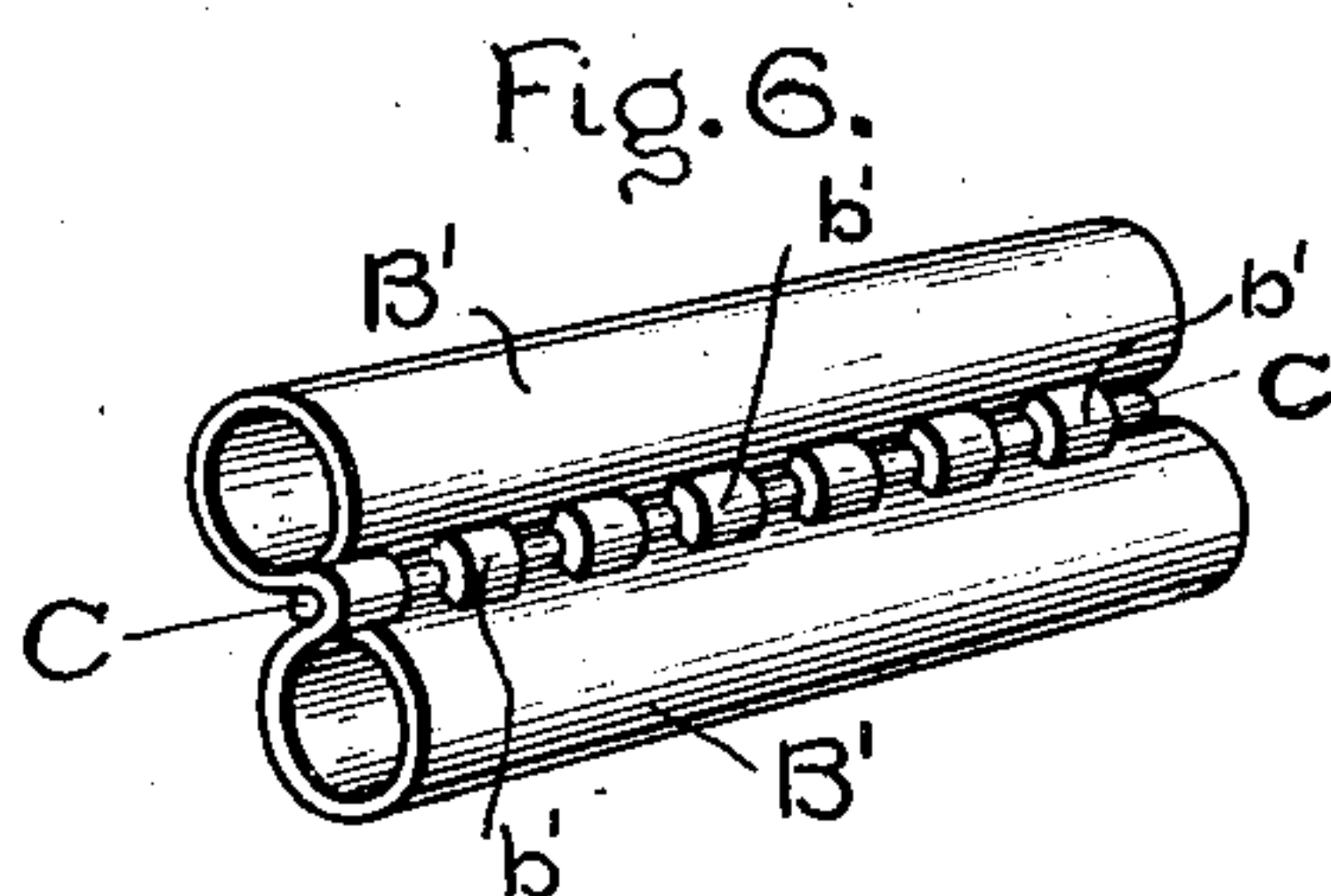
