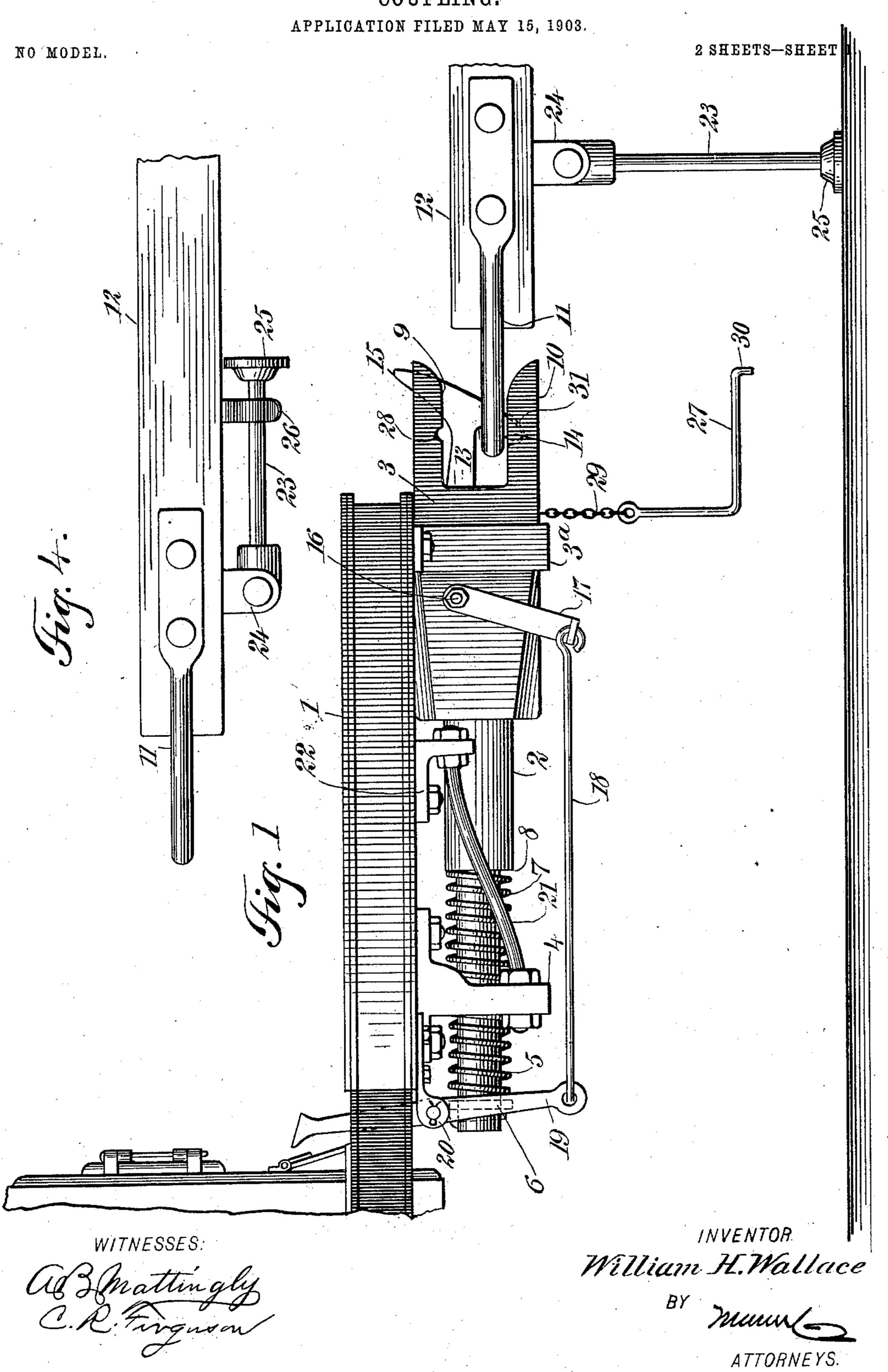
