

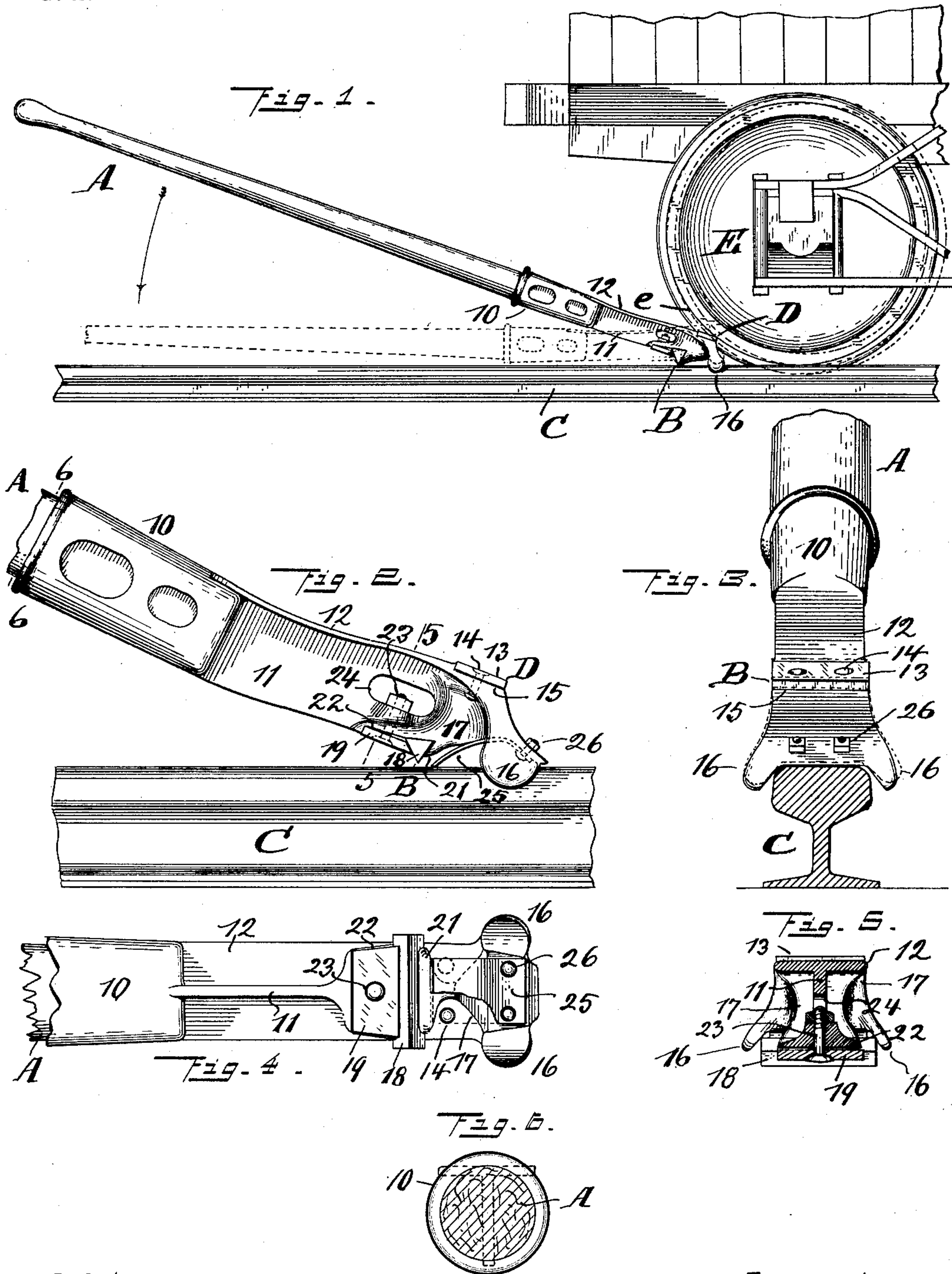
No. 737,522.

PATENTED AUG. 25, 1903.

G. B. SULLIVAN.
CAR LEVER.

APPLICATION FILED JAN. 19, 1903.

NO MODEL.



WITNESSES
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UNITED STATES PATENT OFFICE.

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CAR-LEVER.

SPECIFICATION forming part of Letters Patent No. 737,522, dated August 25, 1903.

Application filed January 19, 1903. Serial No. 139,537. (No model.)

To all whom it may concern:

Be it known that I, GEORGE B. SULLIVAN, a citizen of the United States, residing at Evanston, in the county of Hamilton and State of Ohio, have invented a certain new and useful Car-Lever; and I do declare the following to be a clear, full, and exact description thereof, attention being called to the accompanying drawings, with the reference characters marked thereon, which form also a part of this specification.

This invention relates to certain new and useful improvements in implements for moving vehicles traveling on track-rails, more particularly railway-cars, where such moving is to be done by hand and over a limited distance only.

It relates more particularly to that class of devices which while supported upon the rail are caused to push against the face of the wheel, causing the same to rotate a limited distance, the advance being followed up by the implement and by a similar operation of it, which operation is successively repeated until the car is moved to the desired position.

The main object of the invention is to construct such an implement in the most simple manner, doing away with all unnecessary operating parts, thereby avoiding wear which soon impairs and reduces the usefulness of the device.

Another object is to construct the implement as light as possible without lessening its strength and to render its manipulation during use and its handling during transportation as convenient and little tiresome as possible.