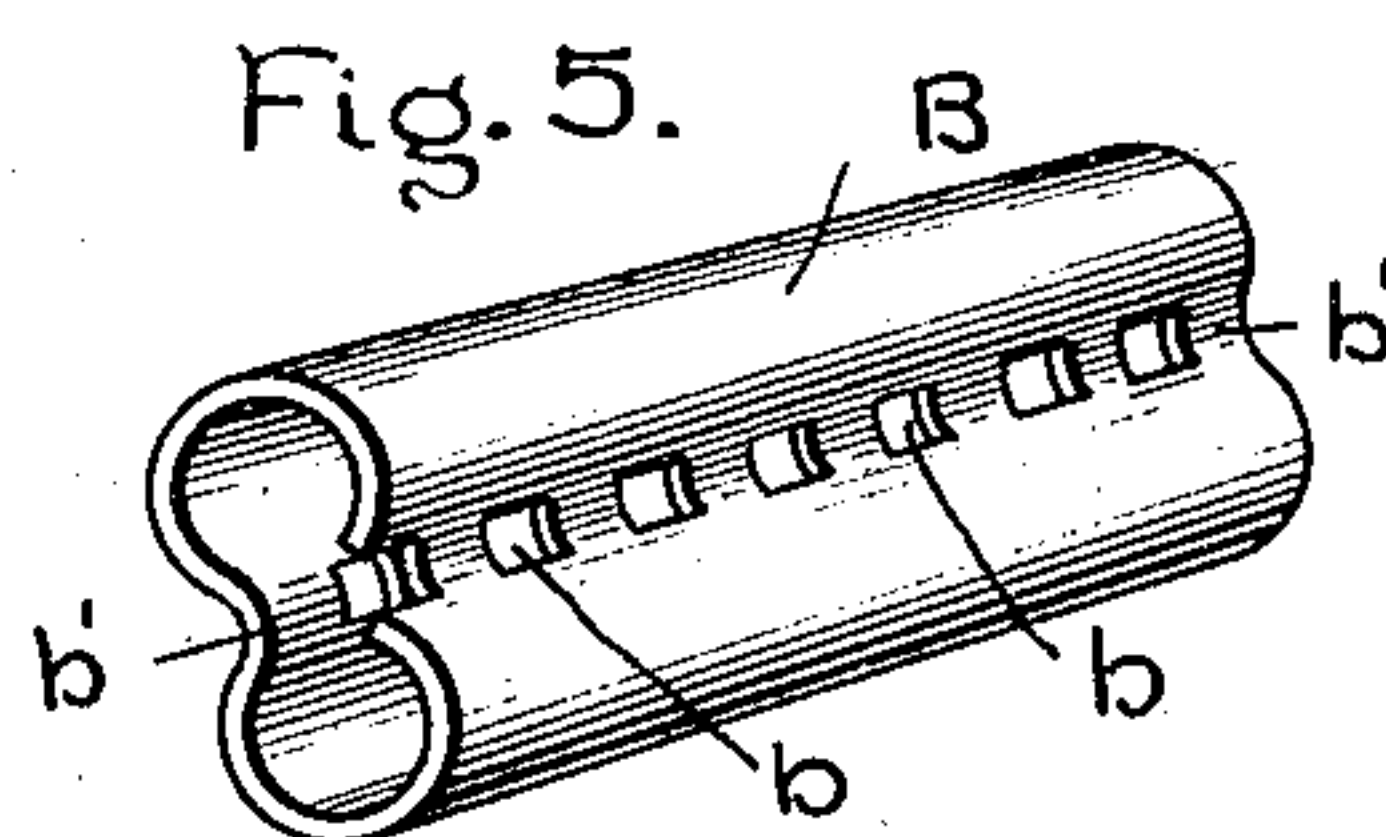
