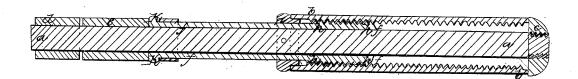
## D. H. Chamberlain, Wrench. Patenteal Mar. 20, 1849.

Tig:1

TYº0,210.

Fig. 2



## UNITED STATES PATENT OFFICE.

D. H. CHAMBERLAIN, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO WILLIAM A. DODGE.

## SLIDING WRENCH.

Specification of Letters Patent No. 6,210, dated March 20, 1849.

To all whom it may concern:

Be it known that I, Dexter H. Chamber-Lain, of Boston, in the county of suffolk and State of Massachusetts, have invented a 5 new and useful Improvement in the construction of Sliding Wrenches, and that the following description, taken in connection with the accompanying drawings, hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvements, by which my invention may be distinguished from others of a similar class, together with such parts as I claim, and desire to have secured to me by Letters Patent.

The object of my improvements is, to simplify the construction of this convenient implement now so generally used, and to arrange the operating or moving parts, in such a way, as to secure their ready repair in case of any breakage of the same.

The figures of the accompanying plate of drawings represent my improved mode of construction for a sliding wrench.

Figure 1 is a side view, and Fig. 2 is a longitudinal central section of the same.

a a, Figs. 1 and 2, is the shank of the wrench, which extends up through the hollow cylindrical handle, b b, and has a screw cut on its upper end on which is fitted the confining nut, c, which keeps the handle from sliding longitudinally.

d is the stationary jaw firmly fastened to the lower end of the shank, a a, and e is the sliding jaw, which is fitted on said shank, so as to be moved up and down for different sizes of nuts to be embraced between it and the stationary jaw, d.

In lieu of cutting a screw all around a casing fitted about the shank, a a, and connected to the sliding jaw, e, I simply use

two segments of a cylinder, f f, f f, Figs. 1 and 2, and cut a screw for a short distance, on the exterior of the upper end of each segment, as shown at h h, h h, Fig. 2, which screws engage with the screw threads cut on the interior of the handle throughout its length, in the usual way. These segments are flat on their under or inner sides, and are fitted one on each side of the shank,  $\alpha$   $\alpha$ , so as to slide up and down, being confined therein by the stationary ring, i, fitted on said shank, which ring also answers as a shoulder for the lower edge of the handle, 55 h

b, b.

These segments at their lower ends have each a right angular stud or shoulder, k, k, projecting outward, which fits into a suitable hole or slot formed in each side of the sliding jaw, as shown in Fig. 2, so that when said segments are moved up and down, as above suggested, this jaw moves with them in the ordinary way.

Having thus described my improvements, 65 I shall state my claim as follows:

What I claim as my invention is—
A wrench in which the sliding jaw is moved by two segments of a cylinder, connected with said jaw as above set forth, 70 and having screws on their upper ends engaging with the screw on the interior of the hollow cylindrical handle, the arrangement of the several parts being substantially as herein above set forth.

In testimony that the foregoing is a true description of my said invention and improvement I have hereto set my signature this twentieth day of July in the year 1848.

## DEXTER H. CHAMBERLAIN.

Witnesses:

EZRA LINCOLN, Jr., HENRY F. CONANT.