

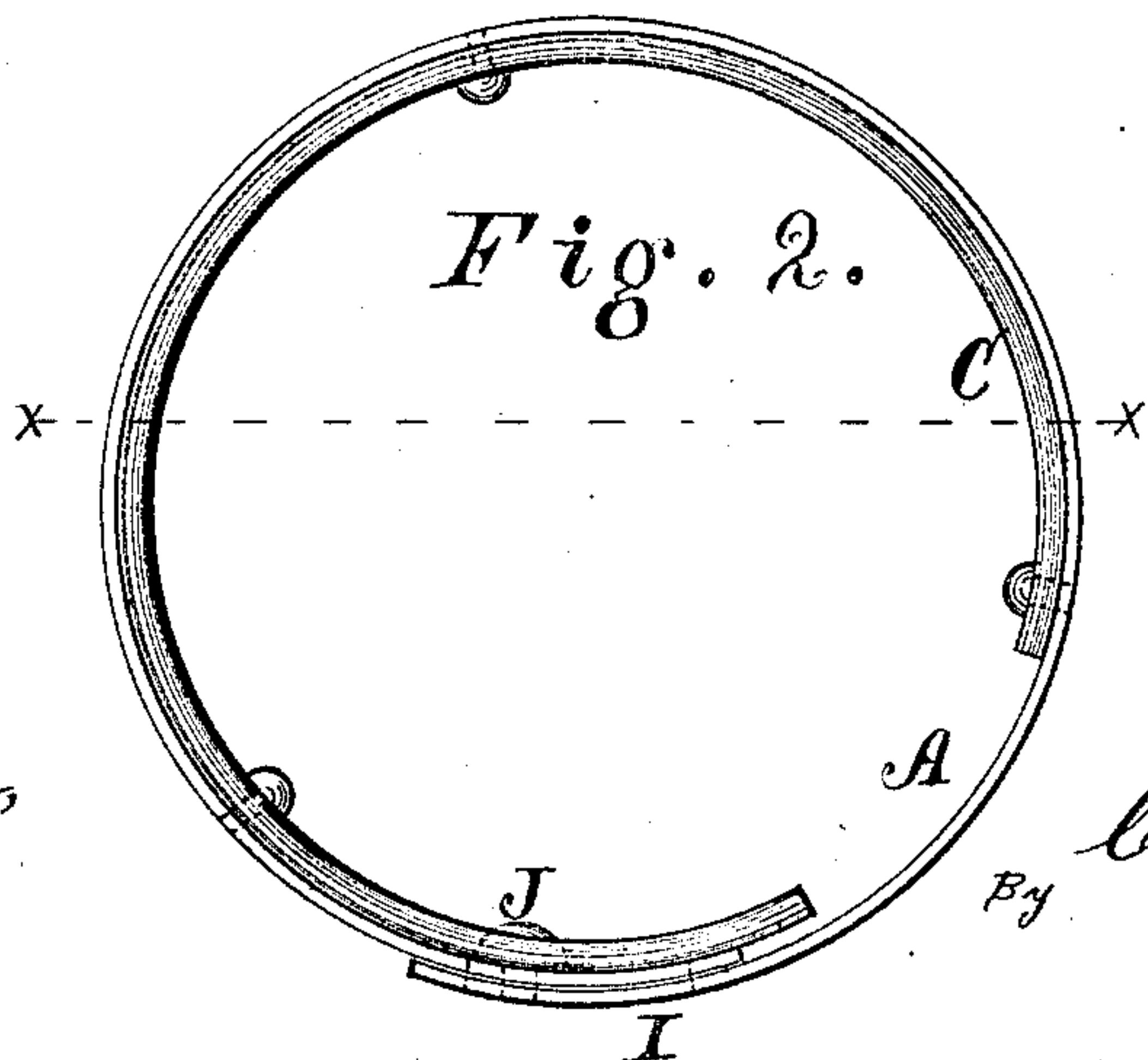
