

(No Model.)

J. D. GIDDINGS & H. C. SWAIN.
ROTARY CUTTER FOR CUTTING OR TRIMMING EDGES OF HAT RIMS, &c.
No. 558,487. Patented Apr. 21, 1896.

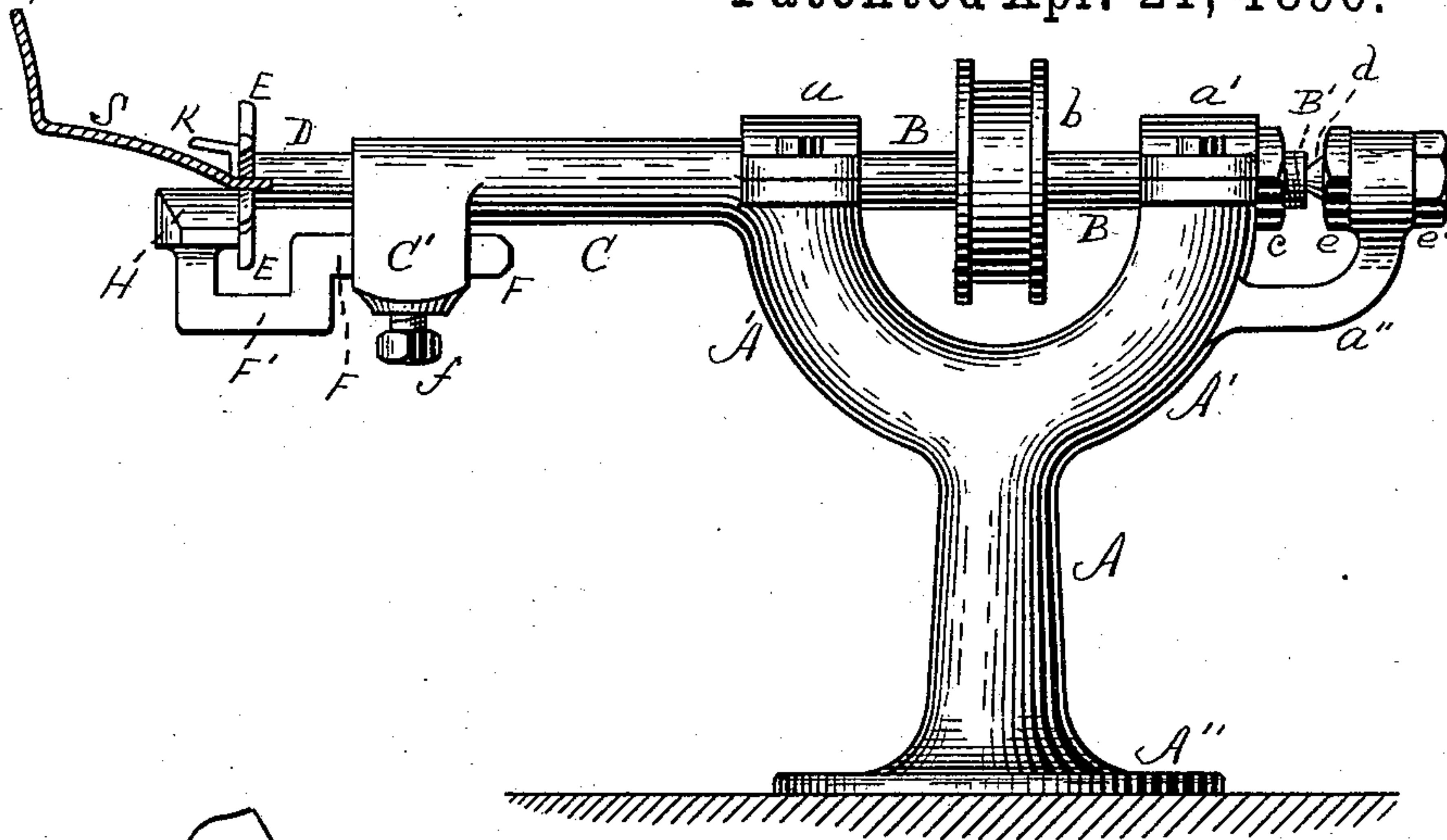


Fig. 1.

