

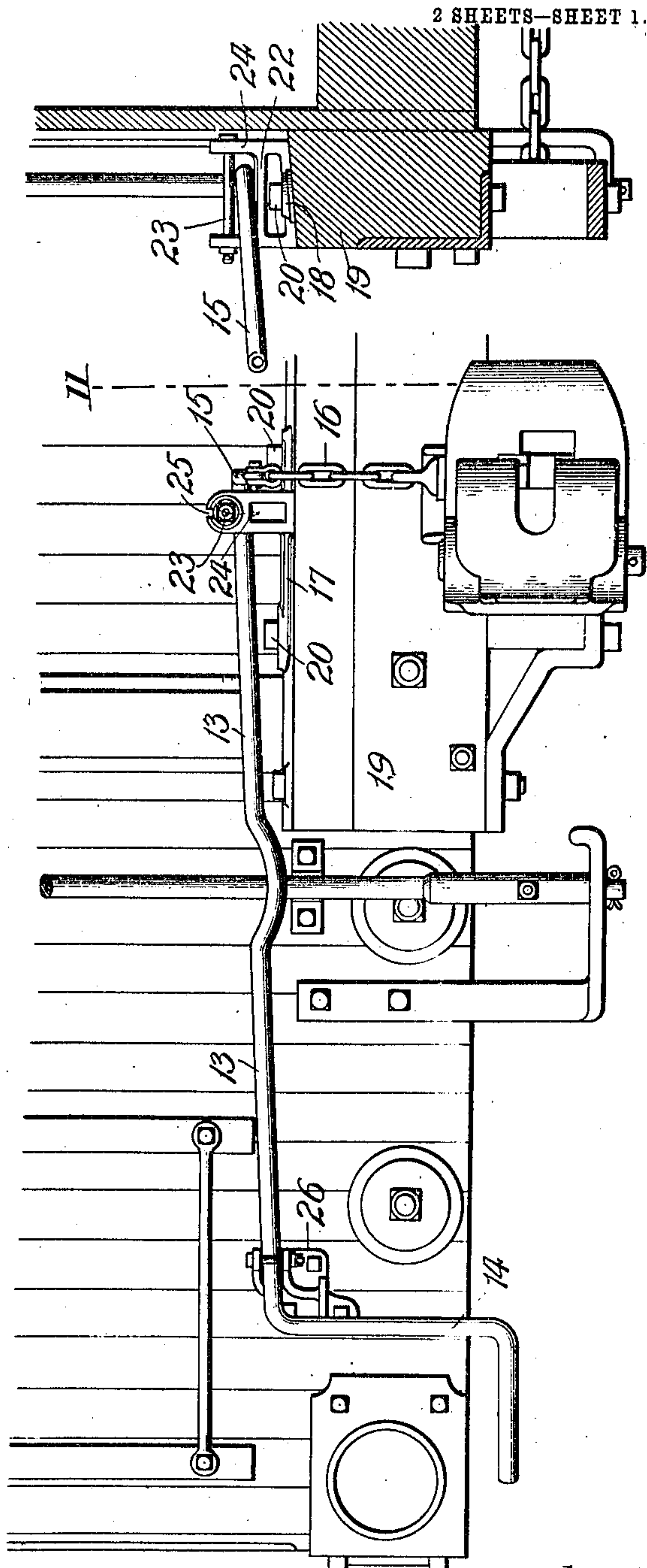
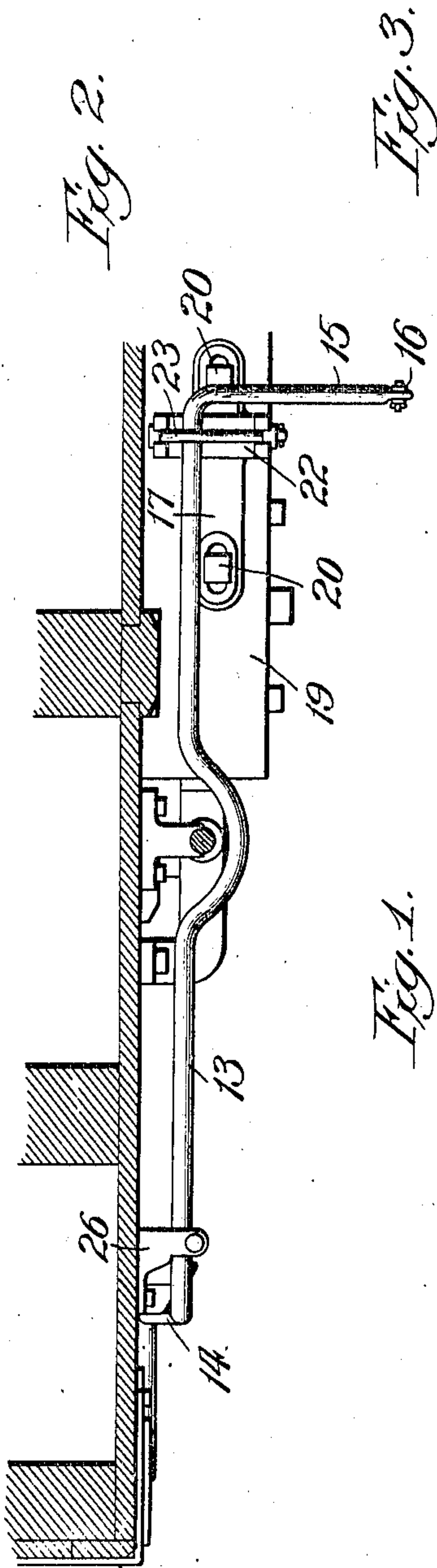
No. 825,343.

