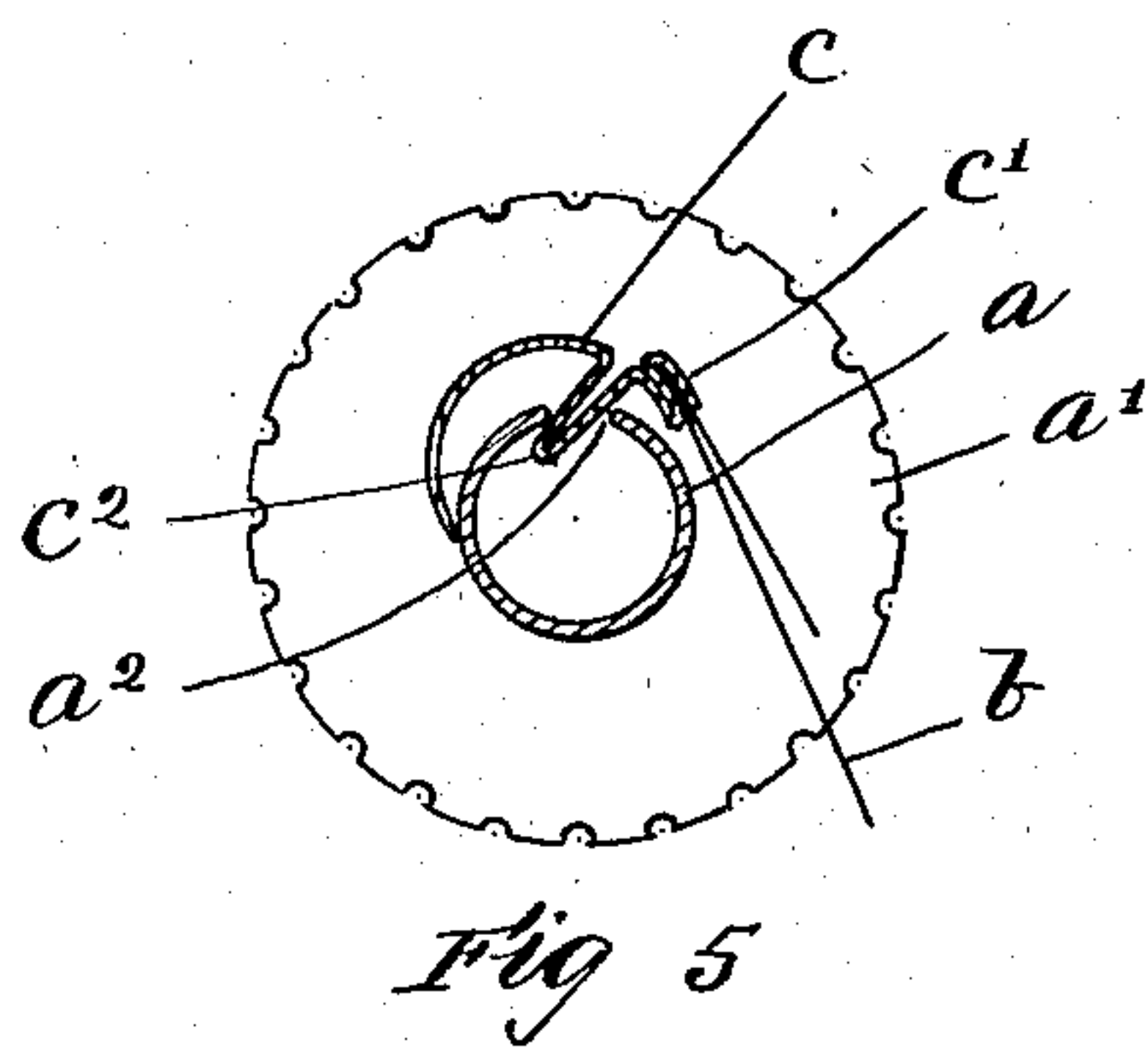
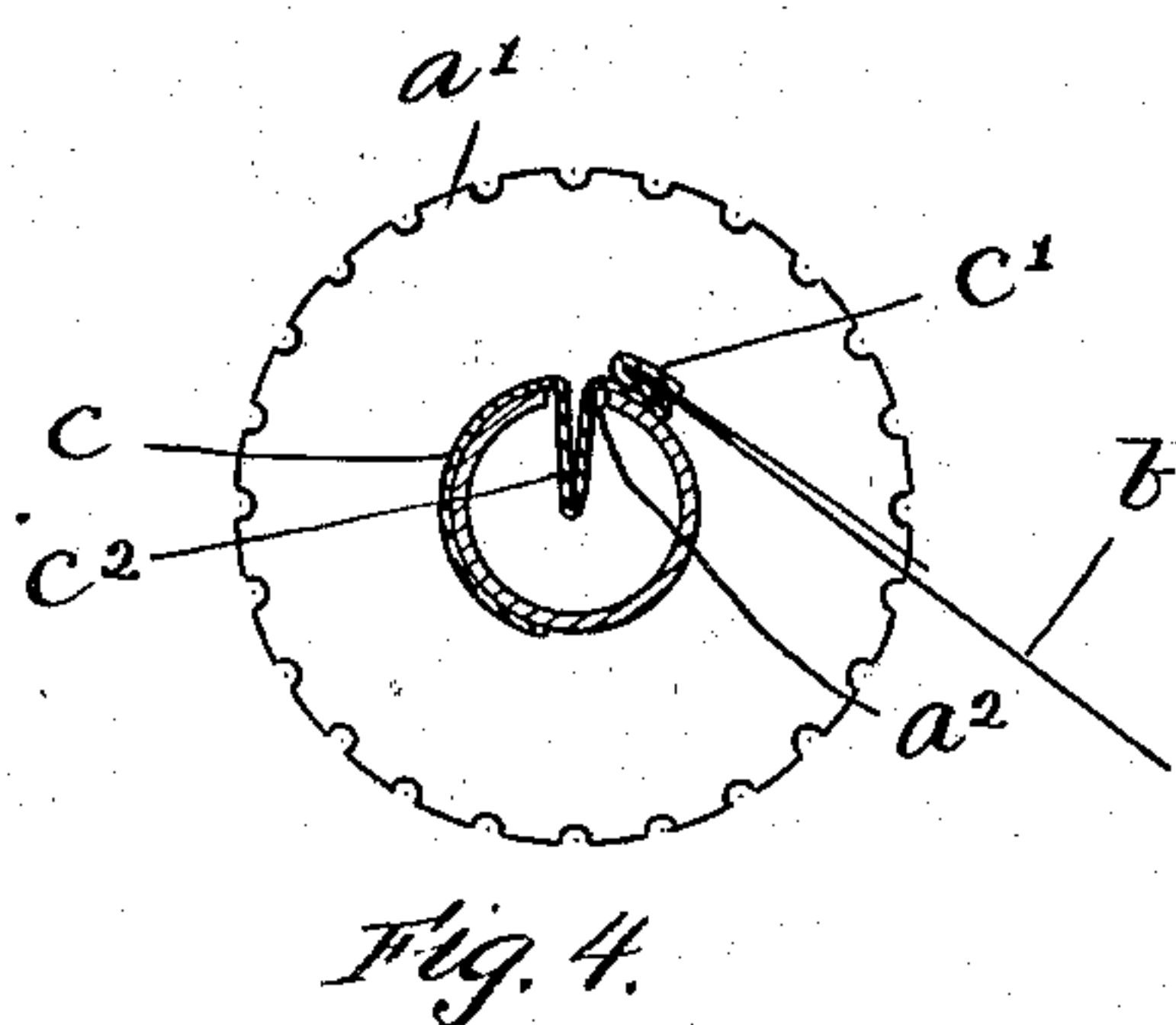