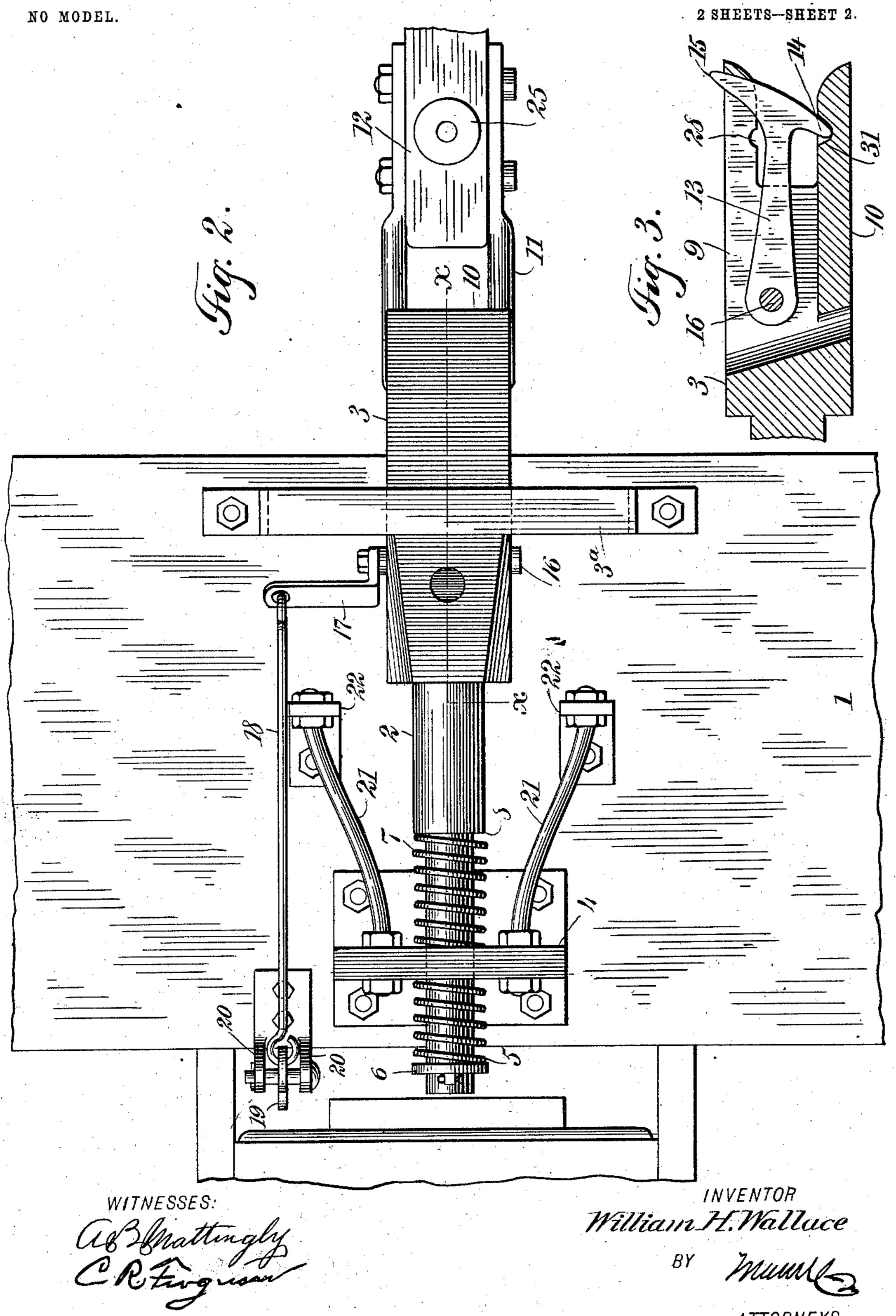
W. H. WALLACE. COUPLING.



