

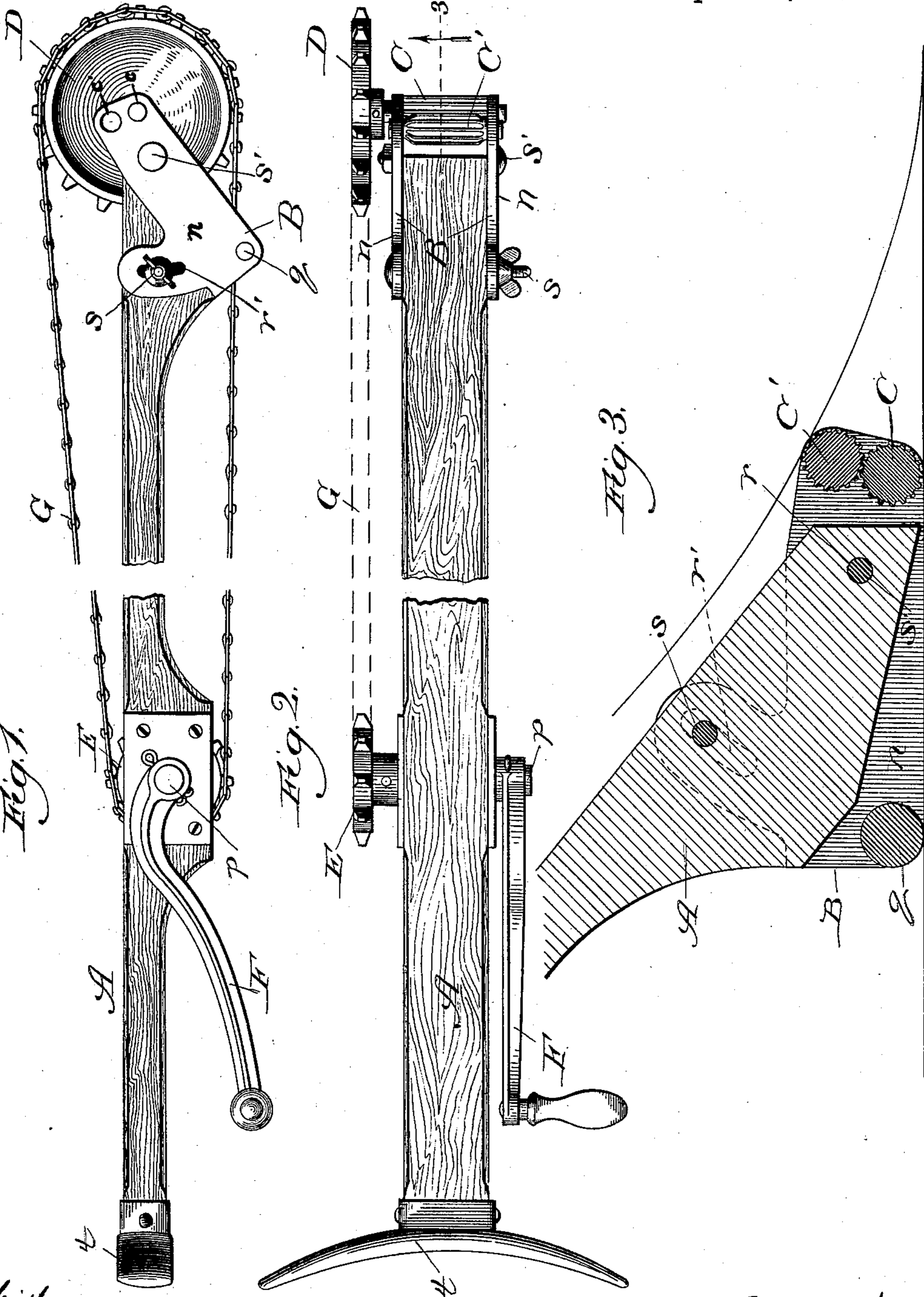
(No Model.)

M. F. CONNETT.

CAR MOVER.

No. 389,689.

Patented Sept. 18, 1888.



Witnesses:
E. Gaylord.
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Inventor:
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UNITED STATES PATENT OFFICE.

MATTHEW F. CONNETT, OF PEORIA, ILLINOIS, ASSIGNOR OF THREE-FOURTHS
TO FRED H. SMITH, OF SAME PLACE, AND ANDREW BROWN AND W.
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CAR-MOVER.

SPECIFICATION forming part of Letters Patent No. 389,689, dated September 18, 1898.

Application filed May 7, 1888. Serial No. 273,117. (No model.)

To all whom it may concern:

Be it known that I, MATTHEW F. CONNETT, a citizen of the United States, residing at Peoria, in the county of Peoria and State of Illinois, have invented a new and useful Improvement in Car Starters and Movers, of which the following is a specification.

My invention relates to an improvement in the class of devices which, besides affording means for giving the car its start, may be also employed to move the car any desired distance along the track. It is desirable in the construction of devices of this character to attain lightness, strength, and great leverage, whereby, with the least force, comparatively speaking, exerted to operate the device, the greatest and most effective power may be brought to bear against the car to move it.

My object is to provide a device which shall possess these qualities in a high degree; and to this end my invention consists in a support carrying co-operating rollers rotatory in opposite directions, and with means for imparting rotary movement to the rollers.

In the drawings, Figure 1 shows my improved device in broken side elevation. Fig. 2 is a broken plan view of the same; and Fig. 3, a longitudinal vertical section of the forward end of the same, taken on the line 3 of Fig. 2 and viewed in the direction of the arrow, enlarged, and shown in operative position wedged between a railroad-track and a car-wheel.

