

(No Model.)

A. GARTNER.
WIRE CONNECTOR.

No. 569,752.

Patented Oct. 20, 1896.

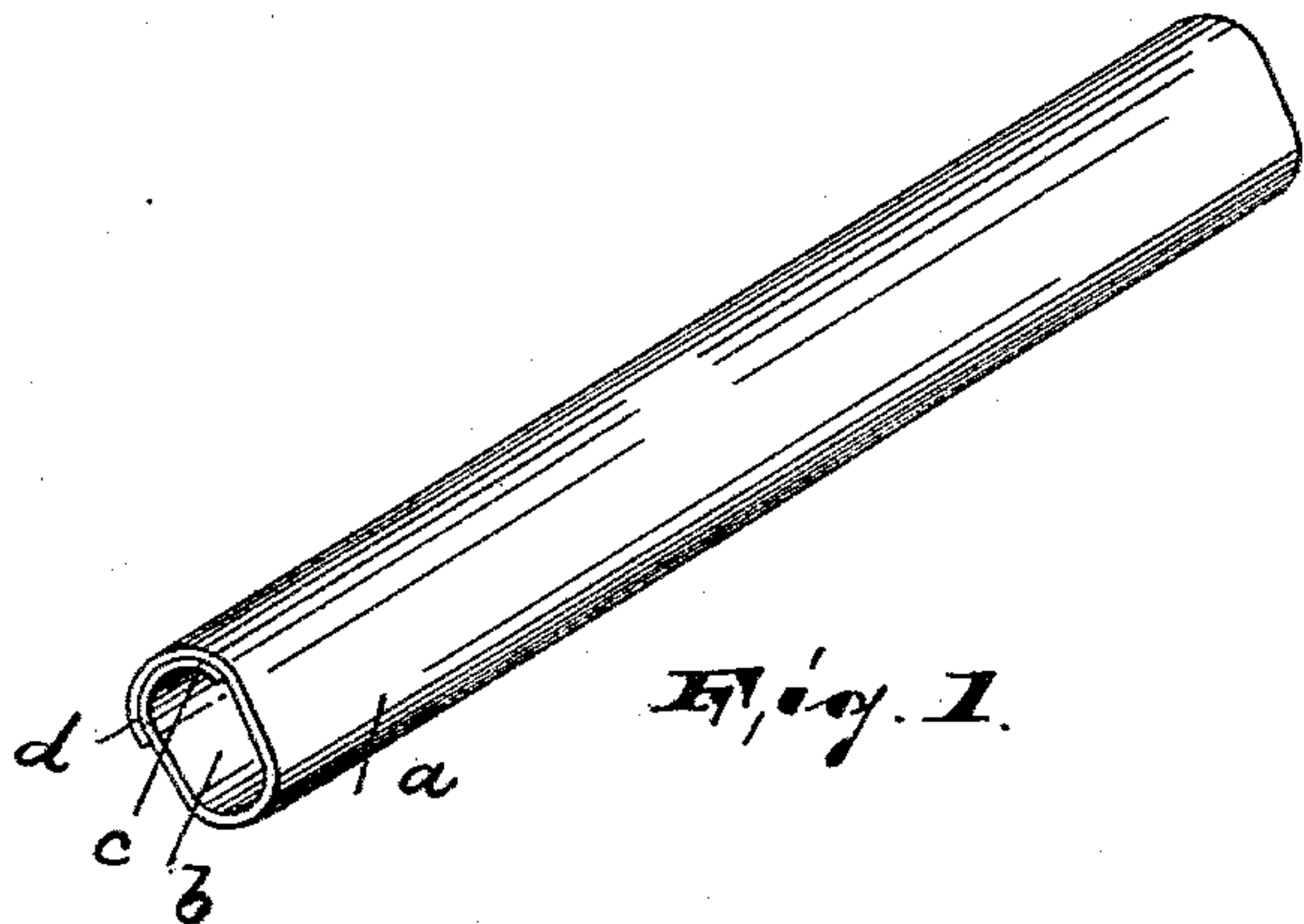


Fig. 1.