In the following specification, and particularly pointed out in the claims, is found a full description of the invention, together with its manner of use, parts, and construction, which latter is also illustrated in the accompanying drawings, in which—

Figure 1 illustrates the implement and manner of its use, for which purpose part of a car near one end is shown. Fig. 2 in a similar view, it being a side view, shows the lower part of the implement enlarged. Fig. 3 is an end view of the preceding figure with the rail in cross-section. Fig. 4 is an under side view of that part of the implement shown in

Fig. 2. Figs. 5 and 6 are cross-sections on lines 5 5 and 6 6, respectively, of Fig. 2.

Fig. 1 shows manner of using the implement, the same being substantially a lever with a manipulation accordingly. A is the handle thereof, where the power is applied, B is the fulcrum resting on rail C, and D the point where the work is done, said point being in engagement with—that is, bearing against—the face *e* of one of the car-wheels E. The operation consists of bearing down on handle A and forcing it toward the rail, whereby point D is raised and by acting against the car-wheel moves the same ahead to an extent shown by the dotted lines. The tool is now raised, shoved ahead under the wheel and into the space between it and the rail below, and the same operation repeated. Where the weight is not excessive and the track level, the car after started once can be readily kept going by following rapidly up with the tool behind the wheel.

As to its construction the implement consists of the lever-handle proper, which is of wood, and of the working head, which is of metal, preferably malleable iron or cast-steel. It consists of the socket 10, which receives the lower end of the wooden handle, and of a T-shaped shank, consisting of the vertical rib 11 and the flange 12 at its upper edge, both extending from the lower end of the socket. The height of this rib 11 equals the diameter of the socket, so that its edges are in line with the outside of this latter. Flange 12 is also flush with the outside of the socket to avoid projections, and thus presents a flat surface which may rest upon the shoulder while the implement is carried from one place to another. For such purpose this flange is also curved, as shown, to more readily rest against the shoulder. Point D, where the work is done—that is, where the engagement of the wheel takes place—is at the outer edge of this flange and consists of a steel clip 13, held by screws 14 to the upper surface of this flange or to a seat 15, provided thereat. When worn out, this clip may be independently renewed without impairing the usefulness of the implement. It also presents four edges, which may each be used first before renewal becomes necessary by simply reversing this clip

on its seat. From the front edge of the seat of this clip the flange is carried downwardly on an abrupt angle toward the rail, above which it laterally spreads and forms two lugs 5 16, one on each side and each reaching down over the edge of the rail on each side. The object of these lugs is to keep the tool in position on top of the rail and prevent it from slipping off sidewise while it is shoved ahead 10 in following up the wheel. From below this point D, downwardly and rearwardly, rib 11 is also laterally enlarged on both sides, as shown at 17, to form the fulcrum B of sufficient width to rest fully across the top of the rail. As to construction this fulcrum consists of a triangular clip 18, held in place by a clamping-plate 19 against a lip 21 at the lowest point of these enlarged parts 17. This plate is seated into a recess 22, within which 15 it is held by a bolt 23. To prevent the nut of this bolt from projecting beyond any part of the implement, I provide a perforation 24 in rib 11 and have said bolt only reaching into this perforation within which the nut is 20 secured.

To protect the edge of clip 18 against unnecessary wear while the tool is pushed along on the rail and behind the wheel, I provide a spring 25, secured to the under side at the 25 forward end and between lugs 16. It is so shaped that when its free end is upon the rail it raises the head of the tool off therefrom, preventing contact and wear. It interposes no obstruction, however, to the use of the tool 30 and readily yields to permit the fulcrum to reach the rail when the handle is operated and pressure applied. This spring is secured by bolts 26.

Having described my invention, I claim as 40 new—

1. In a car-lever, the combination of a lever-handle and a working head, the latter consisting of a socket which receives one end of the former and of a T-shaped shank projecting integrally therefrom and comprises flange 45 12 and rib 11 below it, the front edge of flange

12 constituting the working point which is adapted to engage the wheel while the fulcrum on which the lever rests is formed at the lower part of the front edge of rib 11, such edge being laterally enlarged for such purpose. 50

2. In a car-lever, the combination of a lever-handle and a working head, the latter consisting of a socket which receives one end of the former and of a T-shaped shank projecting integrally therefrom and comprises flange 55 12 and rib 11 below it, the front edge of flange 12 constituting the working point which is adapted to engage the wheel while the fulcrum on which the lever rests is formed at the lower part of the front edge of rib 11, such edge being laterally enlarged for such purpose, flange 12 in front of the working point being continued downwardly toward the rail 60 and laterally enlarged to form a lug 16 on each side as shown and for the purpose described.

3. In a car-lever, the combination of a lever-handle and a working head, the latter consisting of a socket which receives one end of the former and of a T-shaped shank projecting integrally therefrom and comprises flange 65 12 and rib 11 below it, the front edge of flange 12 constituting the working point which is adapted to engage the wheel, a lip 21 formed transversely at the lower part of the front end of rib 11, a clip fitted against this lip and a clamping-plate to hold it in position, the front end of the shank having the lateral enlargements 17, one at each side, a recess 22 at the 70 under side of this enlarged part and back of lip 21 into which and behind said lip the above-mentioned clip with the clamping-plate behind are fitted, a bolt to hold this clamping-plate against the clip and a perforation 24 in 75 rib 11 to receive the nut of this bolt.

In testimony whereof I hereunto set my signature in the presence of two witnesses.

GEORGE B. SULLIVAN.

Witnesses:

C. SPENGEL,
ARTHUR KLINE.