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United States Patent Office.

WILLIAM H. WALLACE, OF WHITEFIELD, NEAR HENRY, ILLINOIS.

COUPLING.

SPECIFICATION forming part of Letters Patent No. 752,731, dated February 23, 1904.

Application filed May 15, 1903. Serial No. 157, 264. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. WALLACE, a citizen of the United States, and a resident of Whitefield, near Henry, in the county of Marshall and State of Illinois, have invented a new and Improved Coupling, of which the following is a full, clear, and exact description.

This invention relates to improvements in couplings particularly designed for use in connection with traction-engines for coupling the same to tenders, agricultural implements, threshing-machines, and other wheeled devices, an object being to provide a coupling of simple construction that may be readily attached to a traction-engine and that will be very strong and durable.

I will describe a coupling embodying my invention and then point out the novel features

in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of a portion of a traction-engine and a coupler embodying my invention attached thereto. Fig. 2 is an inverted plan view thereof. Fig. 3 is a section on the line x x of Fig. 2, and Fig. 4 shows a tongue and a supporting device therefor with 3 a member of the coupling attached to the tongue.

Referring to the drawings, 1 designates the platform of a traction-engine, and arranged underneath the platform is a draw-bar 2, on 35 the outer end of which is a coupling-head 3, supported and movable in a hanger 3^a. The draw-bar 2 extends through an opening in a hanger 4, bolted or otherwise secured to the under side of the platform, and a spring 5 4° surrounds the draw-bar between a collar 6 thereon and the hanger 4. At the opposite end of the hanger 4 is another spring 7, which abuts at one end against the said hanger and at the other end against a shoulder 8 on the 45 draw-bar. By means of these springs a sudden jar is obviated upon the starting or stopping of an engine. The coupling member 3 has an upper wall 9 and a lower wall 10, these members being spaced apart to receive a link-50 like coupling-section 11, attached to a tongue

or pole 12 of the device to be drawn. Mounted to swing in the coupling-head 3 is a lever 13, having a hook portion 14, with which the link 11 is designed to engage. This hook portion 14 is inclined downward and forward, and 55 above said hook portion is an upwardly-extended horn 15, movable in an opening formed in the top wall 9 of the coupling-head. The lever 13 is mounted on a shaft 16, having bearings in the side walls of the coupling-head, 60 and on one end of this shaft is a crank 17, from which a rod 18 extends to a lever 19, pivoted in lugs 20, attached to the under side of the platform 1. This lever 19 extends above the platform, so that the driver of the engine 65 may operate the lever to release the coupling by foot-pressure.

From the hanger 4 brace-rods 21 extend rearward and are connected to brackets 22, attached to the under side of the platform.

To hold the tongue 12 in position to engage the link 11 with the hook portion 14, I employ a standard 23, mounted to swing between lugs 24 on the tongue. This standard has an enlarged bearing end 25 to engage upon the 75 ground, and when the support is not in use for holding the tongue in position it may be swung upward and engaged between spring-clips 26, attached to the tongue.

In some instances, such as when a traction-80 engine drawing a vehicle is passing over rough ground or up or down hill, it is necessary to lock the coupling member 13 in its coupled position. For this purpose I provide a locking-rod 27, which is substantially L-shaped 85 and designed to pass between the upper edge of the lever 13 and the inner side of the top member 9 of the coupling, this top member 9 being provided at its under side with a channel 28, into which the horizontally-disposed 90 member of the locking device may pass. This locking device is attached to the engine by means of a chain 29, and it is held from accidental outward movement when in locking position by engaging its turned end 30 with 95 the side of the top member 9.

It will be noted that the lower member 10 of the coupling-head has a notch or depression 31 to receive the end of the hook 14, thus making a very strong connection between 100

the parts, as the hook will engage against the wall of said notch or depression. The outer end of the hook member is inclined downward and forward, so that it will be automat-5 ically raised when the engine is moved backward and the said curved end of the hook engaged with the member 11 of the coupling. After said member 11 passes underneath the hook the said hook will fall by gravity.

When it is desired to release the coupling, the driver of the traction-engine by placing his foot on the upper end of the lever 19 and pushing it forward will rock the shaft 16, moving the hook member upward and out of

15 engagement with the member 11.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination with a traction-engine, 20 of a coupling-head having spaced upper and lower members, the lower member having a notch or depression in its inner side, a lever mounted to swing in the coupling-head, a hook portion on said lever adapted to engage in 25 said notch or depression, a pole, a swinging support for the pole and a link member on said pole for engaging with the hook.

2. The combination with a traction-engine, of a draw-bar yieldingly connected thereto, a 30 coupling-head on the draw-bar, the said coupling-head having upper and lower spaced members, a lever mounted to swing in the coupling-head, and having a downwardly and forwardly inclined hook member at its end, a 35 link for engaging with said hook, a shaft on

which the lever is mounted, the said shaft having bearings in the side walls of the coupling-head, means for rocking the lever upward, and a pin for locking the lever in its depressed position, the said pin having an out- 40 wardly-turned end for engaging with a side

of the coupling-head.

3. The combination with a traction-engine, of a hanger attached to the lower side of the platform of the engine, the said hanger hav- 45 ing an opening, a draw-bar movable through said opening, springs between opposite sides of the hanger and parts on the draw-bar, bracerods extended from the hanger to the platform, a coupling-head on the draw-bar, a lever 50 mounted to swing in said head, the said lever having a hook portion, a lever having swinging connection with the engine, and a rod connection between said lever and the first-named lever.

4. The combination with a traction-engine, of a coupling member, a tongue or pole, a link-like coupling member attached to said tongue or pole for engaging with the coupling member on the engine, a standard having 60 swinging connection with said tongue or pole, and spring-clips for holding said standard in position parallel with the tongue or pole.

In testimony whereof I have signed my name to this specification in the presence of two sub- 65

scribing witnesses.

WILLIAM H. WALLACE.

Witnesses:

CHARLES P. HEININGER, Joseph P. Heininger.