(No Model.)

# M. A. SHELDON.

## PINCH BAR.

No. 335,389. Patented Feb. 2, 1886.

Fig. 1.

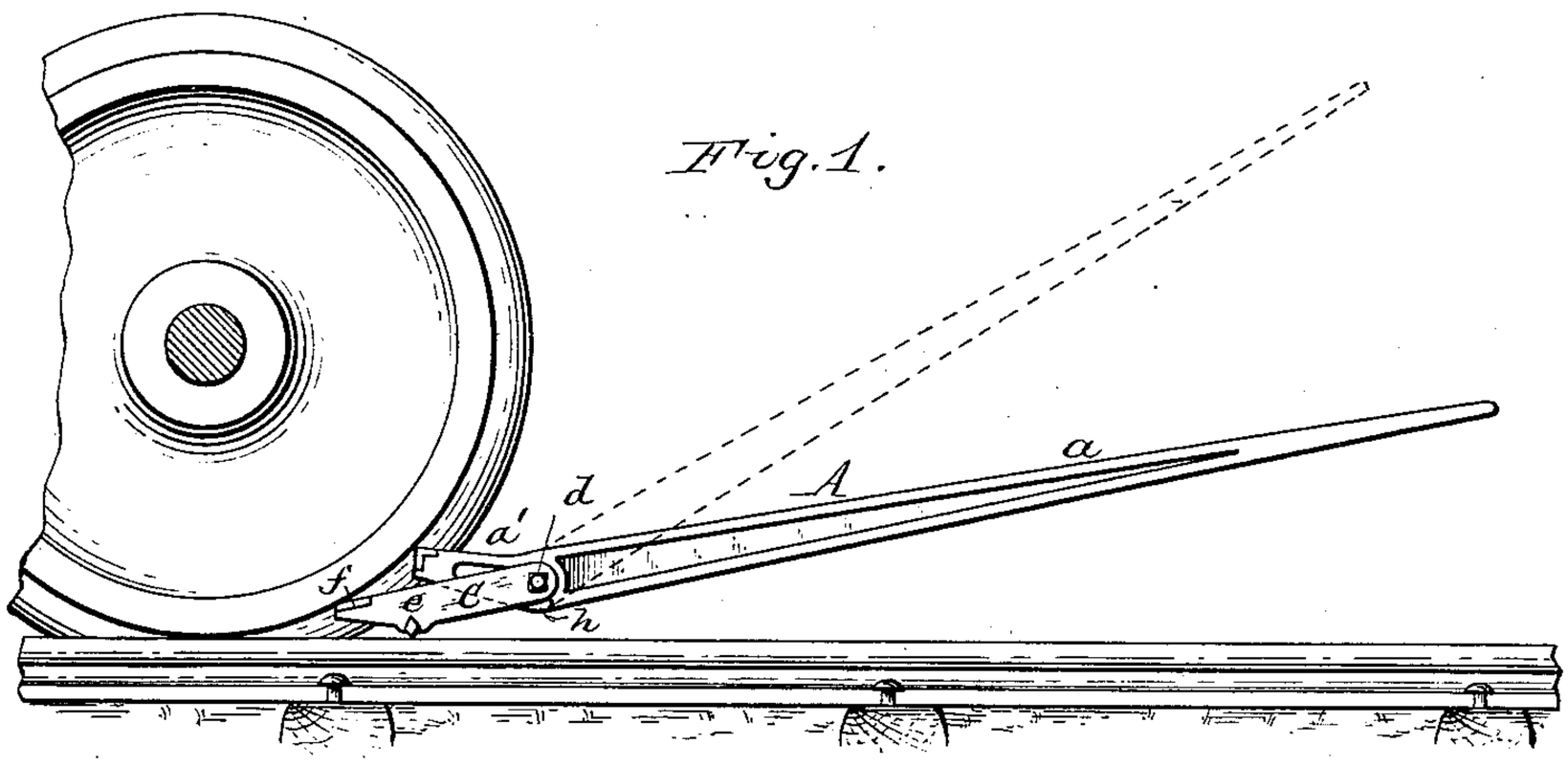



Fig. 2.

