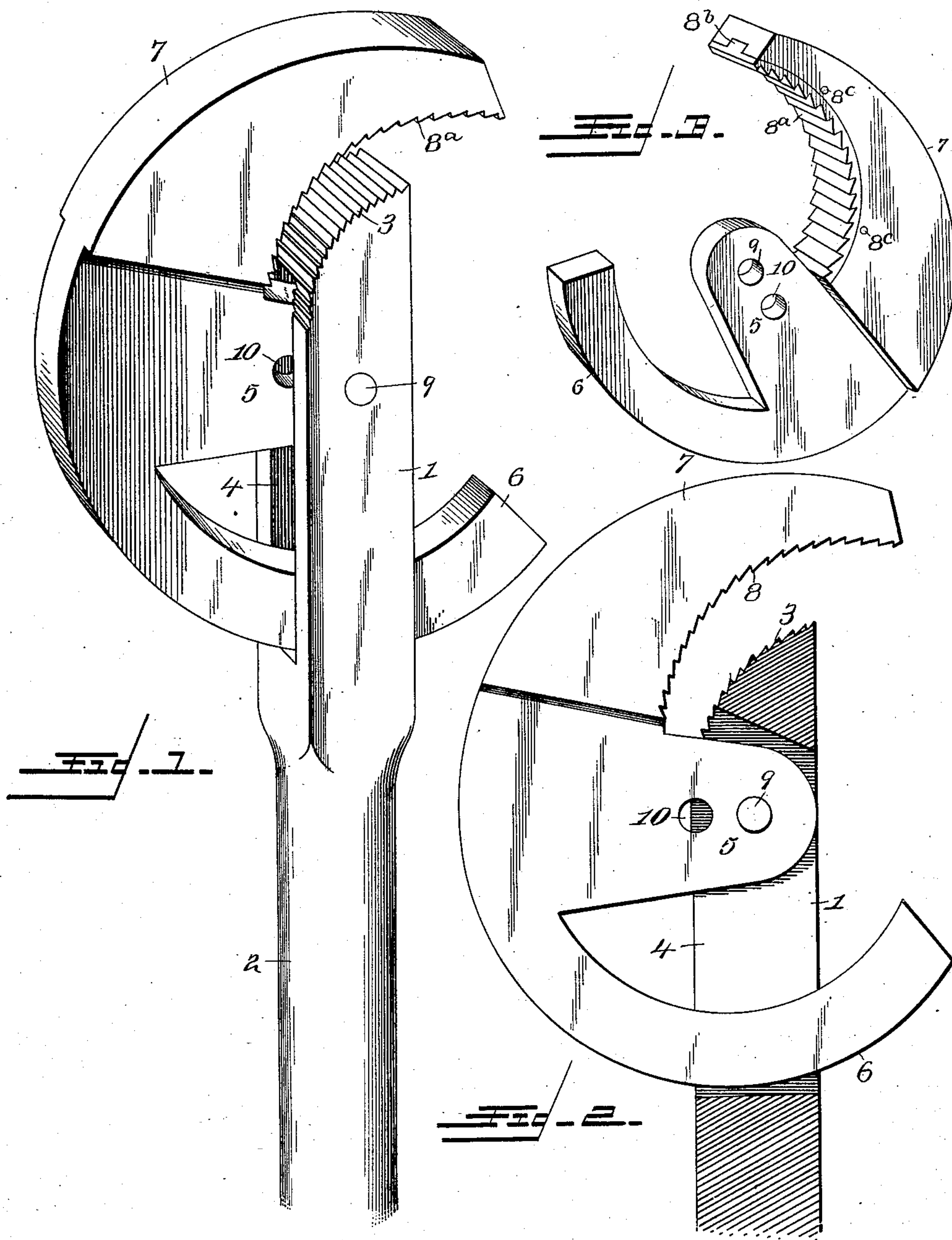


(No Model.)

W. I. FREEMAN.
PIPE WRENCH.

No. 567,229.

Patented Sept. 8, 1896.



Inventor

William I. Freeman.

By His Attorneys,

C. A. Snow & Co.

Witnesses

Thos. W. Riley.
J. F. Riley

UNITED STATES PATENT OFFICE.

WILLIAM I. FREEMAN, OF AUBURN, KENTUCKY.

PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 567,229, dated September 8, 1896.

Application filed November 30, 1895. Serial No. 570,640. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM I. FREEMAN, a citizen of the United States, residing at Auburn, in the county of Logan and State of Kentucky, have invented a new and useful Pipe-Wrench, of which the following is a specification.

The invention relates to improvements in pipe-wrenches.

The object of the present invention is to improve the construction of pipe-wrenches and to provide a simple, inexpensive, and efficient one which will possess strength and durability and which will be quickly adjusted to a rod or pipe, and which will securely grasp and readily release the same.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings, Figure 1 is a perspective view of a pipe-wrench constructed in accordance with this invention. Fig. 2 is a side elevation, partly in section. Fig. 3 is a detail perspective view illustrating a modification of the invention and showing a movable jaw provided with a detachable pipe-engaging face.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a bar or shank provided with a handle portion 2 and having at its opposite end a curved engaging-face 3, which is preferably provided with teeth or serrations. The engaging end of the shank is tapered or beveled at one side to form the face 3, and the shank is provided with a longitudinal slot 4, extending inward from the engaging end and adapted for the reception of an arm 5 and a guide 6 of a pivoted jaw 7. The pivoted jaw 7 is curved and is provided with an inner engaging-face 8, having serrations or teeth shouldered at their inner sides and adapted to engage a pipe or rod, and the pipe-engaging face may be detachable, if desired, as illustrated in Fig. 3 of the accompanying drawings. The teeth may be provided on a separate piece 8^a, arranged on the movable jaw and provided at its inner face with a centrally-arranged rib 8^b, fitting in a corresponding groove of the

jaw and secured to the latter by suitable fastening devices 8^c.

The arm 5, which is arranged at the juncture of the jaw 7 and the guide 6, is disposed radially with relation to those parts. The jaw 7 is curved outward and the guide 6 is curved inward and is adapted to slide in the slot or opening 4 of the shank. The guide 6 and the arm 5 are reduced in thickness to fit in the slot or opening of the shank or bar 1, and as the jaw 7 swings on its pivot 9 its engaging-face is carried toward or from the engaging-face 3 of the outer end of the shank or bar. In order to render the wrench adjustable, the arm 5 of the pivoted jaw is provided with two or more perforations 10 for the reception of the pivot 9, and it will be readily apparent that the wrench is adapted to firmly engage a pipe or rod and that it will readily release the same to enable the operator to obtain a new hold thereon, thereby facilitating rapid working. It will also be apparent that the parts of the wrench are compactly arranged, that it is capable of being operated in a small space, and that the wrench will instantly grip or release a pipe or rod without manipulating or changing the relation of the parts.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

What I claim is—

A wrench, comprising a shank or bar having an engaging outer end and provided with a longitudinal opening, and a movable jaw having an inner curved engaging-face, and provided with a curved guide forming a continuation of the inner end of the jaw and arranged in the opening of the shank or bar, said movable jaw being provided at the juncture of it and the guide with a radially-arranged arm adjustably pivoted to the shank or bar, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM I. FREEMAN.

Witnesses:

W. S. MONROE,
GEO. C. SMITH.