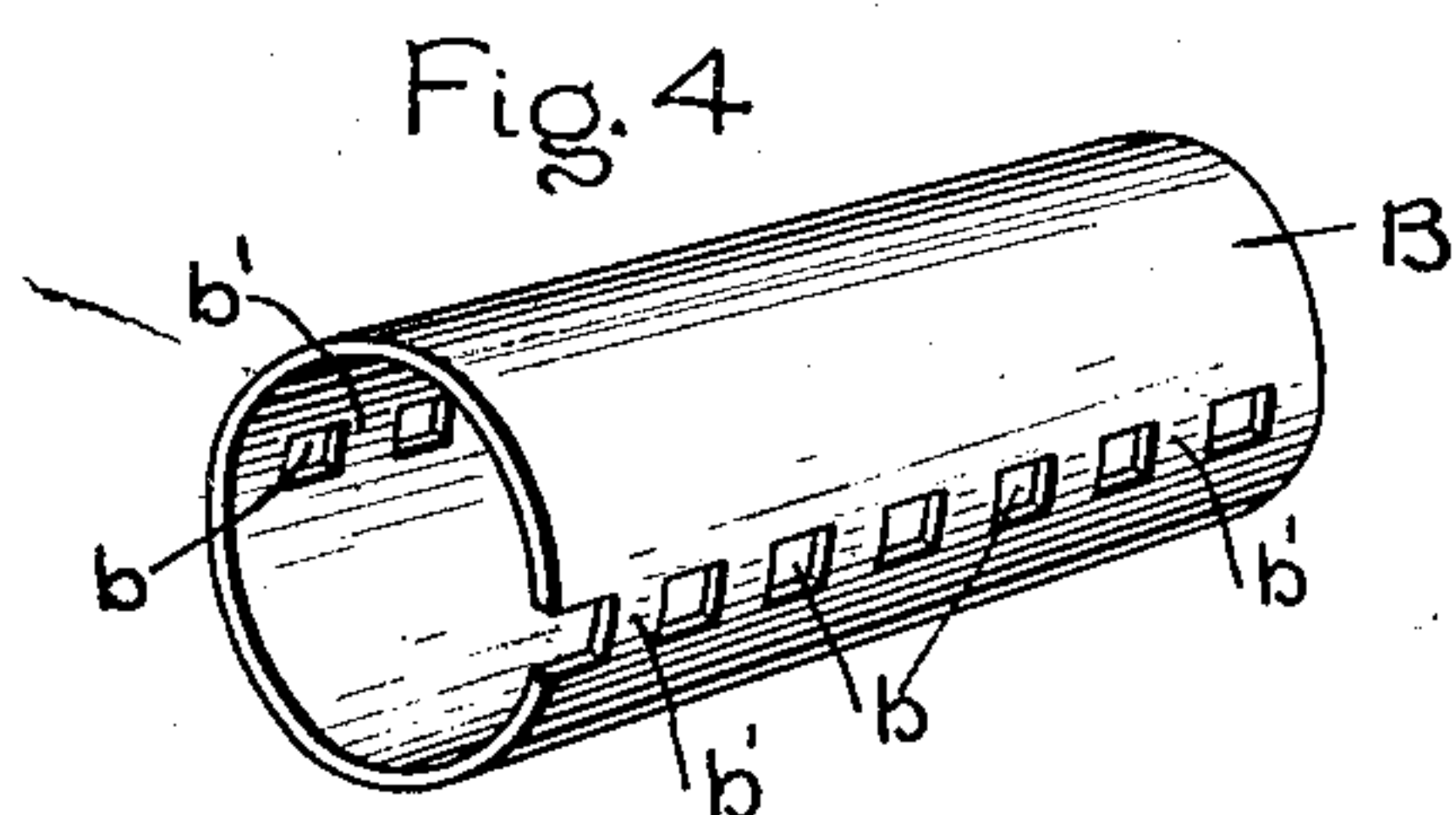
