

No. 632,153.

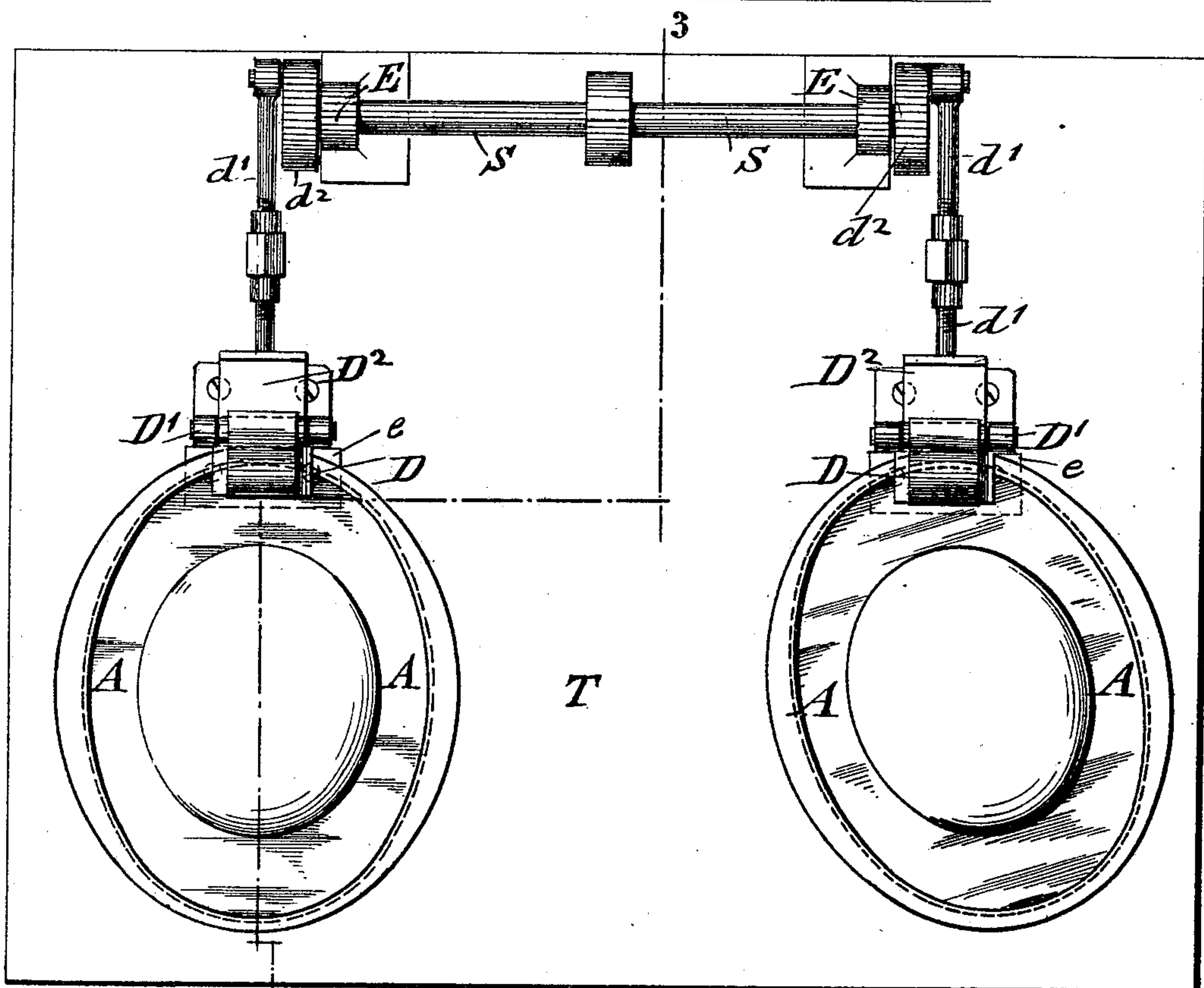
