

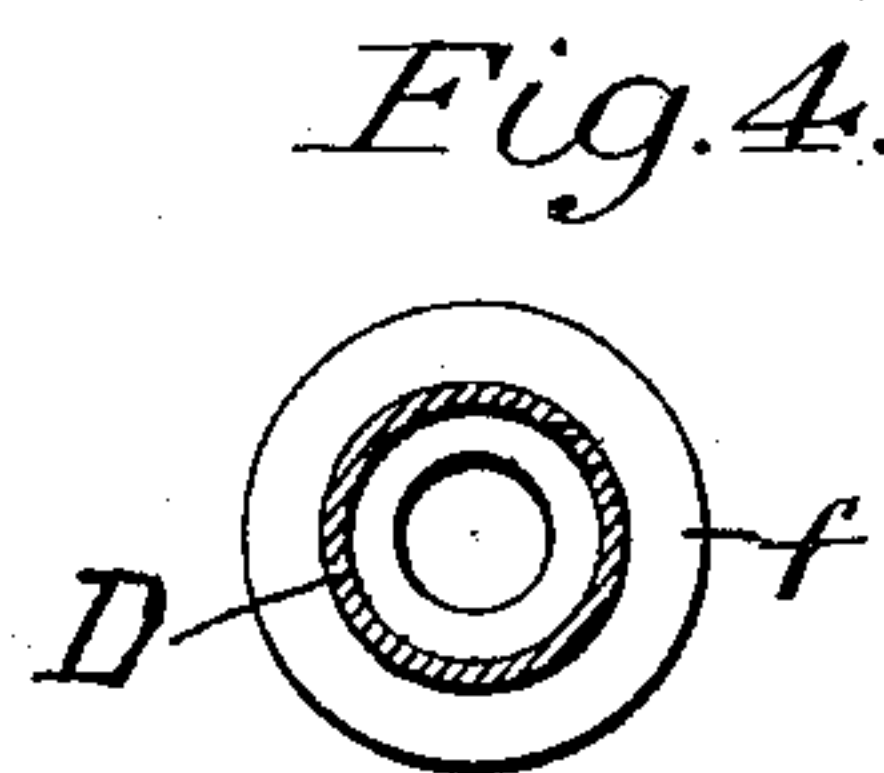
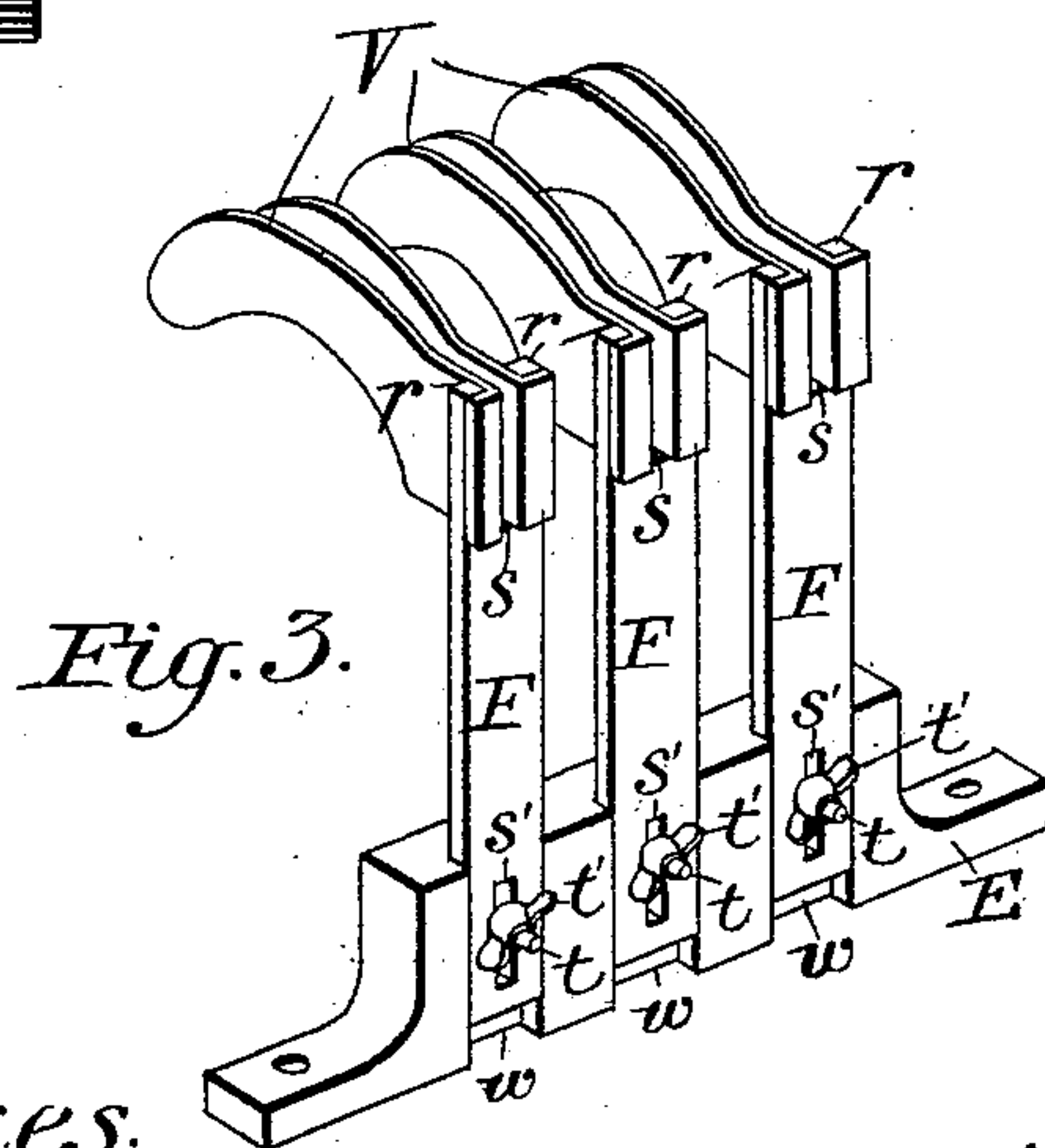