PATENTED JULY 10, 1906.

LE GRAND PARISH.
DEVICE FOR OPERATING COUPLING LOCKS.

APPLICATION FILED FEB. 6, 1905.

2 SHEETS—SHEET 1.



Witnesses:
F. E. Gaither.
Archibald Martin

Inventor:
Le Grand Parish,
By Atty
Paul Symestredt

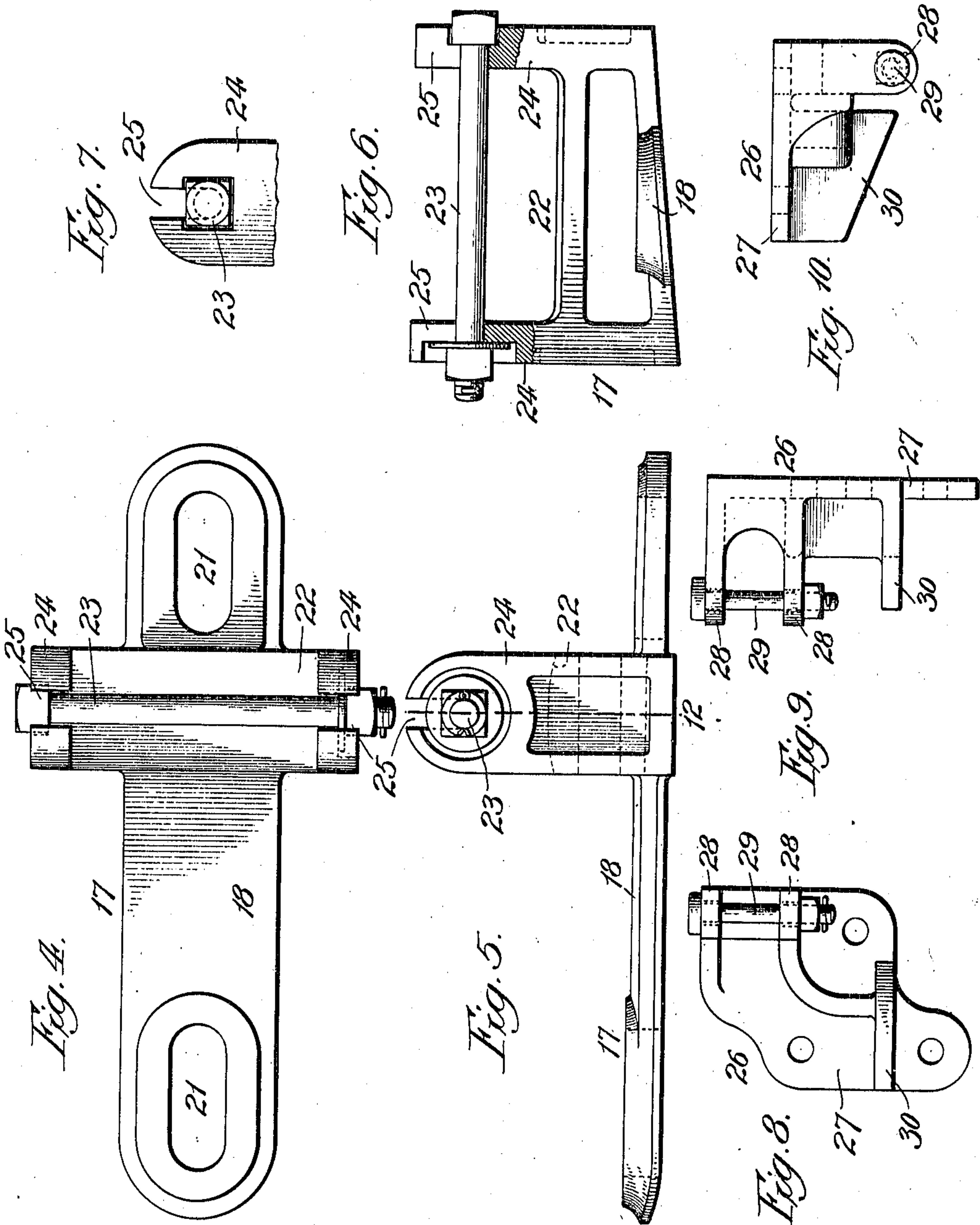
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UNITED STATES PATENT OFFICE.

