(No Model.)

J. K. BABCOCK.

REAMER.

No. 262,885. Patented Aug. 15, 1882.

FIG. 1.

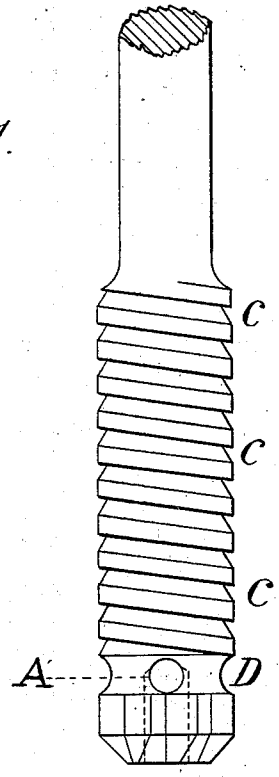
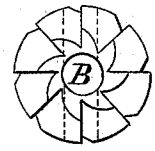


FIG. 2.



WITNESSES:—

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UNITED STATES PATENT OFFICE.

JABEZ K. BABCOCK, OF PHELPS, NEW YORK.

REAMER.

SPECIFICATION forming part of Letters Patent No. 262,885, dated August 15, 1882.

Application filed May 17, 1882. (No model.)

To all whom it may concern:

Be it known that I, JABEZ K. BABCOCK, a citizen of the United States, and a resident of Phelps, in the county of Ontario and State of New York, have invented certain new and useful Improvements in Reamers, of which the following is a specification.

My invention relates to that class of machinists' tools known as "rose" or "fluted" reamers, which, it is well-known, as heretofore constructed, having no adequate clearance, are very liable to clog and stick while in use from the chips or dust working backward upon the reamer, and preventing thereby the making of a true and smooth hole.

The object of my improvement is to overcome these defects and produce a reamer which feeds with perfect freedom and produces a true and smooth hole.

Referring to the drawings accompanying this specification, Figure 1 represents a side view of my improved reamer; Fig. 2, a front end view.

The head or cutting part of the reamer is made in the usual way; but the straight fluted part is made quite short, as shown. Just back of the fluted part is a concave groove, D, in which I make one or more radial holes, A, which communicate with a central or axial hole, B. Immediately back of the hole A, I cut a left-handed continuous spiral groove, *c c c*. The front face of the spiral is preferably square perpendicularly, or nearly so, to the axis. The part left between the spiral groove is in a straight reamer, as shown, of the same diameter as the head or fluted part; but in a taper reamer would be of gradually-increasing diameter.

The action of the reamer will be readily understood. Most of the chips or dust that pass the fluted head will be caught in the groove D and discharged through the radial holes A and central hole, B. Any dust that passes or tends to pass the groove D will be arrested by the spiral groove *c c c*, and will be carried forward thereby and discharged likewise through the holes A and B to mingle with the bulk of the chips in front of the reamer. No clogging or sticking of the reamer can therefore take place. The outer face of the spiral in a straight reamer being of the same size as the cutting-head, the reamer is held true, central, and firm, and the hole is also thereby nicely smoothed and polished, as has been proven by practical use.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The improved reamer comprehending the spiral groove *c c c*, concave groove D, one or more radial holes, A, and central hole, B, substantially as herein set forth and described.

JABEZ K. BABCOCK.

Witnesses:
WILLIAM R. BROOKS,
I. P. CHAMPION.