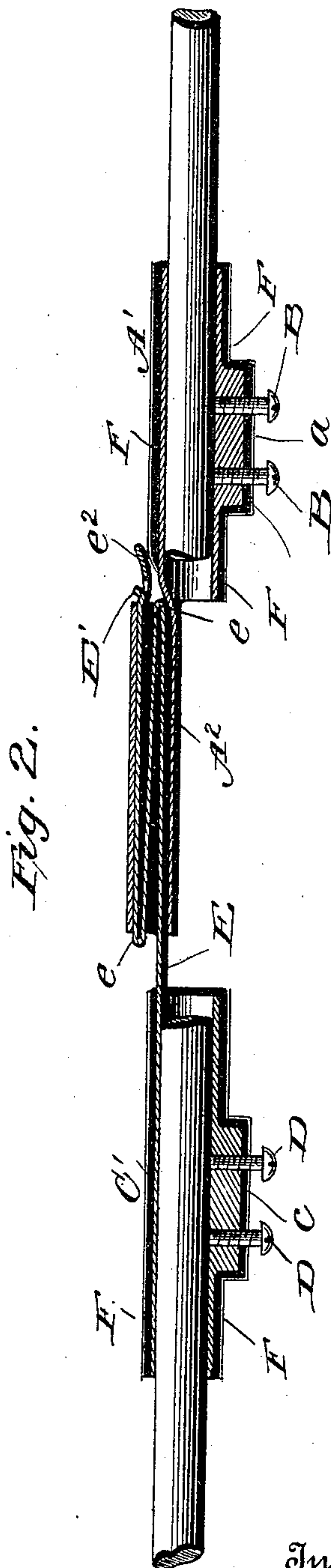
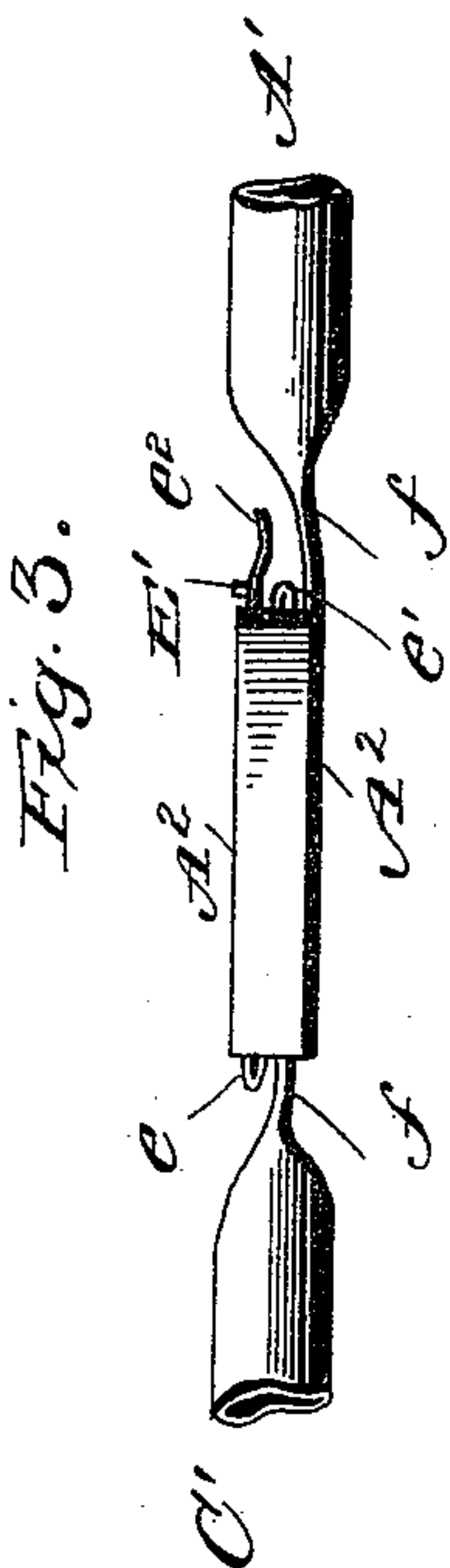
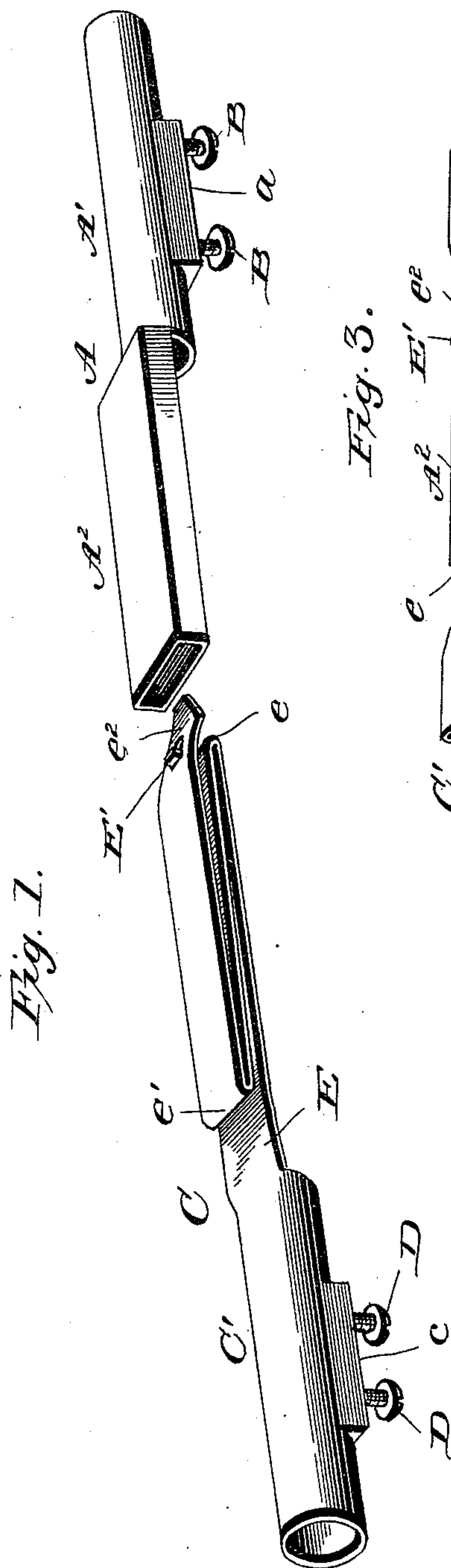


(No Model.)