LE GRAND PARISH, OF CLEVELAND, OHIO.

DEVICE FOR OPERATING COUPLING-LOCKS.

No. 825,343.

Specification of Letters Patent.

Patented July 10, 1906.

Application filed February 6, 1905. Serial No. 244,304.

To all whom it may concern:

Be it known that I, LE GRAND PARISH, a citizen of the United States, residing at Cleveland, in the State of Ohio, have invented certain new and useful Improvements in Devices for Operating Coupler-Locks, of which the following is a specification.

My invention relates to improvements in devices for operating coupler locks and more particularly to the devices employed for attaching the uncoupling lever of automatic couplers, to the car body, the object being to provide an apparatus wherein the parts are so constructed and arranged as to permit of the ready mounting and removal of the uncoupling lever, after the brackets, which support the lever, have been securely attached to the car body, and one in which means are provided to hold the lever in position for uncoupling when desired. A further object of my invention is to provide a supporting bracket from which the uncoupling lever can be readily removed and another substituted therefor, when from any cause the lever has become so badly bent or twisted as to render it inoperative.

These objects and other advantages which may hereinafter appear, I attain by means of the construction illustrated in preferred form in the accompanying drawings, wherein—

Figure 1 is a front elevation of one half of a freight car body having my improved apparatus applied thereto, the uncoupling lever being shown in position for coupling;

Figure 2 is a horizontal section through the car body, showing my improved mechanism in plan, with the parts in the same relative positions as in Figure 1;

Figure 3 is a vertical section of the same, taken on the line (11) of Figure 1, looking toward the outside of the car;

Figures 4 and 5, a plan view and front elevation respectively of the bracket supporting the inner end of the uncoupling lever, adjacent to the coupler head;

Figure 6 is a cross section of the same taken on the line (12) of Figure 5;

Figure 7 is a rear elevation of one of the lugs, illustrating the manner in which it is slotted and countersunk for the reception of the removable bolt;

Figures 8 and 9, a front and side elevation

respectively of the bracket supporting the outer end of the uncoupling lever, and—

Figure 10 is a plan view of the same.

In devices of this kind as heretofore constructed it frequently happens that when it is desired to remove the uncoupling lever, owing to its having become so bent or twisted from accidental or rough usage as to render it inoperative, it is almost impossible to do so without first removing one or both of the supporting brackets from the car body, as it is necessary in such constructions to pull the lever through either the inside or outside bracket, and in order to overcome this very objectionable feature I provide a form of bracket in which the lever is securely supported in any desired position, but from which it can be readily removed by lifting, in a manner to be presently described.

In the practice of my invention I provide an unlocking lever 13, which may be of any preferred form, as for instance that shown in the accompanying drawings, which consists of a straight main portion provided at its outer end with an operating handle 14, and at its inner end adjacent to the coupler head with an arm 15. The straight portion has a slight offset at its center where it passes around the brake-shaft, to allow of its being rotated and shifted toward and from the coupler head when it is desired to release or lock the coupler. The arm 15 is connected to the locking-pin of the coupler, which it operates, by means of a chain 16, in the usual manner and is free to follow the forward and backward movement of the coupler, when the car is being hauled or pushed, by reason of the long bearing seat formed on the inner bracket, to be presently described.

The lever 13 is supported at its inner end, adjacent to the arm 15, by means of a bracket 17, which consists of an elongated base or body portion 18, secured to the upper side of the buffer or dead-wood 19 of the car body, by means of the through bolts 20. A certain amount of adjustment of the bracket is provided for by means of slots 21, formed in the base-plate through which the bolts 20 pass. The bracket is also provided with a long bearing seat 22 extending at right angles to the base-plate, upon which the lever 13 rests and is free to slide back and forth,

but is held in place as against upward movement by means of a bolt 23, secured in upwardly projecting lugs 24 formed at opposite ends of the seat 22.