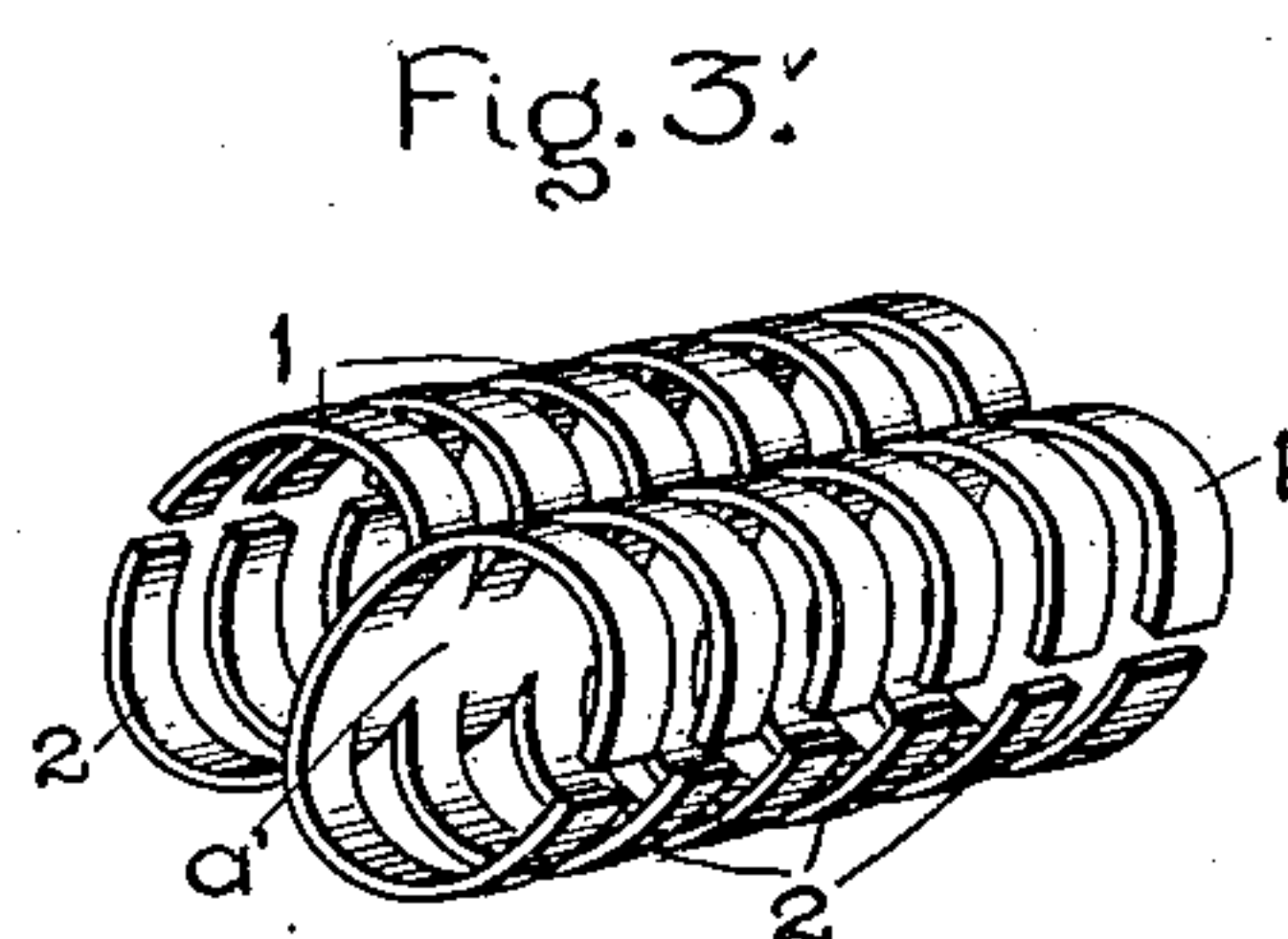