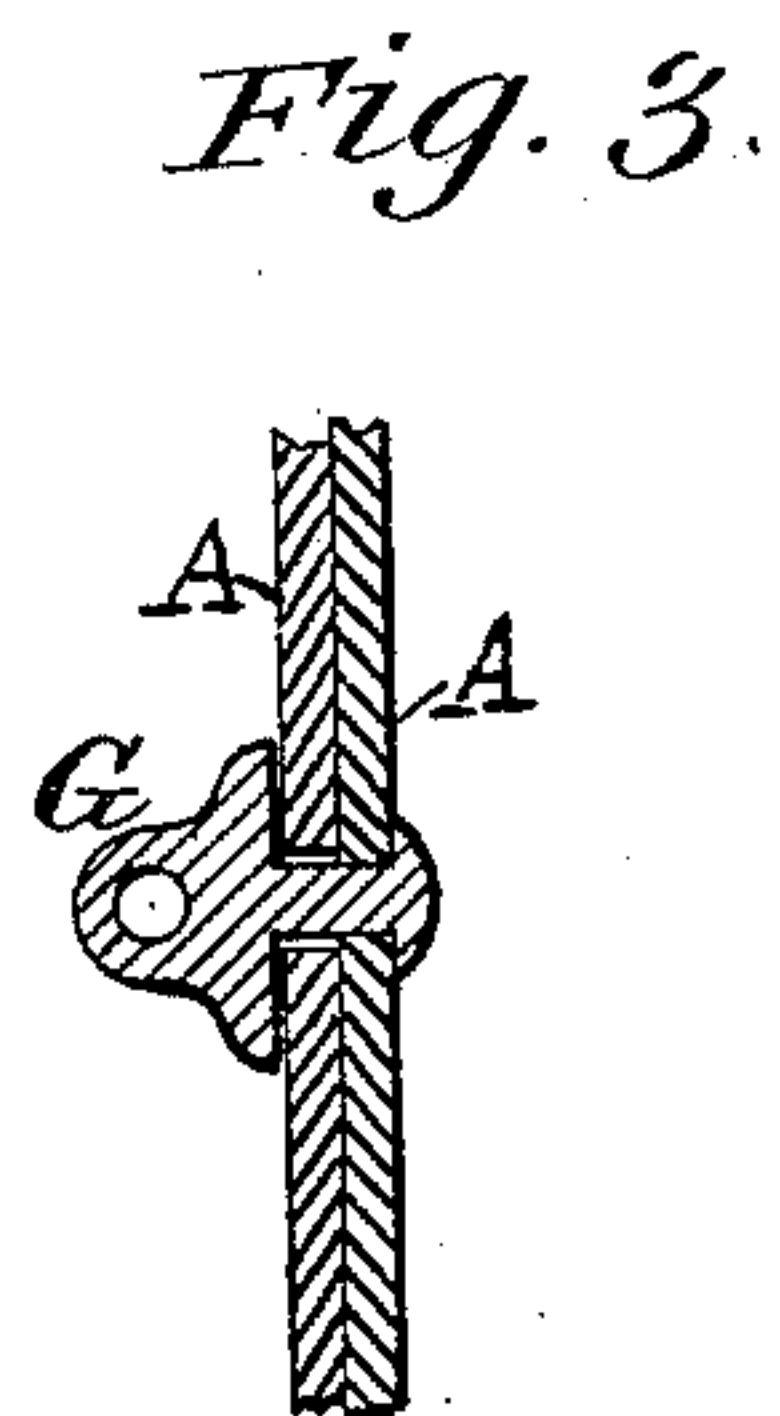
