

935,305.

Patented Sept. 28, 1909.

Fig. 1

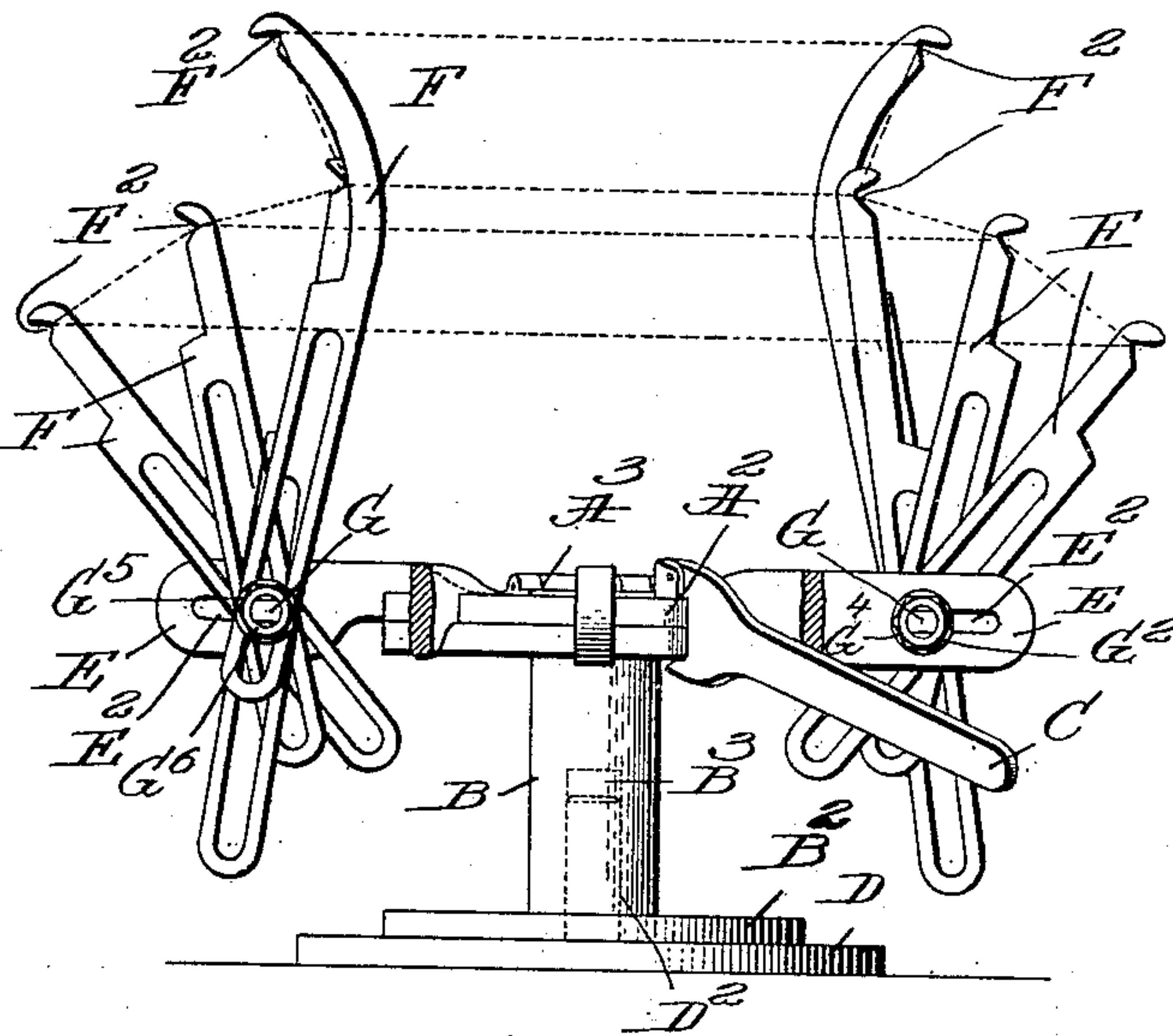


Fig. 2.

