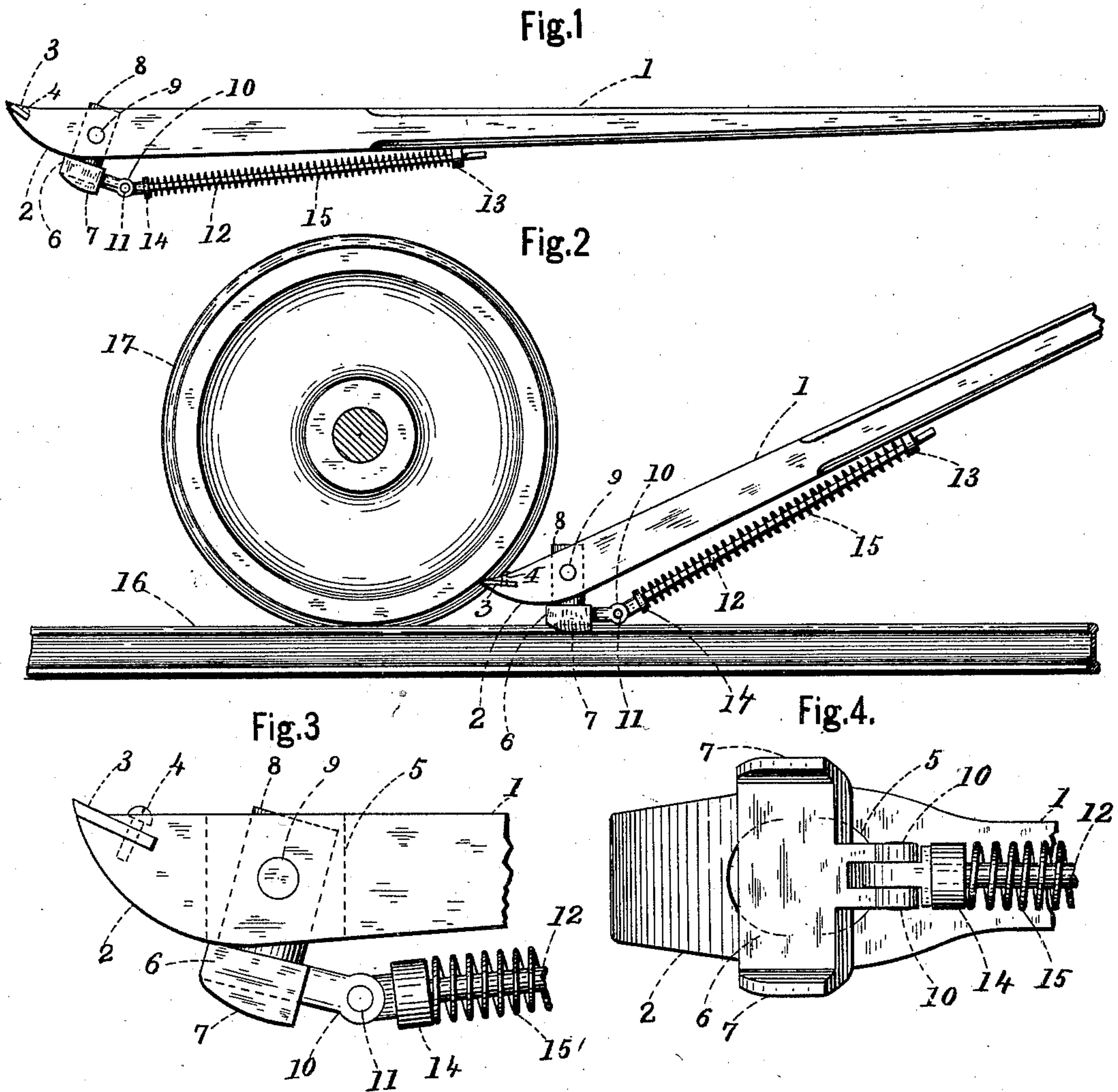


(No Model.)

A. HUBBARD.  
LEVER FOR STARTING CARS.

No. 475,770.

Patented May 31, 1892.



Witnesses.

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# UNITED STATES PATENT OFFICE.

ARTHUR HUBBARD, OF BUFFALO, NEW YORK.

## LEVER FOR STARTING CARS.

SPECIFICATION forming part of Letters Patent No. 475,770, dated May 31, 1892.

Application filed September 29, 1891. Serial No. 407,154. (No model.)

*To all whom it may concern:*

Be it known that I, ARTHUR HUBBARD, a citizen of the United States, residing in Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Levers for Starting Cars, of which the following is a specification.

My invention relates to certain improvements in levers for starting and moving cars along the track by hand and will be fully and clearly hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of the device complete. Fig. 2 is also a side elevation showing the device in position for moving the wheel of a car. Fig. 3 is an enlarged side elevation of the head of the device, showing the several parts connected thereto more clearly. Fig. 4 is an under side view of the same.

Referring to said drawings, 1 represents a lever or bar of iron or steel—steel preferred. This bar 1 is a tapering bar, substantially as shown in Fig. 1, and is provided with an enlarged curved pointed head 2, having a removable hardened pointed end piece or plate of steel 3, secured thereto by screws 4. The object in making the steel plate 3 removable is to provide the means for renewing the point of the bar when broken or as it becomes dull by use. Vertically through the head of the bar is an opening 5. (See Fig. 4, where this opening is more clearly shown.) It is also shown by the dotted lines 5 in Fig. 3.

6 represents a guide-piece having two downwardly-projecting side flanges 7, adapted to guide it as it slides along the track. At the top of this guide-piece 6 is a shank 8, which projects up through the opening 5 and is pivoted therein by a pin 9, and at the back are two projecting ears 10, rigidly secured to the guide-piece.

Between the ears 10 is pivoted by a pin 11

a rod 12, which extends along the bar and passes through a lug 13, so as to be kept in position and slide easily therein. At the lower end of the rod 12 is a collar 14, and a spiral spring 15 is mounted on the rod 12, so that one end presses against the collar 14 and the opposite end against the lug 13, so that the guide-piece 6 in its normal position is always forward, as shown in Fig. 3. The object of the guide-piece and its spring is to provide a pivoted fulcrum for the lever to act on; also, a convenient means for guiding the lever on the track and easily sliding it forward as the wheel (and car) is moved along by it.

Its operation is plainly shown in Fig. 2, where the device is represented with its guide-piece resting upon a railroad-track 16 with its side flanges 7 overlapping the sides of the rail and the point 3 bearing against the car-wheel 17. From this it will be seen that the wheel may be moved forward by forcing downward the upper end of the lever and then lifting it up and moving the pointed end 3 forward under the wheel to take another start, which operation is repeated as often as may be necessary.

I claim as my invention—

A lever for starting cars, having a hardened steel-pointed end, a guiding-piece having flanges to keep it in line upon the rail, and an upwardly-projecting shank which projects through an opening in the end and is pivoted thereto, so as to act as a fulcrum for the lever, and a spring mounted upon a rod pivoted to the guide-piece and having its opposite end secured by a lug on the handle for keeping the guide-piece forward when in its normal position, substantially as described.

ARTHUR HUBBARD.

Witnesses:

J. M. CALDWELL,  
JAMES SANGSTER.