M. H. C. TURNBULL & C. W. TOMLIN.

EMERGENCY CAR COUPLING DEVICE.

APPLICATION FILED FEB. 13, 1909.

934,483. Patented Sept. 21, 1909.

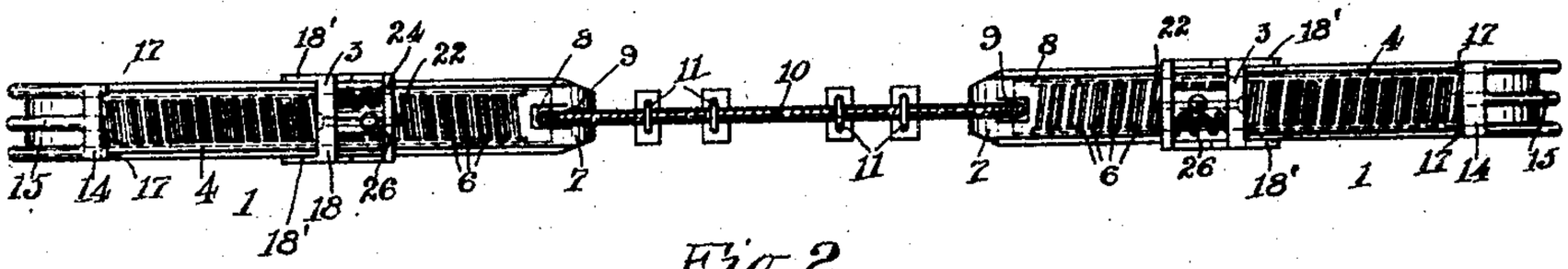

Fig. 2.

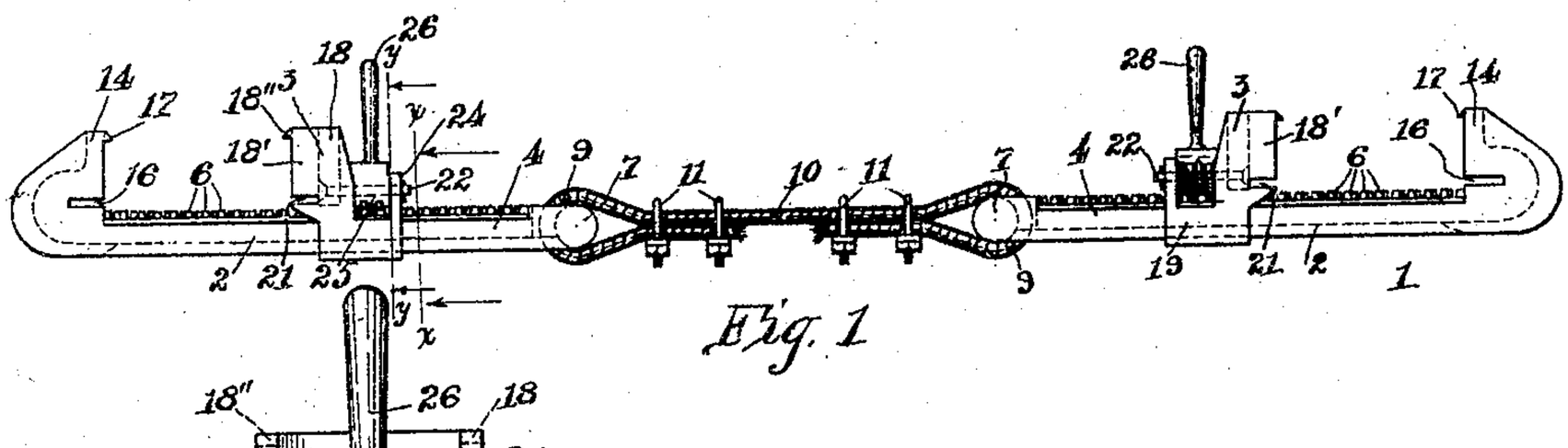

Fig. 1

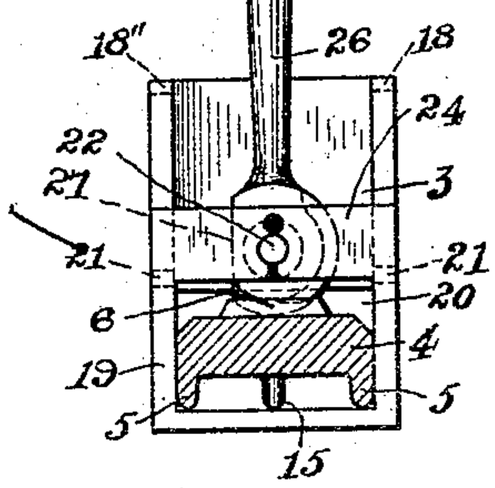

Fig. 3.

