

A. D. BOURNE.
Wagon-Wrenches.

No. 151,955.

Patented June 16, 1874.

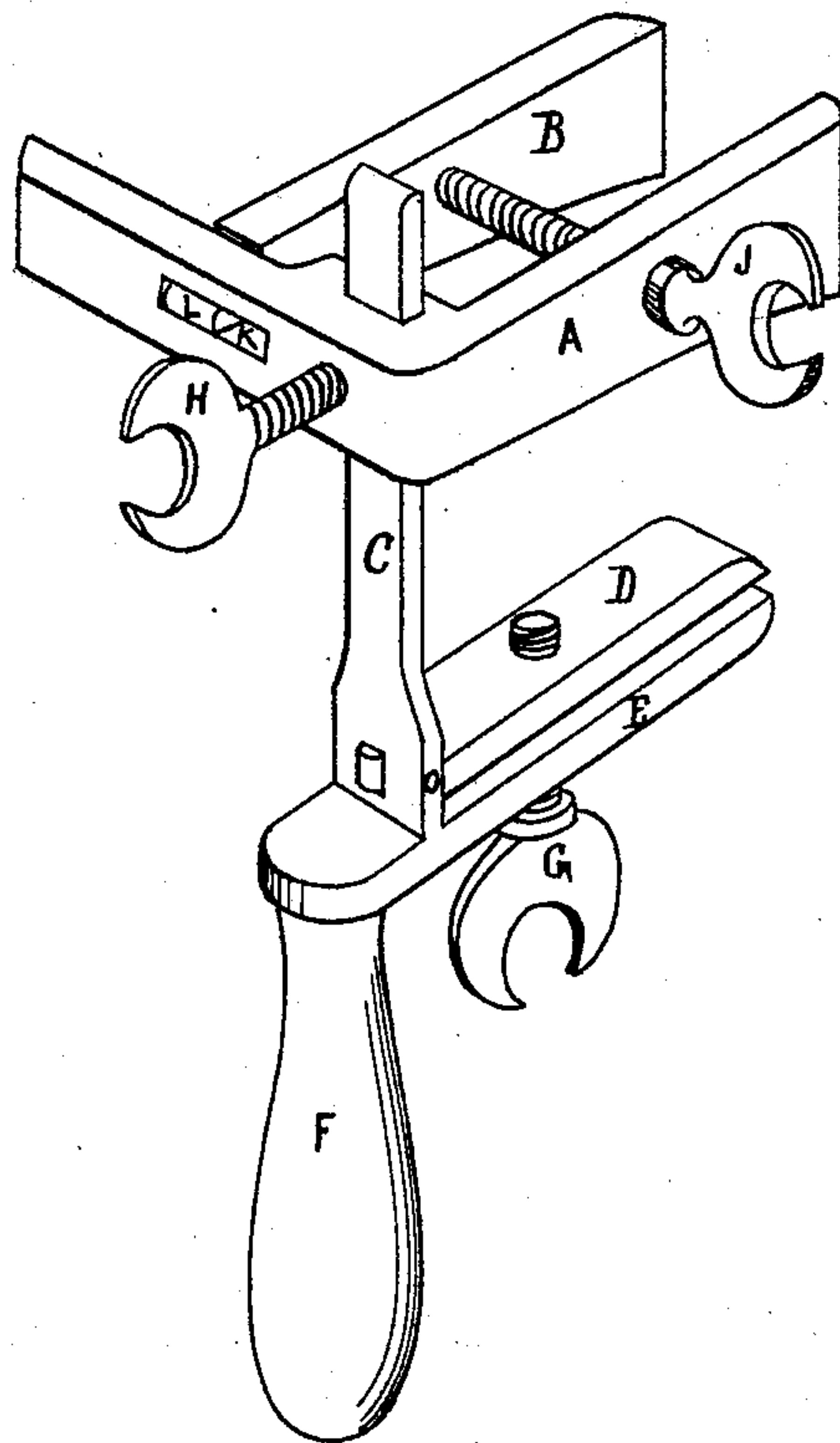


FIG. 1

Witnesses:
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UNITED STATES PATENT OFFICE.

ANSELM D. BOURNE, OF FAIRHAVEN, MASSACHUSETTS.

IMPROVEMENT IN WAGON-WRENCHES.

Specification forming part of Letters Patent No. **151,955**, dated June 16, 1874; application filed May 8, 1874.

To all whom it may concern:

Be it known that I, ANSELM D. BOURNE, of Fairhaven, in the county of Bristol, State of Massachusetts, have invented a certain new and useful Improvement in Wagon-Wrenches, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which my invention appertains to make and use the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is an isometrical perspective view of my invention.

My improvement relates especially to wrenches for removing the axle-nuts of carriages; and consists in a novel construction and arrangement of the parts, as hereinafter more fully set forth and claimed, by which a more effective implement of this character is furnished than is now in ordinary use.

The extreme simplicity of my invention renders an elaborate description unnecessary.

In removing a carriage-axle nut by means of the common screw-wrench, or plain nut-wrench, it is sometimes found to be difficult to keep the wrench on the nut during the operation, and, when the nut is removed, a place has to be found where it can be deposited in such a position as to keep it free from dirt and sand, which is not always convenient or even possible.

My invention is designed to obviate these difficulties; and to this end I construct my improved wrench not only with jaws which grasp the nut, but with a set of auxiliary jaws for attaching the wrench to the hub-band of the wheel, so that the nut may be removed by turning the wheel backward on the axle, and, when so removed, will be held in the wrench, the wrench remaining attached to the wheel after the operation in such a manner as to keep the nut out of the dirt, and enable it to be turned upon the axle again by means of the wheel, and without removing the wrench therefrom.

In the drawing, A B are the nut-jaws; D E, the band-jaws; F, the handle; C, the connecting-bar; J G, the clamping-screws, and H the set-screw. The movable jaw B has a tenon at L, which works loosely in the mortise K, and is caused to advance toward or recede from the jaw A by means of the screw J. The movable jaw D is similarly pivoted in the bar C, and forms a clamp with the rigid jaw E by means of the screw G. The bar C is fitted to slide freely in the jaw A, and is rendered adjustable therein by means of the set-screw H.

From the foregoing the nature and operation of my invention will be readily obvious to all conversant with such matters.

To remove a nut from the axle of a carriage, the jaws A B are caused to grasp the nut, and the jaws D E, the hub-band, all of the screws J G H being turned down firmly when the wrench is properly adjusted. If, then, the wheel is raised from the ground and held suspended by a carriage-jack, or any convenient means, it may be turned backward, and the nut, being grasped in the wrench and the wrench attached to the wheel, will be unscrewed or turned off in a manner which will be readily apparent.

It will be obvious that to screw the nut on again it will not be necessary to remove it from the wrench, thus saving time and performing the work more effectually; also, that by reversing the bar C in the jaws A, a double wrench is produced well adapted to many useful purposes.

Having thus described my invention, what I claim is—

The wrench described, consisting of the jaws A B, screw J, jaws D E, screw G, handle F, bar C, and screw H, combined to operate substantially as and for the purpose specified.

ANSELM D. BOURNE.

Witnesses:

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