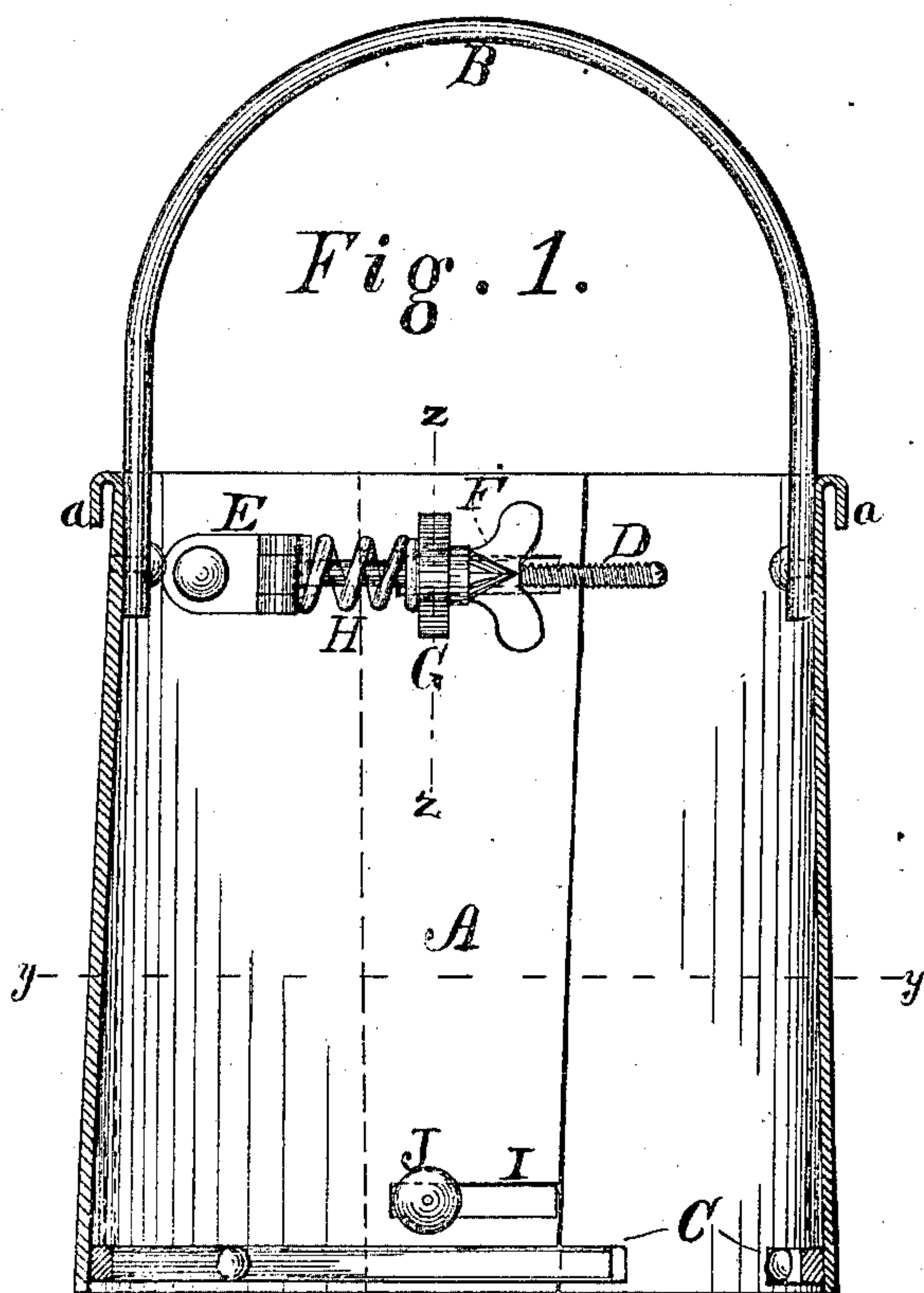
(No Model.)