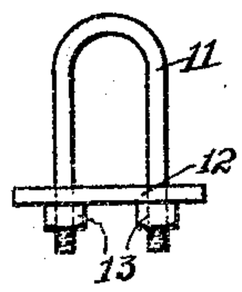

Fig. 5.

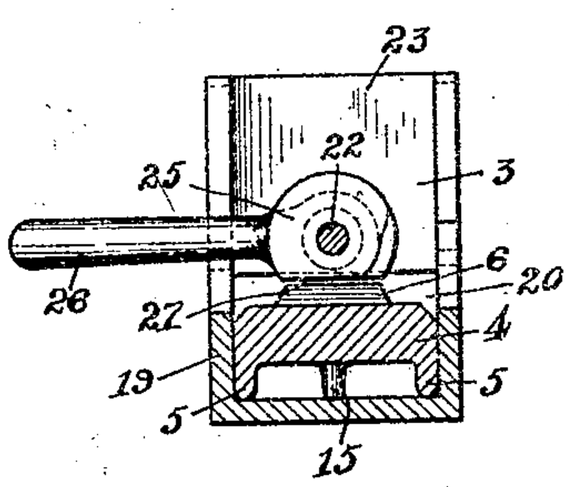

Fig. 4

Witnesses:
H. St. Griffin
J. E. Hogan.

Inventors.
Charles W. Tomlin
and
Mungo H. C. Turnbull
by Joshua R. H. Potts
their Attorney.

UNITED STATES PATENT OFFICE.

MUNGO H. C. TURNBULL AND CHARLES W. TOMLIN, OF CHICAGO, ILLINOIS.

EMERGENCY CAR-COUPLING DEVICE.

934,483. Specification of Letters Patent. Patented Sept. 21, 1909.

Application filed February 13, 1909. Serial No. 477,708.

To all whom it may concern:

Be it known that we, MUNGO H. C. TURNBULL and CHARLES W. TOMLIN, citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Emergency Car-Coupling Devices, of which the following is a specification.

Our invention relates to emergency railway car coupling devices.

The object of our invention is to provide a device of the character mentioned which will be of such construction as to be particularly applicable for use in the event of the couplers of a railway car pulling out or being otherwise disabled.

A further object is to provide a coupling device as mentioned which may be expeditiously and readily applied, and which, when applied, will be adapted to efficiently serve in the capacity of a car coupler, another object being to provide a coupler which will be strong and durable, comparatively simple of construction, hence of low cost to manufacture.

Other objects will appear hereinafter.

With these objects in view, our invention consists in a coupling device characterized as above mentioned and in certain details of construction and arrangement of parts all as will be hereinafter fully described and particularly pointed out in the claims.

Our invention will be more readily understood by reference to the accompanying drawings forming a part of this specification, and in which,

Figure 1 is a side elevation of the preferred form of our invention, Fig. 2 is a top plan view thereof, Fig. 3 is an enlarged transverse section taken on the line *x*—*x* of Fig. 1, Fig. 4 is a substantially similar transverse section taken on the line *y*—*y* of Fig. 1, the locking means illustrated therein being shown in disengaged position, and Fig. 5 is an enlarged detail of the clamping means employed in conjunction with the connecting cable embodied in our invention.

Referring now to the drawings 1—1 indicate clamping devices, the same being identical in construction. Because of said clamping devices being alike in every detail; in the following description one only will be referred to, reference numerals applied to one being applicable as well to the other. The clamping device 1 consists of a body portion 2 and a jaw-forming locking member 3 slidably mounted upon the elongated portion 4 thereof. Said member 2 is channel-formed in construction, that is reinforcing ribs 5 are formed at the lateral edges of the under surface thereof, such being our preferable construction in view of the fact that a bar so formed is of greater strength proportional to its weight. Substantially the entire length of the upper surface of the portion 4 is formed into transversely extending rack teeth 6. The end portion 7 of said member 2 is provided with a preferably vertically extending slot 8 for the reception of the bight 9 of preferably a cable 10, although a connecting member of any other suitable material might be employed if desired. The means employed in securing the extremities of said cable 10 consists preferably of a U-shaped member 11, a perforated plate member 12 slidably mounted upon the parallelly extending end portions of said member 11, and nuts 13 threaded upon said end portions of the latter in engagement with said plate member. By such construction upon positively screwing the nuts 13 upon said end portions of said member 11, it is evident that the cable will be firmly and securely gripped therein. However, we do not wish to limit ourselves to any specific form of securing, as any suitable means might be employed to effect the same purpose.

