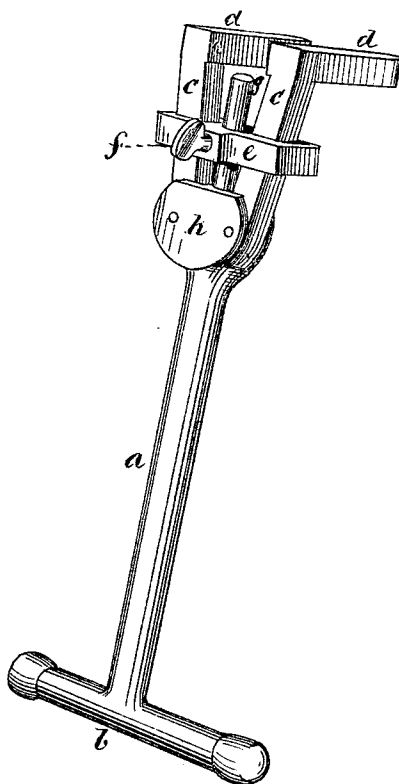


G. H. BUZZELL.

WRENCH.

No. 183,901.

Patented Oct. 31, 1876.



WITNESSES

Frankly Parker

E. A. Stock.

INVENTOR

Geo. H. Buzzell

by J. H. Adams -
Atty.

UNITED STATES PATENT OFFICE

GEORGE H. BUZZELL, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HIMSELF
AND FREDERICK E. STEVENS, OF SAME PLACE.

IMPROVEMENT IN WRENCHES.

Specification forming part of Letters Patent No. 183,901, dated October 31, 1876; application filed
September 21, 1876.

To all whom it may concern:

Be it known that I, GEORGE H. BUZZELL, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Wrench, of which the following is a specification:

The object of my invention is to produce a wrench which may be readily applied to the removal of nuts or screws in places that are not readily accessible to wrenches of ordinary construction; and the invention consists of two arms, which form the jaws, or to which the jaws may be attached, pivoted to and extending out from the end of a handle, and provided with a sliding clasp surrounding each arm, by means of which the jaws can be readily adjusted to a nut or screw-head, and held in position by means of a screw acting upon a central rod between the arms or jaws.

The accompanying drawing is a perspective view of a wrench embodying my invention.

a represents a handle, provided with a cross-piece, *b*, by which the wrench is more easily manipulated. *g* is a bar that extends out from the upper end of the handle, of a smaller diameter, and forming a part of the same. To each side of the upper end of the handle, and in a recess formed in the same, are pivoted two arms, *c*, provided at their ends each with a jaw, *d*, projecting at right angles with the same. Upon the arms *c* is fitted a clasp, *e*, each arm having its separate aperture. The apertures of the clasp are so adapted that when the clasp is brought down in contact with the head *h* the arms or jaws are opened to their fullest extent, so that when the clasp is moved upward the jaws gradually contract, so as to allow them to be fitted to nuts or screws of different sizes. In the center of the clasp, between the two arms *c*, is a hole, in which fits the extension *g* of the handle, so as to allow the clasp to slide up and down freely. The extension or rod *g* serves as a guide to the clasp and to hold the same in position. The clasp is secured in position for action by means of a thumb-screw, *f*, bearing against the extension-bar *g*, which allows the jaws to be adapted to the nut as desired.

The extended jaws *d d* may be dispensed with, and the ends of the arms *c c* may serve as jaws, if desirable. The bar *g* may also be dispensed with and the clasp held in proper position by means of a thumb-screw passing through one side or end of the clasp, and bearing directly upon one of the arms or jaws *c*.

My invention is more particularly adapted for use by plumbers, but is equally applicable for other or general uses.

In removing or attaching wash-bowls that are set in stationary frames, it is often very inconvenient to readily adjust a wrench to the nut or screw that holds the bowl or basin in place, and when so adjusted it is inconvenient to operate the wrench.

With my invention this difficulty is overcome, as all that is necessary to do is to set the jaws upon the nut or screw-head, push up the clasp until the jaws securely grasp the nut, a slight turn of the thumb-screw firmly retaining the jaws in a closed position, and then turning the wrench by the handle.

The handle *a b*, heads *h*, and extension-bar *g* are designed to be cast in one piece, recesses being cored out for the reception of the ends of the arms *c c*.

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

1. The combination of the pivoted arms *c*, jaws *d d*, the guide *g*, and the sliding clasp *e*, secured in position by means of a screw, substantially as and for the purpose specified.

2. In combination with the pivoted arms *c*, jaws *d d*, and sliding clasp *e*, the guide *g*, recessed head *h*, and handle *a*, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEO. H. BUZZELL.

Witnesses:

J. H. ADAMS,
E. A. STOCK.