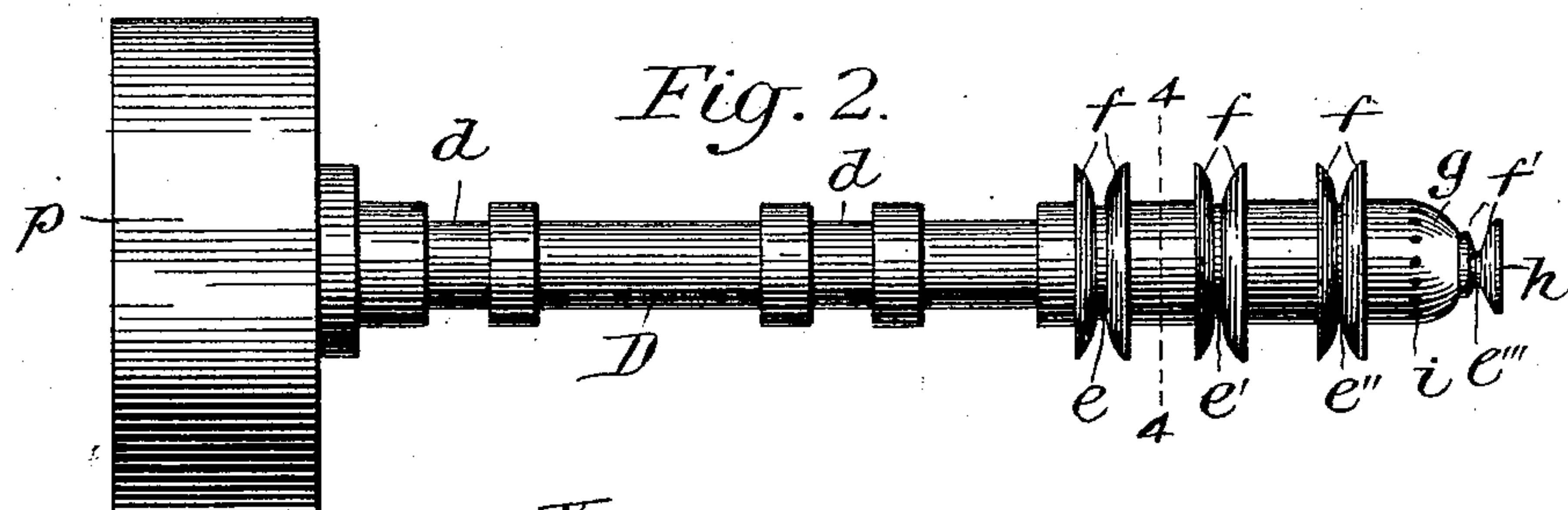
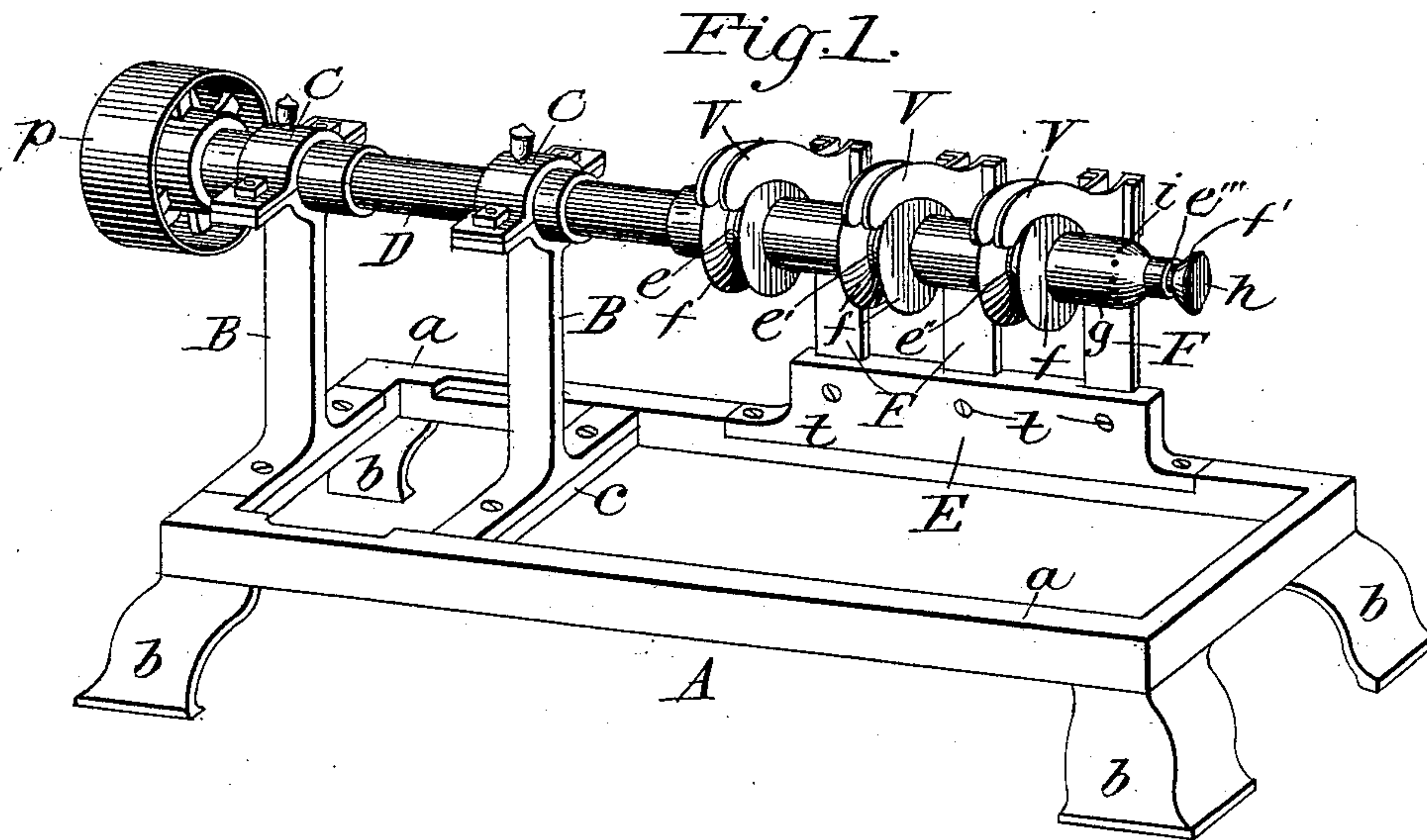
No. 607,179.