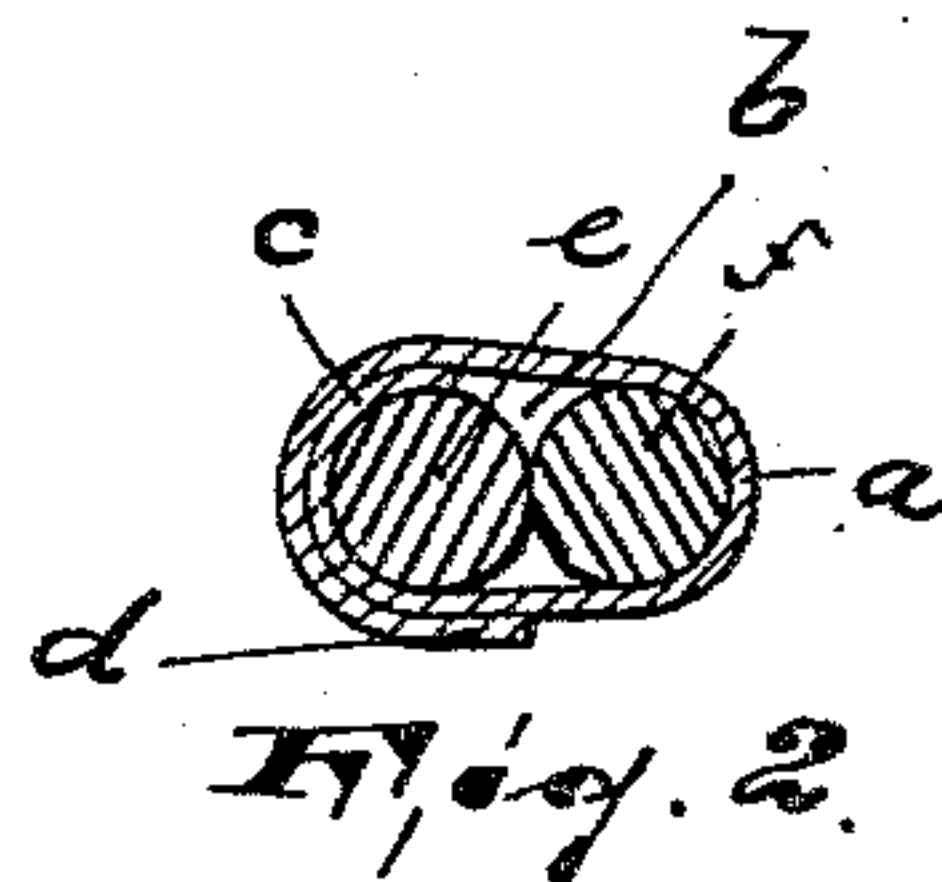


Fig. 2.

