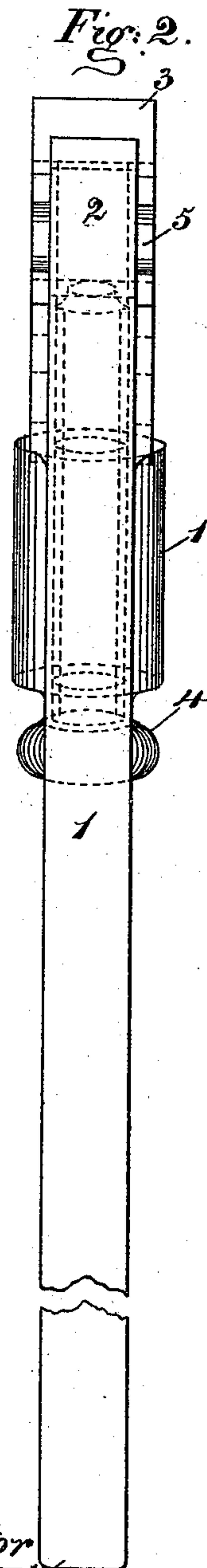
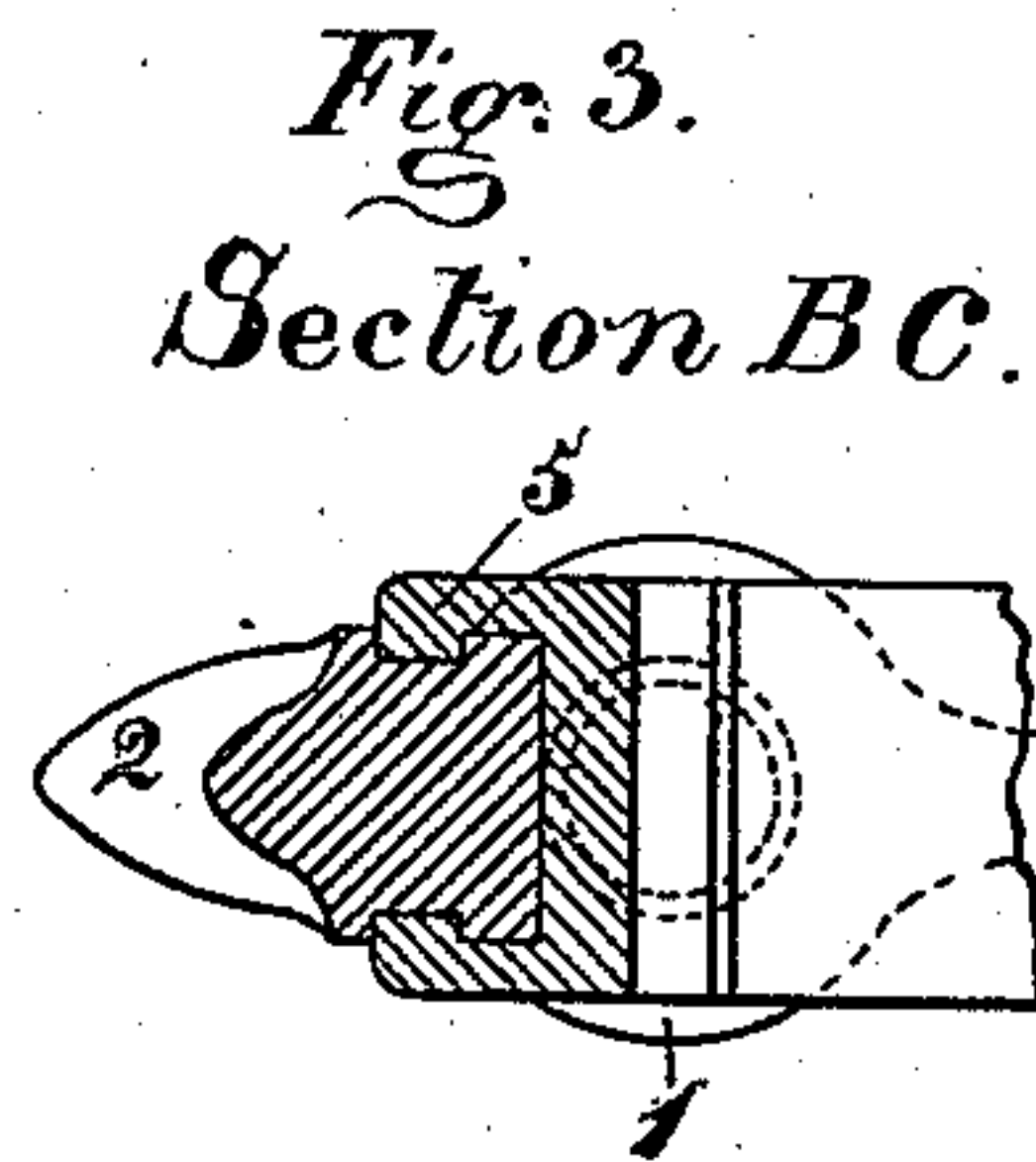
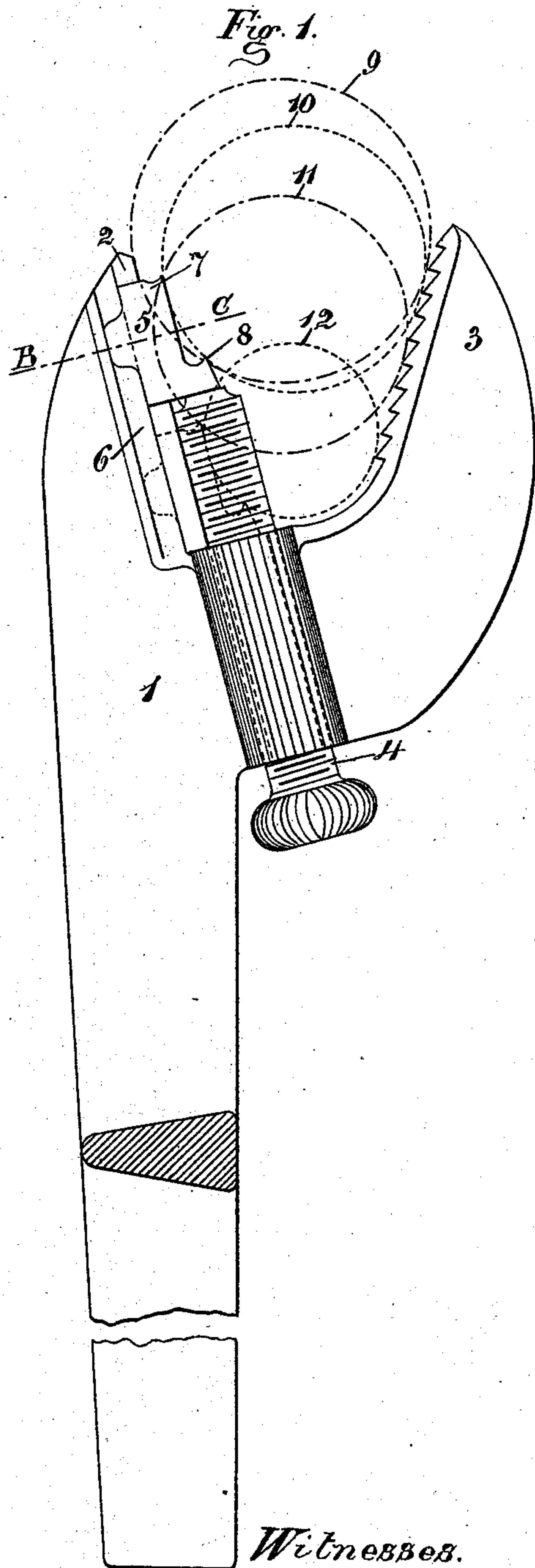