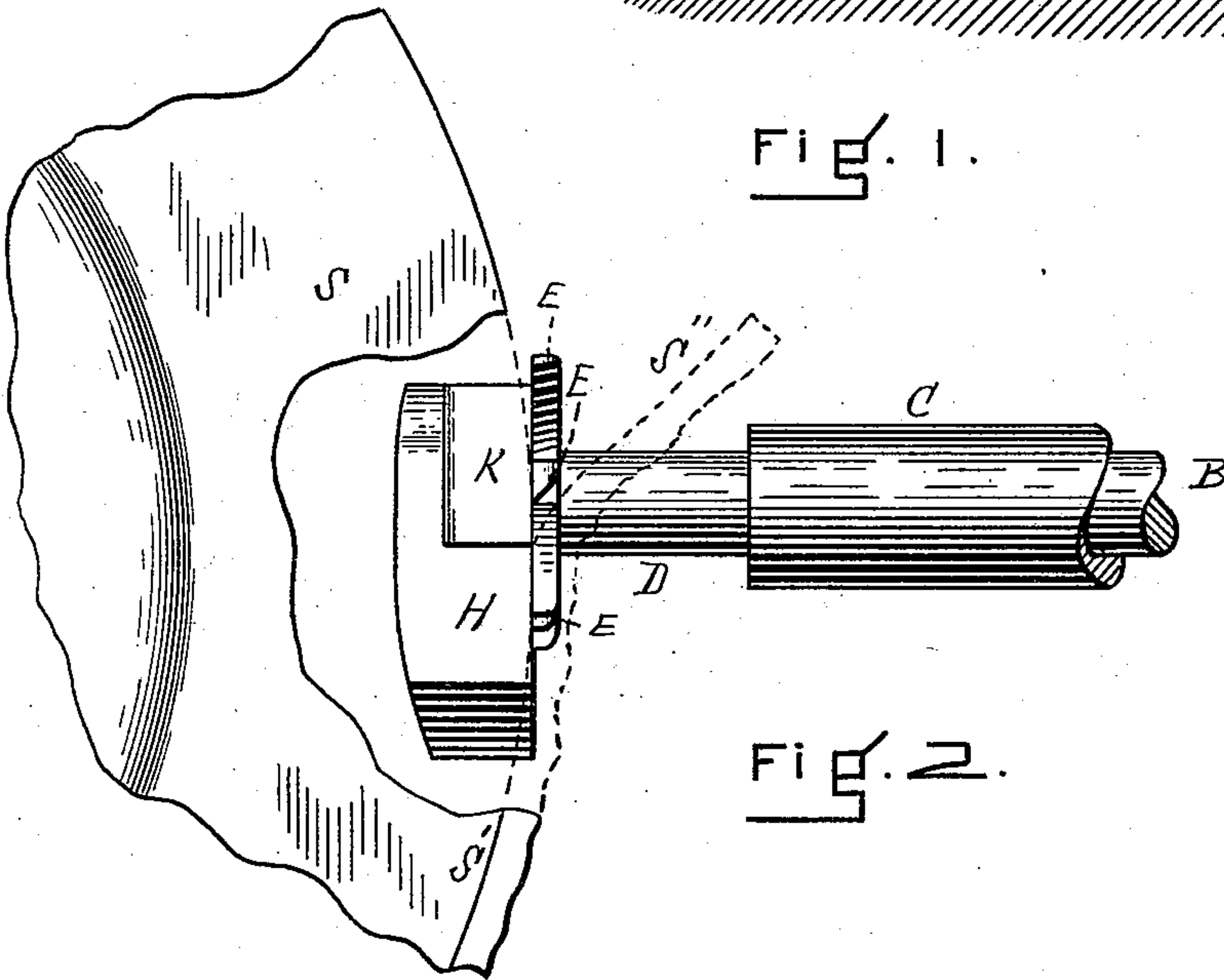


Fig. 2.

