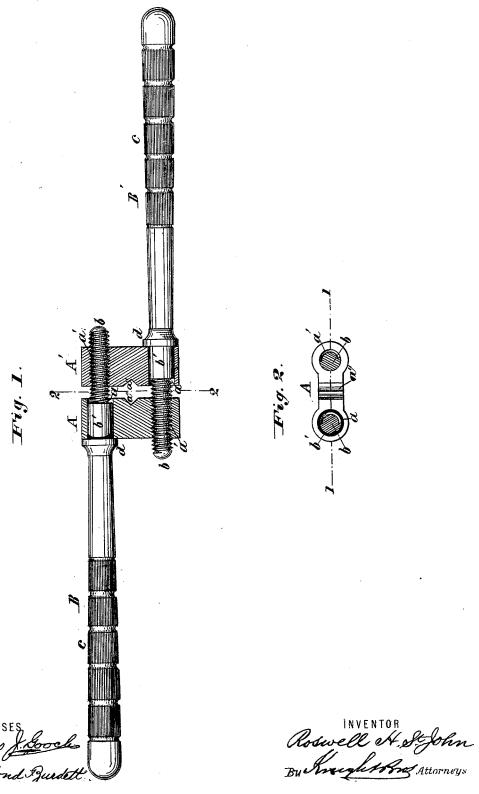
R. H. St. JOHN.

ADJUSTABLE TAP-WRENCH.

No. 188,978.

Patented March 27, 1877.



UNITED STATES PATENT OFFICE.

ROSWELL H. ST. JOHN, OF SPRINGFIELD, OHIO.

IMPROVEMENT IN ADJUSTABLE TAP-WRENCHES.

Specification forming part of Letters Patent No. 188,978, dated March 27, 1877; application filed March 2, 1877.

To all whom it may concern:

Be it known that I, ROSWELL H. ST. JOHN, of Springfield, in the county of Clarke and State of Ohio, have invented a certain Improved Adjustable Tap-Wrench, of which the

following is a specification:

My improved wrench consists of a pair of jaws having angular recesses, adapted to fit the tap head or dies with which they are used, and adjustable away from or toward each other by means of two screw-threaded handles, which are turned one way to open the jaws, and the other way to close the jaws. Each handle engages through one jaw with the opposing jaw.

In the accompanying drawing, Figure 1 is a plan view of my improved tap-wrench, the jaws being in section, as shown at line 1 1, Fig. 2. Fig. 2 is a vertical section on the

line 2 2.

A A' may represent a pair of jaws for grasping the head of a tap. Each jaw is constructed with a female screw, a', and an orifice, a. The jaws have angular recesses a'', so as to seize the corners of the tap-head or dies, with which they may be used. B B' are handles formed with a neck, b', and a male screw-thread, b. These handles are preferably milled, as shown

at c, so as to permit the hands to firmly grasp them. d are shoulders to limit the movement of the jaws on the necks b'.

The operation of my invention is as follows: Supposing the jaws to be closed, and it is desired to open them, the handles are turned so as to increase the distance between the opposing jaws and the shoulders of the handles. At the same time the handles are pressed inward to force the jaws apart. The jaws are closed by reversing this action.

Having thus described my invention, the following is what I claim as new, and desire to

secure by Letters Patent:

The tap-wrench, consisting of jaws A A', each provided with an angular recess, a", adapted to fit the tap-head or dies with which they are used, and having an orifice, a, and female screw a', and the handles B B', each having a male-screw thread, b, adapted to engage through the orifice of one jaw with a screw, a', on an opposing jaw, all arranged to operate in the manner and for the purpose set forth.

ROSWELL H. ST. JOHN.

Witnesses:

EDWARD W. MULLIKIN, A. T. BYERS.