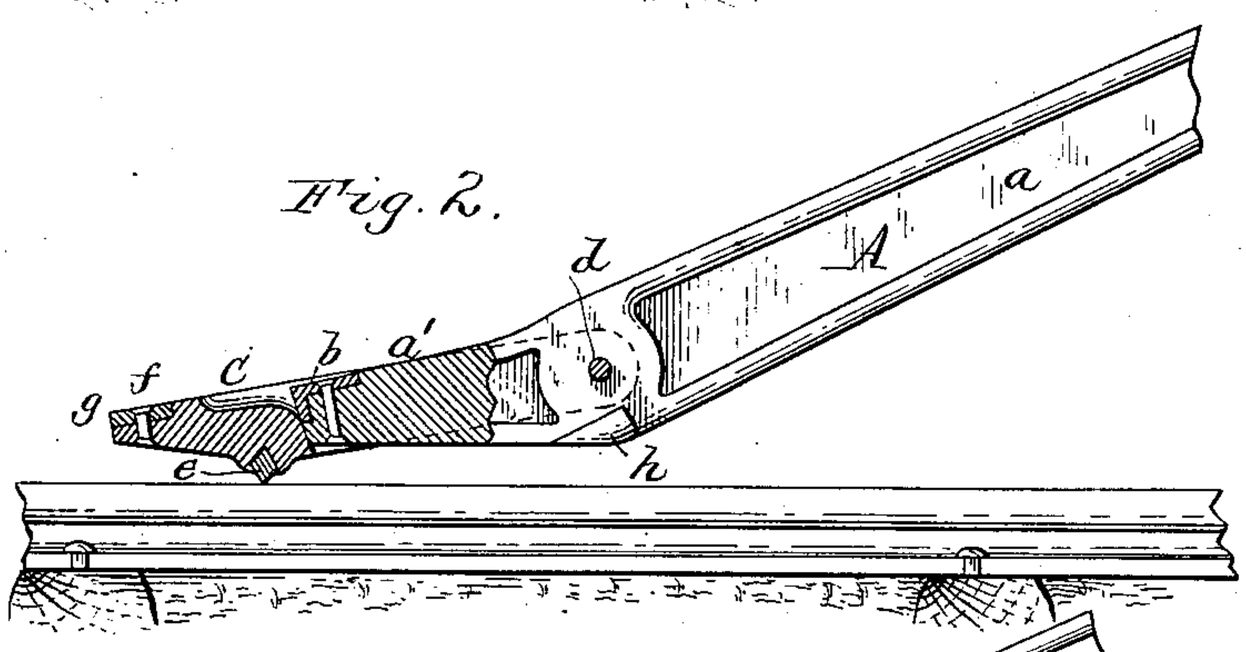



Fig. 3.

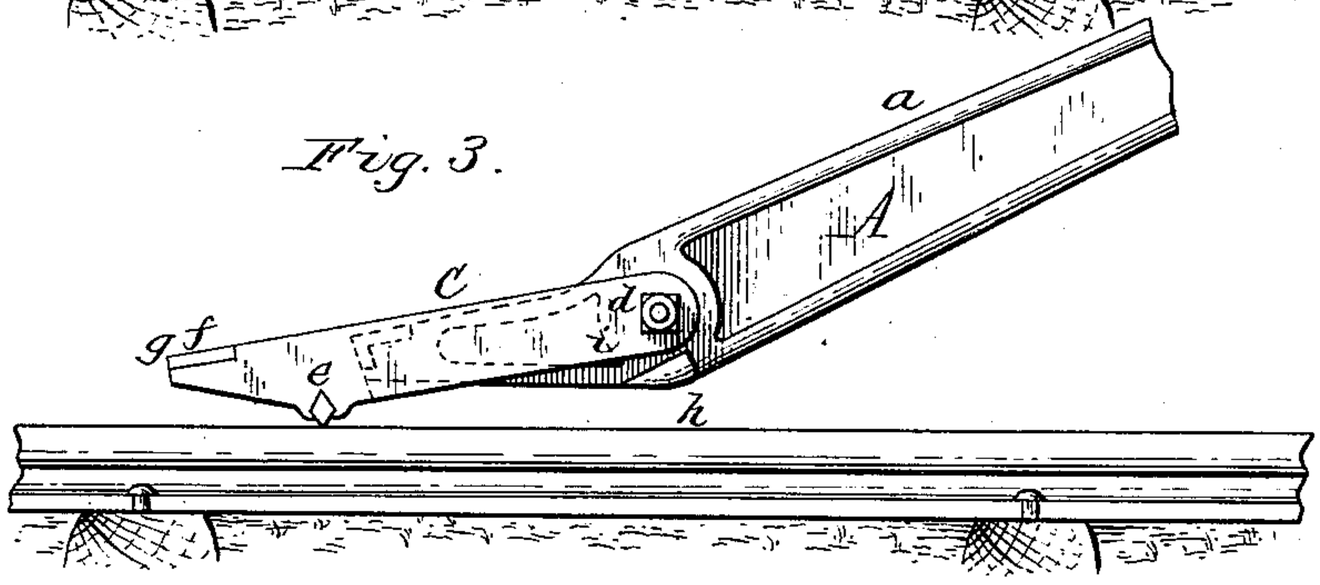
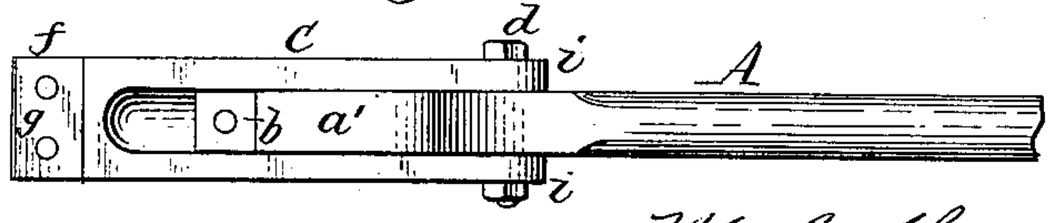



Fig. 4.