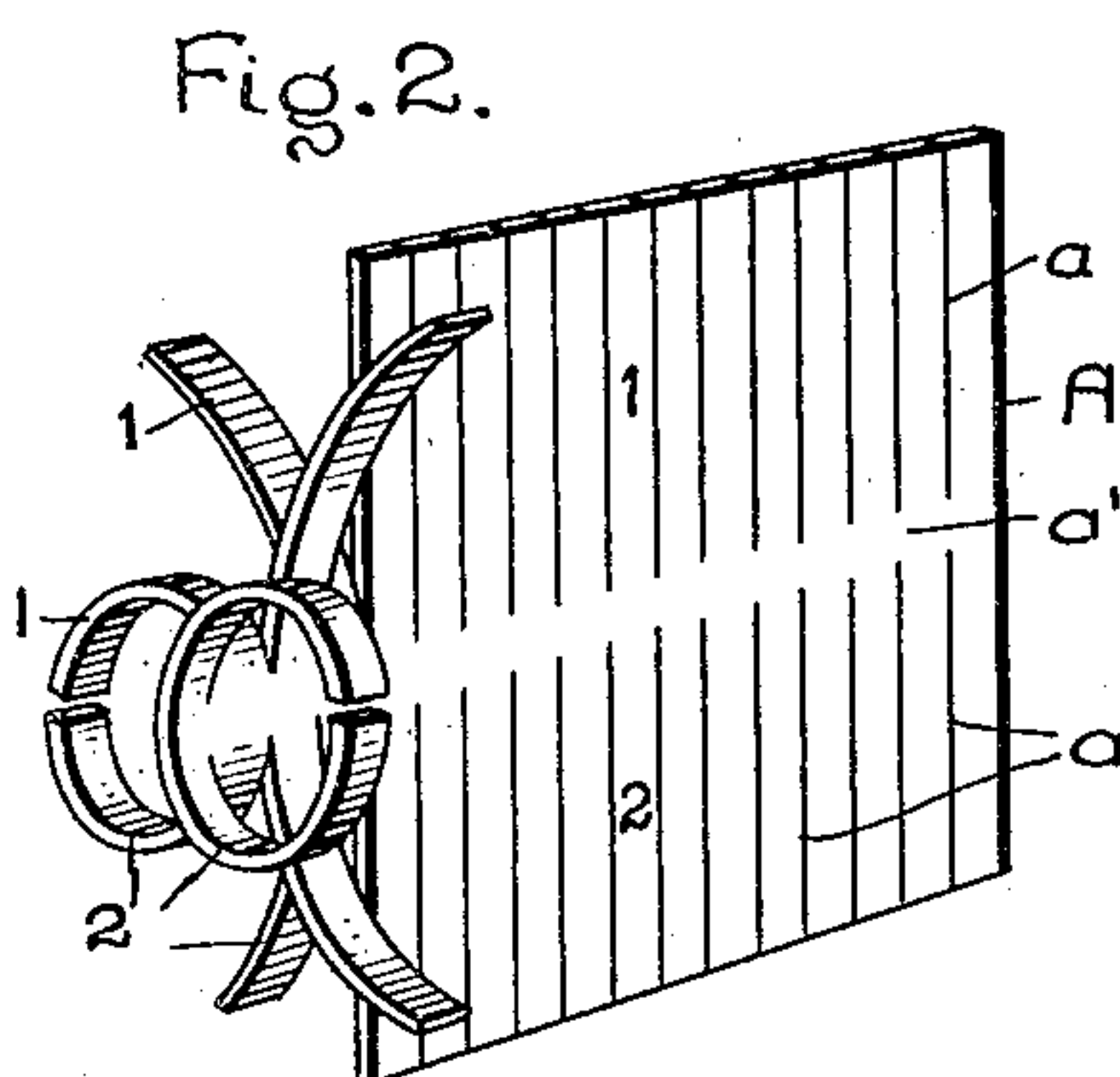
