

C. H. Reynolds,

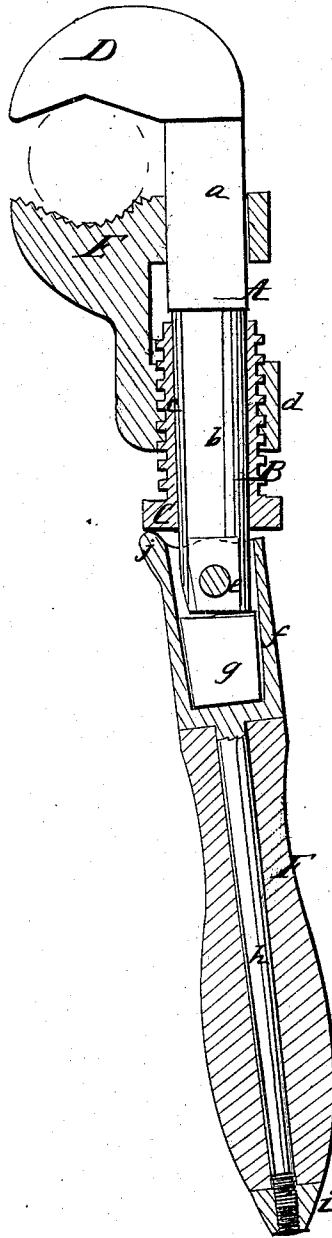
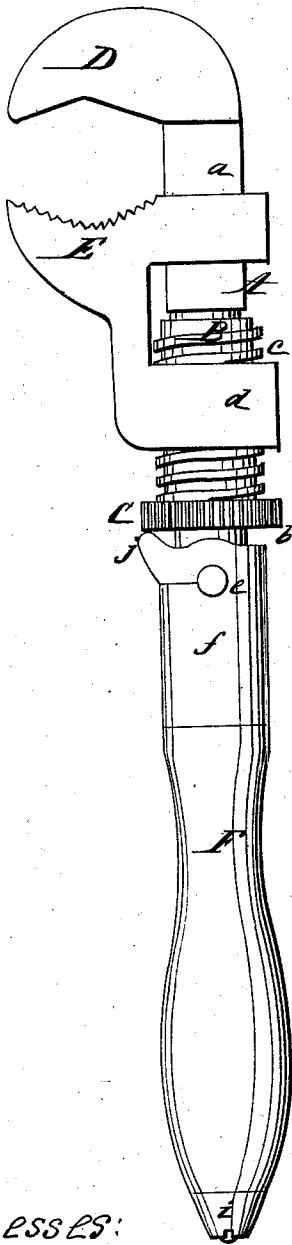
Pipe Wrench.

N^o 31,826.

Patented Mar 26, 1861.

Fig. 1

Fig. 2.



Witnesses:

*McCombs
R. S. Spencer*

INVENTOR:

Charles H. Reynolds

UNITED STATES PATENT OFFICE.

CHARLES H. REYNOLDS, OF NEW YORK, N. Y.

WRENCH.

Specification of Letters Patent No. 31,826, dated March 26, 1861.

To all whom it may concern:

Be it known that I, CHARLES H. REYNOLDS, of the city, county, and State of New York, have invented a new and Improved Screw-
5 Wrench; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

10 Figure 1 is an external view of my invention. Fig. 2, a longitudinal central section of the same.

Similar letters of reference indicate corresponding parts in the two figures.

15 This invention has for its object the facilitating of the adjustment of the wrench to the nut and also the obtaining of a firm hold of the jaws of the wrench on the nut so as to effectually prevent the slipping of
20 the former on the latter.

The invention consists in operating the movable or sliding jaw of the wrench by means of a rotating screw collar which is allowed a certain degree of longitudinal play
25 on the shank of the wrench, and is used in connection with a handle secured to the shank of the wrench by a joint or pin and so arranged as to perform the function of a lever and act upon the screw collar and movable or sliding jaw so as to cause the nut to
30 be firmly grasped between the jaws as the wrench is turned.

To enable those skilled in the art to fully understand and construct my invention I
35 will proceed to describe it.

A. represents a shank of a screw wrench, the upper part *a*, of the shank being of quadrilateral form, and the lower part *b*, being of cylindrical form. The cylindrical
40 part *b*, of the shank A. has a collar B. fitted loosely on it, said collar having a screw thread *c*, on its outer surface and a milled thumb wheel C. at its lower end, the wheel C. being attached permanently to the
45 collar B.

At the outer end of the shank A. there is a jaw D. the latter being attached permanently to the former, and E. is a sliding jaw which is fitted on the part *a*, of the shank
50 and allowed to work freely up and down thereon. The lower part of the jaw E. has a nut *d*, attached, which nut is in line with the portion of the jaw E. that is fitted on the part *a*, of the shank. Within the nut *d*,

the collar B. is fitted and works as shown 55 clearly in Fig. 2, and to the lower end of the shank A. the handle F. is attached by a pivot *e*, said pivot passing through a metal socket *f*, at the end of the handle F. and through the shank A. the end of the latter 60 bearing on a rubber spring *g*, within the socket *f*. The socket *f*, is secured to the handle F. by a rod *h*, which passes longitudinally through the handle and has a nut *i*, at its end, and the socket *f*, has a lip or pro- 65 jection *j*, at its outer end, as shown clearly in both figures.

The wrench is used as follows: The movable or sliding jaw E. is moved on the upper part *a*, of the shank by turning the collar B. 70 the screw thread *c*, and nut *d*, effecting such result. The nut or other article to be turned or operated upon is grasped between the jaws D. E. by turning collar B., and the handle F. is then turned in the direction in- 75 dicated by the arrow and the lip or projection *j*, bears against the wheel C. and forces the collar B. outward causing the jaw E. to press more firmly against the nut. The harder the wrench is turned therefore the 80 more firmly will the nut be grasped, owing to the leverage power of the handle F. It will be understood that the longitudinal play of the collar B. on the cylindrical part *b*, of the shank A. admits of this action of the 85 handle upon the sliding jaw. The spring *g*, throws the handle F. in proper position when the force or power applied to it for turning the wrench is removed.

The jaws D. E. may have concave faces 90 for grasping pipes or cylindrical articles. Jaws with parallel faces are employed for operating nuts.

Having thus described my invention what I claim as new and desire to secure by Let- 95 ters Patent, is,

The collar B. having a longitudinal play or movement on the cylindrical part *b*, of the shank A. provided with the screw thread *c*, and fitted in the nut *e*, of the sliding jaw 100 E. in connection with the pivoted handle F. arranged in relation with the collar B. to operate as and for the purpose herein set forth.

CHARLES H. REYNOLDS.

Witnesses:

M. M. LIVINGSTON,
C. W. COWTAU.