

*J. V. Jensen,
Wrench.*

N^o 60,380.

Patented Dec. 11, 1866.

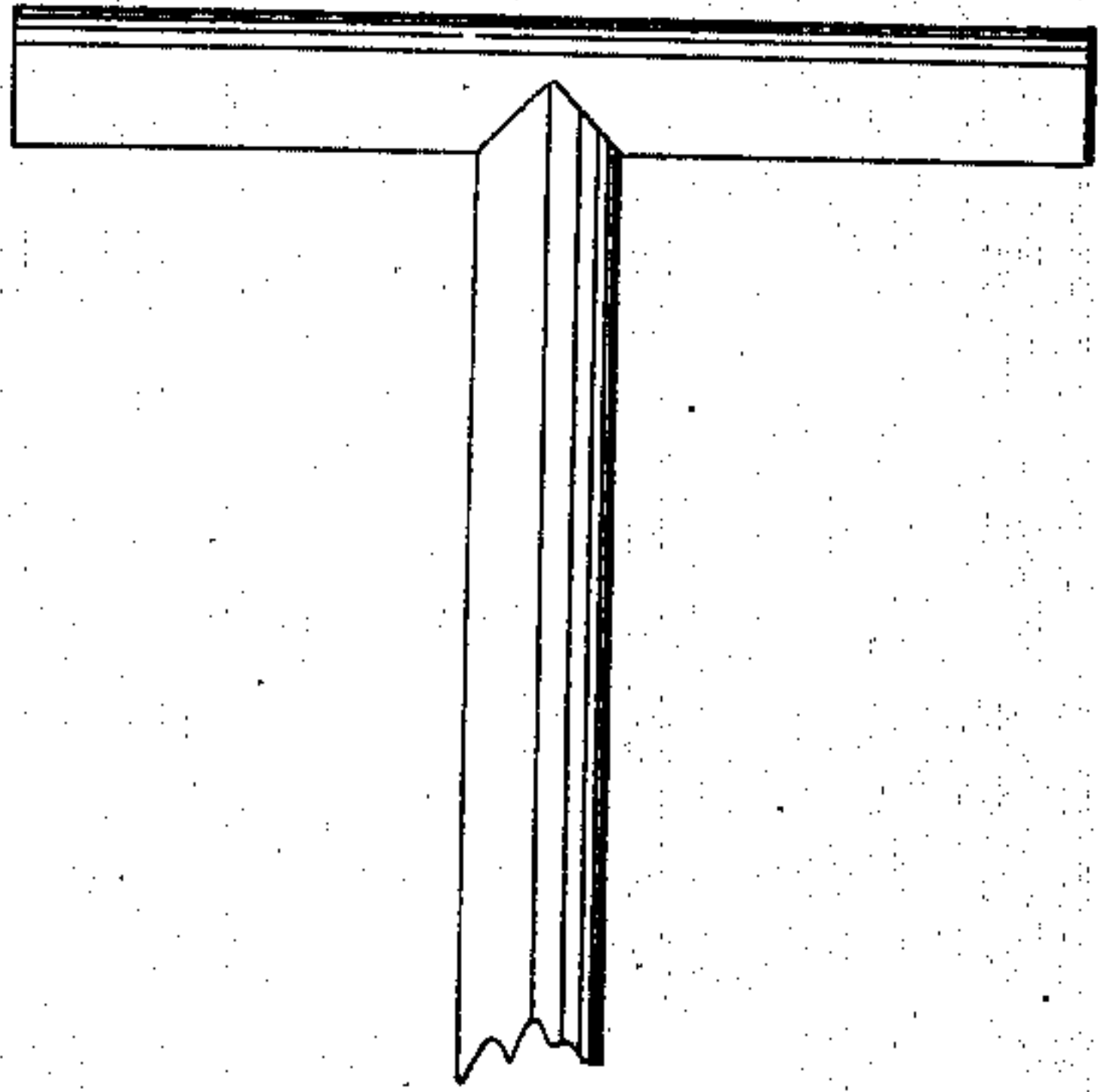
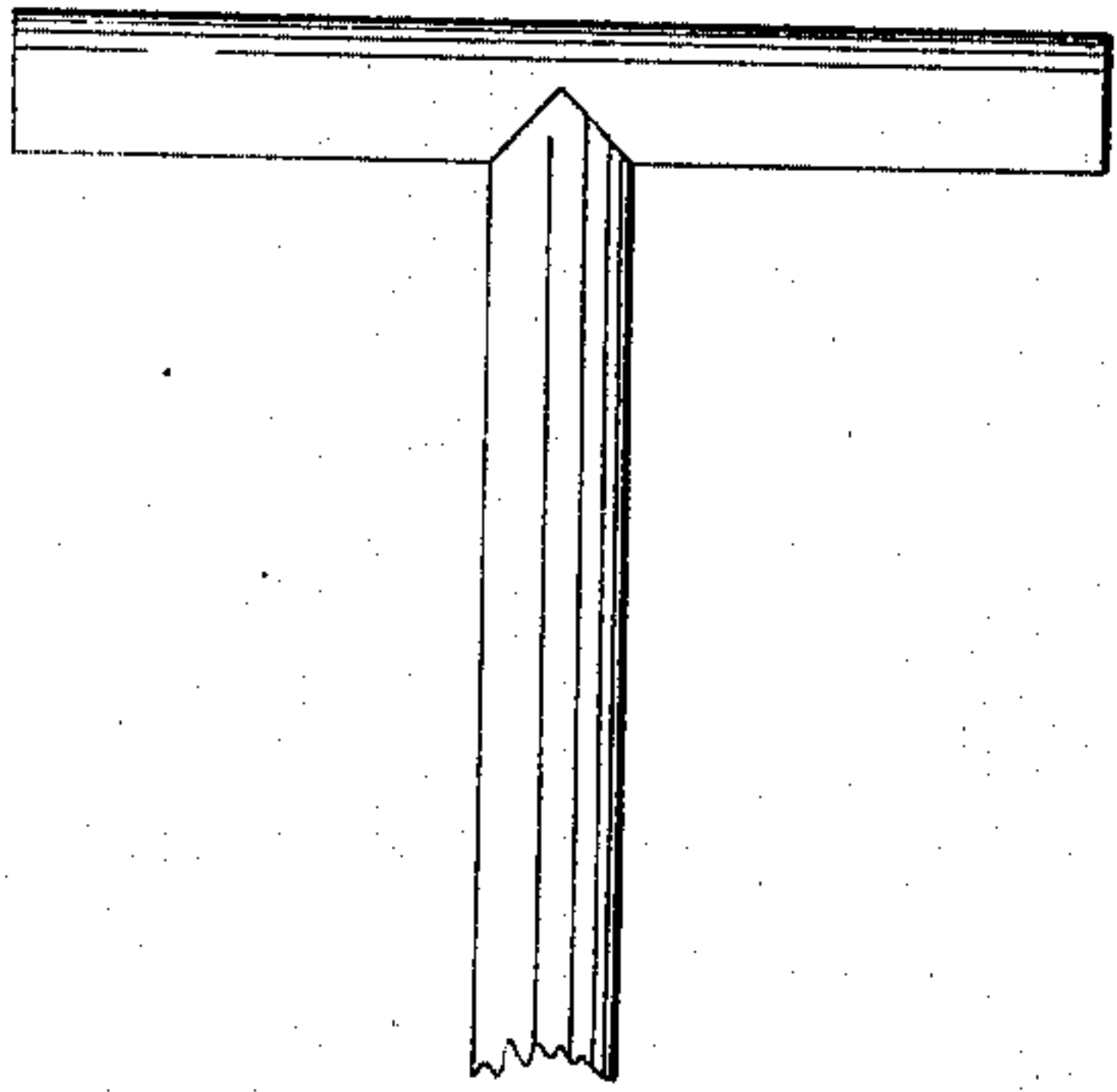


