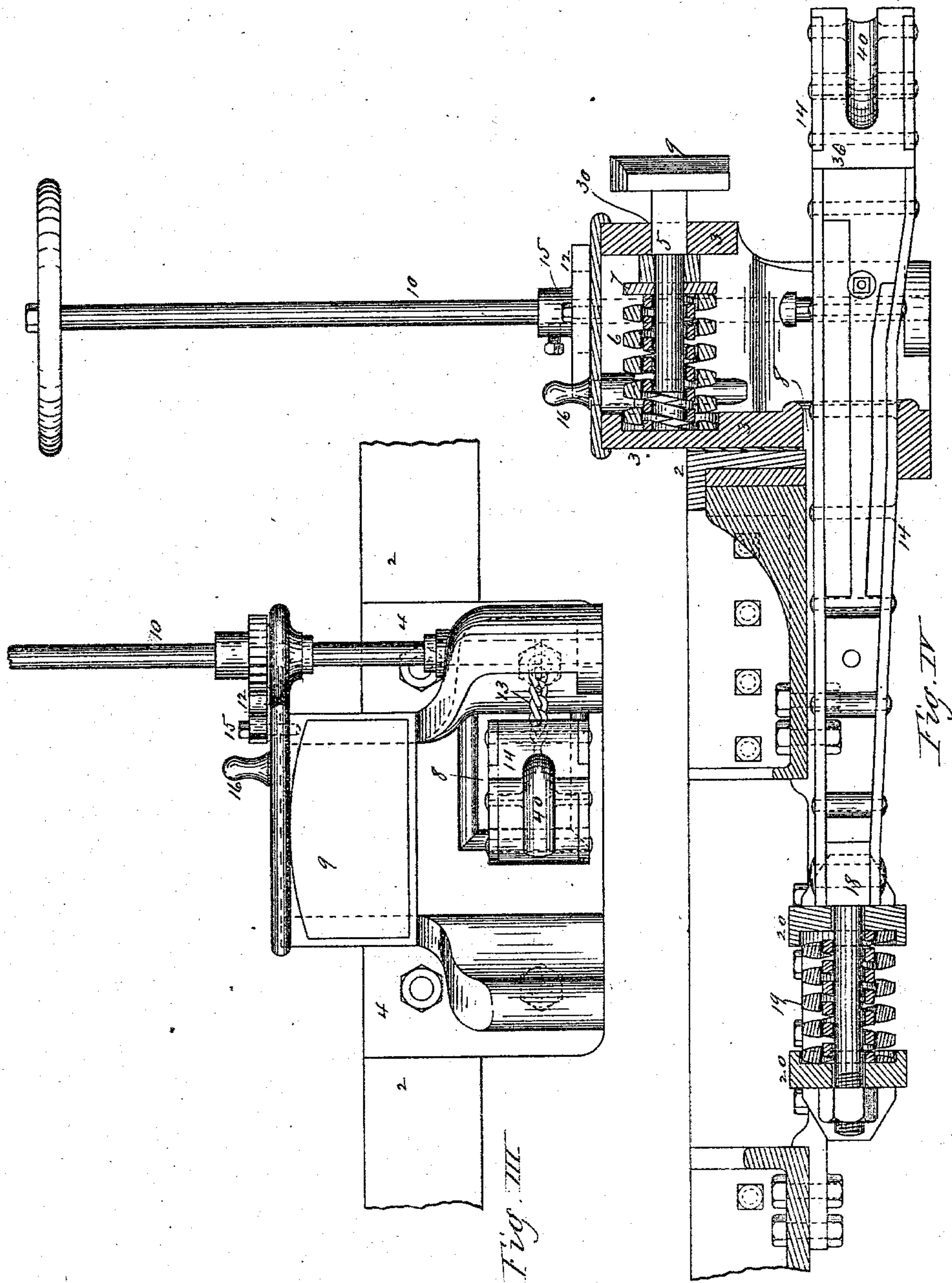
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his Atty.

UNITED STATES PATENT OFFICE.

GEORGE H. COLBY, OF BOSTON, MASSACHUSETTS.

COUPLING ATTACHMENT FOR LOCOMOTIVE-TENDERS.

SPECIFICATION forming part of Letters Patent No. 288,209, dated November 13, 1883.

Application filed June 14, 1883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. COLBY, of the city of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Coupling Attachments for Locomotive-Engine Tenders, of which the following is a specification and description.