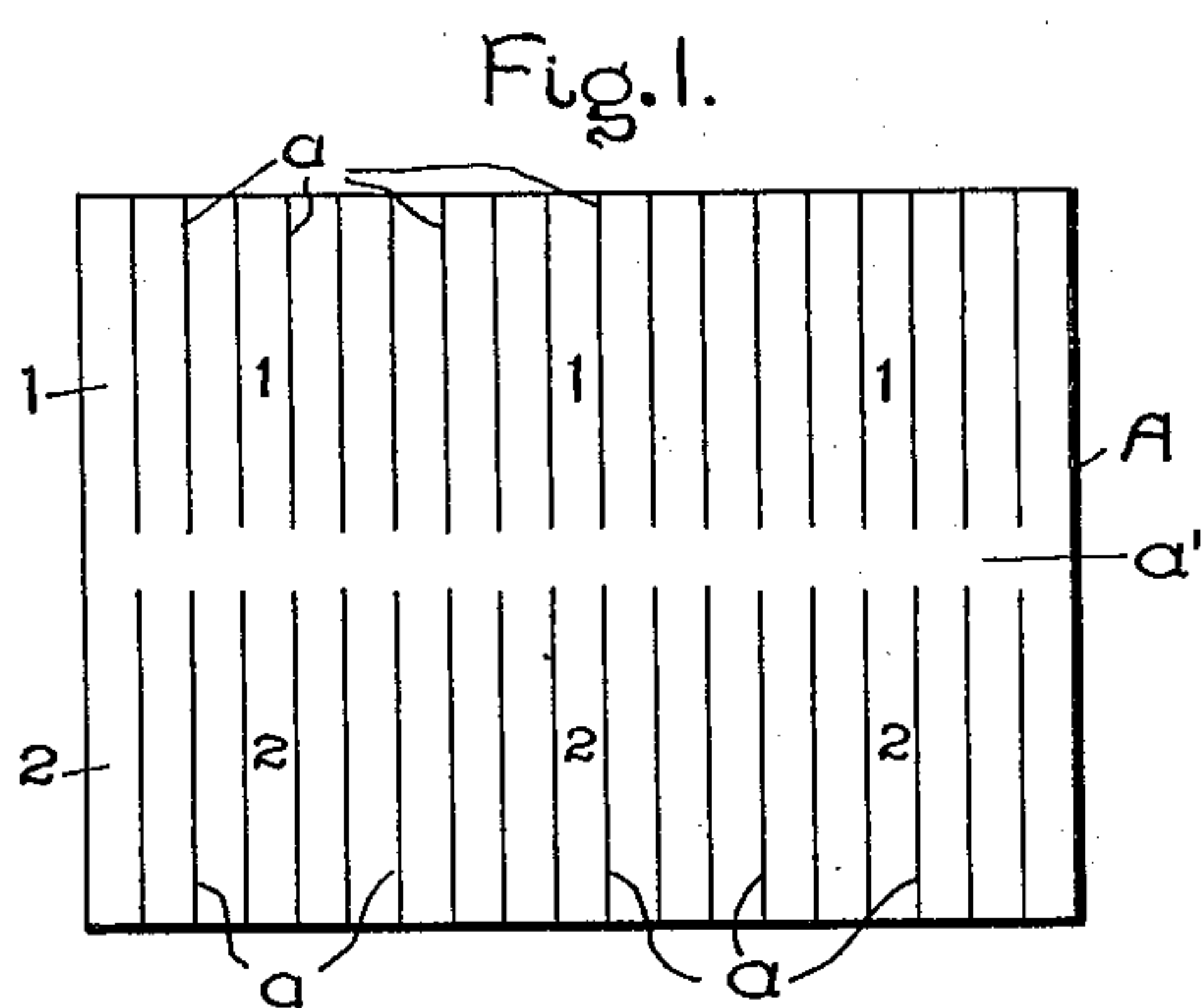