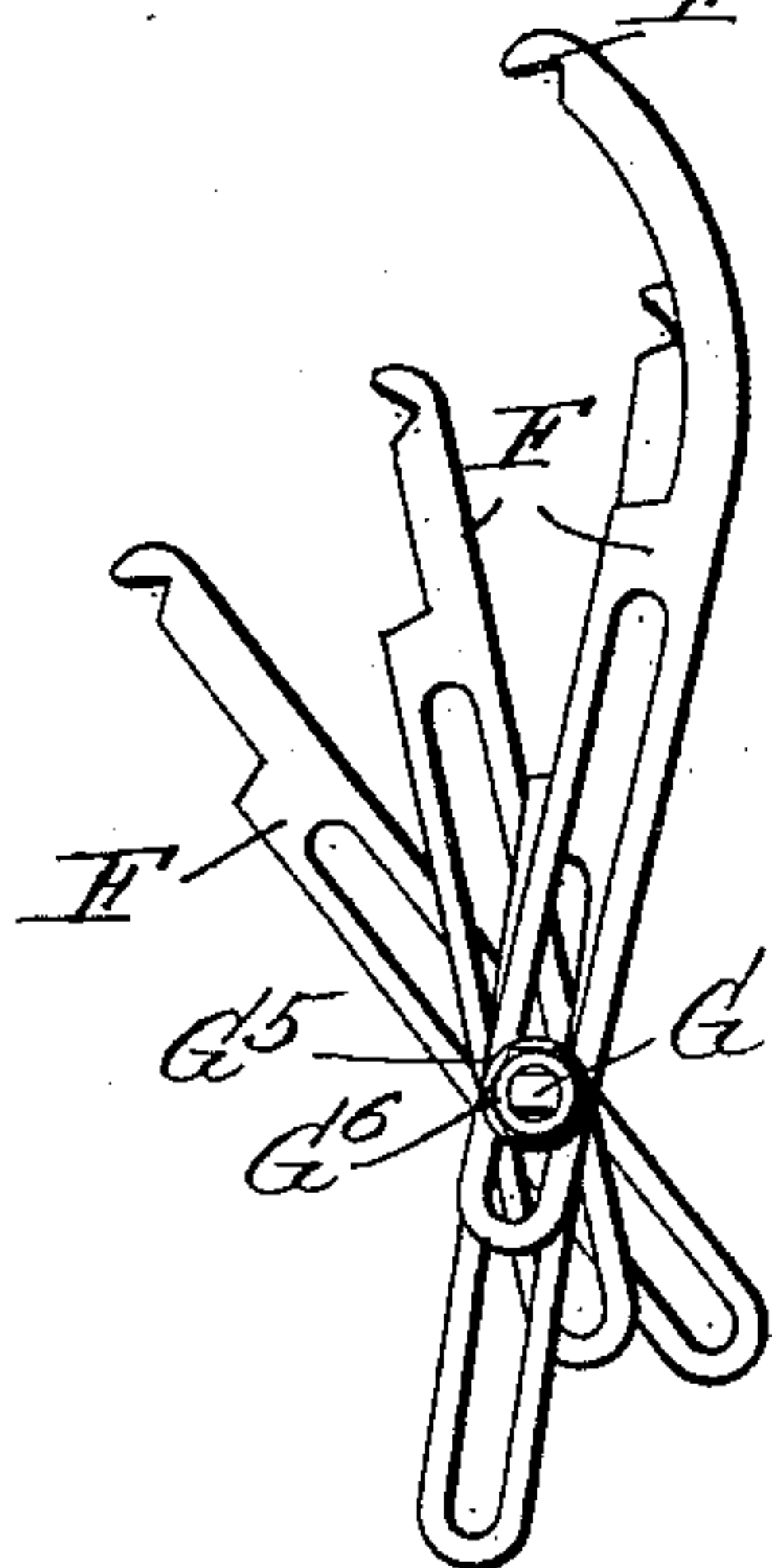


Fig. 3.