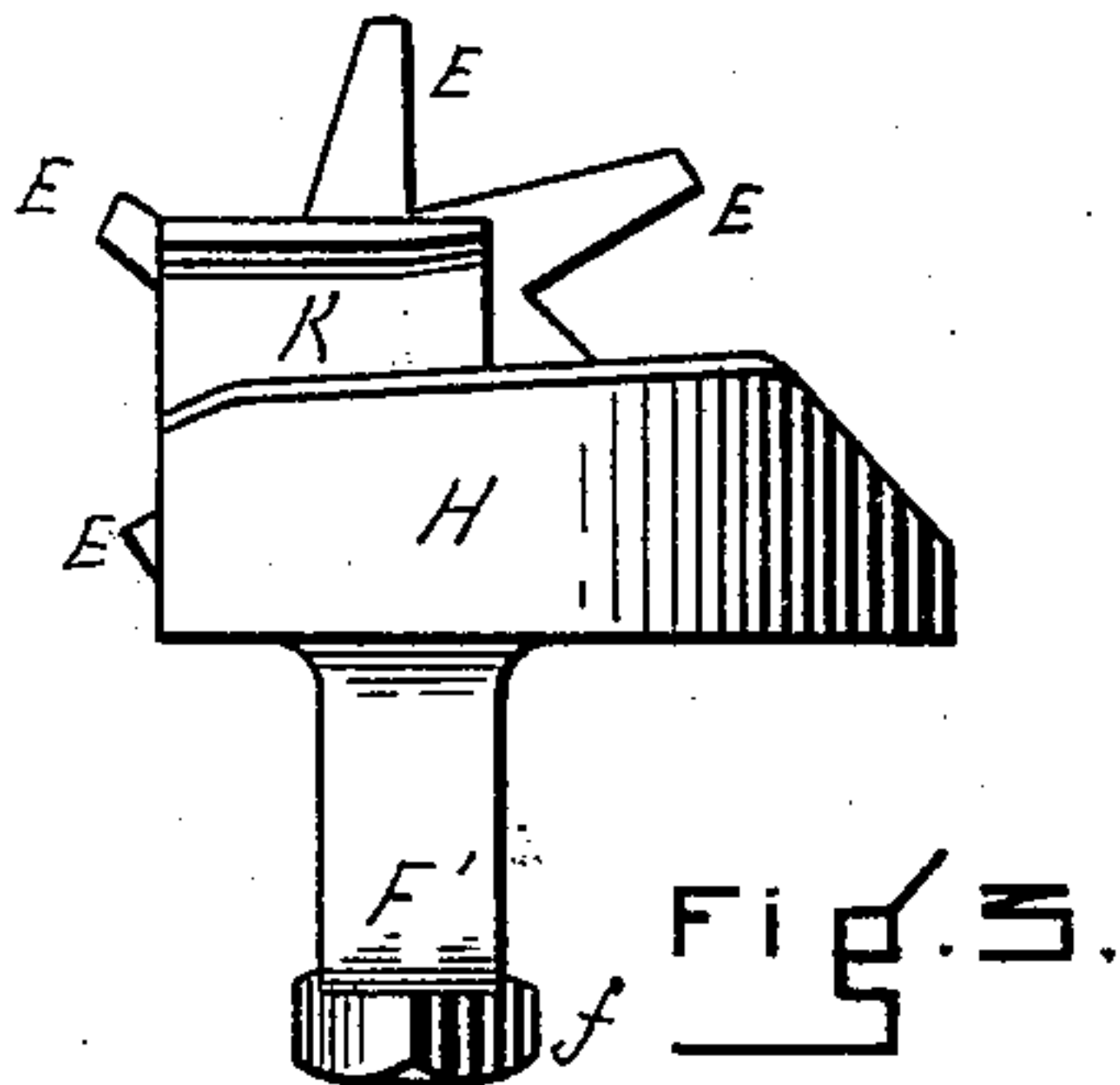


Fig. 3.