Fig. 2

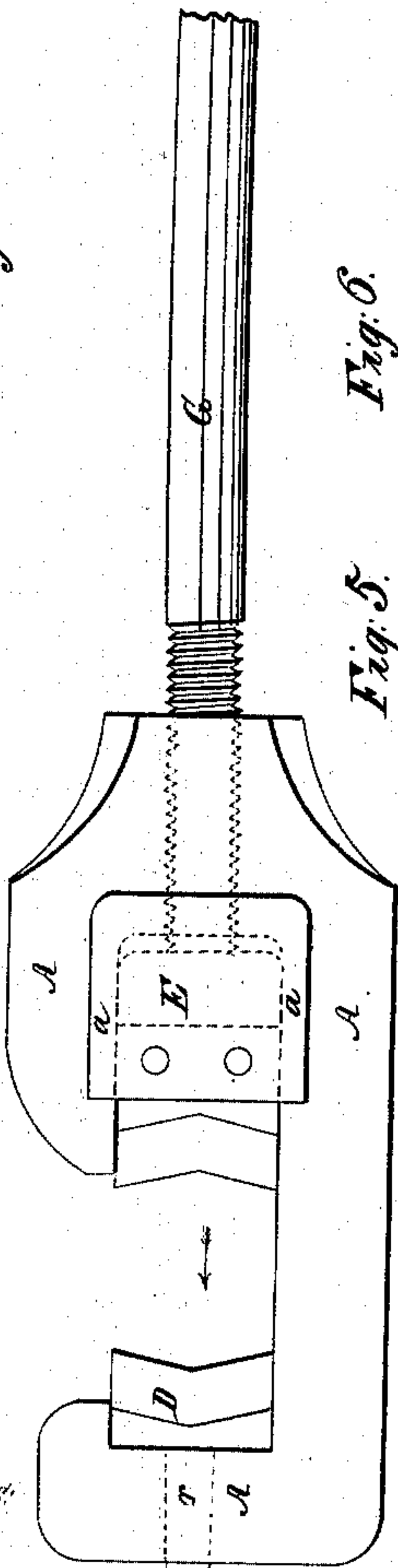


Fig. 3.

