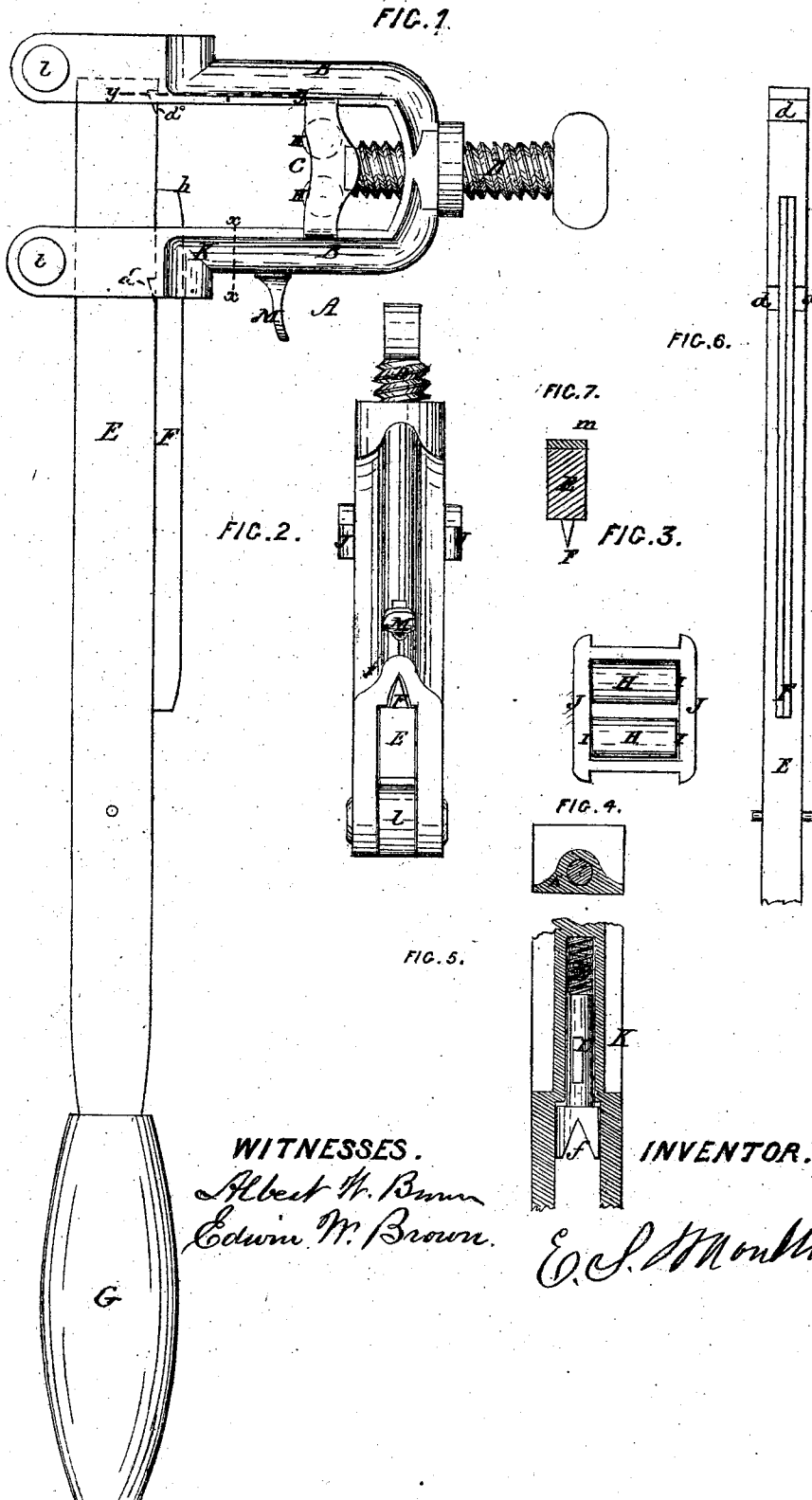


E. S. MOULTON.

Pipe-Cutter.

No. 116,210.

Patented June 20, 1871.