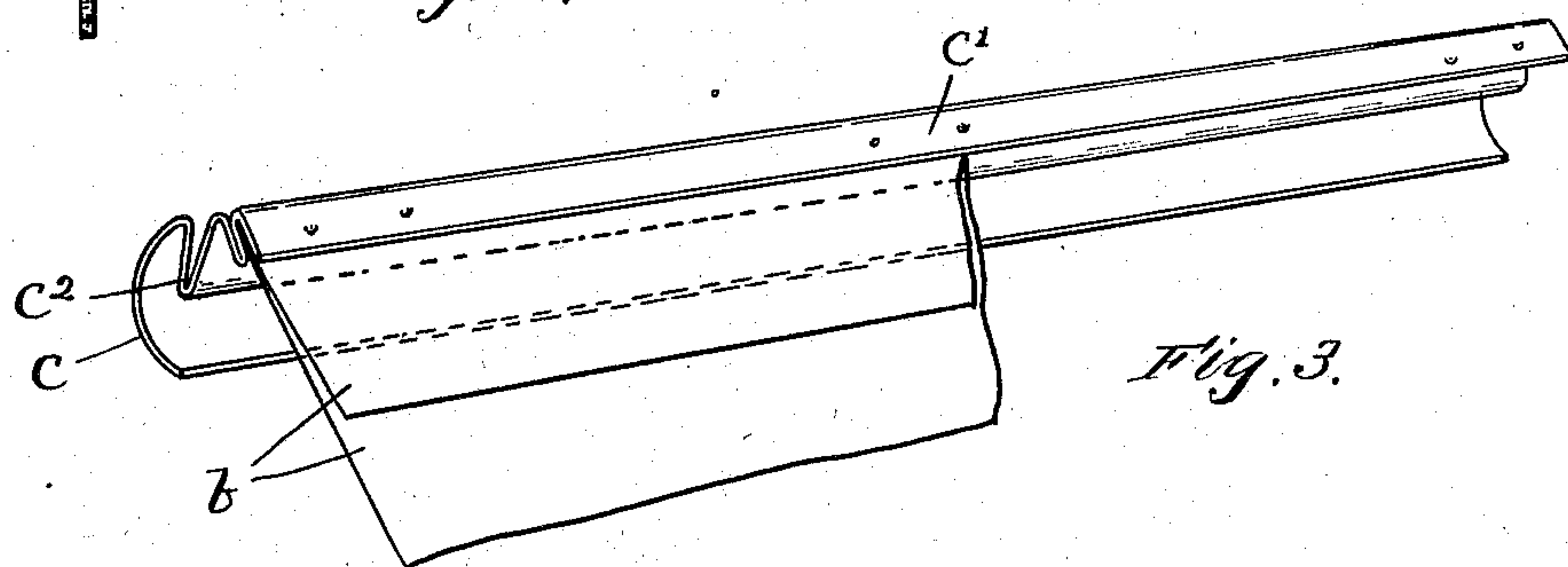
