C. M. OSGOOD.

Machines for Trimming Hat-Brims.

No. 197,167. Patented Nov. 13, 1877.

Fig. 1.

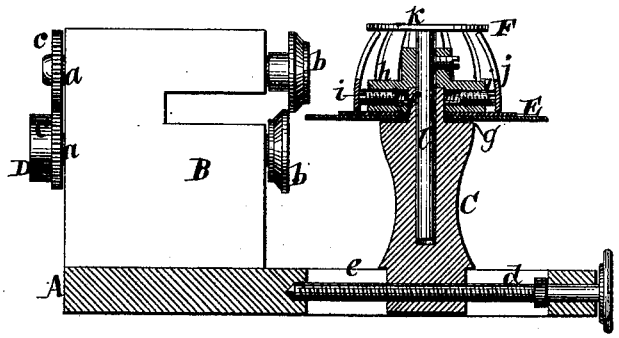
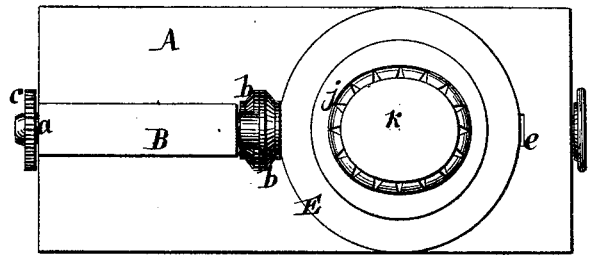


Fig. 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

CHARLES M. OSGOOD, OF AMHERST, MASSACHUSETTS.

IMPROVEMENT IN MACHINES FOR TRIMMING HAT-BRIMS.

Specification forming part of Letters Patent No. **197,167**, dated November 13, 1877; application filed June 14, 1877.

To all whom it may concern:

Be it known that I, CHARLES M. OSGOOD, of Amherst, in the county of Hampshire and State of Massachusetts, have invented a new and Improved Machine for Trimming Hat-Brims, which invention is fully set forth in the following specification, reference being had to the accompanying drawing, in which—

Figure 1 represents a longitudinal vertical section. Fig. 2 is a plan or top view, partly in section.

Similar letters indicate corresponding parts.

This invention consists in the combination of a cutting mechanism, a block-supporting standard, a gage, and a hat-block, both the gage and block being adapted to revolve on the standard.

With the cutting mechanism is combined a screw or other equivalent mechanism for adjusting the distance between the hat-block and the cutting mechanism. The hat-block which I use, by preference, is composed of a base provided with radially-adjustable supporting-points, a shell fitting over said points, and a top plate removably secured to the base, for the purpose of ready adjustment for crowns of different sizes.

In the drawing, the letter A designates the bed-plate of my machine. On one end of this bed-plate is firmly secured a head-block, B, which forms the bearings for two shafts, *a a*, on the inner ends of which are mounted the cutting-disks *b b*, while their outer ends are geared together by cog-wheels *c c*. On one of these shafts is secured a pulley, *d*, so that motion can be imparted to the cutting-disks by means of a belt. Any other suitable cutting mechanism may, however, be substituted for the revolving cutters.

C is a standard, the foot of which fits a slot, *e*, formed in the bed-plate A, so that said standard can be moved toward and from the cutting mechanism. For the purpose of adjusting the position of the standard, I use a screw-spindle, *d*, which has its bearings in the bed-plate, and which fits a screw-socket formed for its reception in the foot of the standard. Any other suitable mechanism may, however, be substituted for the same. On the upper end of the standard C is formed a pivot, *f*, and a shoulder, *g*, and on this shoulder are placed a circular gage, E, and a hat-block, F, both the gage and the hat-block being provided with sockets to receive the pivot *f*, so that said parts can be freely turned round on the standard. At the same time the hat-block and the gage, or either of them, can be readily taken off and replaced by another of different size. A solid hat-block may be used, but I prefer to use an expanding-block, such as I have shown in the drawing. This block is composed of a base, *h*, from the edge of which project supporting-points *i*, which can be adjusted in radial directions for hats of different forms and sizes. Over these supporting-points is slipped a shell, *j*, made of thin sheet metal, so that the same will readily conform to the position of the supporting-points, and that, by changing the position of the supporting-points, the shell can be brought to assume a circular or an oval shape, the proportion between the major and minor axis of the oval being changed by adjusting the supporting-pins. With the base *h* and the flexible shell *j* is combined a top plate, *k*, which is secured to a pin, *l*, extending down through a socket in the base *h* and standard C. This plate serves to support the top of the crown of the hat the brim of which is to be cut.

After the hat has been placed on the block F, with its brim resting on the gage E, (the standard having previously been adjusted at the desired distance from the cutter,) the cutters are set in motion, and by turning the hat, together with the block, on the pivot of the standard C, the brim is trimmed with great rapidity.

By changing the gage the width of the brim can be changed, and by changing the form of the shell *j*, (when the expanding-block is used,) the brim can be cut so that its width from the crown is uniform all round, or that its width varies, as may be desirable.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a machine for trimming hat-brims, of a cutting mechanism, a block-supporting standard, a gage, and a hat-block, both the gage and the block being adapted to revolve on the standard, substantially as shown and described.

2. The combination, in a machine for trimming hat-brims, of a cutting mechanism, a