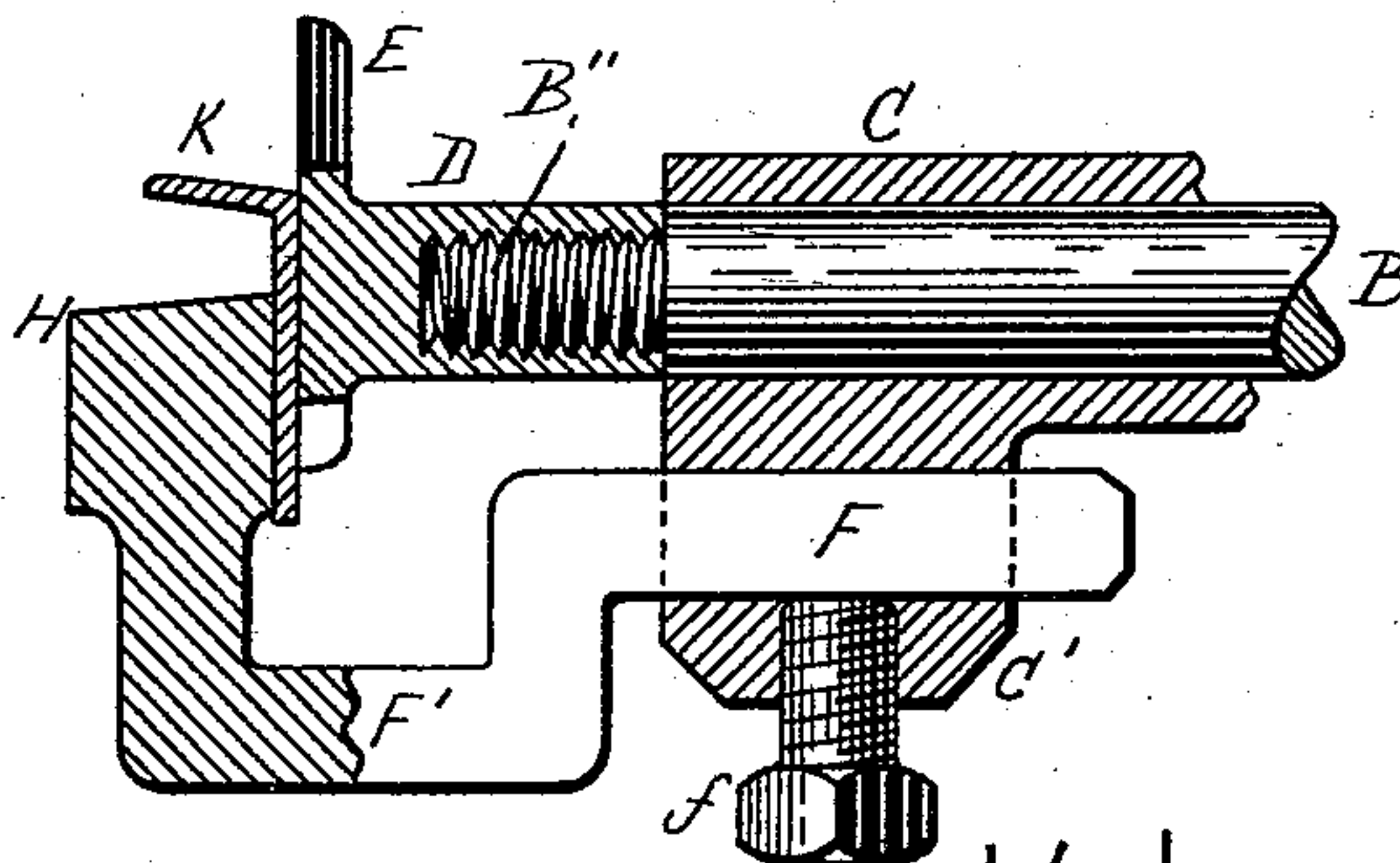


Fig. 4. INVENTORS.
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ROTARY CUTTER FOR CUTTING OR TRIMMING EDGES OF HAT-RIMS, &c.