M. F. KOENIG & I. MANN.
ELECTRICAL COUPLING.

No. 538,423.

Patented Apr. 30, 1895.



Witnesses:
L. C. Mills.
E. A. Bond

Inventors:
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UNITED STATES PATENT OFFICE.

MORRIS F. KOENIG AND IRA MANN, OF HAZLETON, PENNSYLVANIA.

ELECTRICAL COUPLING.

SPECIFICATION forming part of Letters Patent No. 538,423, dated April 30, 1895.

Application filed October 15, 1894. Serial No. 525,954. (No model.)

To all whom it may concern:

Be it known that we, MORRIS F. KOENIG and IRA MANN, citizens of the United States, residing at Hazleton, in the county of Luzerne, State of Pennsylvania, have invented certain new and useful Improvements in Electrical Couplings, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain new and useful improvements in electrical couplings or connections, and it has for its objects among others to provide a simple and cheap coupling which can be easily manipulated to couple or uncouple the wires, and which when coupled will securely hold the wires and form an electrical connection between the separated ends of the wires or cable.

20 The coupler comprises two hollow portions to receive the ends of the wire and provided with binding screws for holding the wires in place, the one portion having an extension to receive a spring tongue upon the other, the said tongue being bent upon itself twice to form a triple tongue, being of spring material and having at its free end a lug or projection stamped therefrom to serve as a catch to prevent separation of the parts. In one of its forms the said tongue and extension are bent so as to lie in the same plane with the hollow body portions.

30 Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

40 Figure 1 is a perspective view of the improved coupling with the same shown separated. Fig. 2 is a substantially central longitudinal section through the same in its coupled position, with the ends of the wires shown therein. Fig. 3 is a detail in elevation, showing the interlocking portions arranged in the same plane with the body portions.

Like letters of reference indicate like parts throughout the several views.

50 Referring now to the drawings A designates the female portion of the coupling. It comprises a hollow body portion A', generally

tubular as shown and provided with an enlargement *a* in which are held the binding screws B which serve to hold the wires in the hollow body portions as shown in Fig. 2. This female portion is provided at one end with a hollow flat extension A² which as shown in Figs. 1 and 2 is out of the plane of the body portions. This extension is preferably integral with the body portion and both are formed of some good conducting material.

C is the male portion of the coupling. It comprises a tubular portion C' having an enlargement *c* in which are held the binding screws D which serve to hold the end of the wire therein as seen in Fig. 2. This body portion is formed with a spring tongue E which is bent upon itself twice as seen at *e* and *e'* to form a triple spring tongue as seen in Figs. 1 and 2 and the free end of this tongue is bent out of the plane of the outer ply thereof as seen at *e*² and this end portion has stamped therefrom a lug or projection E' which serves as a catch to engage the end of the extension A² as indicated in Fig. 2 to prevent separation of the parts when once joined.

The manner of use will be readily understood from the foregoing description when taken in connection with the annexed drawings. F and G represent the ends of the wires held in the tubular portions of the coupling, which in Fig. 2 are shown as connected by the insertion of the spring tongue in the flat extension of the female portion the lug of which tongue engages the outer end of the extension as shown to prevent separation of the parts.

Instead of having the extension and tongue out of the plane of the body portions of the coupling they may be arranged in substantially the same plane therewith as shown in Fig. 3, the connecting portions *f* between the extension and its body portion and between the tongue and its body portion being bent accordingly and the adjacent ends of the tubular body portions being practically closed. The forming of the tongue in the manner shown enables us to obtain a long bearing of the free ply thereof as shown in Fig. 2 upon the inner wall of the extension, and by reason of the disposition of the three plies any tendency of the parts to separate is counteracted by the spreading of the plies of the spring

tongue in such a manner as to increase the frictional contact and produce additional binding at the bends of the tongue, as will be readily understood from Fig. 2.

5 Modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

Each member of the coupler may be provided with a covering F of insulating material as shown in Fig. 2 so that the same may be handled without danger.

What we claim as new is—

1. A coupling of the class described, comprising hollow portions to receive the ends of the wire, and interlocking portions embodying a triple spring tongue, substantially as specified.

2. A coupling of the class described, consisting of hollow body portions with binding screws, the one with a hollow extension and the other with a triple spring tongue adapted to enter said extension, as set forth.

3. An electrical conductor coupling, consisting of the hollow body portions each with an enlargement and binding screws in the enlargements, a hollow extension on the one and a triple spring tongue on the other with a catch-lug, substantially as specified.

4. The coupling described consisting of the female portion with enlargement and binding screws and a flat hollow extension, and the male body portion with enlargement and binding screws, and an integral spring tongue bent upon itself twice and its free end curved and formed with a lug stamped therefrom, substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

MORRIS F. KOENIG.
IRA MANN.

Witnesses:

HENRY PLATT,
JAMES P. WRIGHT.