Fig. 5.

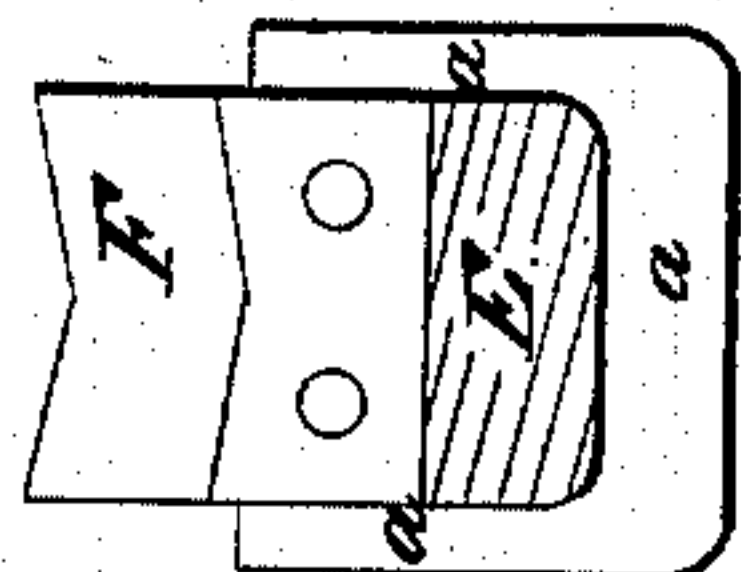


Fig. 1.



Fig. 4.

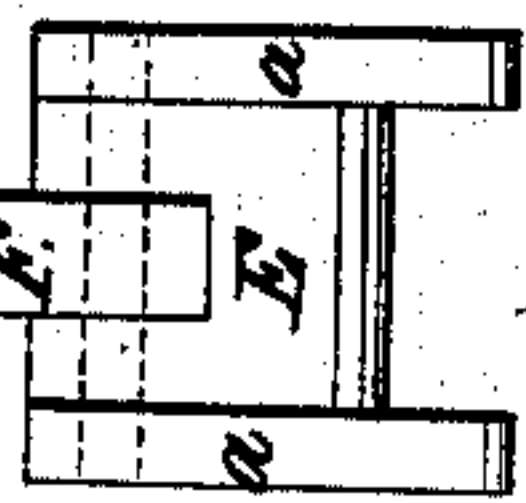


Fig. 3.

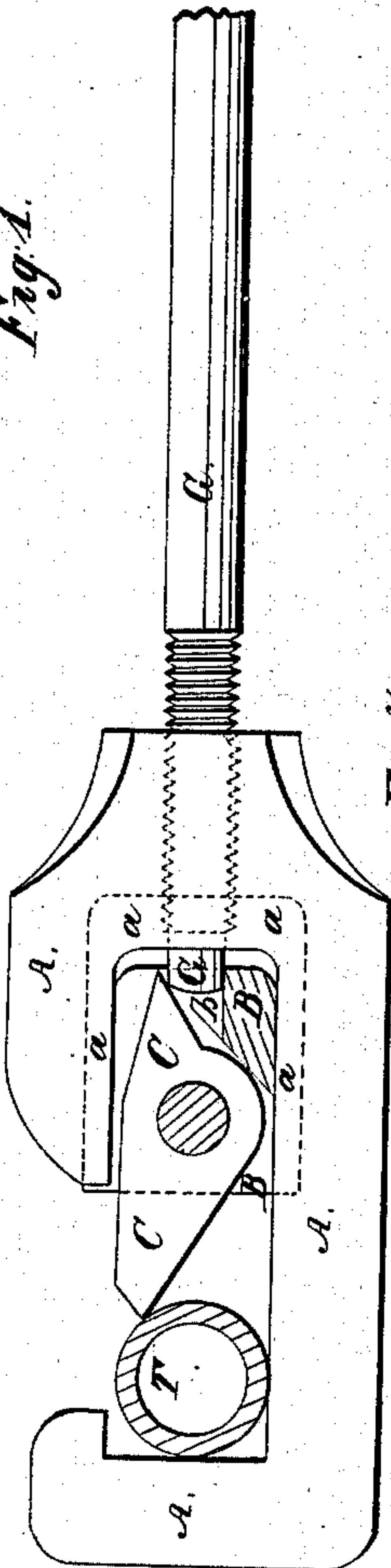
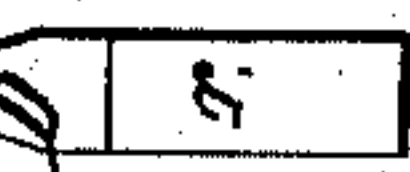


Fig. 7.

