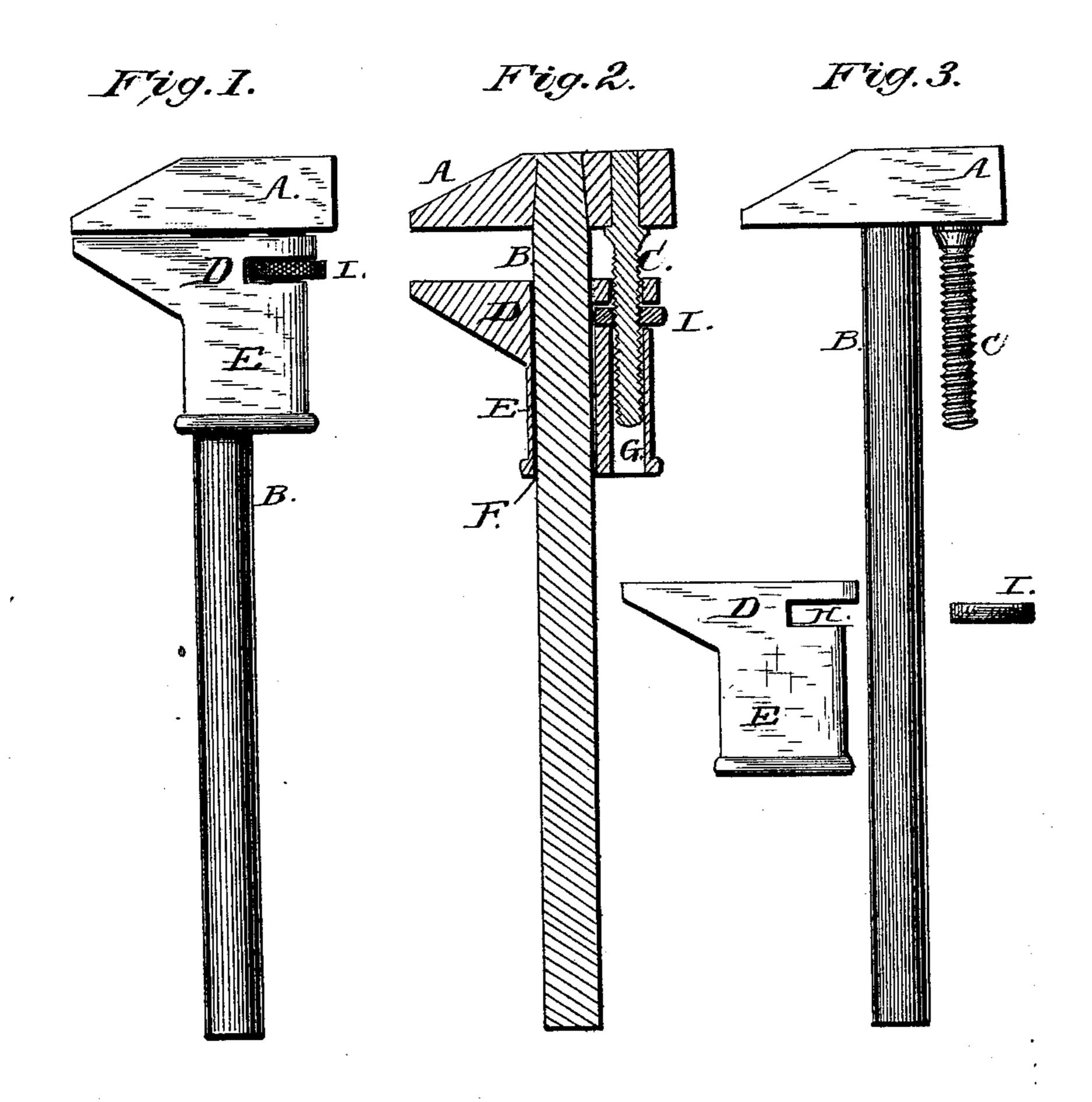
C. H. FISHER. Wrench.

No. 219,853.

Patented Sept. 23, 1879.



Witnesses; Red Gritterich Ma Stitle Inventor; Chagney H. Fishen, by Cabrawl by attion.

UNITED STATES PATENT OFFICE.

CHAUNCEY H. FISHER, OF GRAND RAPIDS, MICHIGAN.

IMPROVEMENT IN WRENCHES.

Specification forming part of Letters Patent No. 219,853, dated September 23, 1879; application filed July 25, 1879...

To all whom it may concern:

Be it known that I, CHAUNCEY H. FISHER, of Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Wrenches; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a side view. Fig. 2 is a longitudinal sectional view, and Fig. 3 is a view showing the several parts detached from each

other.

Corresponding parts in the several figures are denoted by like letters of reference.

This invention relates to nut-wrenches; and it consists in certain improvements in the construction of the same, which will be hereinafter more fully described, and particularly pointed out in the claim.

In the drawings, A represents the head or upper jaw, which is secured to the end of a cylindrical handle, B, made of solid iron, the object of this construction being to adapt the wrench for use as a draw-pin upon a carriage or wagon, where it will thus always be handy for use. C is a male screw, firmly secured to the head A, from which it projects downwardly parallel to the handle, as shown.

The lower or sliding jaw, D, is provided with a downwardly-projecting shank, E, through which extend two longitudinal perforations, F G, adapted to receive, respectively, the handle B and screw C, upon which the jaw D is thus capable of sliding. The jaw D is provided with a lateral recess, H, in which is fitted a loose nut, I, working upon the screw C, as shown.

It will be observed that the jaw D E is of a length equal to that of screw C, the lower end of which cannot, consequently, project below the shank E, and is therefore prevented from |

interfering with the use of the device as a drawpin for vehicles. The strength of the wrench is also materially increased by the said shank E.

From the foregoing description, and by reference to the drawings hereto annexed, the operation of my invention will be readily understood.

By operating the nut I the jaw D may be slid up or down, thus adapting the wrench for nuts of any size. The shank E tends to strengthen and steady the device. By moving the jaw D down until the nut is disengaged from the screw it may be readily detached from handle, thus enabling it, as well as the nut, to be easily replaced if broken or worn out. Finally, the device may be used as a draw-pin upon a wagon, where it will thus always be found in place when wanted.

I disclaim the construction shown in the English Patent No. 3,709 of 1869, in which the lower end of the equivalent of screw C is shown to be permanently affixed or secured to the handle. This makes it impossible to remove the sliding jaw, which is very desirable if any part—for instance, the nut I—should wear out,

or in case of breakage.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

The combination of the head A, having cylindrical solid iron handle B, and male screw C, parallel to the handle, and free at its lower end, with the sliding jaw DE, of equal length with screw C, and having longitudinal perforations F G and lateral recess H, and the nut I, all arranged and operating substantially as and for the purpose herein set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

CHAUNCEY H. FISHER.

Witnesses:

JOSEPH N. FISHER, GEORGE THOMSON.