(No Model.)

J. T. HAWKINS.
PIPE WRENCH.

No. 413,940.

Patented Oct. 29, 1889.



Witnesses.
Francis P. Kelly.
O. H. Davis.

Inventor
John T. Hawkins
by O. H. Davis
Atty.

UNITED STATES PATENT OFFICE.

JOHN T. HAWKINS, OF TAUNTON, MASSACHUSETTS.

PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 413,940, dated October 29, 1889.

Application filed April 29, 1889. Serial No. 309,037. (No model.)

To all whom it may concern:

Be it known that I, JOHN T. HAWKINS, of Taunton, in the county of Bristol and State of Massachusetts, have invented a new and useful Improvement in Pipe-Wrenches, which invention is fully set forth and illustrated in the following specification and accompanying drawings.

The object of this invention is to increase the range of a wrench of any given size and to provide a form of adjustable stop having a width equal to that of the jaw of the wrench instead of only that of the end of an adjusting-screw.

The invention is an improvement upon the wrench described in my pending application, Serial No. 292,886, filed December 7, 1888, and will first be described in detail, and then particularly set forth in the claims.

In the accompanying drawings, Figure 1 is a side elevation, and Fig. 2 an edge view, of the wrench. Fig. 3 is a section taken at the line B C of Fig. 1.

In said figures the several parts are indicated by reference-numbers, as follows:

The number 1 indicates the body of the wrench, having formed upon it the smooth jaw 2 and the serrated jaw 3, making with each other the proper angle. An adjusting-screw 4 is threaded in the body of the wrench, the point of which impinges upon a sliding stop 5. The smooth jaw 2 is grooved at the sides, as at 6, and the sliding stop 5 is formed to fit therein, as shown in section, Fig. 3. The sliding stop 5 has one or more engaging edges formed upon it, 7 and 8, and is shown in one extreme position in full lines and at the other extreme in dotted lines, Fig. 1.

The dotted circles 9 10 11 12 show the range

in size of pipes which may be operated on. For the largest pipe 9, the pipe is taken between the surfaces of the two jaws, and the end engaging tooth-edge 7 is used to prevent further entrance of the pipe into the angle of the jaws and to assist in its rotation, and similarly for any smaller size down to that shown by the dotted circle 11, in which the dotted sliding block 5 is shown impinging against the pipe by its end engaging tooth-edge 7. For the next smaller size 10, the block is placed as in full lines, and the pipe rests upon the forward part of the sliding block instead of on the jaw 2, and the back engaging edge 8 of the block 5 impinges against it, and similarly for any smaller pipe than 10 down to that shown by the dotted circle 12.

Having thus fully described my said improvement, as of my invention I claim—

1. In a pipe-wrench constructed of a serrated or toothed jaw, as 3, and an opposite smooth or unserrated jaw, as 2, the combination of a stop for the pipe sliding upon the smooth jaw and an adjusting-screw for regulating the position of said sliding stop, substantially as set forth.

2. In a pipe-wrench constructed of a serrated or toothed jaw, as 3, and an opposite smooth or unserrated jaw, as 2, in combination with a stop, as 5, sliding upon the smooth jaw and having formed thereon tooth-edges, an adjusting-screw, as 4, for regulating the position of said sliding stop, substantially as set forth.

JOHN T. HAWKINS.

Witnesses:

ALFRED S. BROWN,
FRANCIS P. REILLY.