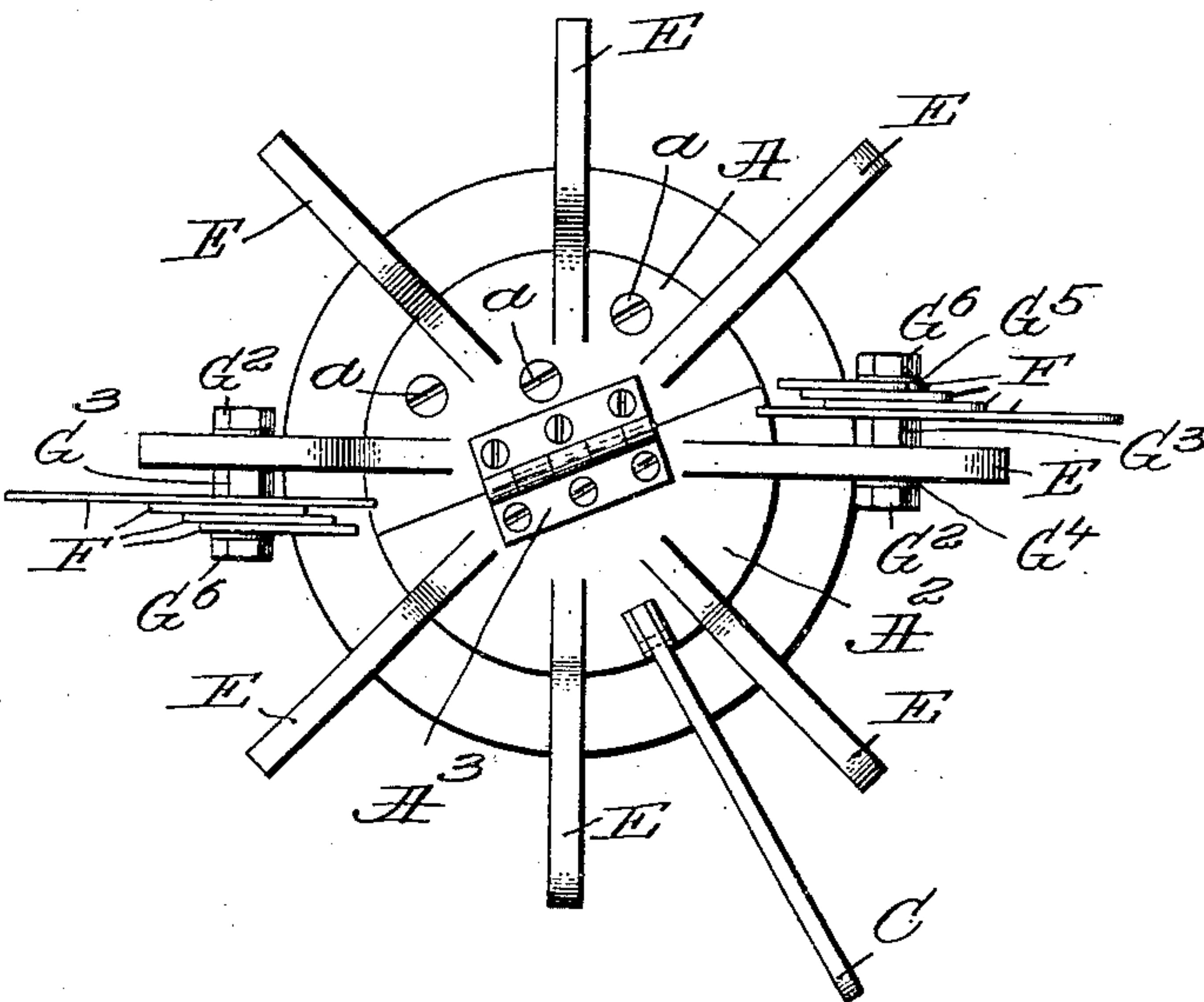


Fig. 4.