Patented July 12, 1898.

G. N. KRAMER.
COLLAR AND CUFF EDGER.

(Application filed Mar. 8, 1897.)

(No Model.)



Witnesses:
John S. Jordan
Sydney B. Davis

Inventor:
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UNITED STATES PATENT OFFICE.

GEORGE N. KRAMER, OF TERRE HAUTE, INDIANA, ASSIGNOR OF ONE-HALF
TO CHRISTOPHER J. DUDDLESTON, OF SAME PLACE.

COLLAR AND CUFF EDGER.

SPECIFICATION forming part of Letters Patent No. 607,179, dated July 12, 1898.

Application filed March 8, 1897. Serial No. 626,545. (No model.)

To all whom it may concern:

Be it known that I, GEORGE N. KRAMER, a citizen of the United States, residing at Terre Haute, in the county of Vigo and State of Indiana, have invented certain new and useful Improvements in Collar and Cuff Edgers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My invention relates to improvements in machines adapted to finish or smooth the rough edges of laundered linen collars, cuffs, neckbands, and other similar objects by ironing the same smooth by means of a heated instrument; and the objects of my invention are to provide a machine which will remove the rough edge from collars, cuffs, and all other similar objects conveniently, rapidly, and at a small expense. I attain these objects by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the machine. Fig. 2 is a view of the detached cylinder. Fig. 3 is a perspective view of the guides mounted upon their supports. Fig. 4 is a sectional view of the cylinder, taken in line 4 4 of Fig. 2.

Similar letters of reference refer to similar parts throughout the several views.

The letter A indicates a strong iron bed, which consists of a skeleton plate or top *a*, four legs *b*, and a brace or support *c*, which connects the two sides of the skeleton top.