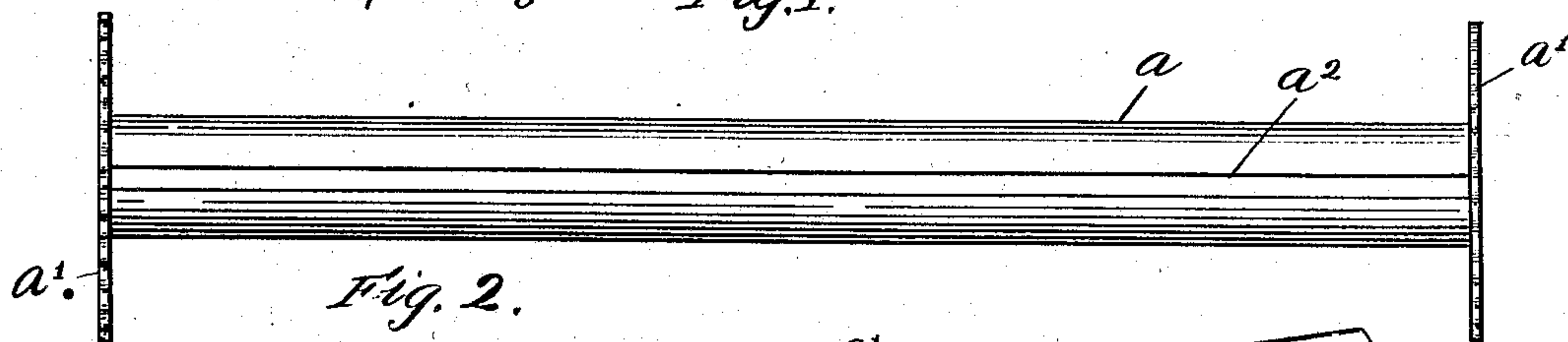
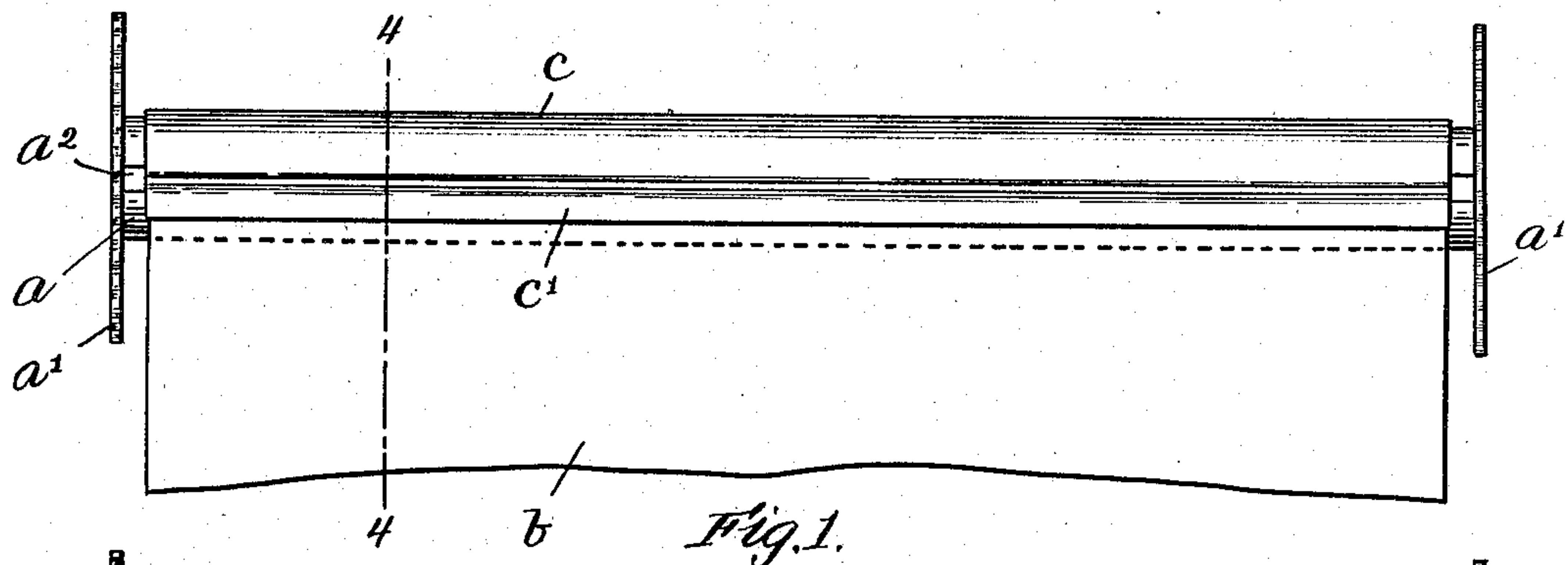