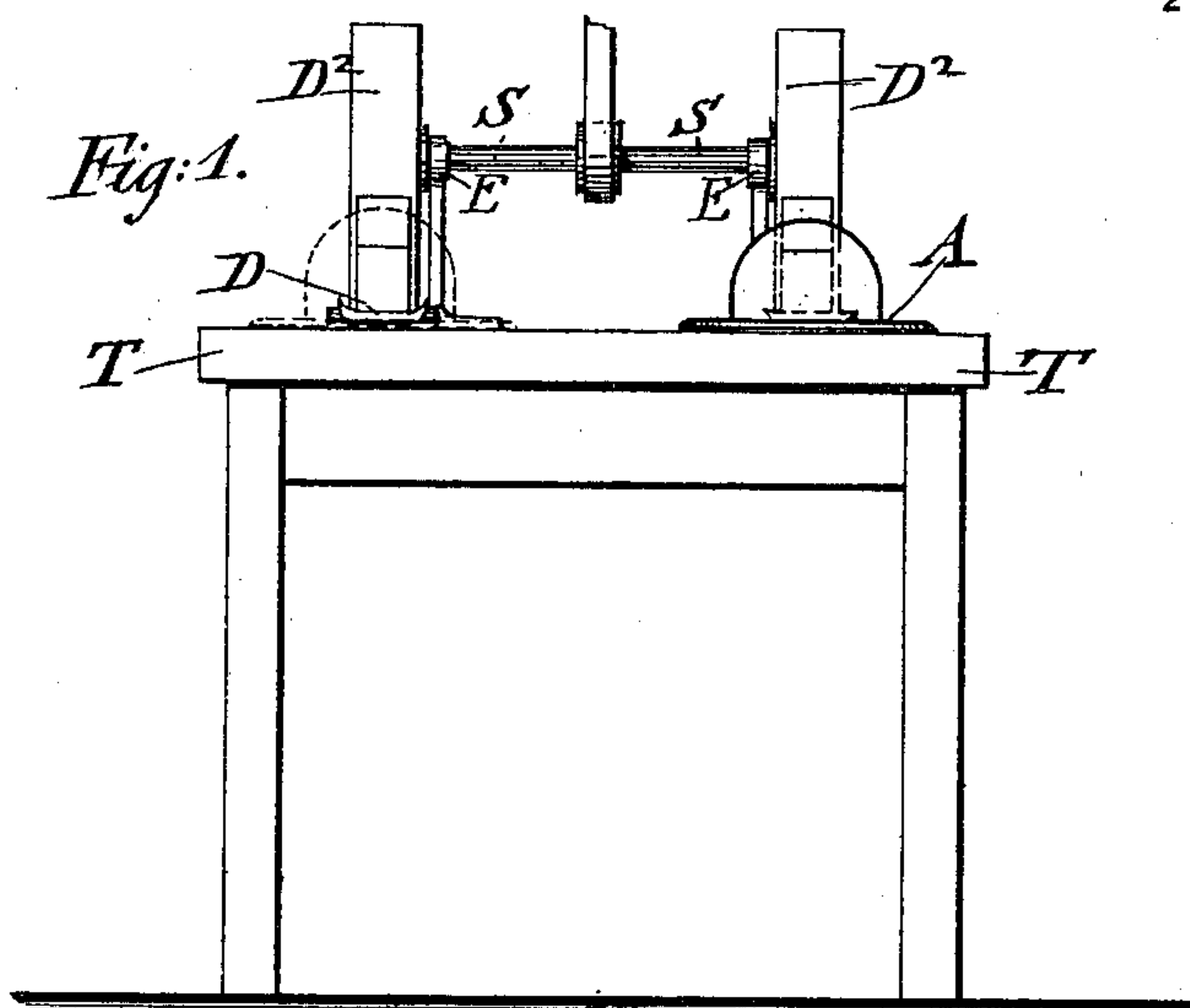
Patented Aug. 29, 1899.