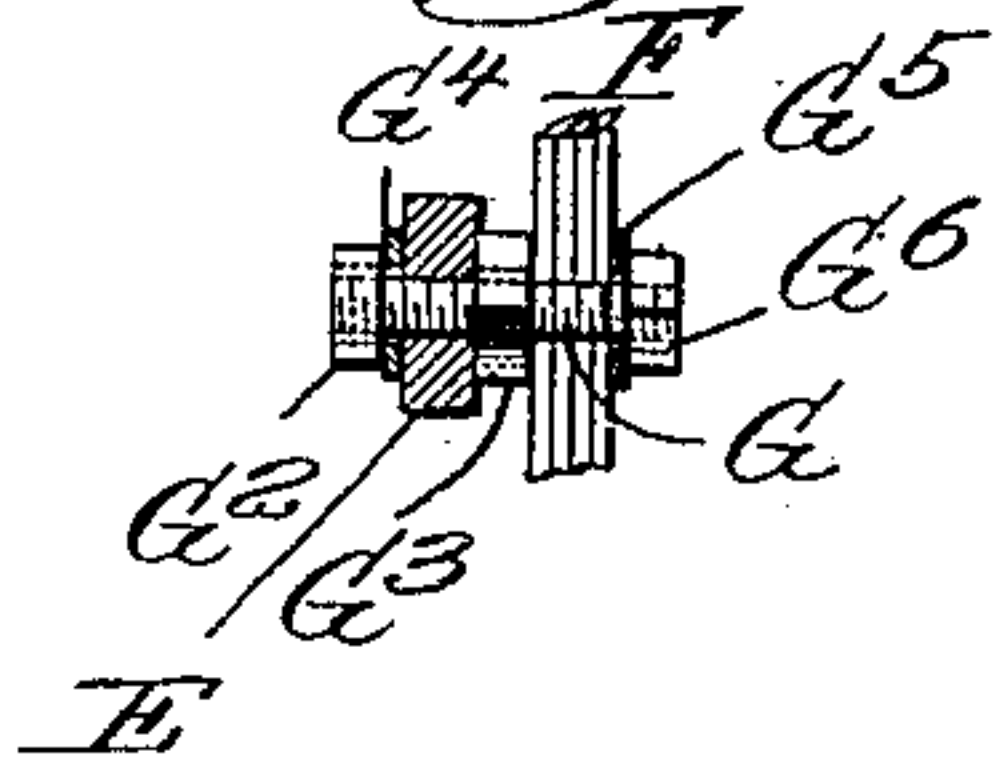


Fig. 5.



Fred. S. Gumbaf  
Joseph M. Ward.

Traverctor.  
Winthrop M. Jameson,  
Esq. Crosby Canyon.  
Calif.



# UNITED STATES PATENT OFFICE.

WINTHROP M. JAMESON, OF CAMBRIDGE, MASSACHUSETTS.

DEVICE FOR FORMING WIRE HAT-FRAMES.

935,305.

Specification of Letters Patent. Patented Sept. 28, 1909.

Application filed March 14, 1908. Serial No. 421,100.

*To all whom it may concern:*

Be it known that I, WINTHROP M. JAMESON, a citizen of the United States, and a resident of Cambridge, in the county of Middlesex and State of Massachusetts, have invented an Improvement in Devices for Forming Wire Hat-Frames, of which the following description, in connection with the accompanying drawing, is a specification, like letters on the drawing representing like parts.

This invention has for its object the production of a device for forming wire hat-frames, such as are employed in ladies' hats. Such hat-frames comprise a series of "round-and-round" wires and a series of "fore-and-aft" wires, the latter preferably radiating from a common center and crossing the former and fastened thereto. These hat-frames are made up in various regular and irregular shapes, including standard shapes and shapes which vary according to the fashion. It is very desirable in the manufacture of these hat-frames to be able to reproduce at any time a particular shape. Hitherto this has involved either the retaining in adjusted position of the devices, such as are used for forming these hat-frames, or else readjusting the device after it has been used for the making of another shape. It would be impracticable on the one hand to have a complete device for each style of hat-frame manufactured, and on the other hand the resetting of the device to reproduce a shape once made is practically as expensive as the adjusting of the device in the first place, and in the second place it is very difficult to reproduce exactly a shape after the machine has once been put out of adjustment if the sample frame has been lost.

The present invention provides for the removal from the device in adjusted position of those parts outlining the hat-frame, so that they may be stored away and replaced upon the device at any time to reproduce the shape for which they are adjusted. These parts of the machine can be furnished at a slight expense, and when once adjusted to a particular shape can be retained in that adjustment and removed from the device and replaced thereon whenever desired without difficulty. This enables a single machine base to be used with an indefinite variety of adjusted hat-frame supporting members and the consequent reproduction of any previously made frame by attaching to the base

in a few moments these previously adjusted members which may be as readily detached and filed away for future use.

The invention will appear more fully from the accompanying description and drawings and will be particularly pointed out in the claims.

The drawings show a preferred form of hat-frame forming device embodying this invention.

Figure 1 is a side elevation of the entire device with two series of the wire-supporting members in position thereon, and adjusted to outline a particular form of hat-frame. Fig. 2 shows one series of the wire-supporting members, such as outline a radial section of the hat-frame, removed from the device. Fig. 3 is a top plan view of the construction shown in Fig. 1. Fig. 4 is a cross section through the connection of the wire-supporting members with the base. Fig. 5 is a detail of the clamping bolt.

The device herein shown has a collapsible base, comprising two generally semi-circular parts A, A<sup>2</sup>, hinged together at A<sup>3</sup>, one of said parts being rigidly secured, as by the screws a, to a standard B, and the other of which is provided with a clamping lever C pivoted thereto by means of which it may be clamped to the standard B when in operative position.

The standard B is formed with a flat base B<sup>2</sup>, and a central vertical bearing B<sup>3</sup>. The standard B rests upon a pedestal D, which is provided with a vertical pin D<sup>2</sup>, entering the bearing B<sup>3</sup> and serving as a journal for the standard B. The standard B is of a height convenient to the operator, and may be turned upon the pedestal D in the operation of making the hat-frame.

