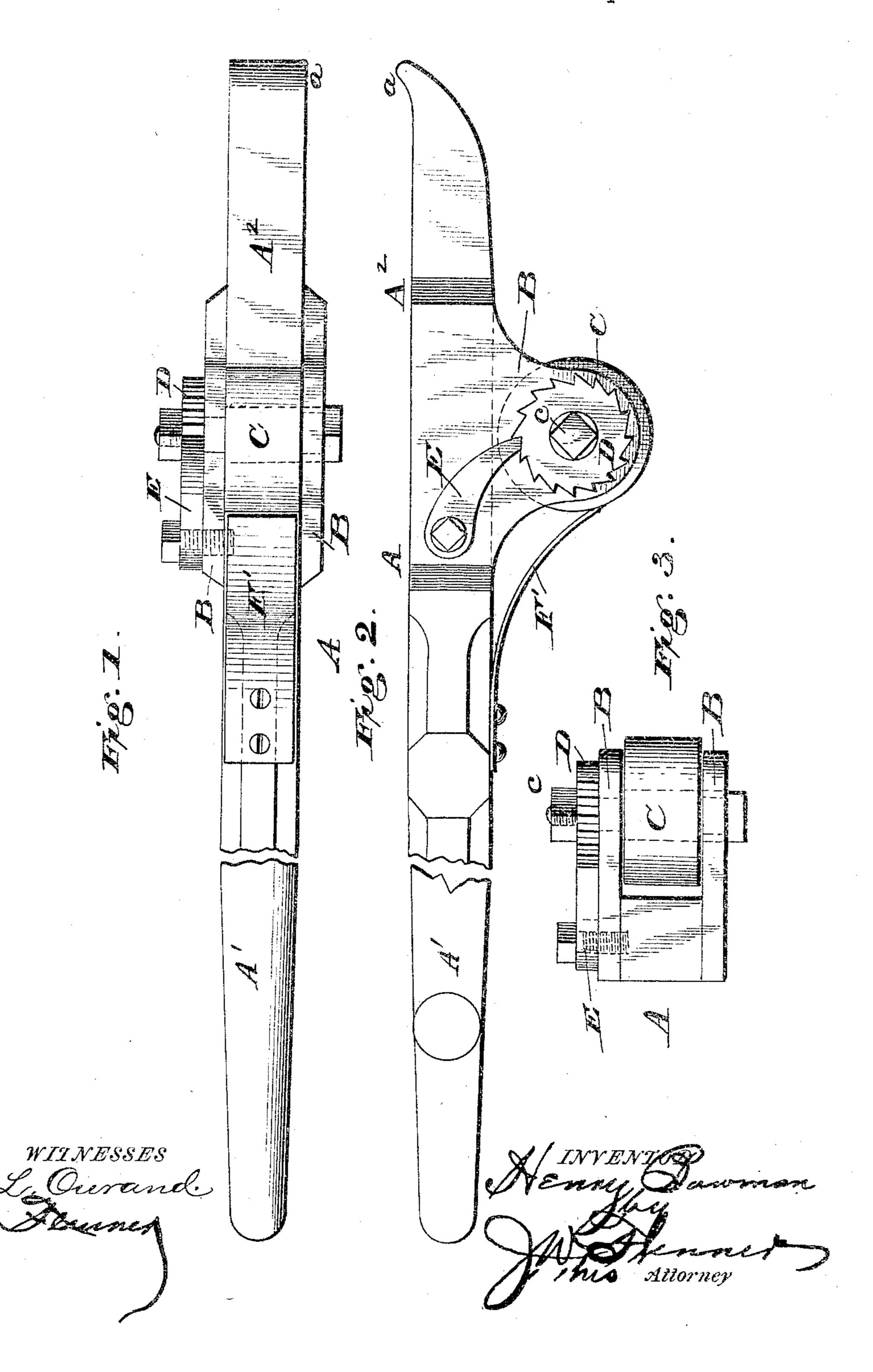
(No Model.)

