

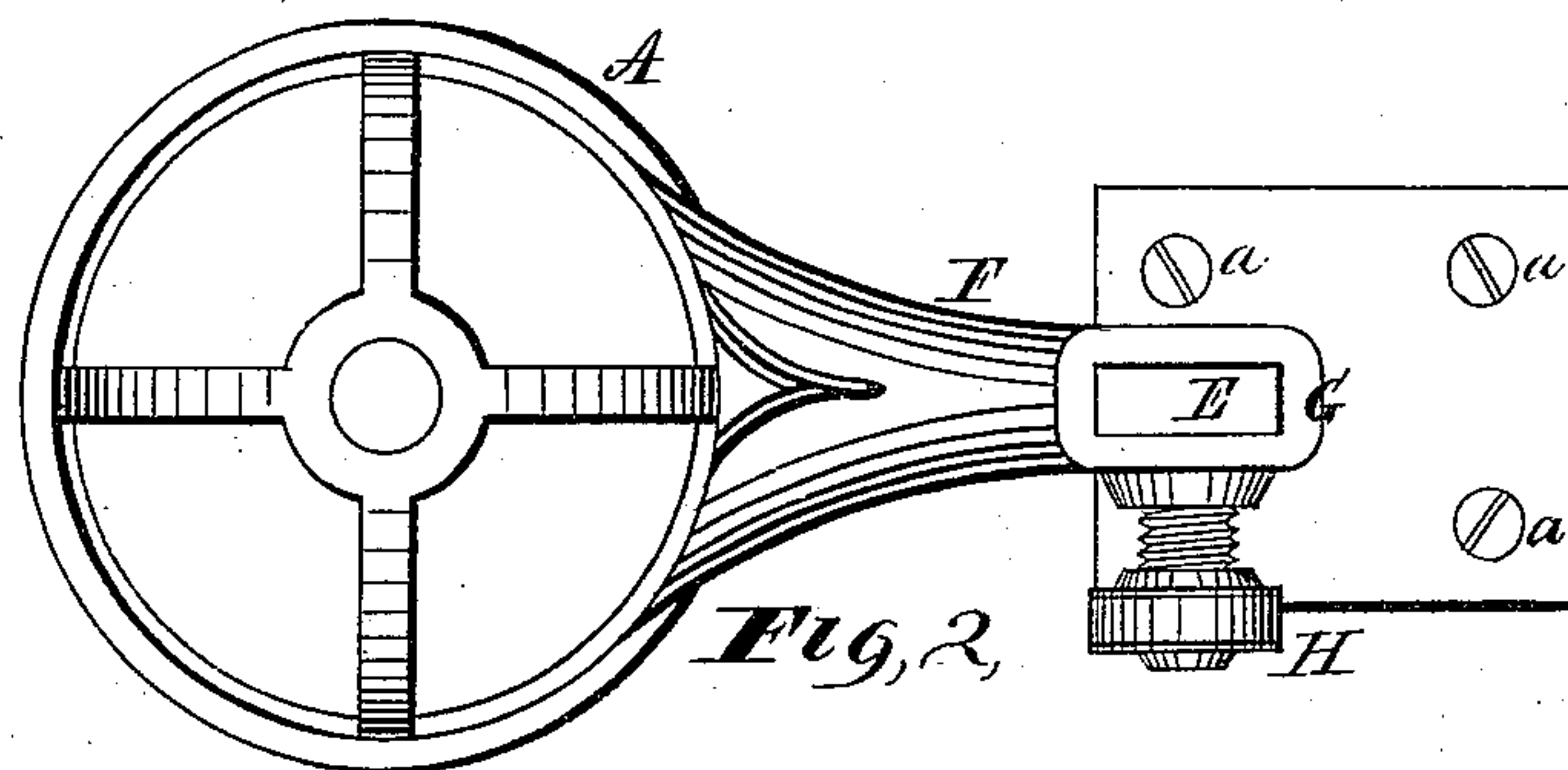