No. 835,406.

PATENTED NOV. 6, 1906.

W. F. DAWSON.
WIRE CONNECTOR.

APPLICATION FILED MAR. 13, 1902.



Witnesses.

Ernest R. Currey.
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UNITED STATES PATENT OFFICE.

WILLIAM F. DAWSON, OF SCHENECTADY, NEW YORK, ASSIGNOR TO
GENERAL ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

WIRE-CONNECTOR.

No. 835,406.

Specification of Letters Patent.

Patented Nov. 6, 1906.

Application filed March 13, 1902. Serial No. 98,016.

To all whom it may concern:

Be it known that I, WILLIAM F. DAWSON, a citizen of the United States, residing at Schenectady, county of Schenectady, State of New York, have invented certain new and useful Improvements in Wire - Connectors, (Case No. 2,281,) of which the following is a specification.

This invention relates to devices for electrically connecting the adjacent ends of two wires; and its object is to provide a connector which can be easily made from sheet metal at a low cost and practically without any waste.

The connector most generally used, especially in telegraph-lines, is made of two short tubes flattened on one side, with the flat portions brazed together. The end of each wire is passed through one of the parallel tubes, one in one direction and the other in the opposite direction, and the short end of each wire is then wound around the standing portion of the other. The whole is then pulled taut, and solder is run into the tubes to secure the wires and insure a good electrical connection.

In my invention I bend a sheet of metal into such shape as to form two parallel tubular receptacles for the ends of the wires. I am aware that this is not broadly new; but my specific modifications of the general idea are believed to be novel and patentable. In one form the sheet is cut into two rows of narrow parallel strips extending from each side in toward the middle of the sheet. These strips or fingers are then bent in opposite directions, alternately forming a series of rings on each side of the sheet, united by the integral middle portion thereof. In another modification the sheet is formed into a tube, which then has a row of holes punched along each side, and the sides are then forced inward until the portions between the holes pass through the holes in the opposite side. A wire is then run through the protruding loops and the singled tube has become a double one.

The invention will be better understood by reference to the accompanying drawings, in which—

Figure 1 shows a sheet of metal cut into a double row of strips or fingers. Fig. 2 is a perspective view showing four pairs of strips

or fingers bent outwardly. Fig. 3 shows the completed connector. Fig. 4 shows the punched tube for making the second form of connector. Fig. 5 shows the punched sides bent inward, and Fig. 6 shows the completed connector.

In Fig. 1 the sheet A has two series of parallel slits *a*, running from opposite edges of the sheet in toward the middle, where an integral longitudinal portion *a'* is left. Alternate pairs of fingers 1 2 are bent in opposite directions, as clearly shown in Fig. 2, being curved into semicircles with their ends adjacent, thereby forming rings lying in planes perpendicular to the axis of the receptacle. When all the fingers have been so bent, the structure presents the appearance shown in Fig. 3, being that of two parallel skeleton tubes slit along the outside and integrally united along their adjacent sides.

When the wires are slipped through such a connector and wound in the usual fashion, solder can be readily run in through the open spaces between the fingers to give a good electrical connection. Moreover, the fingers can be clamped upon the wires by suitable pliers, if desired.

Fig. 4 shows a sheet-metal tube B, having a row of holes *b* punched in each side, the holes in each row standing opposite the intermediate solid portions *b'* in the other row. When these punched sides are forced inwardly, as shown in Fig. 5, the portions *b'* pass through the opposite holes *b* and protrude in the shape of loops, as seen in Fig. 6. A pin C is then run through these loops. The tube B has now become two parallel integral tubes B', forming a strong and efficient connector.

These connectors can be easily and cheaply made and afford a strong and integral metallic connection between the wires.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A wire-connector consisting of two parallel sheet-metal tubular portions with a wall of metal between them integrally connected therewith on both sides of the plane of their axes.

2. A wire-connector consisting of a single piece of sheet metal formed into two cylindrical receptacles with a wall of metal separating them and integrally connected thereto on opposite sides of the plane of their axes.

3. A wire-connector consisting of a strip of metal having integral circular portions extending alternately on both sides thereof.

5 4. A wire-connector consisting of a strip of metal having pairs of integral curved fingers extending from each side thereof.

5. A wire-connector consisting of a strip of metal having pairs of curved fingers extending alternately from both sides thereof.

10 6. A wire-connector consisting of two integral tubular receptacles, each composed of a series of rings, those in one receptacle alternating with those in the other.

7. A wire-connector consisting of two integral tubular receptacles, each composed of a 15 series of pairs of curved fingers forming rings extending perpendicular to the axis of the receptacle, the rings in one receptacle alternating with those in the other.

In witness whereof I have hereunto set my 20 hand this 12th day of March, 1902.

WILLIAM F. DAWSON.

Witnesses:

BENJAMIN B. HULL,
MARGARET E. WOOLLEY.