SPECIFICATION forming part of Letters Patent No. 558,487, dated April 21, 1896.

Application filed August 23, 1895. Serial No. 560,203. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH D. GIDDINGS, residing at Cambridge, in the county of Middlesex, and HARRY C. SWAIN, residing at Boston, in the county of Suffolk, State of Massachusetts, subjects of the Queen of Great Britain, have invented a new and useful Improvement in Rotary Cutters for Cutting or Trimming the Edges of Hat-Rims and other Articles, of which the following is a specification.

In the manufacture of felt hats, more especially for ladies' wear, it is customary to form a crease on the rim in order that when the rim is cut or trimmed the scissors or shears in the hand of the operator may follow this crease as a guide. Of course the crease describes the shape of the hat-rim after it has been cut.

It is the object of this invention to provide a cutter which can cut or trim the hat-rims, following the crease as a guide, with much greater rapidity than it can be done with a pair of shears.

The nature of the invention is fully described below, and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of our device, with a view in section of a hat-rim in process of being cut or trimmed. Fig. 2 is a plan view of the operative end of the said cutter, the portion of the hat-rim which is being operated upon being illustrated as broken out. Fig. 3 is an end elevation of the device. Fig. 4 is a longitudinal vertical section and part of a portion of the same.

Similar letters of reference indicate corresponding parts.

A is a standard provided with the integral arms A' and adapted by means of its base A'' to be secured to an ordinary bench or table. The upper ends of the arms A' constitute, with the boxes *a a'*, bearings for the horizontal spindle or shaft B, which has fixed upon it a driving-pulley *b*, by means of which any suitable power may be applied to the shaft. This shaft is screw-threaded at its rear end B' and carries a nut *c* at that point, whereby the shaft may be adjusted horizontally in its bearings. A suitably-pointed end rest *d* (not new in this invention) bears against the rear end of the shaft B and is supported by the arm *a''* and adjusted by the nuts *e e'*.

A horizontal tubular extension C extends from one of the branches A' and constitutes a

support for the shaft B, which extends through the same and is screw-threaded on its outer end at B'', (see Fig. 4,) such screw-threaded portion extending through the tubular support C and receiving the cutter-head D, from which radiate the integral shear-shaped cutters E. From the under side of the tubular extension C extends an integral hanger or slide-way C', which supports and through which extends the shank F, bent downward into the shape shown at F' and thence upward to sustain the integral stationary shear-blade H, suitably beveled, as shown, and provided on its upper side with a guide K. A suitable set-screw *f* holds the shank F in position.

It will be readily understood that the cutters E, which are not strictly radial, but are nearly so, take the place of the movable blade in a pair of shears, while the portion H takes the place of the stationary blade. The beveling, however, is the reverse of that shown in a pair of shears, so that a left-hand cut is produced in order to accommodate the natural method of feeding in the hat-rim.

In practice the hat-rim S is fed into the machine and guided so that the cutters will follow the line of the crease S' and cut or trim off the refuse portions S''. Thus the operation of cutting along the line of the crease is very rapid.

Of course the shank F is so adjusted that the cutters E and part H are held close together like the two blades of a pair of shears.

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

The herein-described rotary cutter, comprising the tubular frame A A' C, the shaft B supported in said frame and adapted to be rotated by a suitable power, the cutter-head D supported and carried by said shaft, the substantially radial shear-shaped and shear-beveled cutters E rigid with said cutter-head, the frame F F' removably held in a slideway extending from the main tubular frame, and the shear-blade H supported by said frame F F' and adapted to be moved thereby against the face of the cutters, substantially as set forth.

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