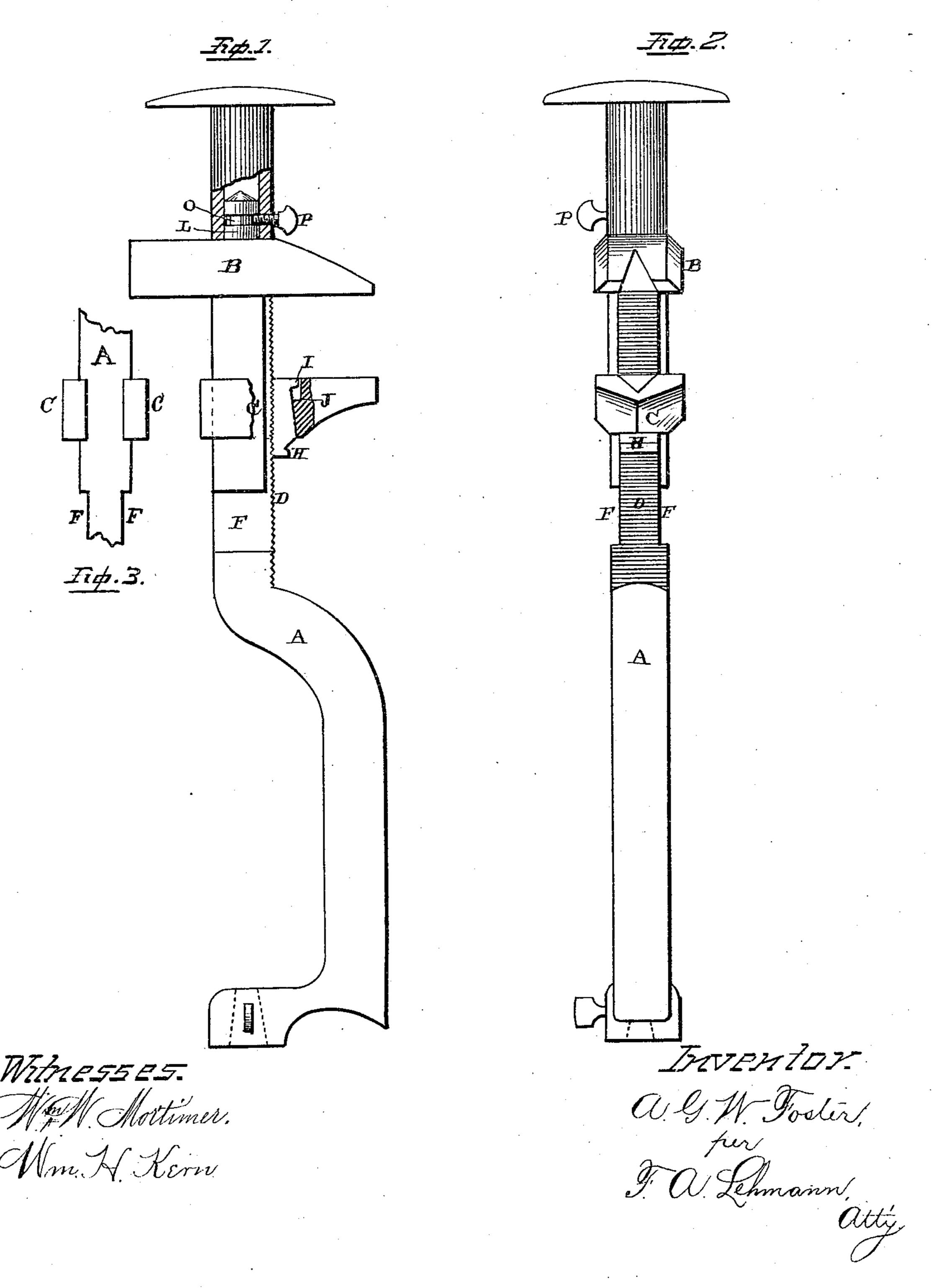
## A. G. W. FOSTER. WRENCH.

No. 246,487.

Patented Aug. 30, 1881.



## United States Patent Office.

ABRAHAM G. W. FOSTER, OF NEWNAN, GEORGIA.

## WRENCH.

SPECIFICATION forming part of Letters Patent No. 246,487, dated August 30, 1881.

Application filed May 26, 1881. (Model.)

To all whom it may concern:

Be it known that I, ABRAHAM G. W. Fos-TER, of Newnan, in the county of Coweta and State of Georgia, have invented certain new and useful Improvements in Wrenches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification:

My invention relates to an improvement in wrenches; and it consists in forming the lower part of the handle of the wrench into a bit15 stock, and forming an extension upon the top of the stationary jaw of the wrench, and upon which is placed a swiveled head, as will be more fully described hereinafter.

The object of my invention is to form a com-20 bined wrench and bit-stock, and to make the head of the bit-stock removable in such a manner that the wrench can be used as a hammer for drawing nails and other such purposes.

Figure 1 is a side elevation of my invention complete, partly in section. Fig. 2 is an edge view of the same. Fig. 3 is a detail view.

A represents the shaft or handle of the wrench, which has its lower part bent, as shown, so as to form a bit-stock. The upper jaw, B, 30 is secured permanently to the top of the handle, while the lower jaw, C, slides back and forth over the ratcheted surface D of the handle, and is made removable therefrom by forming an opening in the rear end of the jaw and 35 corresponding recesses F in the sides of the handle, as shown in Fig. 3. This sliding jaw, instead of being secured in position by means of a set-screw or other similar device, is fastened in place by a wedge, H, having its in-40 ner side shaped like the ratchet formed on the handle, and having a projection, I, formed on its upper end, so as to catch against the shoulder J, which is made inside of the sliding jaw. This shoulder on the wedge prevents the wedge 45 from becoming displaced until the jaw is moved down opposite the two recesses, so that it can be moved outward upon the handle, and thus allow the wedge to be withdrawn. When it is desired to fasten the jaw in any desired place, 50 it is only necessary to push the wedge upward

into the jaw as far as it will go, when the jaw will be locked securely in place. To loosen the jaw the lower end of the wedge is pulled downward and outward, so as to disengage its ratcheted surface from connecting with the 55 ratchet on the handle, and then the jaw can be moved freely back and forth.

The stationary jaw has one of its ends bifurcated, as shown, so as to act like a claw of a hammer, and has its other end so formed as to 60 be adapted for driving nails, tacks, and other such articles. The lower jaw has a groove cut in its face, which, in connection with the division in the upper jaw, adapts the wrench for use upon pipes and round articles.

Formed upon the top of the stationary jaw is the extension L, which has a groove, O, formed in its side, and passed down over this extension is the rotary knob or handle, which is swiveled upon the extension by means of 70 the set-screw P. The inner end of this set-screw catches in the groove formed in the side of this extension, and, while it prevents the knob or handle from being removed, allows the handle to turn freely around, as is the case upon all bit-stocks. When it is desired to use the wrench alone, or to use the wrench as a hammer, this knob is taken off by loosening the set-screw.

Having thus described my invention, I 80 claim—

1. In a combined wrench and bit-stock, the combination of the handle A, having its lower end formed into a bit-stock, and provided with the jaw B and extension L, with a swiveled 85 head or knob and a sliding jaw, substantially as shown.

2. In a wrench, the combination of the handle A, provided with recesses F, rigid jaw B, sliding jaw C, having an open end, and the 90 shoulder J, with the wedge H, having the shoulder I, the handle and wedge being corrugated, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ABRAHAM G. W. FOSTER.

Witnesses:

W. Y. ATKINSON, WILLIAM WELLS.