

(No Model.)

J. BODINE.
WIRE COUPLING.

No. 499,090.

Patented June 6, 1893.

Fig. 1.

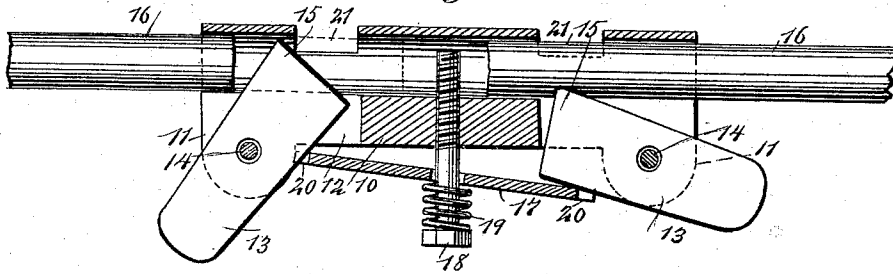


Fig. 2.

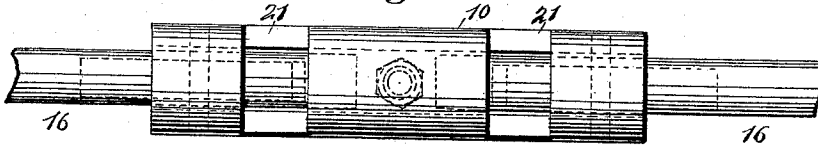


Fig. 3.

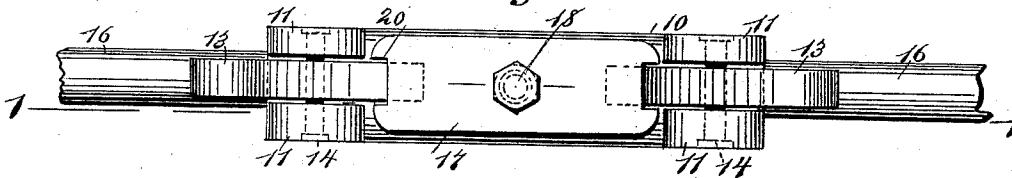
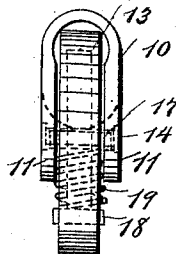


Fig. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN BODINE, OF PITTSFIELD, ILLINOIS.

WIRE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 499,090, dated June 6, 1893.

Application filed November 29, 1892. Serial No. 453,459. (No model.)

To all whom it may concern:

Be it known that I, JOHN BODINE, of Pittsfield, in the county of Pike and State of Illinois, have invented a new and Improved Wire-Coupling, of which the following is a full, clear, and exact description.

My invention relates to improvements in that class of devices which are adapted for use in fastening together the ends of wires.

My invention is especially intended for electric wires, and it is well known that it is quite a tedious operation to couple two such wires or mend a broken wire in such a way that the circuit will be as good as it was before the break.

The object of my invention is to provide a very simple device of this kind which may be almost instantly applied to the adjacent ends of wires, which will bind the wires firmly in place, which will hold them in such a way that the grip of the coupling will be increased by increased tension on the wires, and which will also permit the uninterrupted passage of the current.

To this end my invention consists of a wire coupling the construction of which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a longitudinal section, on the line 1—1 in Fig. 3, of the coupling embodying my invention, showing it connecting two wires. Fig. 2 is a plan view of the same. Fig. 3 is an inverted plan; and Fig. 4 is a detail end view of the coupling.

The coupling has a hollow elongated body 10 of a generally cylindrical shape and this body has, at its ends, depending parallel lugs 11 and the body is slotted longitudinally opposite the lugs, as shown at 12 in Fig. 1, so as to provide for the swinging of the clamping dogs 13, which dogs are pivoted near their centers between the lugs 11 and on pins 14. The inner corners of the dogs are made sharp, as shown at 15, so as to readily engage a wire 16. Between the dogs 13 is a locking plate 17 which is held loosely at its center on a screw or bolt 18, and the latter is screwed into the central body portion of the coupling.

The locking plate is normally pressed against the body of the coupling by a spiral spring 19 which is arranged between the head of the bolt and the locking plate, and the ends of the locking plate are notched, as shown at 20 so as to clasp the dogs 13. The pressure of the locking plate forces the inner ends of the dogs inward and upward so as to hold them in engagement with the wires 16, and the movements of the dogs are independent of each other so that the device may be applied, if necessary, to different sized wires.

The locking plate is hung loosely on the bolt 18 so that it may, if necessary, tilt on its support and accommodate itself to the different positions of the locking bolts. Opposite the inner ends of the dogs and on the opposite side of the body 10 the body is recessed or cut away, as shown at 21, and this enables the wire to be bent slightly by the pressure of the dog if the wire is a small one, and as a kink is thus formed, the dog holds more securely than it otherwise would.

The coupling is used in the following way: The ends of the wires 16 to be coupled are simply pushed into opposite ends of the coupling and the dogs 13 spring inward under pressure of the locking plate 17 and spring 19, so as to engage and hold the wires in place. It will be seen that the tension of the wires, which causes them to be pulled out of the body 10, also causes the inner ends of the dogs to swing inward so that as the tension is increased the grip of the dogs is increased. The body 10 is made of conducting material and its area in cross section should at least equal the area of the wires so that there will be no resistance to the passage of the electric current.

The coupling may be made of any necessary size, and if the wires are very heavy they may be notched at a point where they are engaged by the dogs.

This coupling, while especially adapted for joining electric wires, may also be used in mending wire fences or any other broken wires.

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

1. A wire coupling comprising a body hav-

ing a single longitudinal bore, and spring pressed clamping dogs, the inner adjacent corners of which project into said bore, substantially as set forth.

5 2. A wire coupling comprising a longitudinally bored body, two pivoted clamping dogs pivoted between their ends to the body and projecting at their inner ends into the bore thereof, and a spring pressed plate bearing
10 on the inner ends of both dogs, substantially as set forth.

3. A wire coupling comprising longitudinally bored body having slots in one side at opposite sides of the middle, and clamps projecting into the bore opposite to said slots
15 and adapted to bend the wire therein, substantially as set forth.

4. A wire coupling, comprising a hollow

elongated body having recesses on one side, and clamping dogs pivoted in the end portions of the body and adapted to swing into the bore and opposite the recesses, substantially as described. 20

5. The combination with the elongated body having recesses on one side and downwardly projecting lugs on the opposite side, of the
25 swinging dogs pivoted between the lugs and held to swing opposite the recesses in the body, and a spring-pressed locking plate fastened to the body and adapted to press against
30 the inner end portions of the dogs, substantially as described.

JOHN BODINE.

Witnesses:

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MINNIE COLEY.