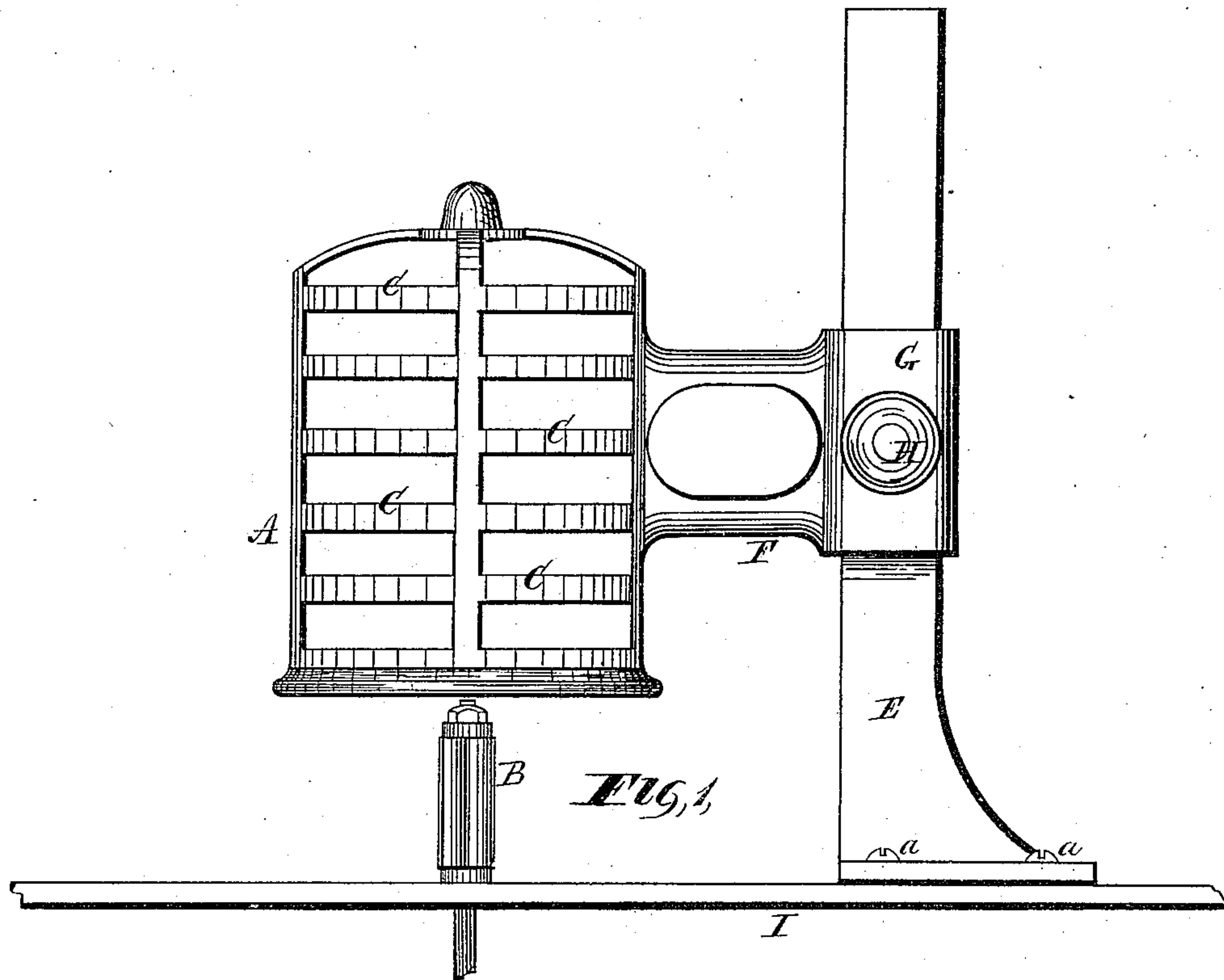
(No Model.)

