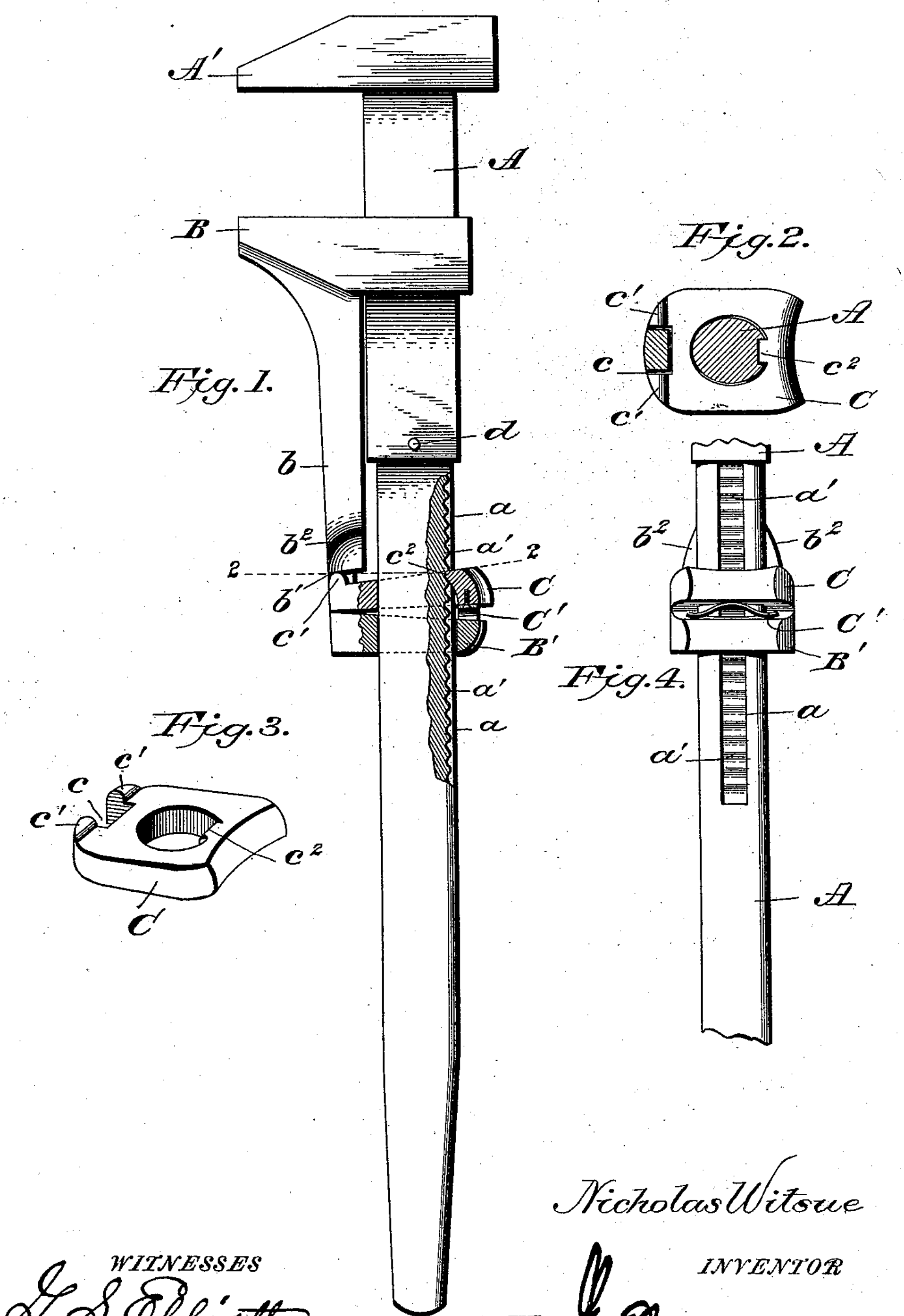
(No Model.)

N. WITSUE.

MONKEY WRENCH.

No. 552,029. Patented Dec. 24, 1895.



WITNESSES

G. S. Elliott,

E. M. Johnson

Nicholas Witsue

INVENTOR

by Geo. [signature] Johnson

Attorney

ANDREW B. GRAHAM, PHOTO-LITHO. WASHINGTON, D.C.

UNITED STATES PATENT OFFICE.

NICHOLAS WITSUE, OF OGDEN, UTAH TERRITORY.

MONKEY-WRENCH.

SPECIFICATION forming part of Letters Patent No. 552,029, dated December 24, 1895.