WITNESSES.

Albert H. Brown
Edwin W. Brown.

INVENTOR.

E. S. Moulton

UNITED STATES PATENT OFFICE.

ERI SEWELL MOULTON, OF CHELSEA, MASSACHUSETTS.

IMPROVEMENT IN PIPE-CUTTERS.

Specification forming part of Letters Patent No. 116,210, dated June 20, 1871; antedated June 9, 1871.

To all whom it may concern:

Be it known that I, ERI SEWELL MOULTON, of Chelsea, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Pipe-Cutters; and that the following is a full and exact description of the same, reference being had to the accompanying drawing.

This invention relates to that class of devices known as pipe and rod cutters; and it consists of a certain combination of parts, as will hereinafter more fully be set forth.

The invention consists, first, in providing the bearing-surface of the clamp or presser employed in said pipe-cutter with a roller or rollers arranged to be free to turn, for the purpose of reducing the friction of said clamp upon the tube being cut as the cutter is turned about the same or the tube is turned within the cutter; second, in the knife-bar of said cutter being constructed with notches at such points that by means of a spring-catch arranged within the carrier or yoke said knife-bar can be fastened with the carrier at the proper point for the knife to cut a pipe and to allow of the insertion or removal of a pipe, when so desired, without necessitating the detachment of the knife-bar from the carrier; third, in a novel arrangement and construction of a spring-catch for fastening the knife-bar.

In the accompanying drawing my improvements in pipe-cutters are illustrated—

Figure 1 being a side view of a Freeman pipe-cutter with my improvements applied; Fig. 2, an edge view of the same for knife-bar; Fig. 3, a face view of the clamp or presser detached from the carrier; Figs. 4 and 5, sections in detail of the carrier and spring-catch arranged thereon, respectively, in planes of lines *x x* and *y y*, Fig. 1; Fig. 6, an edge view of a portion of the length of the knife-bar; and Fig. 7, a cross-section of knife-bar.

A in the drawing represents a "Freeman pipe-cutter," constructed, as described in aforesaid Letters Patent, of a carrier or yoke, B, presser or clamp C, with operating-screw D, and bar E having a knife-blade, F, inserted in it for a portion of its length, and a handle, G, attached to one end. The bearing-surface of

the presser or clamp C is provided with two friction-rollers, H, each arranged to turn freely on a separate center spindle or axis, I, within the frame of said clamp, and between its two side pieces, J. (See Fig. 3, more particularly.) These rollers reduce the friction or rub of the clamp on the pipe or tube on which the cutter is operating. The stock of knife-blade F is inserted in the two ends of the yoke B, passing across its width, the cutter-edge of the knife being toward the clamp. In one arm, K, of the yoke B is arranged a sliding catch, L, provided with a projecting thumb piece, M, for operating it, and a spring, N, for holding it engaged with the notches *d* of the knife-stock E each side of the blade, the end *f* of the said catch interlocking with said notches being bifurcated so as to set over the cutting-edge of the knife-blade. The notches *d* are shown as made at two points in the length of the knife-bar, the one set at or near the end of the bar, so that the knife can be drawn from across the yoke when a pipe is to be inserted or removed and yet held secured to the yoke, and the other set at a suitable point in the length of the bar to enable the knife to be set by its point *h* in proper position for commencing to cut a pipe. In each end of the yoke is arranged a roller, *l*, for increasing the freedom of the movement of the knife-bar through the same, and for protecting the back of said bar E against wear from friction; it is provided with a steel facing or back, *m*. (See Fig. 7.)

Having thus described my improvements in pipe-cutters, what I claim as my invention, and desire to secure by Letters Patent, is—

The sliding catch L bifurcated at its end *f*, with the spring N, both arranged within one of the arms K of the yoke B, and operated by a thumb piece, M, in combination with the bar E and knife F, substantially as described.

The above specification of my improvements in pipe-cutters signed by me this 19th day of September, A. D. 1870.

E. S. MOULTON.

Witnesses:

EDWIN W. BROWN,
ALBERT W. BROWN.