G. SEGSCHNEIDER.
MACHINE FOR ROUNDING HAT BRIMS.

(Application filed July 3, 1899.)

(No Model.)

2 Sheets—Sheet 1.



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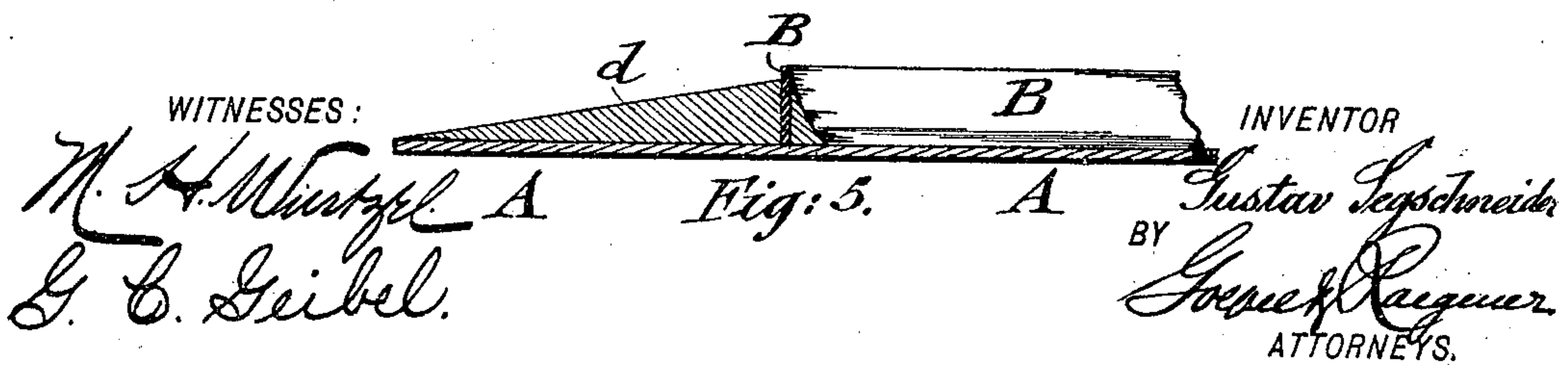
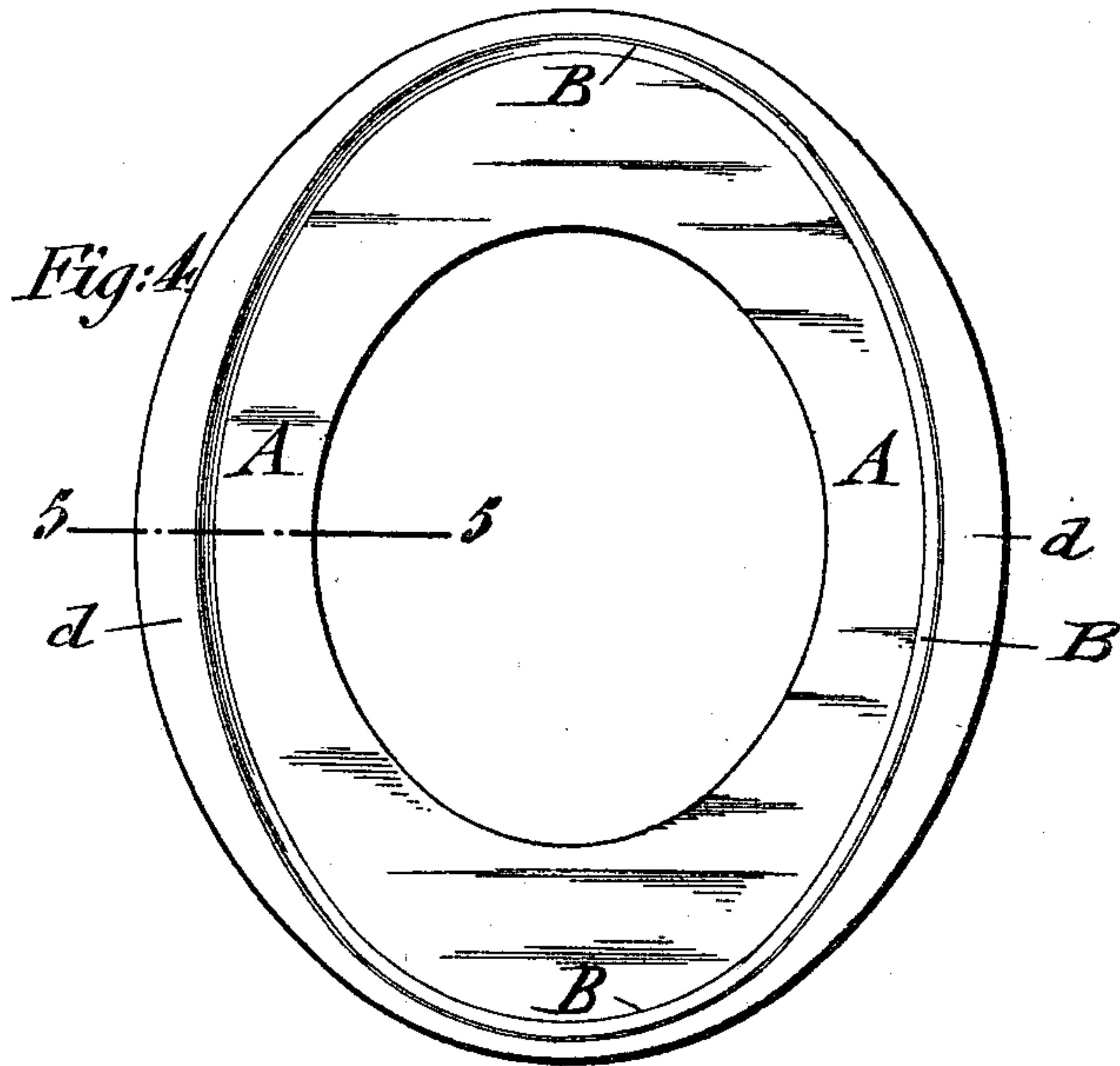
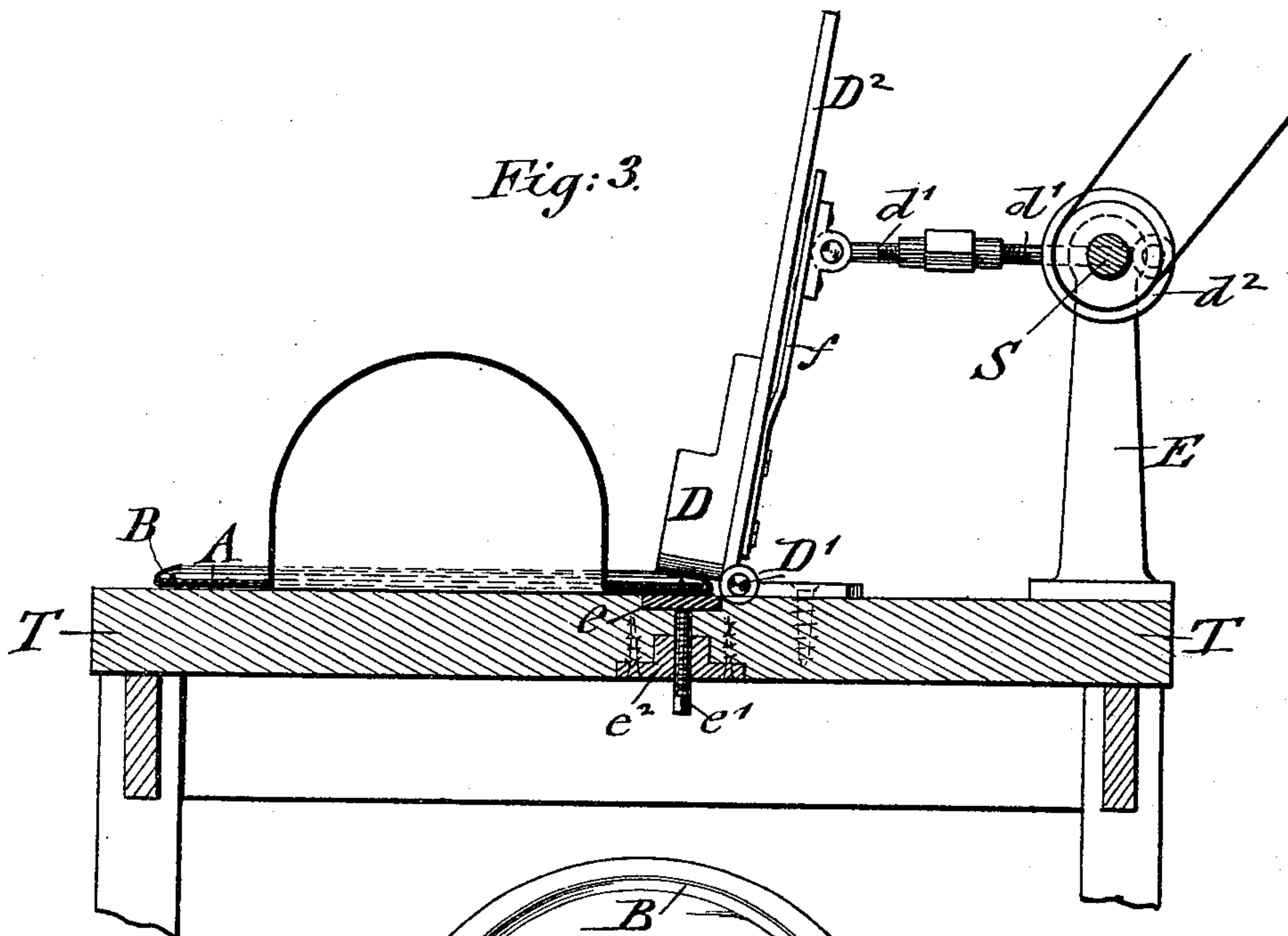
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2 Sheets—Sheet 2.



