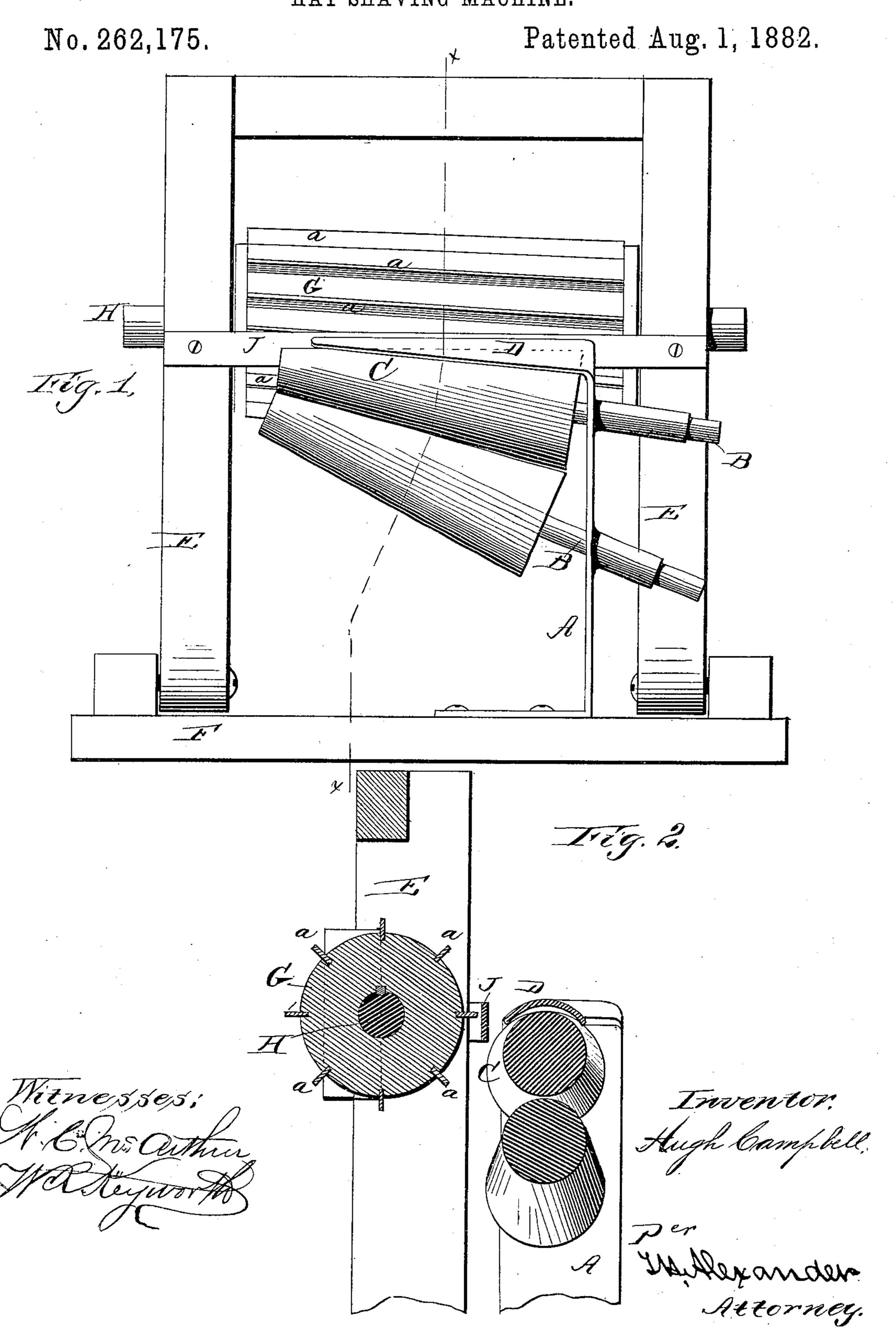
H. CAMPBELL.
HAT SHAVING MACHINE.



## 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 xx, Fig. 1.

This invention relates to means for shearing hat-bodies; and the nature of my invention consists in the combination, with conical feedrolls 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 longitudi- 45 nal 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 50 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 55 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 60 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 65 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 75 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.