Witnesses:
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# UNITED STATES PATENT OFFICE.

MARK A. SHELDON, OF CORRY, PENNSYLVANIA.

## PINCH-BAR.

SPECIFICATION forming part of Letters Patent No. 335,389, dated February 2, 1886.

Application filed November 16, 1885. Serial No. 182,934. (No model.)

*To all whom it may concern:*

Be it known that I, MARK A. SHELDON, of Corry, in the county of Erie and State of Pennsylvania, have invented new and useful Improvements in Pinch-Bars, of which the following is a specification.

This invention relates more especially to an improvement in that class of pinch-bars which are employed for moving railway-cars, and has for its object to increase the efficiency of such bars and to render the same more convenient in their operation, so that a greater pressure can be exerted upon the wheel of the car and the latter can be moved with greater ease than heretofore without increasing the pressure which is applied to the bar.

My invention consists, to that end, of the improvements in the construction of the bar, which will be hereinafter fully set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of my improved pinch-bar applied to a car-wheel. Fig. 2 is a sectional elevation of the lower end of the pinch-bar. Fig. 3 is a side elevation of the same. Fig. 4 is a top plan view thereof.

Like letters of reference refer to like parts in the several figures.

A represents the body or handle portion of the pinch-bar, composed of a long arm or hand-lever, *a*, and a short lifting arm or nose, *a'*, which latter is adapted to bear with its sharp or edged end against the face of the car-wheel. The end of the nose *a'* is provided with a wear-plate, *b*, of case-hardened steel or other suitable material. This plate is secured to the arm *a'* by a screw-bolt or otherwise, so that it can be readily detached and replaced by a new one when worn out.

C represents the fulcrum portion of the pinch-bar, pivoted with its rear end to the handle portion A by a horizontal bolt, *d*, which passes through the handle portion A above the nose *a'*. The fulcrum portion is made bifurcated, and straddles the lower end of the portion A and the nose *a'*.

*e* represents the fulcrum formed on the lower side of the pivoted portion C, so as to rest on the thread of the rail. This fulcrum is preferably formed by an angular bar, of steel, which is inserted in a socket formed transversely in the under side of the pivoted portion C.

*f* represents a lifting or working nose formed at the end of the fulcrum portion C, and provided with a removable steel plate, *g*, similar to the plate *b* of the nose *a'*.

*h* represents lugs or ears formed on both sides of the handle portion A below the pivot-bolt *d*, and adapted to bear against the under side of the rearwardly-extending arms *i* of the fulcrum portion C when the nose *a'* has been raised sufficiently above the arms *i*.

My improved pinch-bar is used like an ordinary pinch-bar by placing the fulcrum *e* on the head of the rail and pushing the working-nose *f* against the face of the wheel. In this position of the bar the handle portion A and the pivoted fulcrum portion C are in line with each other, or nearly so, and the nose *a'* of the handle portion lies between the arms *i* of the fulcrum portion, as represented in Figs. 2 and 3. Upon depressing the upper hand portion, A, the nose *f* is raised and brought in contact with the periphery of the wheel, and the handle portion next turns on the bolt *d* until the nose *a'* is against the face of the wheel. The pinch-bar now operates upon the face of the wheel at two points by means of the noses *a'* and *f*. The action of the lower nose, *f*, is principally that of lifting, and the action of the upper nose, *a'*, that of turning the wheel, and by the joint action of both the wheel is moved with great facility and with greater speed and a much smaller application of power than with ordinary pinch-bars. The lugs or ears *h* form guards which prevent the fulcrum portion from swinging back too far when the bar is raised, and which prevent the handle portion from going down too far in depressing the bar.

I claim as my invention—

1. The combination, with the handle portion A, of a fulcrum portion, C, pivoted at its rear end to the handle portion, and provided at its under side with a fulcrum adapted to rest on the rail, substantially as set forth.

2. The combination, with the handle portion A, provided with a working-nose, *a'*, of a fulcrum portion, C, pivoted to the handle portion and provided with a working-nose, *f*, both noses being adapted to bear against the wheel simultaneously, substantially as set forth.

3. The combination, with the handle portion A, provided with a working-nose, *a'*, of the fulcrum portion C, provided with a working-nose, *f*, and rearwardly-extending arms *i*, straddling the nose *a'* and pivoted to the handle portion above said nose, substantially as set forth.

4. The combination, with the handle portion A, provided with a working-nose, *a'*, and lugs or ears *h*, of the fulcrum portion C, pivoted to the handle portion A, and adapted to be supported by said ears, substantially as set forth.

5. The combination, with the handle portion A, having a working-nose, *a'*, provided with a removable wear-plate, *b*, of a fulcrum portion, C, pivoted to the handle portion A, and having a working-nose, *f*, provided with a removable wear-plate, *g*, substantially as set forth.

Witness my hand this 28th day of October, 1885.

MARK A. SHELDON.

Witnesses:
IDA M. SHELDON,
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