## H. BOWMAN. CROW BAR.

No. 424,757.

Patented Apr. 1, 1890.



## TATES PATENT OFFICE.

## HENRY BOWMAN, OF LOUISVILLE, KENTUCKY.

## CROW-BAR.

SPECIFICATION forming part of Letters Patent No. 424,757, dated April 1, 1890.

Application filed January 14, 1890. Serial No. 336,954. (No model.)

To all whom it may concern:

Be it known that I. HENRY BOWMAN, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of 5 Mentucky, have invented certain new and useful Improvements in Crow-Bars; and I do hereby declare the following to be a full, clear, and exact description of the invention such as will enable others skilled in the art to to which it appertains to make and use the Baine,

My invention relates to crow-bars; and it consists in the improved construction and arraugement or combination of parts hereinas afterfully disclosed in the description, draw-

lags, and claims.

The objects of my invention are, first, to provide a crow-bar with a rolling fulcrum; second, to provide means for preventing backso ward movement of the roller, which serves as a fulcrum, and, third, to provide means for preventing elogging of said roller.

The objects are attained in the crow-bar illustrated in the accompanying drawings, as forming part of this specification, in which the same reference-letters indicate the same parts,

and in which--

Figure I represents a bottom plan view of my improved crow-bar; Fig. 2, a side view,

so and Fig. 3 an end view.

In the drawings, the letter A indicates the crow-bar proper, which is formed with the handle portion A', the end portion A', and the usual nib or upturned nose a. Two plates as or brackets B B are secured to the sides of the crow-bar between the handle portion and the end portion at the point where the fulerum is to be and extend beyond the under side of said bar. A roller C is journaled with go its shaft din suitable bearings in said plates or brackets below said bar and projects with the lower portion of its periphery beyond the edges of said plates or brackets. A ratchetwheel D is secured upon the shaft of said as roller and upon the outside of one of said plates or brackets B, and a pawl E engages said ratchet-wheel, and is pivoted upon said plate or bracket above and to the rear of said ratchet-wheel. A flat spring F' is seso cured to the under side of the crow-bar to the rear of the roller, and bears with its free end against the rear side of the periphery of said |

I roller, serving as a scraper for the same to remove all impurities—such as dirt or sticky

substances—from the same.

In practice the crow-bar is placed with its nib or end  $\alpha$  under the object to be raised in the usual manner and it may have a fulcrum upon the roller. The ratchet-wheel and pawl will admit of the handle of the bar being de- 60 pressed; but will prevent the roller from revolving backward, so that the crow-bar will bear a firm rest or fulcrum upon the roller. The crow-bar may be pushed forward and will then travel upon the roller, which may re- 65 volve in that direction; but the pawl must be disengaged from the ratchet-wheel to admit of the bar being drawn backward upon the roller.

The scraper F' will remove all obstructions 70 from the periphery of the roller, so that dirt and sticky substances cannot collect above. said roller between the latter and the bar, and thus obstruct the free revolutions of the same.

Having thus fully described the construction and arrangements or combination of the

several parts of my improved crow-bar, what I claim as new is—

1. The combination, with a crow-bar, of two 80 plates or brackets secured to the sides of the same and extending below its under side, a roller journaled between said plates or brackets, a ratchet-wheel upon the shaft of said roller, and a pawl pivoted upon one of said 85 plates or brackets and engaging said ratchetwheel, substantially as described.

2. The combination of the bar A, the plates or brackets B upon the sides of the same, the roller C, journaled with its shaft c in said 90 plates or brackets, the ratchet-wheel D upon the shaft of said roller, the pawl E, for said ratchet-wheel, and the flat-spring scraper F', bearing with its end against the periphery of said roller, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

> $HENRY \times BOWMAN.$ mark

Witnesses: JOHN B. DAVIES, WM. SHARP.