

F. P. Rand,

Wrench.

No. 107,539.

Patented Sep. 20. 1870.

FIG. 1.

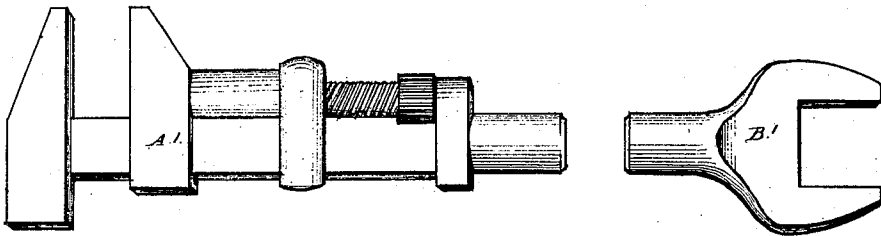
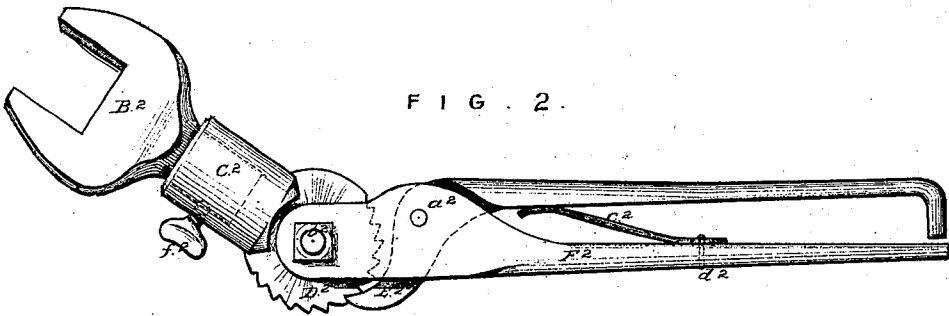


FIG. 2.



WITNESSES.

Rayas Lee
James A. Brown

INVENTOR.

Franklin P. Rand

United States Patent Office.

FRANKLIN P. RAND, OF PAWTUCKET, RHODE ISLAND.

Letters Patent No. 107,539, dated September 20, 1870.

IMPROVEMENT IN WRENCHES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, FRANKLIN P. RAND, of Pawtucket, in the county of Providence and State of Rhode Island, have invented a new and improved Wrench for the Turning of Nuts where other wrenches are not practicable; and I do declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

My invention consists in the application of a ratchet and a socket to a wrench. The ratchet is for the adaptation where a rigid wrench is not practicable, and the socket is for the adjustment of different-sized wrench-jaws.

Figure 1 is a view of an ordinary monkey-wrench, with one end cut off.

Figure 2 is a view of my invention.

Fig. 1—

A' B' is the well-known monkey-wrench.

Fig. 2—

B², the wrench-jaws.

C², the socket attached to the ratchet-wheel D².

E², pawl.

F², the handle of the wrench.

c², a spring, which forces the pawl from the teeth of the ratchet-wheel.

d², a pin which secures the spring c² to the handle F².

b², a bolt, by which the ratchet-wheel is hung in a movable joint to the handle F².

f² is a thumb-screw, which secures the jaw B² in the socket C².

Operation.

The within-described wrench being constructed as herein set forth and applied where there is not sufficient space to operate a rigid wrench, its operation will be apparent without further specification.

Claim.

What I claim as my invention, and desire to secure by Letters Patent, is—

The ratchet-wrench, with socket and wrenches, constructed and operating as herein described.

FRANKLIN P. RAND.

Witnesses:

ROYAL LEE,

JAMES A. BROWN.