A. S. WHEELER.
RIBBON ATTACHING DEVICE.
APPLICATION FILED APR. 19, 1909.

930,327.

Patented Aug. 3, 1909.



Witnesses:
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UNITED STATES PATENT OFFICE.

ARTHUR S. WHEELER, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO F. S. WEBSTER CO.,
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RIBBON-ATTACHING DEVICE.

No. 930,327.

Specification of Letters Patent.

Patented Aug. 3, 1909.

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To all whom it may concern:

Be it known that I, ARTHUR S. WHEELER, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Ribbon-Attaching Devices, of which the following is a specification.

This invention relates to ribbon-attaching-devices, particularly adapted for detachably connecting the end of a ribbon with a spool having a slotted barrel. Such a ribbon may be employed as the inking-ribbon of a typewriting machine.

The invention has for its object to construct an attaching-device for the ribbon adapted to be arranged externally on the barrel of the spool and to be easily manipulated, without soiling the hands, and without using a tool to apply it to and remove it from the barrel.

Figure 1 is a front view of an attaching-device for ribbons embodying this invention. Fig. 2 is a front elevation of a spool to which the ribbon may be attached. Fig. 3 is a view in perspective of the attaching-device. Fig. 4 is a transverse section of the attaching-device taken on the dotted line 4—4, Fig. 1. Fig. 5 is a sectional view, similar to Fig. 4, illustrating the manner of removing the device from the barrel of the spool.

The spool to which the ribbon is to be attached is of any usual or suitable size, and construction. It comprises a barrel *a*, having heads *a'* at its ends. The barrel *a* is here shown as cylindrical, and as having a longitudinal slot *a²*, extending from end to end of it.

b represents the ribbon, which is made of any suitable material and width.

The attaching-device is preferably, although not necessarily, made of sheet metal. It consists of a member *c*, of suitable size and shape to fit snugly upon the exterior of the barrel *a*, having at one edge, means, as *c'*, for securing the end of a ribbon thereto, and having means for preventing it from turning on the barrel. It is here shown as semi-circular, adapting it to be placed on a cylindrical barrel; and it is made spring-acting in order that it may be sprung on to the barrel.

