(No Model.)

H. J. SNYDER & F. PITSKE.

GAGE FOR ROTARY CUTTERS.

No. 536,103. Patented Mar. 19, 1895.

Fig. 1.

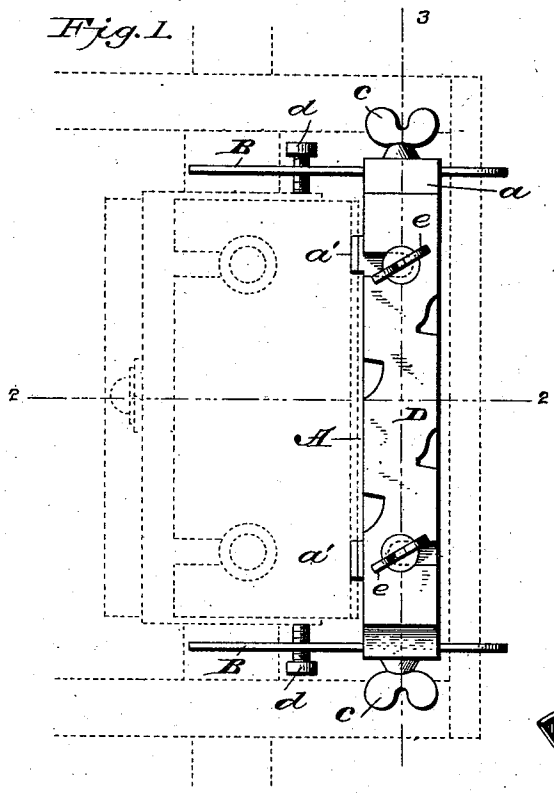


Fig. 2.

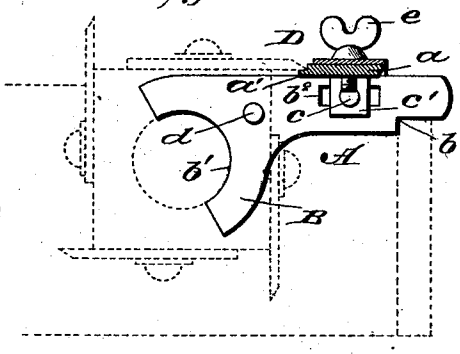


Fig. 4.

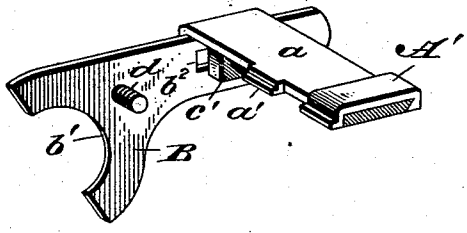
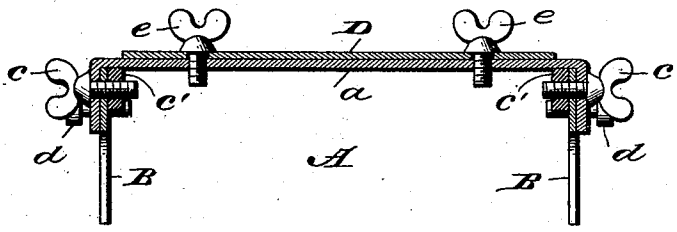


Fig. 3.



Hubberd J. Snyder
Frank Pitske
INVENTOR

WITNESSES
G. S. Elliott,
W. Johnson

by [signature] Attorney

UNITED STATES PATENT OFFICE.

HUBBERD J. SNYDER AND FRANK PITSKE, OF MERRILL, WISCONSIN.

GAGE FOR ROTARY CUTTERS.

SPECIFICATION forming part of Letters Patent No. 536,103, dated March 19, 1895.

Application filed September 6, 1894. Serial No. 522,285. (No model.)

To all whom it may concern:

Be it known that we, HUBBERD J. SNYDER and FRANK PITSKE, citizens of the United States of America, residing at Merrill, in the county of Lincoln and State of Wisconsin, have invented certain new and useful Improvements in Gages for Rotary Cutters; and we do hereby 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in gages for setting the cutting knives on the heads of rotary cutters.