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To all whom it may concern:

Be it known that I, NICHOLAS WITSUE, a citizen of the United States of America, residing at Ogden, in the county of Weber and Territory of Utah, have invented certain new and useful Improvements in Monkey-Wrenches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of my invention is to provide a wrench in which one of the jaws can be readily moved upon the shank of the other jaw and locked in position by frictional contact with the shank of a bridle or binding-sleeve carried by the movable jaw; and to this end the invention consists in the construction and combination of the parts, as will be hereinafter fully set forth and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation, partly in section, showing a monkey-wrench constructed in accordance with my invention. Fig. 2 is a sectional view on the line 2 2 of Fig. 1. Fig. 3 is a detail perspective view of the bridle or binding-sleeve detached, and Fig. 4 is a rear elevation of a part of the wrench.

A designates the handle-bar or shank of the wrench, to which is attached the rigid jaw A′, and B designates the movable jaw which slides upon the shank, the part of the shank or bar upon which the movable jaw slides being preferably rectangular in cross-section. The shank or handle-bar below the rectangular portion is elliptical in cross-section and is provided in its rear edge with a longitudinal groove or recess *a*, the base of which is serrated to provide teeth *a′*, which are comparatively small, for the purpose hereinafter set forth.

The sliding jaw B is provided with a rectangular aperture in which fits the rectangular portion of the shank or handle-bar A, and this jaw has formed integral therewith a depending shank *b* provided at its lower end with a loop B′, through which the rounded portion of the handle-bar or shank passes. The upper surface of the loop B′ is inclined downwardly, as shown, and the shank *b* is provided adjacent to the loop B′ with recesses *b′* formed by the outwardly-projecting portions b^2 of said shank.

C designates a bridle or binding-sleeve, which is provided with a central opening corresponding with the elliptical portion of the shank or handle-bar A. This binding-sleeve is slightly wedge-shaped and at its forward end is provided with a recess *c*, adjacent to which are upwardly-projecting lugs *c′* having rounded bearing-surfaces which are adapted to bear against the shoulders b^2 of the shank *b*. The bridle or binding-sleeve is also provided with a clamping edge or projection c^2, which projects into the central opening and is adapted to engage the teeth *a′* of the shank or handle-bar A when the bridle or sleeve is in position. Attached to the under side of the rear end of the bridle or binding-sleeve C is a flat spring C′, the ends of which are adapted to bear against the loop B′ of the movable jaw. The tendency of the spring is to throw the projection c^2 of the binding-sleeve into engagement with the teeth *a′*. The rear edge of both the binding-sleeve and loop B′ is cut away, as shown, to receive the end of the thumb in adjusting the parts.

It will be noted that the construction of the bridle or binding-sleeve C is such that the projections or lugs *c′* are out of line with the projection c^2.

The sliding jaw B after being placed in position upon the handle-bar or shank A is retained thereon by means of a pin *d*.

A wrench constructed as hereinbefore described is cheap and simple and can be readily adjusted with one hand, for in adjusting the sliding jaw upwardly it is only necessary to push upon the rear end of the loop B′, and in adjusting the jaw in the opposite direction pressure is put upon the binding-sleeve to free it from the teeth on the handle-bar. When the parts have been adjusted and pressure is brought upon the sliding jaw, the sleeve C will be wedged upon the handle-bar A and prevent a downward movement of said sliding jaw. When the device is used in the ordinary manner as a coupling-pin, the weight of the shank A and rigid jaw carried thereby

will cause the handle-bar to pass through the openings in the sliding jaw, the binding-sleeve allowing the handle-bar to pass freely through the same.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a wrench, the combination, of a handle-bar having a fixed jaw, a rectangular portion and a rounded portion with teeth; a sliding-jaw having an opening through which the rectangular portion of the handle-bar passes and a loop through which the rounded portion of said handle-bar passes; a bridle or binding-sleeve apertured for the passage of the handle-bar, said binding-sleeve engaging the movable jaw and having a projection which engages the teeth on the handle-bar; and a spring carried by the binding-sleeve and bearing upon the loop of the movable-jaw to normally hold the lug on the binding-sleeve in engagement with the teeth on the handle-bar, substantially as shown and for the purpose set forth.

2. In a wrench, the combination, of a handle-bar having a fixed jaw; a sliding jaw mounted on the handle-bar and provided with a depending shank b and projecting loop B′, the shank having recesses b' directly above the loop; and a bridle or binding-sleeve C having lugs c' which engage the shoulders formed by the recesses b' and a lug c^2 which impinges against one edge of the handle-bar, substantially as shown and for the purpose set forth.

3. In a wrench, the combination, of a handle-bar having a fixed jaw and teeth a' on its rear edge; a sliding jaw mounted on the handle-bar and provided with a depending shank b having a projecting loop B′, the shank also having recesses b' forming shoulders; a bridle or binding-sleeve C having lugs c' which engage the shoulders on the shank and a lug c^2 which is adapted to engage the teeth on the handle-bar and a flat spring attached to the binding-sleeve and bearing upon the loop B′ to hold the projection c^2 normally in engagement with the teeth on the handle-bar, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

NICHOLAS WITSUE.

Witnesses:
G. J. S. ABELS,
M. A. BREEDEN.