5 As there is not sufficient space between the rear lug 24 and the body of the car to permit of the insertion and removal of the bolt 23 in the usual manner, the lugs are provided with slots 25 for this purpose and also have
10 countersunk depressions in their outer faces for the reception of the nut and head of the bolt. The depression in the rear lug is square and of a corresponding size to fit the head of the bolt snugly and prevent its turning
15 when in position, while the corresponding depression in the forward lug is round and of a sufficient diameter to permit of the rotation of the nut upon the bolt. When it is desired to insert or remove the bolt it is
20 only necessary to unscrew the nut a sufficient distance to permit the nut and the bolt head to clear the outer faces of the lugs 24, as there is sufficient space between the rear lug and the car-body to permit of the
25 withdrawal of the bolt for this purpose. The nut may be locked in position on the bolt by a washer and a cotter-pin as illustrated in Figures 4, 5 and 6, or in any other suitable manner. By means of this construction it
30 will be seen that the lever 13 can be removed from the bracket 17 at any time without disturbing the bracket.

The lever 13 is supported at its outer end adjacent to the handle 14 by a bracket 26,
35 which consists of a base plate 27, bolted to the face of the car body and lugs 28 projecting outwardly therefrom, between which the lever rests. A bolt 29 passes through the outer ends of the lugs 28 and serves to hold
40 the lever in place but leaving it free to be rotated or shifted transversely.

The bracket 26 is further provided with a horizontally projecting plate or step 30,
45 against which the handle 14 of the lever 13 abuts. The outer face of the step 30 is inclined in such a manner that when the lever is shifted inwardly toward the coupler head the handle 14 and arm 15 will be held in their raised or uncoupling position and will remain
50 so until the lever is again shifted outwardly, when they will be free to fall into the lower or coupling position.

From the foregoing description it will be seen that when the bolts 23 and 29 are removed
55 the uncoupling lever can be easily lifted from the supporting brackets and another lever inserted in place thereof without in any way disturbing the positions of the brackets on the car body no matter how
60 badly the lever to be removed may have been bent or twisted.

Having thus described my invention and illustrated its use, what I claim as new and

desire to secure by Letters Patent, is the following:

1. In a device for operating coupler locks, the combination with an uncoupling lever, of two brackets in which said lever is mounted, each having removable means for retaining the lever therein, substantially as described. 65 70

2. In a device for operating coupler locks, the combination with an uncoupling lever, of two brackets in which said lever is mounted, one of said brackets being adapted to hold the lever in position for uncoupling, together with removable means for retaining the lever in the brackets, substantially as described. 75

3. In a device for operating coupler locks, the combination with an uncoupling lever, of two brackets in which said lever is mounted, each of said brackets consisting of a body portion and projecting lugs adapted to form seats for the lever, together with removable bolts connecting the lugs, substantially as described. 80 85

4. In a device for operating coupler locks, the combination with an uncoupling lever, of two brackets, in which said lever is mounted, located adjacent to its outer and inner ends respectively, the outer bracket having a seat for the lever and an inclined step adapted to hold the lever in position for uncoupling, the inner bracket having a long bearing seat for the lever, extending at an angle to the body portion thereof, together with removable bolts adapted to hold the lever on the seats, substantially as described. 90 95

5. In a device for operating coupler locks, the combination with an uncoupling lever, of a bracket for holding the same, consisting of a body portion and a long bearing seat extending at an angle thereto, together with upwardly projecting lugs located at opposite ends of the seat and a bolt connecting said lugs, substantially as described. 100 105

6. In a device for operating coupler locks, the combination with an uncoupling lever, of a bracket for holding the same, consisting of a body portion and a long bearing seat extending at an angle thereto together with upwardly projecting lugs located at opposite ends of the seat and having their outer ends slotted for the reception of a bolt, substantially as described. 110

7. In a device for operating coupler locks, the combination with an uncoupling lever of a bracket supporting the same, said bracket having a bearing seat and an inclined step adapted to hold the lever in position for uncoupling, together with removable means for retaining the lever in the bracket, substantially as described. 115 120

8. In a device for operating coupler locks, the combination with an uncoupling lever of a bracket supporting the same, said bracket consisting of a body portion, lugs extending 125

at an angle therefrom to form a seat for the lever, a bolt connecting said lugs and an inclined step adapted to hold the lever in position for uncoupling, when said lever is shifted
5 toward the coupler head, substantially as described.

In testimony whereof I have hereunder

signed my name in the presence of the two subscribed witnesses.

LE GRAND PARISH.

Witnesses:

PAUL CARPENTER,
ALBERT GRANT MILLER.