UNITED STATES PATENT OFFICE.

GUSTAV SEGSCHNEIDER, OF YONKERS, NEW YORK.

MACHINE FOR ROUNDING HAT-BRIMS.

SPECIFICATION forming part of Letters Patent No. 632,153, dated August 29, 1899.

Application filed July 3, 1899. Serial No. 722,683. (No model.)

To all whom it may concern.

Be it known that I, GUSTAV SEGSCHNEIDER, a citizen of the United States, residing at Yonkers, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Machines for Rounding Hat-Brims, of which the following is a specification.

The rounding of the brims of felt hats was heretofore accomplished by cutting off the flange by means of scissors operated by hand. This required skilled and expensive workmen. Repeated attempts were made to supply machines for this purpose, but without obtaining satisfactory results.

This invention is intended to furnish to manufacturers of felt hats an improved machine for rounding off hat-brims by which better results than by the means heretofore employed are obtained, said machine consisting of a metallic templet placed on the brim and provided with a raised cutter projecting from the same, said cutter conforming to the contour of the edge of the hat-brim, a spring-cushioned hammer, and means for reciprocating this hammer so that the same imparts a series of quick blows on the edge of the brim, so as to gradually cut it off as the brim is moved over the cutter below the hammer.

The invention consists, further, of certain details of construction, which will be fully described hereinafter and finally pointed out in the claims.

In the accompanying drawings, Figure 1 represents a front elevation of two of my improved machines for rounding off hat-brims driven from the same shaft. Fig. 2 is a plan view of the same, showing the hats in different positions. Fig. 3 is a vertical transverse section on line 3 3, Fig. 2, drawn on a larger scale. Fig. 4 is a detail top view of the templet with its cutter; and Fig. 5 is a detail vertical transverse section on line 5 5, Fig. 4, through a portion of the templet and cutter.

Similar letters of reference indicate corresponding parts.

In the manufacture of felt hats the hat-brim is first ironed down in the ironing-down machine. After this is accomplished the hat goes to the rounder, who trims off the edge of the brim. This operation is intended to be

accomplished by my improved rounding-machine, which employs as its essential elements a metallic templet provided with a steel cutter projecting at right angles therefrom and corresponding to the contour of the edge of the hat-brim to be rounded off and a vertically reciprocating or oscillating hammer that acts by a series of quick blows on the edge of the hat-brim, so as to cut off the edge as the hat is moved with the templet under the hammer.

