

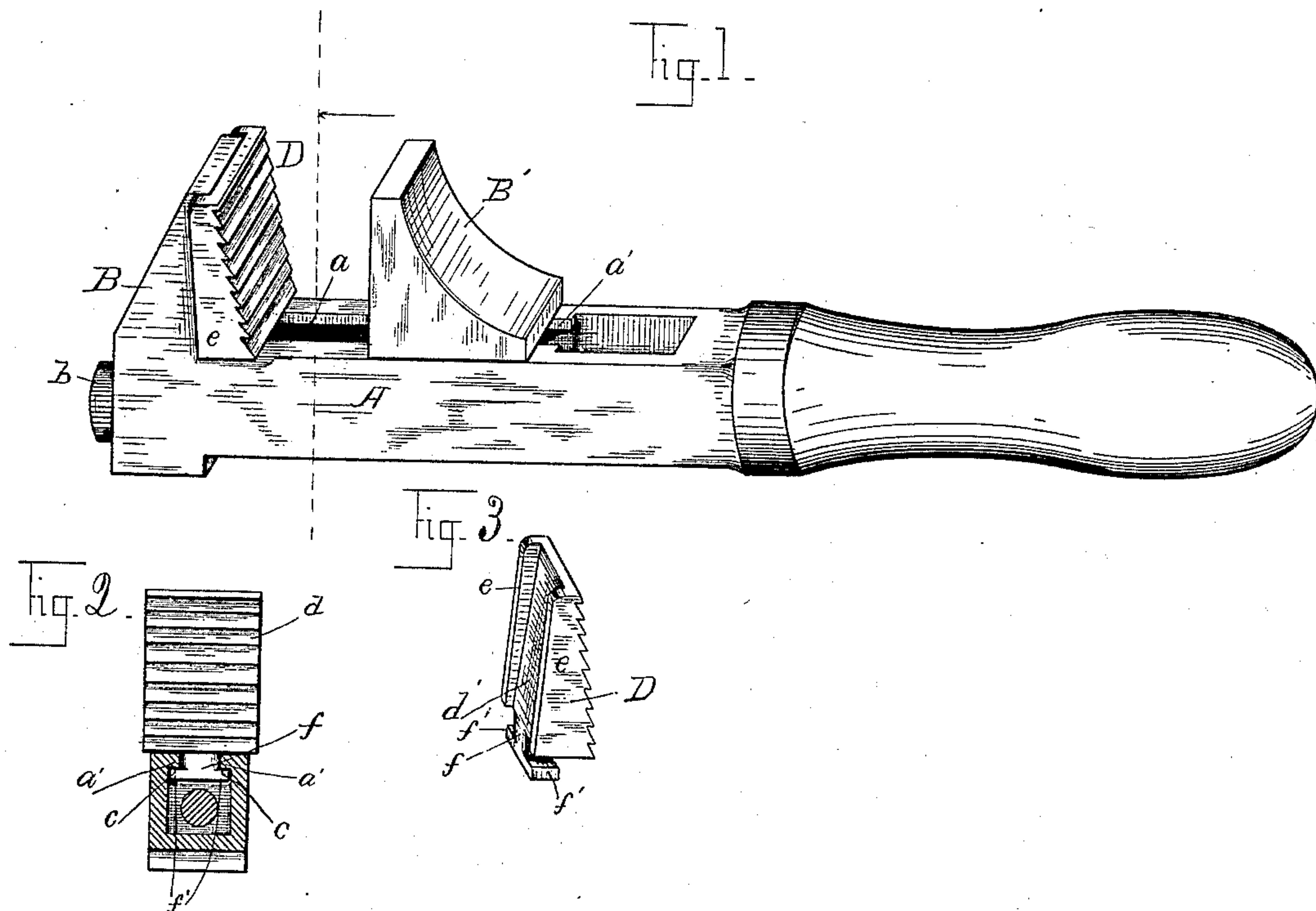
(No Model.)

C. F. LAGANKE & T. E. GAWN.

WRENCH ATTACHMENT.

No. 396,751.

Patented Jan. 29, 1889.



Witnesses,

C. B. Wash.
N. H. Fay.

Inventor,
C. F. Laganke & T. E. Gawn
By their Attorney,
Thos. D. Hall

UNITED STATES PATENT OFFICE.

CHARLES F. LAGANKE, OF LORAIN, AND THOMAS E. GAWN, OF NORTH AMHERST, ASSIGNORS TO THE LORAIN WRENCH COMPANY, OF LORAIN, OHIO.

WRENCH ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 396,751, dated January 29, 1889.

Application filed August 27, 1888. Serial No. 283,841. (No model.)