G. H. HANSCOM, H. P. & H. E. BROOKS.

SAFETY GUARD FOR MOLDING MACHINES.

No. 291,897.

Patented Jan. 15, 1884.



Witnesses,
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UNITED STATES PATENT OFFICE.

GEORGE H. HANSCOM, OF BROOKLYN VILLAGE, AND HENRY P. BROOKS
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SAFETY-GUARD FOR MOLDING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 291,897, dated January 15, 1884.

Application filed October 31, 1883. (No model.)

To all whom it may concern:

Be it known that we, GEORGE H. HANSCOM, of Brooklyn Village, Cuyahoga county, Ohio, HENRY P. BROOKS and HERBERT E. BROOKS, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and Improved Safety-Guard for Upright Molding-Machines and others of similar character; and we do hereby declare that the following is a full, clear, and complete description thereof.

The object of the above-said guard is to protect workmen from being injured while holding and adjusting the material being worked to the cutters, which cutters are used in a vertical position for cutting molding on boards, &c., and for giving other forms to the material; also, the guard serves as a foot to hold the material down upon the table while it is being worked.

The construction of the said guard and the practical application of the same to the cutters for the purpose specified are as follows, and which is illustrated by the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a side view of the guard as when in practical use. Fig. 2 is a plan view of the same.

Like letters of reference refer to like parts in the drawings.

In certain machines for forming wood-molding and for other similar uses, a cutter or cutters are used, against which the material being operated upon is forced and adjusted by the hands of the workmen. Said cutter has a vertical position above the table, and revolves naked or unguarded, so that the hands of the operator, in guiding the material to the revolving cutters, are liable to be torn or cut by them, as the work sometimes slips suddenly and unexpectedly, causing the hands to come in contact with the said cutters, sometimes at the expense of the loss of fingers or more serious injury to the hands. The work is also liable to spring up and fly off from the cutters, with consequent danger to the workman's person.

To protect the hands and person from being injured in the way above said and to hold the

wood material in position is the purpose of this invention, and which consists of a metal frame or hood, A, having an open bottom, that it may be let down more or less over the cutters B, as the thickness or nature of the board or other material being operated upon may require. The guard or hood is preferably made open at the top, and the spaces between the bars C C wide enough to enable the workman to look through the guard and view the work while it is being done, which is clearly in sight, as the bottom of the guard is open, as above remarked. The guard is supported above or down around the cutter B more or less by a standard, E, to which it is attached by an arm, F, provided with a sleeve, G, fitting on over the standard and movable thereon for adjusting the guard A in its relation to the cutters, for the purpose above specified.

In machines where similar guards have been used heretofore they have been made adjustable upon round standards, for the purpose of turning them for use from one cutter-shaft to any other on the same table. By this arrangement there is always danger that the guard may be moved so as to strike the cutters. Our standard being rectangular, the guard is always concentric with the axis of the cutter-shaft.

H is a set-screw for securing the guard to the standard at any desired height to accommodate different classes of work, and which may also answer as a pressure-bar or foot to hold down the work upon the table, to which it may be adjusted for that purpose.

It will be obvious that in using the above-described guard the operator's hands cannot come in contact with the cutters, for should the work unexpectedly slip while his hands are thereon they would strike against the hood or guard, and be thereby prevented from being cut, and at the same time he is enabled to watch closely the progress of the work by looking through the interstices of the guard, which for that purpose are left wide in the sides thereof and much wider in the top, as seen in Fig. 2, thereby giving the workman full view of the work while in progress, as hereinbefore said.

As aforesaid, the guard may be used as a foot or pressure-bar to hold the material down upon the table, thereby preventing it from being thrown therefrom by the cutters, which
5 is sometimes done with considerable violence and injury to the operator.

The guard is shown and described as applied to a revolving cutter. It is also applicable to other similar machines for the purposes specified.
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We are aware that guards have heretofore been used in a similar manner and for the purpose as described, and we do not broadly claim such. We make our guard cylindrical,
15 with the open spaces horizontal, that the chips will pass immediately out of the guard. The guards made close as some are, and others being somewhat curved above or nearly hemispherical with vertical slits only, the chip will
20 be thrown back upon the cutters. We there-

fore confine our claim to the method of constructing the guard and the support.

What we claim as our invention, and desire to secure by Letters Patent, is—

A guard and guide for vertical cutters of
25 molding and other machines, formed of a hollow cylinder having horizontal openings for the passage of chips, the upper end with braces and the lower end open, in combination with a rectangular standard and the adjustable arm
30 and set-screw, substantially as and for the purpose described.

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

GEORGE H. HANSCOM.

HENRY P. BROOKS.

HERBERT E. BROOKS.

Witnesses:

J. H. BURRIDGE,

C. H. TURNEY.