The parts A, A<sup>2</sup> of the base present at intervals about their periphery a plurality of supports E, and are herein shown as extending radially from the base and cast integrally therewith. As shown, these supports are in the form of flat vertically-arranged projections slotted horizontally at E<sup>2</sup>.

The parts thus far described are all preferably made of metal castings. The wire-supporting members in the preferred form are also made of metal, and are shown as thin, flat bars F, slotted longitudinally and provided at their upper ends with wire-retaining notches F<sup>2</sup>. The members F may be straight or curved, and preferably a combination of both, as indicated in the drawings,



their particular shape depending somewhat upon the shape of the hat to be formed, but a combination of straight members with a single curved member, as illustrated, is sufficient to form a very large variety of hat-frames.

The wire-supporting members F are placed in series, each series designed to outline by its wire-retaining notches a radial section of a hat-frame. These series are firmly clamped together in adjusted position, and each of the series is removably attached to one of the supports E. This is secured in the construction illustrated by the following means. A bolt G is slotted off on opposite sides at one end to fit in the slot E<sup>2</sup>, and slotted off throughout its length for convenience of manufacture. This bolt carries two nuts G<sup>2</sup>, G<sup>3</sup>, by means of which it is clamped in position in the slot of the support E, the support lying between the nuts G<sup>2</sup>, G<sup>3</sup>, and a washer G<sup>4</sup>, if desired, being interposed between the nut G<sup>2</sup> and the support E<sup>2</sup>. The wire-supporting members F are placed over the projecting end of the bolt G, another washer G<sup>5</sup> is put on the bolt, and a nut G<sup>6</sup> serves to clamp the wire-supporting members F in position after they have been adjusted by the operator. The longitudinally slotted ends of the wire-supporting members F enable them to be moved angularly and transversely of the bolt G, so that their ends may be placed in any desired position. The slot E<sup>2</sup> is preferably slightly elongated, and the bolt G is designed to be set at either one or the other end of the said slot, thus allowing some leeway in the making up of the hat-frame. It will thus be seen that the wire-supporting members are secured together in series in fixed adjusted position relatively to each other, and that each series makes up a radial section of that frame. It will also be seen that by the removal of the nut G<sup>2</sup> the bolt G may be taken from the base, carrying with it the wire-supporting members of the series without disturbing their adjusted position relatively to each other. These radially-arranged series may then be stored away, retaining the shape of the hat-frame to which they have been set. When it is desired to reproduce the shape all that is necessary to do is to replace the special series on their proper supports E and at the end of the slot E<sup>2</sup> at which they were originally set, and they will then be in exactly the position in which they were when the hat-frame of the particular shape in question was first made.

Having described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. In a device for forming wire hat-frames, a base, wire-supporting members arranged in a plurality of series each of which

series outlines a radial section of the hat, and means for attaching to and detaching from said base said series, without disturbing the interrelative position of the members of the series.

2. In a device for forming wire hat-frames, a base, a plurality of series of wire-supporting members, means for securing the members of each series in fixed adjusted position relatively to each other, and means for removably attaching the said secured series to the said base at intervals.

3. In a device for forming wire hat-frames, a base, provided with a plurality of radial supports, wire-supporting members arranged in a plurality of series, each of which outlines a radial section of the hat, means for attaching to and detaching from said supports said series without disturbing the interrelative position of the members of the series.

4. In a device for forming wire hat-frames, a base provided with a plurality of radial supports, wire-supporting members, a plurality of clamping means for fastening said wire-supporting members together in adjusted position into a plurality of series to outline a radial section of the hat, and means for attaching to and detaching from said radial supports said adjusted series without disturbing the said clamping means.

5. In a device for forming wire hat-frames, a base provided with a plurality of radial supports, longitudinally slotted wire-supporting members arranged in separate series, the members of each series intersecting, clamping bolts, one for each series, passing through the said slots at the intersection of the members, means for clamping the members of the respective series to the respective bolts, and independent means for clamping the respective bolts to the respective radial supports.

6. In a device for forming wire hat-frames, a base provided with a plurality of radial slotted supports, longitudinally-slotted wire-supporting members arranged in separate series, each of which outlines a radial section of the hat with the members of each series intersecting, a bolt for each series adapted to pass through the slot in the radial supports and the slots of the members of each series at their intersecting point, means for clamping the members of each series to the bolt, independent means for clamping the bolt to its radial support.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

WINTHROP M. JAMESON.

Witnesses:

MABEL PARTELOW,  
THOMAS J. DRUMMOND.