

E. HARROLD.
CUTTER HEAD KNIFE ADJUSTING WRENCH.
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1,050,455.

Patented Jan. 14, 1913.

Fig. 1.

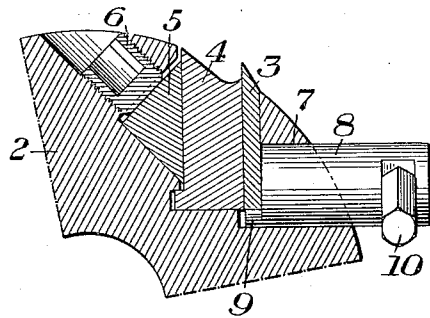
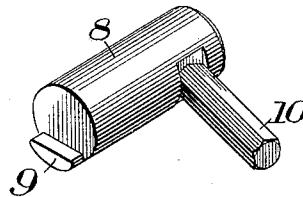


Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

ELMER HARROLD, OF LEETONIA, OHIO, ASSIGNOR TO THE CRESCENT MACHINE
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CUTTER-HEAD-KNIFE-ADJUSTING WRENCH.

1,050,455.

Specification of Letters Patent.

Patented Jan. 14, 1913.

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To all whom it may concern:

Be it known that I, ELMER HARROLD, of Leetonia, Columbiana county, Ohio, have invented a new and useful Cutter-Head-Knife-Adjusting Wrench, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a transverse section of a portion of a cutter head for wood-working machines, showing one form of my improved wrench in position for adjusting the knife in the cutter head; Fig. 2 is a perspective view of the wrench.

The object of my invention is to provide a simple, cheap and efficient wrench for adjusting the knives of cutter heads for wood-working machines, and is designed to provide a wrench having a stem with a knife-adjusting projection on the outer end thereof, and a journal on this stem arranged to rotate in a bearing in the cutter head.

Another object of my invention is to provide a wrench in which the handle is arranged to be used as a wrench for actuating the set screws for retaining the knife in its adjusted position in the cutter head.

The precise nature of my invention will be best understood by reference to the accompanying drawings, is being premised, however, that changes may be made without departing from the spirit and scope of my invention as defined in the appended claim.

Referring to the drawings, the numeral 2 designates the cutter head, which is provided with the usual seat for receiving a knife 3 and a keeper 4.

5 designates a holding bar seated in a recess opening into the seat for the keeper and knife. One face of the holding bar is arranged to engage the keeper 4, while one of the other faces of the bar is arranged to be engaged by a set screw or screws 6 engaging screw-threaded orifices in the cutter head 2. The outer end of these set screws are provided with hexagonal recesses which are arranged to be engaged by one portion of the wrench hereinafter described.

Extending through the wall of the cutter head at right angles to the knife seat, and opening into the lower portion thereof, is an opening 7 which is arranged to receive

and form a bearing for a portion of the knife-adjusting wrench. The knife-adjusting wrench is provided with a stem 8, the forward end of which is cylindrical and is arranged to act as a journal for the wrench when in use. Connected to the front end of the stem 8 and within the peripheral edge thereof is a projection 9, and 10 is a handle at the other end of the wrench which is of hexagonal cross-section.

When it is desired to adjust the knife in the cutter head, the set screw or screws 6 are first slackened by inserting the handle 10 in the opening 6. The stem of the wrench is then inserted in the opening 7 and rotated to raise the knife to its predetermined position, the projection 9 engaging the bottom of the knife, and the journal portion at the front end of the wrench engaging the wall of the opening 7 which forms a bearing in which the wrench is rotated.

The advantages of my invention result from the provision of a knife-adjusting wrench having a journal and a projection at one end, the projection being within the peripheral edge of the stem of the wrench, so that the wrench can be inserted in a circular orifice in the cutter head, which orifice will provide a bearing for the wrench. Another advantage results from the provision of a handle which is arranged to be used as a wrench for actuating the set screws for retaining the knife in its adjusted position.

I claim:—

A removable wrench for adjusting a cutter head knife within the cutter head, comprising a cylindrical stem arranged to form a journal to rotate in a bearing in the cutter head, a knife-adjusting projection on one end of the stem having an arc-shaped bearing surface coincident with the cylindrical stem, said projection having a knife-engaging surface opposite the arc-shaped bearing surface, and a handle fixedly connected to the other end of the stem; substantially as described.

In testimony whereof, I have hereunto set my hand.

ELMER HARROLD.

Witnesses:

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