As a securing means for the end of the ribbon the edge of the device may be lapped or folded upon itself, and the end of the ribbon placed between the laps or folds, and held by

compressing the laps or folds together, or by indenting the laps or folds at convenient points. This form of securing-means is simple, and securely holds the end of the ribbon, but the invention comprehends the employment of any other form of securing-means arranged at the edge of the semi-circular member or thereabout.

As a means of preventing the barrel-engaging member from turning on the barrel it is here shown as having a projection *c²* extended inwardly and adapted to enter the slot in the barrel. The projection *c²* is here shown as a rib, formed by bending the sheet metal approximately V-shape. Said rib extends throughout the length of the device. It is made narrower than the slot in the barrel. Its function is to hold the barrel-engaging member from turning on the barrel, and also, by engaging one wall of the slot, to serve as a fulcrum for the purpose of enabling said barrel-engaging member to be rocked when removing it from the barrel. The rib is arranged near one edge of the semi-circular member, and, as here shown, close to the securing-means for the ribbon. The invention, however, is not limited to constructing the rib as shown, as it is obvious that it may be otherwise made and still enter the slot in the barrel of the spool and subserve all the functions of the rib *c²*.

When the device is sprung or otherwise placed in position on the barrel, see Fig. 4, and the projection *c²* contained in the slot thereof, it will be observed that by turning the device on the barrel said projection will engage the wall of the slot, and serving as a fulcrum will cause the barrel-engaging portion to rock, to thereby assist in disengaging it from the barrel, as shown in Fig. 5.

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

1. An attaching-device for attaching a ribbon to a spool having a slotted barrel consisting of a semi-circular spring-acting barrel-engaging member, adapted to fit snugly upon the barrel and having securing-means for the ribbon and having a projection extended inwardly and adapted to enter the slot in the barrel and to engage one wall thereof when the device is turned on the barrel, to thereby assist in removing the device from the barrel, substantially as described.

2. An attaching-device for attaching a

ribbon to a spool having a slotted barrel consisting of a semi-circular spring-acting barrel-engaging member having securing-means for the ribbon, and having a projection adapted to enter the slot in the barrel, which, by engaging one wall thereof causes the device to rock as it is turned on the barrel, to thereby assist in removing it therefrom, substantially as described.

3. An attaching-device for attaching a ribbon to a spool having a slotted barrel, consisting of a semi-circular spring-acting barrel-engaging member having securing-means for the ribbon, at one edge, and having an inwardly extended rib adapted to enter the slot in the barrel, and to engage one wall thereof as the device is turned on the barrel, to thereby cause the device to rock to facilitate its detachment therefrom, substantially as described.

4. A sheet-metal attaching-device for attaching a ribbon to a spool having a slotted barrel, bent to form a semi-circular spring-acting barrel-engaging member having securing-means at one edge for the ribbon, and having a V-shaped rib extending throughout its length adapted to enter the slot in the barrel and to engage one wall thereof as the semi-circular member is turned on the barrel, to thereby cause said member to rock to facilitate its detachment from the barrel, substantially as described.

5. An attaching-device for attaching a ribbon to a spool having a slotted barrel, consisting of an external barrel-engaging member having means for attaching the ribbon thereto and having a projection extended in-

wardly and adapted to enter the slot in the barrel, substantially as described.

6. An attaching-device for attaching a ribbon to a spool having a slotted barrel, consisting of an external spring-acting barrel-engaging member adapted to be sprung onto the barrel, and having means for attaching the ribbon thereto and also having a projection extended inwardly and adapted to enter the slot in the barrel, substantially as described.

7. An attaching-device for attaching a ribbon to a spool, consisting of an external spring-acting barrel-engaging member adapted to be sprung onto the barrel of the spool, having means for attaching the ribbon thereto and having means for preventing said member from turning on the barrel, substantially as described.

8. An attaching-device for attaching a ribbon to a spool, consisting of an external spring-acting barrel-engaging member adapted to be sprung onto the barrel of the spool, having securing-means for the ribbon and having means for preventing said member from turning on the barrel and for rocking said member to assist in disengaging it from the barrel when turned thereon, substantially as described.

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

ARTHUR S. WHEELER.

Witnesses:

B. J. NOYES,
H. B. DAVIS.