The object of my invention is to provide an attachment for locomotive-tenders by and in which an ordinary hooked coupling-bar and a bunter may be supported and operated, so that the engine and tender may be easily and readily connected with a train of railway-cars or disconnected therefrom; and I accomplish this by the mechanism substantially as hereinafter described, and illustrated in the accompanying drawings, in which—

Figure I is a plan view of my attachment as secured to and connected with the rear end of a locomotive-tender. Fig. II is a transverse section at line B, showing the manner of securing the draw-bar to the lower side of the tender. Fig. III is a front view of my attachment as secured to a locomotive-tender, and Fig. IV is a longitudinal vertical section through the attachment and a portion of the tender-frame.

In the drawings, 2 represents the lower part of the frame of a locomotive-tender at the rear end, and 3 represents a case made preferably of cast metal, and hollow, and bolted through its flanges 4 to said frame at the rear end of the tender. A bunter-bar, 5, extends through the upper part of this case, with a bunter-head, 9, on its outer end, and with a washer or plate, as 7, fixed to the bar on the inside of the case, with a spring, 6, placed around the bar 5, and bearing against the inside of the case at one end, and against said plate or washer at the other end, so that when the bunter-bar is forced in the spring is compressed, and its elasticity operates to force the bunter backward or outward. A coupling-bar, 14, provided with a hook, 36, at the outer end, extends through the lower part of this case 3, and extends beneath the tender, and is secured or pivoted to one end of the draw-bar 18, so that the hook end of the coupling-bar may be moved in a lateral direction; and the draw-bar 18 has a nut turned on its thread-

ed end, with the blocks 20 secured upon said draw-bar, with a spring, as 19, between said blocks. These blocks are adapted to have a limited sliding movement lengthwise the tender in guide-pieces 23, bolted to the frame of the tender beneath, so that whether the coupling-bar 14 be forced in either direction lengthwise the spring 19 will be compressed, and one of the blocks 23 may move in the guide-pieces, and if the force against the coupling-bar is removed the block will regain its position by the action of the said spring. This spring attachment of the coupling-bar gives an easy movement, and prevents shock and undue strain to the machinery in starting and in drawing the train.

A vertical shaft, 10, provided with a hand-wheel or winch at the upper end, has suitable bearings in the case at one side, with an ordinary ratchet-wheel fixed to said shaft, and a pawl, 12, pivoted to the case, as at 15, and a chain, 13, fastened at one end to the shaft and at the other end to the coupling-bar 14, serves to draw the latter to one side when the shaft is turned and the chain wound thereon, and the coupling-bar may be held in its position, when so drawn to one side, by the pawl 12 engaging with the ratchet on the shaft. When the pawl is disengaged from the ratchet, a spring, 40, (shown in dotted lines,) and attached to the tender-frame beneath, operates to draw the coupling-bar back into position for its hook 36 to engage with the hook of the coupling-bar on the next car.

When it is desired to couple the locomotive and tender to the train, the former, with its tender, is backed against the first car of the train, and as the outer ends of the coupling-bars come together they are moved to one side and the hooks engage with each other in the ordinary manner; and when it is desired to detach the locomotive from the train the vertical shaft 10 is turned by its winch or hand-wheel to wind the chain 13 upon the said shaft, and the coupling-bar, with its hook 36, is drawn to one side, so that the hooks will be disengaged, and the locomotive and tender are moved away from the train.

Inasmuch as locomotive-tenders are not provided with a platform in and upon which to support and operate a hooked coupling-bar,

it is obvious that this attachment furnishes a very convenient medium for that purpose, and the vertical shaft 10 may be turned by its winch or hand-wheel by the train-man when standing on the front platform of the next car behind the tender.

A recess, 40, may be made in the front part of the hook of the coupling-bar, with a vertical hole, 17, in which to insert a link-pin, 16, which may be carried in a hole in the top of the case 3, so that the engine and tender may be coupled to a train or car provided with the ordinary bunter and link-and-pin coupling.

It will be seen that the coupling-bar 14 extends through the hole 8 in the case 3, and that the said bar is held up in place by that part of the case which is beneath the hole 8; but instead of said hole being made in the case, a recess might be made up into the case from the lower side, and a supporting-bar placed across beneath the coupling-bar to support it,

without departing from the invention in the least.

Having thus described my invention, what I claim as new is—

An improved coupling attachment adapted to be secured to the rear end of a locomotive-engine tender, consisting of the casting or case 3, provided with a recess or opening, through which the coupling-bar extends, in combination with a spring-actuated bunter contained within and with its head projecting rearward through said case, a shaft or rod having its bearing in said case, and a chain secured at one end to said shaft or rod, and at the other end to said coupling-bar, to move the latter in a lateral direction, all substantially as described.

GEORGE H. COLBY.

Witnesses:

T. A. CURTIS,

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