The letter B indicates a strong metallic standard, the upper part of which is adapted to serve as a bearing for the cylinder hereinafter described and adapted to be firmly fixed transversely to and project above the bed. Two of these standards are employed.

The letter C indicates a cover which fits over and confines the cylinder within its bearings. The covers C are provided with oil-cups, whereby the cylinder-bearings are lubricated. One of said standards is secured to the rear end of the bed and the other is

mounted upon the brace or support *c*, for the purpose hereinafter set forth.

The letter D indicates a hollow metallic cylinder, which is provided with two bearings *d*, adapted to fit into the bearings of the two standards B, three grooves *e*, *e'*, and *e''*, provided with outwardly-turning flanges *f*, as shown and for the purpose hereinafter set out, a rounded portion *g*, perforated with a series of air-vents *i*, and a small projection *h*, furnished with a groove *e'''* and outwardly-turning flanges *f'*. The rear end of the cylinder is provided with a driving-pulley *p*. The three grooves *e*, *e'*, and *e''* are V-shaped, with the apex flattened, and vary from each other in width at the apex for the purpose of receiving varying thicknesses or plies of material, and are adapted to receive and smooth or iron a large, medium, or small number of plies of material, respectively.

The letter E indicates an iron guide-support provided with three or more recesses or ways *w* for the purpose of receiving the hereinafter-described guides. The guide-support is firmly fixed upon one of the side rails of the bed A, as shown in Fig. 1.

The letter F indicates a metallic bar, the upper end of which is slotted, thereby forming two prongs *r*, and a slot *s'* is cut through the bar near the lower end for the purpose of receiving a bolt *t*, which projects from the guide-support E in the middle of the ways *w*.

The letter V indicates a thin metallic plate or guide, one end of which is adapted to be secured to the prongs *r* of the bars F, and the other end is rounded and projects over the flanges which wall the grooves *e*, *e'*, and *e''*.

The under edges of the guides are concaved to fit down over the cylinder. There are two guides V on each bar F, and between them they guide an object, such as a collar, which is passed between them into the grooves *e*, *e'*, and *e''* between the flanges *f*. By means of the slot *s'* in each of the bars F the guides may be raised and lowered for the purpose of adjusting them a proper distance from the cylinder. The bars F are confined by thumb-nuts *t'* upon the bolt *t*. The cylinder is provided with the perforations *i* for the escape of the products of combustion and is heated

from within by the insertion of any convenient form of gas-jet, and I make no claim upon any form of burner.

To operate my machine, I connect the driving-pulley with any convenient motive power, and thereby revolve the cylinder rapidly while heated from within. A collar, cuff, or any other laundered object is passed between the guides V in such manner that the rough edge of the same when lowered will fit into the groove upon the cylinder adapted to the ply of linen used, and then by drawing the collar, cuff, or other object back and forward across the revolving and heated cylinder the rough edge of the same will be ironed or smoothed down to fit and conform with the shape of the flattened apex of the groove, thereby removing all rough or saw-like projections upon the edge of the linen.

When collars or other like objects have small angles, flaps, or other parts that cannot be ironed in either of the large grooves e , e' , or e'' , those small parts are placed in and ironed by the groove e''' between the flanges f' of the projection h .

I claim as my invention—

1. An ironing-machine for the edges of collars, cuffs and the like, comprising a rotatable shaft provided with an annular groove and outwardly-flared flanges at said groove, and guides adjustable with relation to said flanged groove, substantially as described.

2. An ironing-machine for the edges of collars, cuffs and the like, comprising a rotatable shaft provided with annular grooves of varying widths and outwardly-flared flanges

at said grooves, and guide-arms adjustable with relation to said grooves, substantially as described.

3. An ironing-machine for the edges of collars, cuffs and the like, comprising in combination a hollow shaft horizontally mounted near one end on a suitable base and having near its opposite end annular grooves of varying widths formed by outwardly-flared flanges, guide-arms at the flanged grooves carried by bars vertically adjustable on said base, substantially as described.

4. An ironing-machine for the edges of collars, cuffs and the like, comprising a horizontal shaft provided with annular grooves and outwardly-flared flanges at said grooves, means by which the shaft may be rotated, means by which the shaft may be heated, and guide-arms carried by bars and vertically adjustable with relation to said grooves, substantially as described.

5. An ironing-machine for the edges of collars, cuffs and the like comprising a rotatable shaft having annular grooves and outwardly-flared flanges at said grooves, and having its outer end free and provided at said end with a groove having flaring sides, and guide-arms adjustable with relation to the aforesaid grooves, substantially as described.

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

GEORGE N. KRAMER.

Witnesses:

CHRISSIE J. DUDDLESTON,
SYDNEY B. DAVIS.