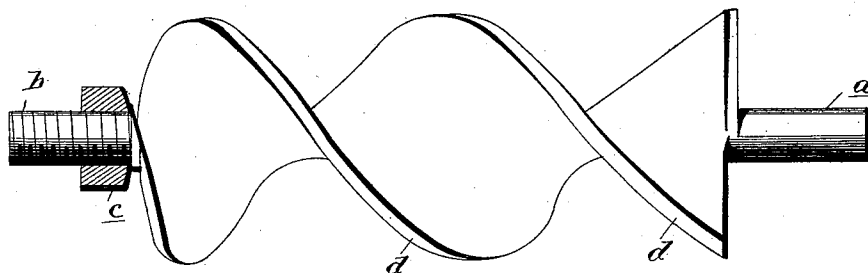


(No Model.)

C. KUSSMAUL & C. F. REICHERT.
PLANING CUTTER.

No. 469,845.

Patented Mar. 1, 1892.



Witnesses:

G. A. Rader

H. D. Matthews

Inventors

*Christopher Kussmaul &
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Attorney

UNITED STATES PATENT OFFICE.

CHRISTOPHER KUSSMAUL AND CHARLES F. REICHERT, OF PHILADELPHIA,
PENNSYLVANIA.

PLANING-CUTTER.

SPECIFICATION forming part of Letters Patent No. 469,845, dated March 1, 1892.

Application filed May 2, 1891. Serial No. 391,366. (No model.)

To all whom it may concern:

Be it known that we, CHRISTOPHER KUSSMAUL and CHARLES F. REICHERT, citizens of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Cutters; and we do 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 appertains to make and use the same.

This invention has relation to an improvement in planing-cutters for use in wood-working machinery, and may be used for either round or straight planing.

The novelty will be fully understood from the following description and claim, when taken in connection with the annexed drawing, in which the figure is a side view of our improved cutter.

In forming the cutter we take a sheet of steel of sufficient length and width and reduce the opposite ends, as shown. One of these ends *a* is turned round and made plain, so as to fit in a suitable box or bearing on a lathe or other suitable machine. The opposite end *b*, which is of approximately the same length, is externally threaded, as shown, to be screwed into a rotatable shaft or other suitable device on the lathe, and a nut *c* is employed for securing the cutter in position. The plate of steel, which is of a uniform width

throughout its length from the reduced portions *a* to *b*, has its longitudinal edges beveled and sharpened to form cutters *d*, and is shaped into a spiral by being given a twist of about a half-revolution. It is obvious that the pitch of the spiral might be varied as desired and a spiral of great or less degree employed.

This cutter may be manufactured at a minimum expense and may be used in either a horizontal or vertical position. It is adapted for use in various kinds of machines and may be readily removed and replaced when desired.

With a device of this character I am enabled to form straight or round planed work.

Having described our invention, what we claim, and desire to secure by Letters Patent, is—

The cutter described, formed from a single plate of steel having its opposite ends reduced and rounded and one end externally threaded and also having its longitudinal edges beveled to form cutters and twisted to form a double spiral, substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

CHRISTOPHER KUSSMAUL.
CHARLES F. REICHERT.

Witnesses:

LOUIS DUCHER,
JNO. J. MAXWELL.