Formed at the opposite extremity of the toothed bar portion 4 of the member 2 is a perpendicularly disposed jaw-forming portion 14, the same being preferably formed of gradually increasing thickness toward its base, for obvious reasons. In addition to the ribs 5 formed at the lateral edges of said jaw, an additional reinforcing central longitudinally extending rib 15 is provided. Provided at the edges of said jaw 14, in the inner or contacting surface thereof, is a transverse horizontally extending slot 16 adapted, when the device is in use, to accommodate the lip or flange of the car end-beam, in the event of the latter being of metal construction. In order to insure a positive gripping of the car end-beam, es-

pecially when the latter is of wooden construction, the upper extremity of said jaw is provided at the lateral edges thereof with inwardly extending pointed or knife edged projections 17, the same being adapted to serve an obvious purpose.

The member 3 is comprised of an upper jaw-forming portion 18 adapted to co-act with the jaw 14 of the member 2, and a lower slotted portion 19, the slot 20 formed in the latter portion being adapted to snugly receive the portion 4 of the member 2 upon which it is slidably mounted. The inner or contacting surface of said jaw portion 18 is preferably provided at its vertically extending edges with projecting ribs 18′ the upper extremities of which are provided with projections 18″ similar to the projections 17 provided upon the jaw portion 14 before described. Alining slots 21 provided at the base portion of said ribs in horizontal alinement with the slot 17 provided in the jaw portion 14, are adapted to serve in the same capacity as the last named slot. Rockingly mounted in said member 3 upon a centrally positioned horizontally disposed pin 22 the extremities of which rest respectively in the body portion 23 of said member 3 and the vertical wall 24 provided for the support of said pin, is a worm gear 25 adapted to mesh with the teeth 6 of the member 2. 26 indicates an integral hand lever projecting from said gear 25. A portion 27 of said gear is flattened as clearly shown in Figs. 3 and 4. By such provision upon rocking the lever 26 to a horizontal position, as shown in Fig. 4, the worm 25 will be entirely disengaged from the teeth of the member 2, whereupon it is evident that the jaw member 3 may be slid to any position upon the portion 4 of said member 2. Hence, a speedy advancement of our device during the application thereof is effected.

In use our device is preferably applied to the front end-beam of the rear car and the rear end-beam of the front car to be coupled, although the same may be applied to any other suitable support provided at the adjacent ends of the cars.

While we have shown what we deem to be the preferable form of our device, we do not wish to be limited thereto, as there might be many changes made in the details of construction and arrangement of parts without departing from the spirit of our invention. And while we have designed our device with special reference to railway cars, we may use the same in any other connection to which it is applicable.

Having described our invention what we claim as new and desire to secure by Letters Patent is:

1. In a coupling device, the combination of similar clamping means comprising a bar; a jaw formed at one end of said bar and provided with a notch adapted to receive the flange of a car end beam; a jaw adjustable on said bar and provided with a notch adapted to receive a car end beam flange; and a flexible connection between said clamping means, substantially as described.

2. In a coupling device, the combination of similar clamping means comprising a bar; a jaw formed at one end of said bar and provided with a notch adapted to receive the flange of a car end beam, and a tooth adapted to enter the side of a wooden beam; a jaw adjustable on said bar and provided with a notch adapted to receive a car end beam, and a tooth adapted to enter the side of a wooden beam; and a flexible connection between said clamping means, substantially as described.

3. In a coupling device, the combination of similar clamping means comprising the bar 2 having teeth 6 on its upper face; jaw 14 on bar 2 provided with the notch 16; member 3 slidably mounted on said bar and provided with the notch 21; gear 25 mounted in member 3 and provided with the handle 26 and a flattened side 27; and a flexible connection between said clamping means, substantially as described.

4. In a coupling device, the combination of similar clamping means comprising the bar 2 having teeth 6 in its upper face and slot 8 in its end; jaw 14 on bar 2 provided with the notch 16 and tooth 17; member 3 slidably mounted on said bar and provided with the notch 21 and tooth 18″; gear 25 mounted in member 3 and provided with the handle 26 and the flattened side 27; cable 10 taking through slot 8; and clamping means for securing the end of the cable, substantially as described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

MUNGO H. C. TURNBULL.
CHARLES W. TOMLIN.

Witnesses to signature of Mungo H. C. Turnbull:

JAPHETH A. LOVELL,
ALEXANDER J. ANDERSON.

Witnesses to signature of Charles W. Tomlin:

JOSHUA R. H. POTTS,
HELEN F. LILLIS.