My improved templet A is preferably made of sheet metal of suitable thickness and provided on its upper face with a steel cutter B, which is soldered or otherwise attached thereto, preferably in such a manner that the solder *d* along its outer edge is beveled off toward the edge of the templet, as shown in Fig. 5. The templet A, with its cutter B, is applied to the brim of the hat before the same is inserted into the ironing-down machine, which latter lays the flange of the brim over the edge of the templet and irons it down over the beveled circumferential edge of the templet. By the heated iron a crease is formed at the under side of the flange at that part which is directly over the cutter. After the flange is ironed down the hat-body is removed, with the templet, from the ironing-down machine and placed in my improved rounding-off machine, which consists of a table T, made of iron or other suitable material, as required, and to which a reciprocating oscillating hammer D is applied by means of a hinge D'. The hammer D is made, preferably, of brass and rounded off at both ends, as shown in Fig. 1, so that the flange of the hat-brim can freely pass below the hammer. The upper end or shank D² of the hinged hammer D is connected by an adjustable rod *d'* with an eccentric *d*² on a driving-shaft S, which is supported in bearings of upright standards E, as shown clearly in Figs. 1, 2, and 3. A cushioning-spring *f* is applied at its lower end to the hammer-shank and at its upper end to the rod *d'*, so that the blows of the hammer are cushioned. The shaft is rotated by means of a belt-and-pulley transmission from a suitable counter-shaft, so that a quick oscillating motion is imparted to the hammer by the eccentric, the hammer pressing thereby the brim

by a quick succession of blows on the cutter, so as to gradually round off the edge by the repeated blows of the hammer on the cutter.

In front of the hinge D' is arranged in the
5 table T a countersunk plate or anvil *e*, of oblong shape, which is accurately fitted into a recess of the table and acted upon at its center by a set-screw *e'*, which is guided in a stationary countersunk nut *e''*, attached to the
10 under side of the table, so as to adjust slightly the anvil and render the action of the hammer more effective and reliable, especially when the cutter has been used for some time.

The templet, with the hat, can either be fed
15 by hand past the hammer or mechanical means can be employed for this purpose. The hinge D' acts as a guide for the edge of the hat-brim, against which the hat-brim is pressed while turning the hat-brim under the ham-
20 mer. When the entire circumference of the hat-flange has been passed below the hammer, the edge, which has been cut off or severed by the quick blows of the hammer, is removed and the flange of the hat is trimmed
25 evenly. The cutter on the templet does not require to be sharpened. On the contrary, a dull edge is preferable, for the reason that the cutter is not intended to cut through the felt by the quick blows of the hammer, but
30 to sever the rough edge bodily therefrom by pressure exerted on the felt by "breaking" the hairs, so to say, instead of cutting them by a shear cut in the same manner as the rounding action is accomplished by scissors.
35 The result is an even and uniform edge without any projecting hairs, which requires no further treatment and is directly ready for the binding of the brim.

The rounding of the hat-brims by my im-
40 proved machine can be attended to by girls, as no specially-skilled labor is required for this purpose. The rounding off is accomplished thereby in a quicker, cheaper, and more uniform manner than by hand labor
45 and forms thereby a very important accessory to the ironing-down machines in hat factories.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

50 1. A machine for rounding hat-brims, con-

sisting of a templet provided with a cutter corresponding to the contour of the flange of the hat-brim to be rounded off, a hammer, means for operating said hammer so as to apply quickly-repeated blows to the edge to be
55 rounded off, and means for guiding the outer edge of the brim below the hammer, substantially as set forth.

2. A machine for rounding hat-brims, which consists of a templet provided with a cutter
60 corresponding to the contour of the flange of the hat-brim to be rounded off, a hammer, and means for repeatedly oscillating the said hammer, whereby a series of quickly-repeated blows are applied to the edge to be rounded
65 off, substantially as set forth.

3. A machine for rounding hat-brims, consisting of a supporting-table, a hammer, an adjustable plate or anvil below said hammer, means for imparting reciprocating motion to
70 the hammer, and a templet placed over the hat-brim and provided with a cutter corresponding to the contour of the brim to be rounded off, substantially as set forth.

4. A machine for rounding hat-brims, con-
75 sisting of a templet provided with a cutter corresponding to the contour of the edge of the hat-brim to be rounded off, an oscillatory hammer provided with curved-off ends, means for quickly and repeatedly oscillating said
80 hammer, and means for guiding the outer edge of the brim below the hammer, substantially as set forth.

5. A machine for rounding hat-brims, consisting of a supporting-table, a templet pro-
85 vided with a cutter corresponding to the contour of the flange of the hat-brim to be rounded off, a spring-cushioned hammer means for reciprocating the same, so as to sever the inner rough edge of the flange, and means for guid-
90 ing the outer edge of the ironed-down brim below the hammer, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

GUSTAV SEGSCHNEIDER.

Witnesses:

PAUL GOEPEL,
M. H. WURTZEL.