(No Model.)

S. H. HEGINBOTTOM & R. C. & W. H. HAYTON.

MONKEY WRENCH.

No. 302,842. Patented July 29, 1884.

Fig. 1.

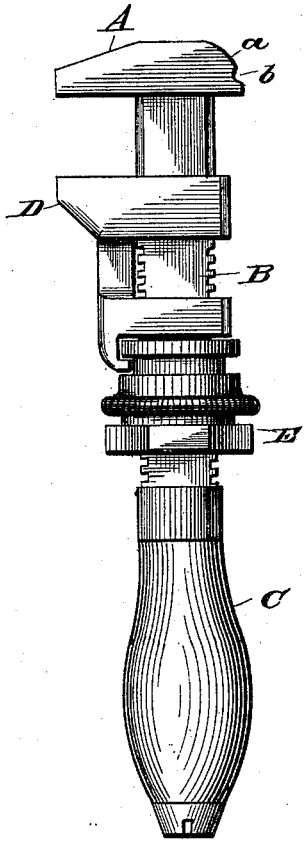


Fig. 2.

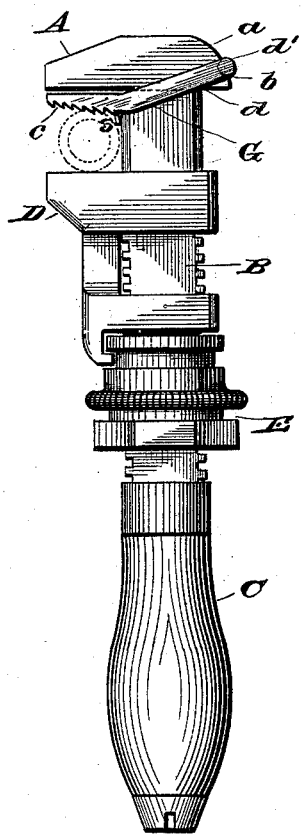


Fig. 3.

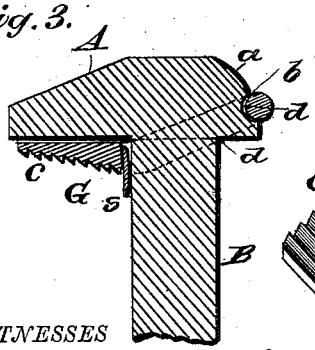
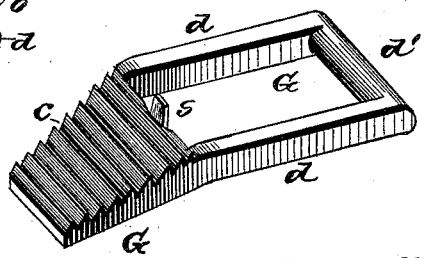


Fig. 4.



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MONKEY-WRENCH.

SPECIFICATION forming part of Letters Patent No. 302,842, dated July 29, 1884.

Application filed May 5, 1884. (No model.)

To all whom it may concern:

Be it known that we, S. H. HEGINBOTTOM, R. C. HAYTON, and W. H. HAYTON, of East Saginaw, in the county of Saginaw and State of Michigan, have invented certain new and useful Improvements in Monkey-Wrenches; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification, in which—

Figure 1 is a side view of a monkey-wrench adapted for nuts. Fig. 2 is a similar view having our improved serrated pipe-gripping jaw applied to the fixed jaw of the wrench. Fig. 3 is a sectional view of the fixed jaw with our detachable jaw applied to it. Fig. 4 is a perspective view of the gripping-jaw detached from the wrench and inverted.

This invention has for its object the application to the fixed jaw of a monkey-wrench of a detachable jaw of peculiar construction, whereby the instrument can be readily converted from a nut-wrench to a pipe-wrench, and vice versa, as will be fully understood from the following description when taken in connection with the annexed drawings.

Before describing our improvements we desire to state that serrated detachable jaw-faces have been applied to the fixed jaws of well-known monkey-wrenches, and therefore we do not broadly claim a pipe-jaw or jaw-face which can be applied to or detached from the fixed jaw of a wrench at pleasure.

A designates the jaw of a monkey-wrench, (or nut-wrench,) which jaw is permanently fixed on a toothed shank, B, having a handle, C, secured to it.

D designates the movable jaw of the wrench, which is looped on the shank B, and adjustable by means of a milled nut, E, in the well-known manner. The jaws A and D have plain faces adapted for clamping square or polygonal nuts of various sizes. The fixed jaw A is constructed with a butt, the face *a* of which is the arc of a circle, and transversely in this face we make a groove, *b*. (Clearly shown in Fig. 3 of the drawings.)

G designates our improved detachable jaw, which is constructed with serrations *c* on its gripping-face, and also with a loop or frame, *d*, adapted to embrace the sides and butt of the fixed jaw. The tranverse connecting-bar of the loop or frame *d* is constructed with a rounded internal edge, *d'*, adapted to enter the groove *b* in the butt of said fixed jaw when the gripping-jaw is adjusted in its place, as shown in Figs. 2 and 3. At the back of the upturned serrated portion of the jaw or jaw-face G we suitably secure a spring, *s*.

It will be seen by reference to the drawings, Figs. 1 and 2, that when the detachable jaw G is applied to the fixed jaw A the top of the serrated portion will lie flatly against the face of jaw A, and that the rear looped portion, *d*, of jaw G assumes an obtuse angle with respect to said face of jaw A. It will also be seen that the plane of the serrated side of the jaw G is at such an angle with respect to the shank B that most of the strain in turning the pipe or rod gripped between jaws A D will be thrown against the said shank, rather than against the jaw A. The spring *s* acts to forcibly draw the edge *d'* of the connecting-bar of frame *d* into the notch or groove *b* in the butt of the fixed jaw, and to prevent casual detachment of the serrated jaw.

Having described our invention, we claim—

1. A serrated gripping-jaw constructed of angular form and having a serrated face, a loop-extension, a cross-bar fastening, and a spring, all combined and adapted for use on the fixed jaw of a nut or monkey wrench substantially as and for the purposes described.

2. The fixed jaw of a monkey-wrench, having a beveled and transversely-grooved butt, in combination with a detachable serrated jaw provided with a rear cross-bar, and spring-fastening, all constructed and adapted to operate substantially in the manner and for the purposes described.

In testimony that we claim the foregoing as our own we affix our signatures in the presence of two witnesses.

SAMUEL H. HEGINBOTTOM.
ROBERT C. HAYTON.
WILLIAM H. HAYTON.

Witnesses:
JAY W. SUTTON,
GEO. W. WEODOCK.