S. Kane & T. & J. Keane,

Wrench.

Nº 1720. Patented Aug. 12, 1840. 10 Inventor. Wrtnesses Kleberrele Stephen Kane Thomas Reane

James Koone

John Hoorf

UNITED STATES PATENT OFFICE.

STEPHEN KANE, THOMAS KEANE, AND JAMES KEANE, OF NEW YORK, N. Y.

SCREW-WRENCH.

Specification of Letters Patent No. 1,720, dated August 12, 1840.

To all whom it may concern:

Be it known that we, STEPHEN KANE, THOMAS KEANE, and JAMES KEANE, all of the city, county, and State of New York, machinists, have made certain new and useful Improvements in the Construction of the Tool Commonly Known as the Screw-Wrench, whereby the said instrument is made more efficiently avail-10 able for general use, and for which improvements we seek Letters Patent of the United States, and that the said improvements are substantially and fully set forth and shown in the following description and 15 in the drawing annexed to and making part of this specification, wherein-

The principal Figure 1 is a representation of the head jaw and shaft or handle of a screw wrench with our improvements at-20 tached for use. Fig. 2 is a plan of the moving or adjustable parts and Fig. 3 is a representation of the same parts seen vertically on the side next the shaft or handle, the same letters as marks of reference applying 25 to the same parts in all the figures.

 α is the shaft or handle of the tool or instrument; b, the head or fixed jaw; c, the movable jaw, with a mortise or slot d which slides on the handle a. The lug e of the 30 jaw c, finishes in a stout arbor f which goes through a keeper slide g also formed to slide on the arm a. Upon the arbor f is a short stout screw h fitted to revolve upon the arbor f, the threads of this screw h, fit into cor-35 responding worm teeth i, i, cut into the edge

of the handle a, the lower part of the screw h may be made square or sexangular, octangular or round at the will of the owner, to be moved by hand, and has one or two small mortises wherein to insert the end of a 40 tommy or small lever to tighten or loosen the hold of the jaws when needful and the connection of the whole is maintained by a screw and nut k on the end of the arbor of outside the keeper slide g. When thus fitted 45 use a workman can quickly and firmly compress any article to be held between the jaws by turning the screw h to approximate the jaws, or release the hold of the jaws by reversing the motion.

We do not claim to have invented a screw wrench but we claim as new and of our own

invention-

The mode of constructing the movable jaw by combining therewith a revolving screw 55 whose threads work into worm teeth cut into the edge of the wrench handle substantially as such mode is hereinbefore described and set forth.

In witness whereof we have hereunto set 60 our hands in the city of New York this twenty-seventh day of June one thousand eight hundred and forty.

> STEPHEN KANE. THOMAS KEANE. L. s. JAMES KEANE.

Witnesses:

H. R. SEWELL, JOHN THORP.