(No Model.)

H. CAMPBELL.

HAT SHAVING MACHINE.

No. 262,175. Patented Aug. 1, 1882.

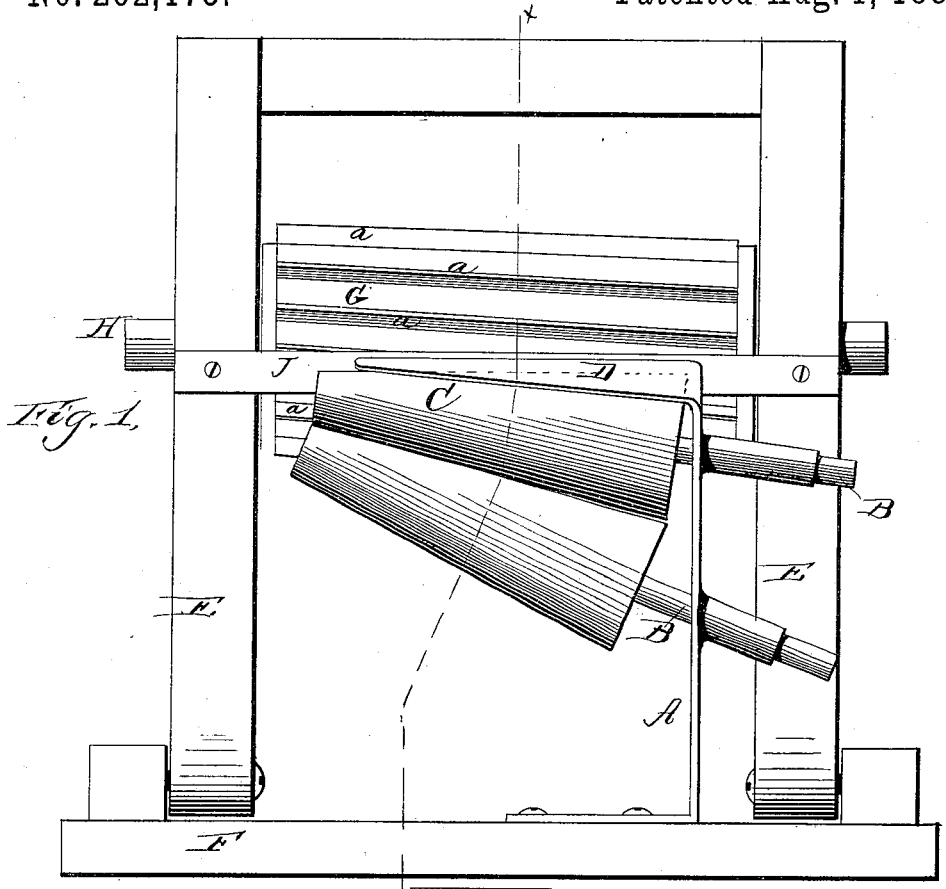

Fig. 1.

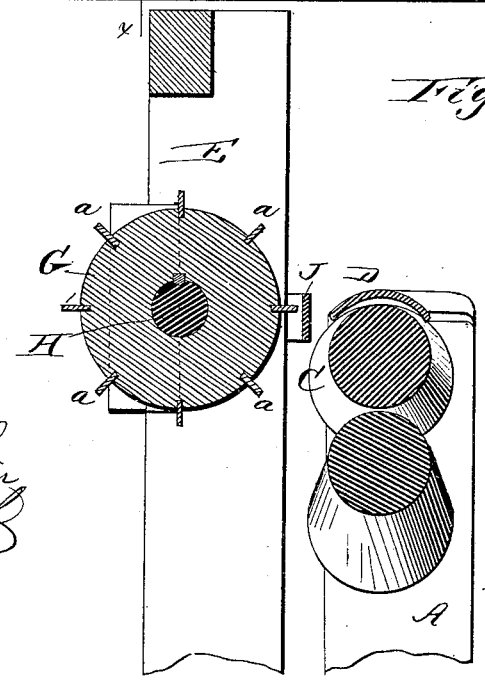

Fig. 2.

Witnesses:
H. C. McArthur
W. A. Seymour

Inventor:
Hugh Campbell.

Per
Wm. Alexander
Attorney.

UNITED STATES PATENT OFFICE.

HUGH CAMPBELL, OF SANDY HOOK, CONNECTICUT.

HAT-SHAVING MACHINE.

SPECIFICATION forming part of Letters Patent No. 262,175, dated August 1, 1882.

Application filed June 9, 1882. (No model.)

To all whom it may concern:

Be it known that I, HUGH CAMPBELL, of Sandy Hook, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Hat-Shaving Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification, in which—

Figure 1 is a front elevation. Fig. 2 is a central vertical section on the line *x x*, Fig. 1.

This invention relates to means for shearing hat-bodies; and the nature of my invention consists in the combination, with conical feed-rolls provided with an open rest, of a revolving knife-bearing cylinder applied to a vibrating frame, and a shear-guard, constructed and arranged as will be hereinafter explained in connection with the annexed drawings.

The letter A designates a frame in which the driving-shafts B B of two conical feed-rollers have their bearings. These two cones are adapted to have stretched upon them the hat-bodies to be sheared, and they are rotated by suitable means, so as to feed the hat-body to the work of shearing with the required speed. The plane of the top line of the upper feed-roller, C, is horizontal, and this top roller is covered by a concavo-convex rest, D, which is secured to the frame A.

E designates a frame, which is pivoted to bearings upon the base F of the machine, so that it can be vibrated toward and from the cone feed-rollers during the shearing operation, which movements may be given to the said frame either by hand or by suitable machinery.

G designates a cylinder, which is keyed on a horizontal shaft, H, that has its bearings in the vertical arms of the frame E. The periphery of this cylinder is armed with shearing-blades arranged at suitable distances apart and in an oblique direction with respect to the longitudinal axis of the cylinder, as shown.

In front of the cylinder G, and secured to the frame E, is a horizontal guard, J, the upper straight edge of which lies closely to the surface of the hat-body on the rollers and rest and prevents the knives *a* from cutting too deeply into the surface of the body during the shearing operation. The knives *a* act with a shearing cut on the upper edge of the hat-body and shear off all inequalities from the surface thereof.

The conical rollers may be made adjustable by means of a treadle attachment for the purpose of applying and removing hat-bodies.

My improved machine is self-adjusting to any unevenness that may be in the hat-bodies, and for this reason none of them are injured during the shearing operation.

I am aware of the existence of the patent of Gowdy, No. 198,377, of December 18, 1877, and do not wish to be understood as claiming anything covered by this patent; but

What I do claim is—

The combination of the conical rollers, arranged one above the other, the stationary concavo-convex rest D, arranged over the top roller, the vibrating frame E, the cylinder-bearing shearing-blades, and the guard J, secured to said frame, all constructed and arranged to operate substantially in the manner and for the purposes described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

HUGH CAMPBELL.

Witnesses:

JOHN F. LENIHAN,

CHARLES HURLBUTT.