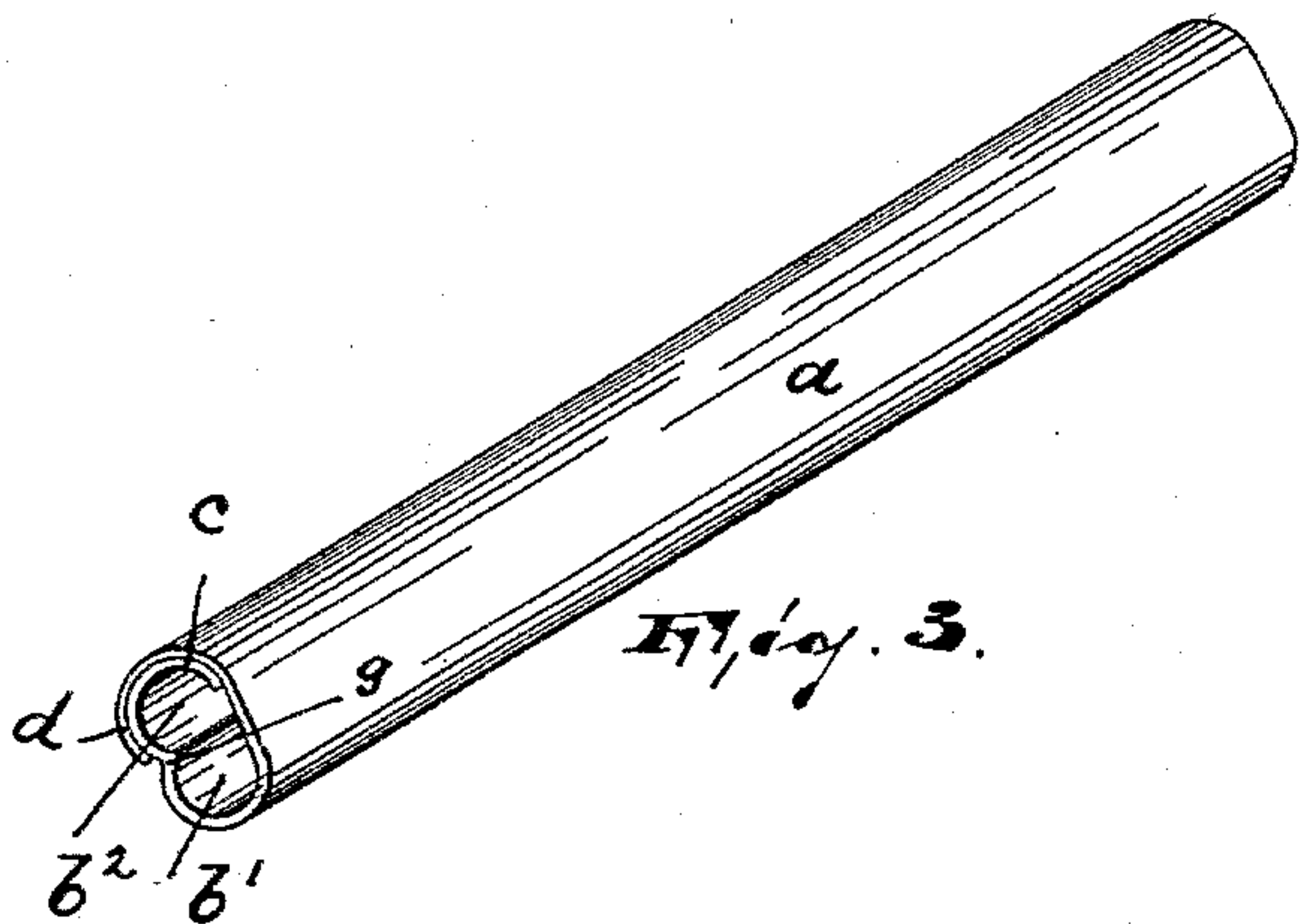


Fig. 3.

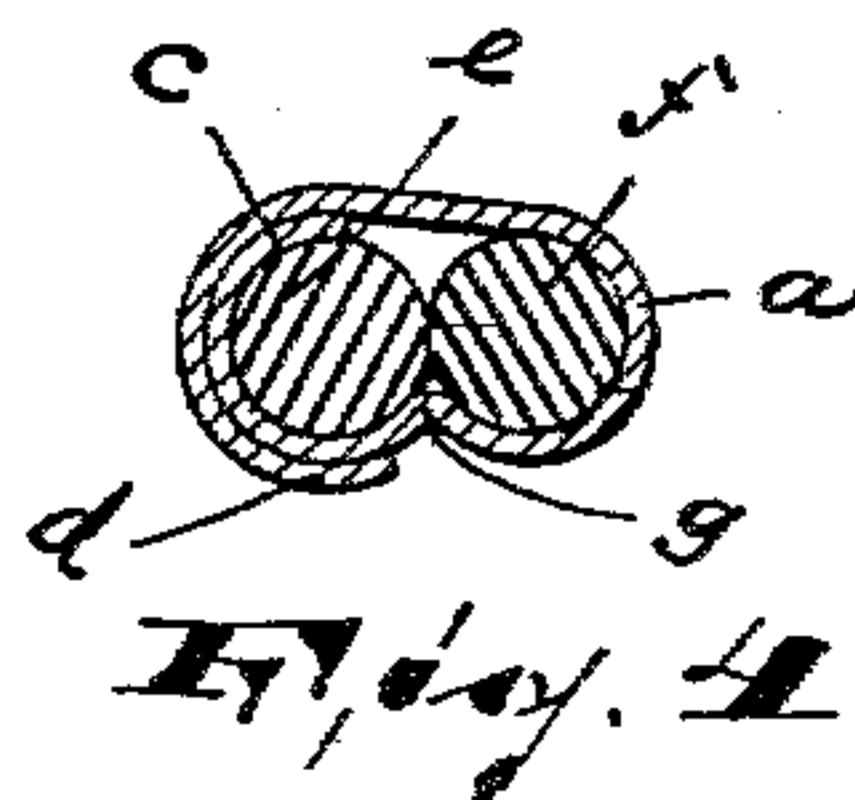


Fig. 4.

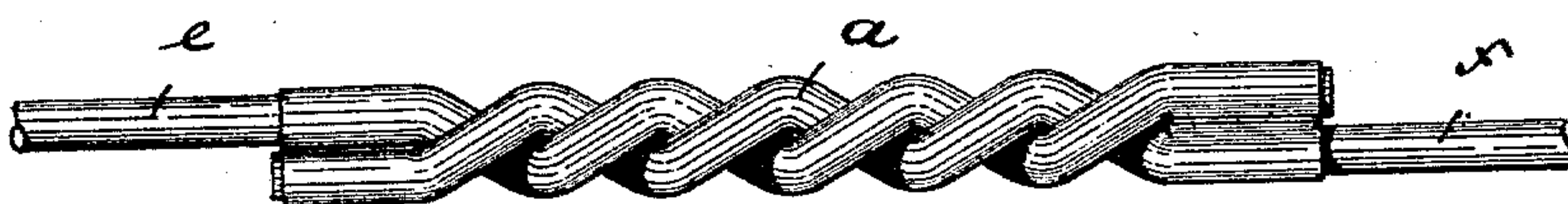


Fig. 5.

