

W.K. Foster,

Screw Tap,

N^o 83,371.

Patented Oct. 27, 1868.

Fig. 1

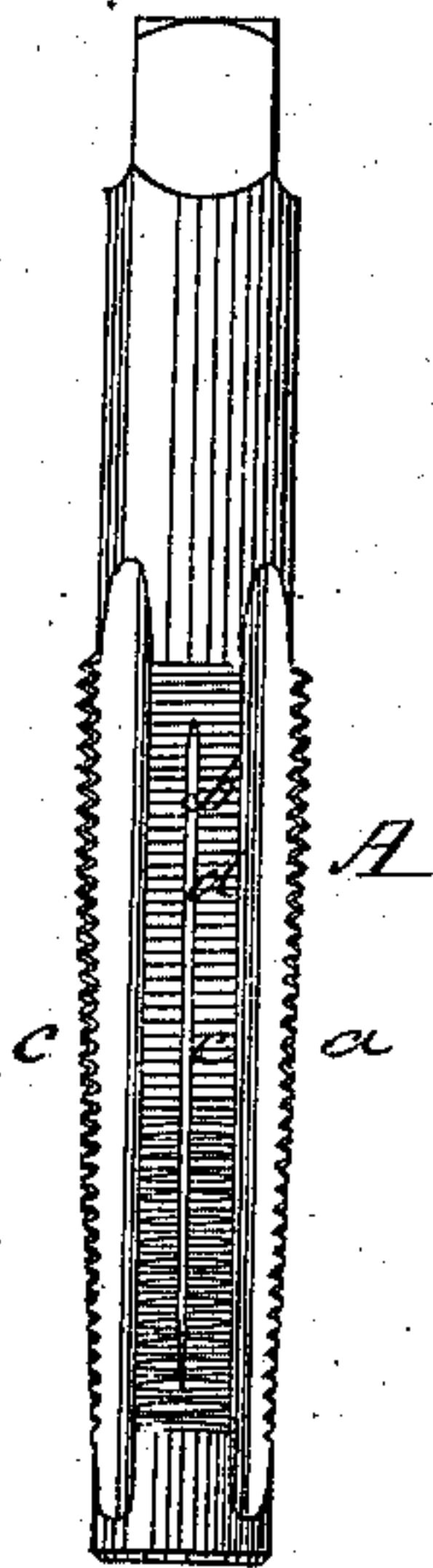
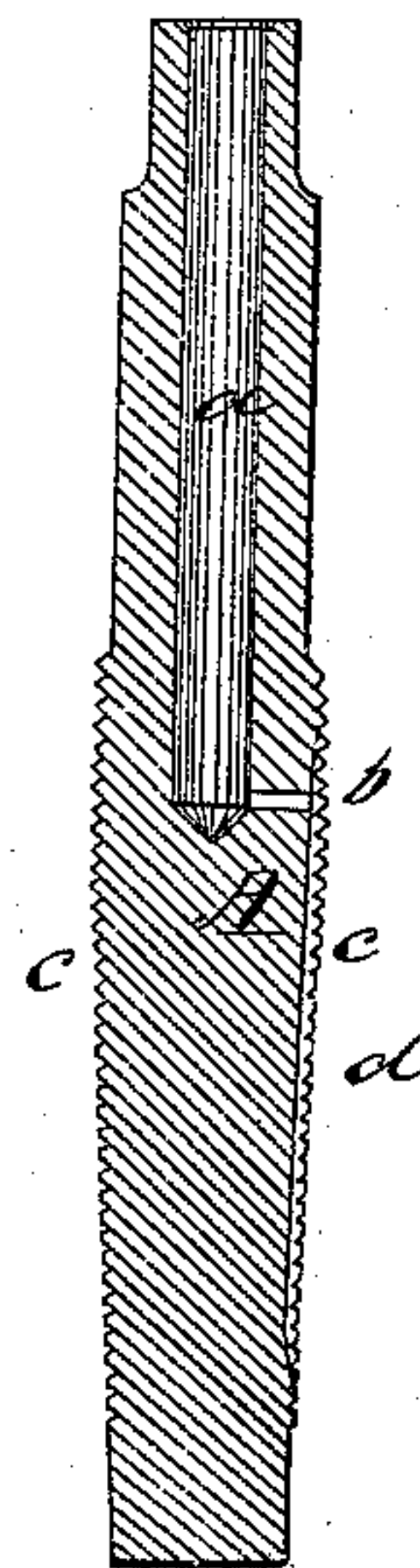


Fig. 3



Fig. 2



Witnesses
S. N. Piper.
A. P.

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United States Patent Office.

WALTER K. FOSTER, OF CAMBRIDGEPORT, MASSACHUSETTS.

Letters Patent No. 83,371, dated October 27, 1868.

IMPROVED SCREW-TAP.

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

To all persons to whom these presents may come:

Be it known that I, WALTER K. FOSTER, of Cambridgeport, of the county of Middlesex, and State of Massachusetts, have invented a new and useful Improvement in Screw-Taps; and do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 denotes a front elevation,

Figure 2, a vertical section, and

Figure 3, a horizontal and transverse section of a screw-tap provided with my improvement.

In carrying out my invention, I take a common screw-tap, *A*, and form in it, from its head, and down along in line of its axis, or about so, an oiling-passage, *a*, from which I lead a hole, *b*, laterally through the tap to the upper part of one of its series or ranges *c c c c*, of screw-cutters. I also form in such range a groove, *d*, to extend down therein, from the said hole, to or nearly to the bottom of the range.

For the purposes of my invention, the tap may be tubular, or be bored through from end to end, in which case I usually insert in the bore or hole a plug, having its upper end on a level with, or somewhat below, the inner end of the lateral passage *b*, in order that oil, after having been poured into the upper end of the bore or passage *a*, may flow through the hole *b* upon the range of cutters, or into the groove made down therein.

When a screw-tap is so made, or provided with my improvement, it will be an easy matter to oil its cutters while it may be in the act of cutting a female screw.

To accomplish this, the lubricating-fluid is to be poured into the top of the passage *a*. This saves the necessity of pouring it into one of the chip-grooves of the tap, and the usual loss or waste resulting therefrom.

With my invention, very little oil need be used, to enable the tap to perform its work, in comparison to what would be necessary were the tap unprovided with the improvement.

An equivalent for the passage *a b* would be a single passage, leading from the upper end of the screw-tap obliquely through the shank, and out through one of the ranges of cutters.

If desirable, there may be more than one lateral passage leading from the main oiling-passage to the outside of the tap. The lateral passage may have a very small diameter in comparison to that of the vertical passage, which may be so large as to constitute a reservoir for holding oil, in which case, if desirable, a plug may be fixed on the mouth of the passage *a*, so as to cause the oil to weep from time to time, in a very small quantity, from the discharge-passage. The said plug may be a screw, screwed into the top of the oil-receptacle.

What I claim as my invention is—

The arrangement of the main and lateral oiling-passages *a b*, and the groove *d*, in one of the ranges of screw-cutters, the whole being substantially as described.

W. K. FOSTER.

Witnesses:

R. H. EDDY,

F. P. HALE, Jr.