A is a support, preferably in the form of a bar, and, for the sake of lightness, of wood, provided at one end with a rest, *t*, to fit the chest of the operator. At its opposite end two metal plates, *n*, are secured to the sides of the bar by means of bolts *s* and *s'*, which pass transversely through the bar and through holes *r* and slots *r'* in the plates, as shown. This construction renders the plates adjustable, for a purpose hereinafter described, to different angles within a space limited by the length of the slots *r'*, the adjustment being effected by loosening the nut upon the bolt *s* (which, for convenience, may be a thumb-nut, as shown) and turning the plates upon the bolts *s'*. The plates *n* thus form together an adjustable frame, B, and afford journal-

bearings for a roller, *q*, toward the rear end of the frame, and for two rollers, C and C', at the forward end thereof. The roller C' rests loosely in its bearings, which are somewhat larger than the journals, whereby it may be thrown in and out of contact with the roller C, for a purpose hereinafter described.

The journal portion at an end of one of the rollers, preferably the roller C, as shown, extends beyond its bearing in the frame B and affords a shaft for a sprocket-wheel, D, which is rigidly attached thereto to cause the sprocket-wheel and roller C to turn together. E is a sprocket-wheel supported at a convenient distance from the rest *t* upon a shaft, *p*, and is operated by a crank, F. G is a drive-chain connecting the sprocket-wheels D and E.

The operation of my improved car starter and mover is as follows: The device, which may be easily carried about by one man, is placed in position by the operator, with the rollers *q* and C resting upon the tread of a track and the rollers C' against the tread of a car-wheel. Pressure exerted against the rest *t* wedges the rollers C and C' between the wheel and track and produces contact of the rollers. The crank F is then turned in a direction to cause the roller C to advance, and consequently its companion rollers C' to turn in the opposite direction. The friction of the roller C' against the tread of the car-wheel causes the latter to revolve in the direction which moves the car forward, while the friction of the roller C against the tread of the rail causes the device to travel forward, thus maintaining the wedging effect, which keeps up the necessary pressure to produce the operation of my device of the roller C' against the car-wheel. The roller *q* serves to steady the device and keep the rollers C and C' at the adjusted angle with relation to the track and car-wheel. When it is desired to change the angle of the bar A to raise or lower the operative position of the rest *t*—as, for instance, to accommodate the device to the height of the operator—this may be accomplished by adjusting the frame B to the desired angle, as hereinbefore explained.

I prefer that the rollers C and C' shall be serrated, as shown in the drawings, to per-

mit them to intermesh. They may, however, be simply rough, to afford adequate friction-surfaces to engage the rail, and travel thereon and be turned one by the other, and turn the car-wheel, by the frictional contact of their peripheries against each other and each, respectively, against the rail and car-wheel

To prevent the accumulation of dust and other foreign substances upon the rollers C and C' from clogging the latter, and thus interfering with their action, the roller C' is supported on its journals in bearings a trifle larger than the journals, whereby the latter have limited play, as hereinbefore described.

The center of the roller C' is, by preference, slightly in advance of that of its companion roller, as shown, whereby the wedging pressure of the rollers C and C' holds the roller q down against the tread of the track.

While I prefer to construct my improved car-starter in the form shown in the drawings and above described, the gist of my invention lies in the employment of the two rollers C and C', which are operated to become wedged between the treads of the car-wheel and track by being turned simultaneously in opposite directions and by the continued turning automatically to maintain the wedging effect and cause the lower roll to travel along the track and the upper roll to revolve the car-wheel; and hence any auxiliary mechanical agencies operating to produce the above effects upon the rolls are the obvious mechanical equivalents of the agencies for the same purpose herein shown and described, and are comprehended within the spirit of my invention.

What I claim as new, and desire to secure by Letters Patent, is—

1. A car starter and mover comprising, in combination, a support, A, a roller, C, on one end of the support to engage the rail, and a roller, C', adjacent to the roller C to engage the car-wheel, and means, substantially as described, connected with the said rollers for

rotating them in opposite directions, substantially as and for the purpose set forth.

2. The combination of a support, A, roller q, co-operating rollers C C' on the end of the support, and means, substantially as described, connected with the said rollers C C' for rotating them in opposite directions, substantially as and for the purpose set forth.

3. A car starter and mover comprising, in combination, a support, A, a roller, C, on one end of the support to engage the rail, and a roller, C', adjacent to the roller C to engage the car-wheel, a wheel, D, connected with one of the rollers, a wheel, E, on the support, geared to the wheel D, and a crank, F, for operating the wheel E, substantially as described.

4. The combination of a support, A, adjustable frame B on the end of the support, carrying a roller, q, and co-operating rollers C C', and means, substantially as described, connected with the said rollers C C' for rotating them in opposite directions, substantially as and for the purpose set forth.

5. The combination of a bar, A, adjustable frame B, supported on the end of the bar, carrying a roller, q, and co-operating rollers C C', rotatory wheels D and E, geared together, and a crank, F, connected with the wheel E, substantially as and for the purpose set forth.

6. A car starter and mover comprising, in combination, a support, A, a roller, C, on one end of the support in close-fitting journal-bearings, and a second roller, C', adjacent to said first roller and normally in contact therewith in loose-fitting journal-bearings, and means, substantially as described, connected with one of said rollers to rotate it in one direction and through it the other roller in the opposite direction, substantially as and for the purpose set forth.

MATTHEW F. CONNETT.

In presence of—

J. W. DYRENFORTH,
W. H. DYRENFORTH.