To all whom it may concern:

Be it known that we, CHARLES F. LAGANKE, a citizen of the United States, residing at Lorain, county of Lorain, and State of Ohio, and THOMAS E. GAWN, a citizen of the United States, residing at North Amherst, county of Lorain, and State of Ohio, have invented certain new and useful Improvements in Monkey-Wrench Attachments; and we do hereby declare the following to be a description of the same, and of the manner of constructing and using the invention, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it appertains to construct and use the same; reference being had to the accompanying drawings, forming a part of the specification, the principle of the invention being herein explained and the best mode in which we have contemplated applying that principle, so as to distinguish it from other inventions.

The object of our invention is to provide a form of detachable pipe-wrench attachment that may be easily attached to and removed from a monkey-wrench, and that will have a broad and ample bearing-surface in engagement with the stationary jaw, whereby rigidity and firmness will be insured.

Referring to the drawings, Figure 1 is a perspective view of the monkey-wrench with the attachment in position. Fig. 2 is a view of the attachment as secured in position, the wrench being sectioned on the dotted line of Fig. 1 and in the direction indicated by the arrow. Fig. 3 is a detail perspective view of the attachment.

A is the hollow stock of the wrench, provided with the slot *a*, having the opposite shoulder-walls *a'*.

B B' are respectively the fixed and movable jaws of the wrench, motion being imparted to said movable jaw by means of the knob *b*, that is rigid with a screw that engages with said movable jaw and works in said hollow stock. The inner walls of said hollow stock adjacent to the slot form the shoulders *c*.

D is a detachable pipe-wrench grip, preferably formed from cast-steel, said attachment having the milled working-face *d*, the smooth reverse bearing-face *d'*, and the side flanges, *e*, on either side of said smooth face and equal

in length therewith. Said pipe-wrench attachment D has two side flanges, *e*, and has a longitudinal lug formed with neck *f* and the two lateral shoulders *f'*, the base of the attachment having bearing on said walls *a'*, the lug-neck being formed in a transverse plane between said attachment-base and the lug-shoulders *f'*, locking under the wall-shoulders *c*, the thickness of said entire lug and also the width of the lug-neck being slightly less than the width of said slot, the length of said slot being greater than the width of said entire lug.

The operation is as follows: The attachment is turned with its narrow edge parallel with the slot, and the lug is then inserted in the slot. The attachment is given a quarter-turn, so that the shoulders *f'* engage with the shoulders *c* and lock the attachment against outward movement. Said attachment is then moved upward until its smooth face engages with the working-face of the stationary jaw, and the ears *e* engage with the lateral side faces of said jaw, thus furnishing a broad surface of engagement between the attachment and the stationary jaw.

The foregoing description and accompanying drawings set forth in detail mechanism in embodiment of our invention. Change may be made therein provided the principles of construction respectively recited in the following claims are employed.

We therefore particularly point out and distinctly claim as our invention—

1. The combination, with a wrench provided with a slot, *a*, adjacent to a jaw, B, and having side walls, *a'*, formed with inner shoulders *c*, of a pipe-wrench attachment, D, having a longitudinal lug formed with a neck, *f*, and two lateral shoulders, *f'*, the base of the attachment having bearing on said walls *a'*, the lug-neck *f* being formed between said attachment-base and the lug-shoulders *f'*, and fitting between said walls *a'*, said lug-shoulders *f'* locking behind said wall-shoulders *c*, the thickness of said entire lug and also the width of the lug-neck being slightly less than the width of said slot, the length of said slot being greater than the width of said entire lug, substantially as set forth.

2. The combination, with a wrench pro-

vided with a slot, *a*, adjacent to a jaw, B, and
having the two side walls, *a'*, formed with inner
shoulders, *c*, in same transverse plane with
said walls, of a pipe-wrench attachment, D,
5 provided with the two side flanges, *e*, and hav-
ing a longitudinal lug formed with the neck
f and the two lateral shoulders *f'*, the base
of the attachment having bearing on said
walls *a'*, the lug-neck being formed in a trans-
10 verse plane between said attachment-base
and the lug-shoulders *f'*, and fitting between
said walls *a'*, the lug-shoulders *f'* locking
under the wall-shoulders *c*, the thickness of

said entire lug and also the width of the lug-
neck being slightly less than the width of 15
said slot, the length of said slot being greater
than the width of said entire lug, substantially
as set forth.

In testimony that we claim the foregoing to
be our invention we have hereunto set our 20
hands this 24th day of August, A. D. 1888.

CHARLES F. LAGANKE.

THOMAS E. GAWN.

Witnesses:

FRANK HOGAN,

OTIS E. YOUNG.