WITNESSES:

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UNITED STATES PATENT OFFICE.

ALFRED GARTNER, OF NEWARK, NEW JERSEY, ASSIGNOR TO CHARLES H. McINTIRE, OF SAME PLACE.

WIRE-CONNECTOR.

SPECIFICATION forming part of Letters Patent No. 569,752, dated October 20, 1896.

Application filed June 10, 1896. Serial No. 594,923. (No model.)

To all whom it may concern:

Be it known that I, ALFRED GARTNER, a citizen of the United States, residing in Newark, county of Essex, and State of New Jersey, have
5 invented certain new and useful Improvements in Wire-Connectors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as
10 it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to provide a
15 connector for telegraph or telephone wires of simple and cheap construction and easily handled, the connector not requiring any welding or soldering and yet furnishing a perfect joint for and contact with the inserted wires with-
20 out interfering with the bearing-surface between the said wires within the connector.

The invention consists in the improved wire-connector bent, of a strip of metal, into an oval tube having its edges overlapping,
25 substantially as will be hereinafter more fully described, and finally embodied in the clauses of the claim.

In the accompanying drawings, Figure 1 represents in perspective view my improved
30 connector; Fig. 2, an enlarged transverse section through the same, the wires having been inserted; Fig. 3, a view similar to Fig. 1, illustrating a slight modification thereof; Fig. 4, an enlarged transverse section through Fig.
35 2, showing the position of the wires within the connector before being twisted; and Fig. 5, a side elevation of a completed joint.

In said drawings, *a* represents a metallic strip bent into the shape of an oval tube *b*,
40 having its edges *c* and *d* overlapping each other sufficiently to prevent the opening of the tube when the wires *e* and *f* are inserted and twisted together with said oval tube. The longer internal diameter of the tube is
45 normally equal to the combined diameter of the wires, while the shorter internal diameter is approximately equal to the diameter of a single wire; but it will be evident that on account of the elasticity of the said tube and the
50 metallic strip forming the same the insertion

of wires of even larger diameter can be accomplished without difficulty.

In the connector illustrated in Figs. 3 and 4 its under side is provided with an inwardly-extending depression or dent *g*, extending
55 longitudinally throughout the entire length of the same and thus dividing it into two channels *b'* and *b''*, adapted to receive the wires to be connected.

Heretofore joints have been constructed
60 which consisted of an oval tube with or without depression, as in the United States Letters Patent Nos. 541,998 and 557,690, or with a spirally-arranged closed or open slot, as in United States Letters Patent No. 551,933,
65 but none of said joints allowed the insertion of wires of various sizes. The first two mentioned are either welded or soldered together, while the latter one (having the spiral slot) does not entirely cover the inserted wires
70 and thus allows rain or moisture to enter the joint, which is objectionable, as will be manifest. In other joints as covered by the state of the art, as, for instance, the United States Letters Patent Nos. 347,625, 535,592, and
75 561,438, the surface between the wires within the joint is interfered with.

My present joint overcomes all these objections. It allows the insertion of wires of different size, as the edges of the metallic strip
80 are overlapping each other and are not soldered or welded together. The bearing-surface between the wires within the joint is not interfered with.

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

1. A connector for electric wires, consisting of a metal strip bent into the shape of an oval tube and having its edges overlapping
90 and adapted to slide on each other, said oval tube being adapted to receive the wires from opposite directions and to be twisted together with said wires, substantially as shown and described.

2. A connector for electric wires, consisting of a metal strip bent into the shape of an oval tube and having its edges overlapping
95 and adapted to slide on each other, and of a dent or depression arranged in said tube and
100

extending longitudinally through its entire
length and dividing said tube into two con-
necting-channels, adapted to receive the wires
from opposite direction and to be twisted to-
5 gether with the said wires, substantially as
shown and described.

In testimony that I claim the foregoing I

have hereunto set my hand this 2d day of
June, 1896.

ALFRED GARTNER.

Witnesses:

WM. D. BELL,

DUNCAN M. ROBERTSON.