C. B. ADKERSON.

Flexible Cylinder for Soldering Fruit Cans.

No. 232,223.

Patented Sept. 14, 1880.



Witnesses:

Chas. M. Fletcher,
John S. Pugh.

Inventor:

Charles B. Adkerson.
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UNITED STATES PATENT OFFICE.

CHARLES B. ADKERSON, OF DECATUR, ILLINOIS.

FLEXIBLE CYLINDER FOR SOLDERING FRUIT-CANS.

SPECIFICATION forming part of Letters Patent No. 232,223, dated September 14, 1880.

Application filed July 14, 1880. (No model.)

To all whom it may concern:

Be it known that I, CHARLES B. ADKERSON, a citizen of the United States, residing at Decatur, in the county of Macon and State of Illinois, have invented a new and useful Improvement in a Flexible Cylinder for Soldering Fruit-Cans, of which the following is a specification.

My invention relates to a device for use in the manufacture of sheet-metal fruit-cans which are cylindrical in form; and it consists in a steel cylinder having a handle or bail, and having an adjusting-screw to change its diameter, and a radially-operating spring at one end, whereby it readily adjusts itself to various sizes of can-bottoms, and holds the can and bottom together while being soldered. I attain this object by the device illustrated in the accompanying drawings, in which—

Figure 1 is a vertical transverse section of the cylinder on the line *x x*, Fig. 2. Fig. 2 is an end view of the bottom, and represented as cut off, on the line *y y*, Fig. 1. Fig. 3 is a detail sectional view on line *z z*, Fig. 1.

Corresponding letters represent corresponding parts throughout the several views.

A is the cylinder. B is the handle or bail. C is the radial spring, which is fastened to the cylinder by riveting inside near the bottom end, and is designed to expand the lower end of the cylinder, so that it will conform to the various sizes of can-bottoms.

D is an adjusting-screw, and is attached to the inner lap of the cylinder, near the top, by the jointed piece E, and is provided with the thumb-nut F and spiral spring H. Said spiral spring is confined between the standard G and the jointed end of the screw D, and is designed to maintain an even tension on the thumb-nut F, and admits of an easy movement of that end of the cylinder, while the lower end is expanded or contracted, thus avoiding any cramping of the standard while the machine is in use.

The standard G is riveted to the outer lap of the cylinder by a stem which passes through a slot in the inner lap of the cylinder, so as to allow the cylinder to be expanded or contracted at will by turning the thumb-nut F.

It is obvious that the spring C at the bottom of the cylinder will conform to the various diameters attained by the adjusting-screw D.

J is a rivet fastened to the outer lap of the cylinder, and operates in the slot I in the in-

ner lap to prevent the cylinder from expanding too far at that end.

The upper edge of the cylinder is bent over, forming a recess, as shown at *a*, Fig. 1, and serves a double purpose—first, to confine the can to the cylinder, and second, to act as a stop to prevent the cylinder from being forced too far into the can.

Having thus described my invention in detail, the operation is as follows: By holding the machine by the handle the sheet-tin, after being cut to a size and formed as a cylinder, is slipped over the cylinder until it reaches the recess shown at *a*, Fig. 1. Then, by grasping the cylinder around the body having the can thereon, contracting it with the hand until it is small enough to allow the top of the can to be put on, it will be seen that as soon as the top is on the can it will be held there by the radial spring as it presses outward on the cylinder. Having thus secured the can to the cylinder the soldering is done as follows: By holding the cylinder by the handle in the left hand, having the iron in the right, the iron is passed along the seam from top to bottom. Then the cylinder is turned slowly around, allowing the iron to follow the seam around the can, thus securing the top to the can. The finished can is easily removed from the cylinder by the hand.

It is preferable to have a slight projection on the bench to act as a center while turning the cylinder.

By this device it will be seen that cans may be made very rapidly.

I am aware that prior to my invention soldering-clamps having flexible cylinders have been patented. I therefore do not claim such a combination broadly; but,

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

1. A flexible cylinder provided with an adjusting-screw, D, and thumb-nut F, the standard G, and spiral spring H, as and for the purpose herein shown and described.

2. A flexible cylinder provided with the radially-operating spring C, when arranged to operate as and for the purpose shown and described.

CHARLES B. ADKERSON.

Witnesses:

C. L. WAGGONER,
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