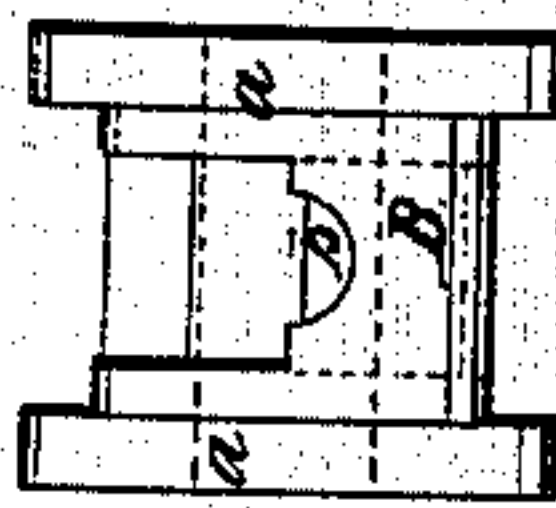


Fig. 8.



*Inventor.
J. V. Jensen*

Witnesses:

*Amos Townsend
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United States Patent Office.

IMPROVED TOOL FOR CUTTING TUBES.

JOHN V. JEPSON, OF BROOKLYN, NEW YORK.

Letters Patent No. 60,380, dated December 11, 1866.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN V. JEPSON, of the city of Brooklyn, in the county of Kings, and State of New York, have invented certain new and useful improvements in Pipe Cutters, with wrench attachment; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawing, making part of this specification, in which—

Figure 1 is a side elevation of said improved wrench when fitted to screw or twist a piece of pipe.

Figure 2 is a side elevation of said wrench when fitted to cut off a piece of pipe or cut out a transverse section of a line of pipe, as the case may require.

Figures 3, 4, 5, 6, 7, and 8 are parts of the wrench to be hereinafter referred to.

In the drawing, A represents the head of the wrench, in the upper jaw of which a sliding or adjustable block, E, is inserted. This block should be provided with flanges, *a a*, to lap over on the sides of the jaw, and should be accurately fitted in its place, and at the same time be susceptible of ready adjustment. This adjustable block is fitted with a knife or cutter, F, as shown in figs. 4 and 6, and is moved forward by means of a screw-cut on the end of the handle, C, which screw passes through the top of the head, as shown in the drawing. In the lower jaw of the head there is inserted a knife or cutter D, made as shown in figs. 3 and 5. This cutter is accurately fitted in its place, and is held in position by means of a tail-piece, which passes through the lower part of the jaw, as shown by *r*. These knives or cutters I prefer to make V-shaped on their cutting edge, so as to make them bear in four places upon the surface of a cylindrical pipe.

Now, when this wrench is thus fitted to cut pipe with, it is operated by simply hooking it over the line of pipe, by then screwing the handle down to bring the knives to bear against the pipe, and by then moving the handle to and fro, by which the wrench is made to vibrate around the pipe as a centre, the block, E, being moved forward by the screw as the knives cut their way into the pipe until it is cut off. By this make of wrench it will be seen a pipe fitter can cut a section or piece out of a line of pipe when it is so situated that the wrench cannot be turned or rotated all the way around the pipe; and the object of making the cutters V-shaped is to enable me to cut all the way around the pipe with as little motion of the wrench as possible. Now, when the wrench is fitted to screw or twist a pipe, the block, E, with its cutter F, and the cutter D, are taken out of the jaws and a block B made, as shown by figs. 7 and 8, is put in the place of the block E. This block B should be made with flanges and as accurately fitted in its place as the block E, and should be made with a semi-circular bearing place, *b*, in its rear end to support the end of the screw, G, when screwed against the tail of the pawl, C, fitted in the block B upon a centre pin, in the manner shown. This pawl, C, should be made of steel, and should be so shaped as to make the front end take hold of the pipe, T, when the end of the screw is forced against its rear end, as shown.

The drawing indicates so plainly the method of applying the wrench to the pipe that no further description is thought necessary.

Having now described the nature and extent of my invention, I claim and desire to secure by Letters Patent—

The combination of the stationary knife D with the adjustable knife F, and the jaw A of the wrench, constructed and arranged substantially as described.

JOHN V. JEPSON.

Witnesses:

AMOS BROADNAX,
P. D. KENNEY.