The object of our invention is to provide a gage of improved construction which is adapted to be fitted to rotary cutter heads of different sizes for use in setting or adjusting the knives thereon; and with the above object in view our invention consists in a gage which is provided with means for adjusting the same so as to adapt it to cutters having heads of different lengths and widths, and it further consists in the construction and combination of the parts, as will be hereinafter fully set forth and particularly pointed out in the claims.

In the accompanying drawings, which form part of this specification, Figure 1 is a plan view showing our improved gage applied to a rotary cutter of ordinary construction. Fig. 2 is a sectional view on the line 2—2 of Fig. 1. Fig. 3 is a sectional view on the line 3—3 of Fig. 1, and Fig 4 is a detail perspective view.

In the drawings we have illustrated a rotary cutter-head and frame thereof in dotted lines, said cutter head being of ordinary construction, such as is used on planing, matching and grooving machines.

A designates the gage which consists of a cross-bar *a* having bent ends which are adjustably attached to the supports B, one end of each support having a notch *b* for engagement with the frame or yoke which supports the cutter-head, the opposite end of each support B having a semi-circular recess *b'* which engages with the shaft or spindle of the rotary cutter. The supports B are each provided with a slot b^2 through which pass thumb-screws *c*, said thumb-screws also passing through the downwardly bent ends of the bar *a* and engaging with nuts *c'* which bear against the bar *a* to prevent their turning.

The bar *a* is preferably provided on its inner edge at a suitable distance from each support B with projections *a'* which are notched as shown, and against these projections the edges of the straight blades on the cutter-head are adapted to abut in adjusting the same, as shown in Figs. 1 and 2. The rear edge of the bar *a* is beveled to receive and retain upon said bar movable gage-blocks A' which may be used when a plurality of straight cutters are employed.

The supports B adjoining the semi-circular recesses *b'* are provided with set-screws *d* which are adapted to be set for engagement with the ends of the cutter-heads.

It will be noted that with so much of the device hereinbefore described we provide a gage which is adapted to be used with cutter-heads of different lengths and upon which blades having straight edges are used, but in practice blades with curved cutting edges are often used with the straight blades, especially in making moldings or in planing and grooving lumber, and in such cases we provide a gage-plate D which is provided on each edge with recesses of the same shape as the ends of the grooving blades, and this plate is secured upon the bar *a* by set-screws *e*, the set-screws passing through slots in the plate which extend from opposite sides thereof so as to provide for readily reversing the same. Each gage is furnished with several plates D having different shaped recesses. When one of the plates D is used the ends of the cutters fit into the recesses therein and rest upon the bar *a*.

By means of this device the cutting blades on the cutter-head can be readily and accurately adjusted, and the device can be readily removed.

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

1. A gage for the knives of rotary cutters,

comprising supports which are adapted to engage with the periphery of the spindle or shaft of the cutters and with its supporting frame, of a gage-bar which is attached to the supports, so as to be adjustable thereon, and set-screws carried by the supports so as to project at right angles therewith for engagement with the ends of the cutter-heads, substantially as shown and for the purpose set forth.

2. A gage for rotary cutters, comprising supports B B having at one end semi-circular recesses b' and at the other end a notch b, and intermediate slots b^2; a cross-bar having bent ends which lie over the supports, and set-screws which pass through the slots b^2 and engage with nuts for the purpose of adjusting the cross-bar upon its supports to and from the cutter-head, substantially as shown.

3. In a gage for rotary cutters, a cross-bar carried by supports which engage with the cutter-head and its frame, substantially as shown, the combination, of a reversible, bar or plate attached thereto and provided on one or both edges with recesses for the purpose set forth.

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

HUBBERD J. SNYDER.
FRANK PITSKE.

Witnesses:
C. C. MAXIN,
GEORGE F. ALLEN.