

A. D. DUVALL & W. E. DAWSON.  
 COUPLING FOR CONDUCTOR WIRES.  
 APPLICATION FILED NOV. 4, 1910.

990,478.

Patented Apr. 25, 1911.

FIG. 1

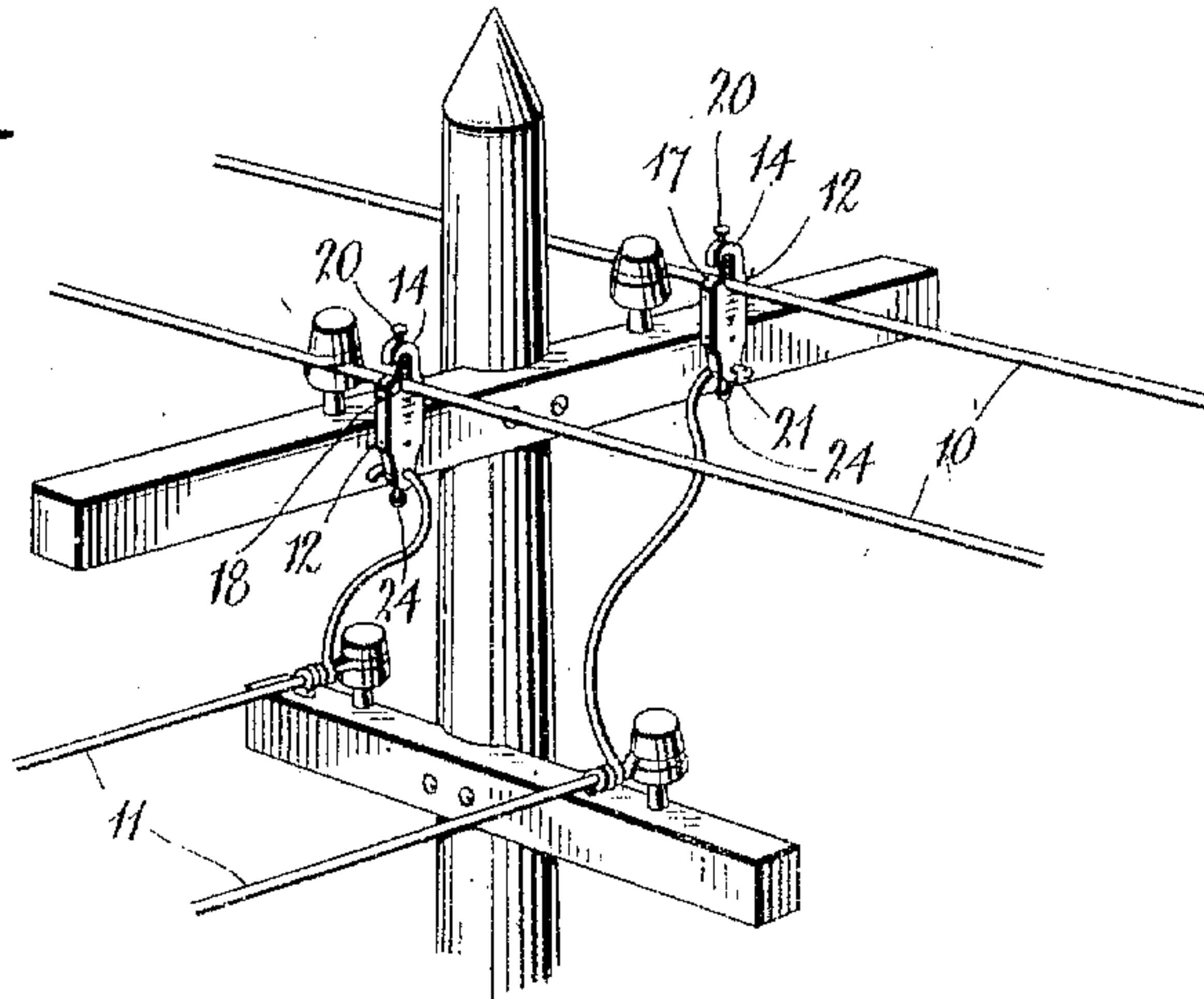


FIG. 2

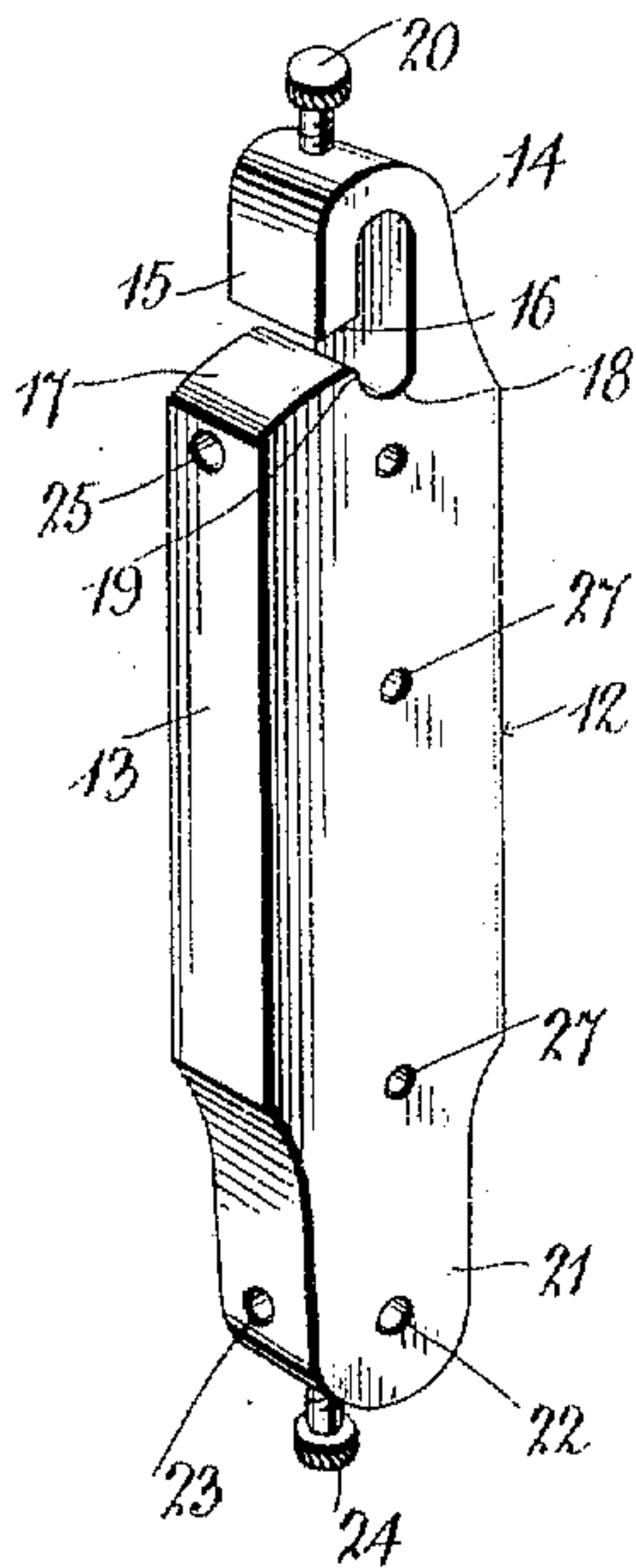


FIG. 3

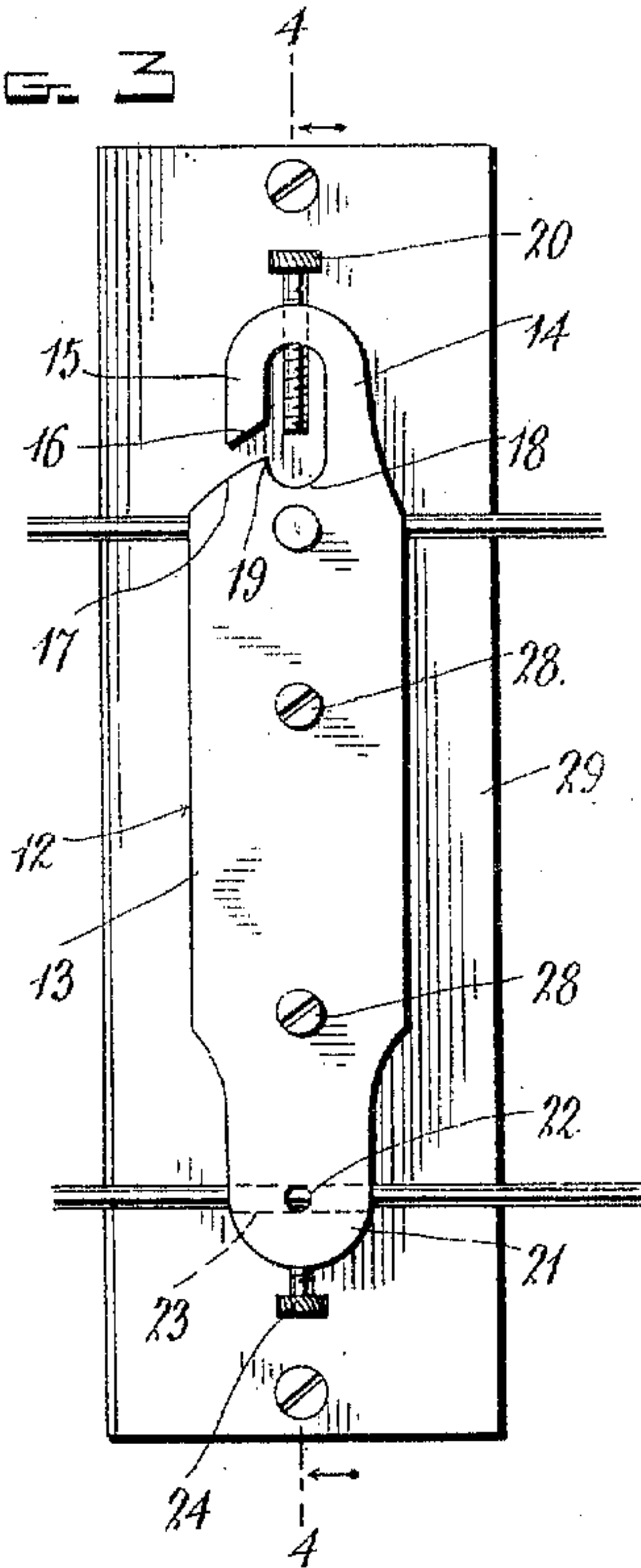
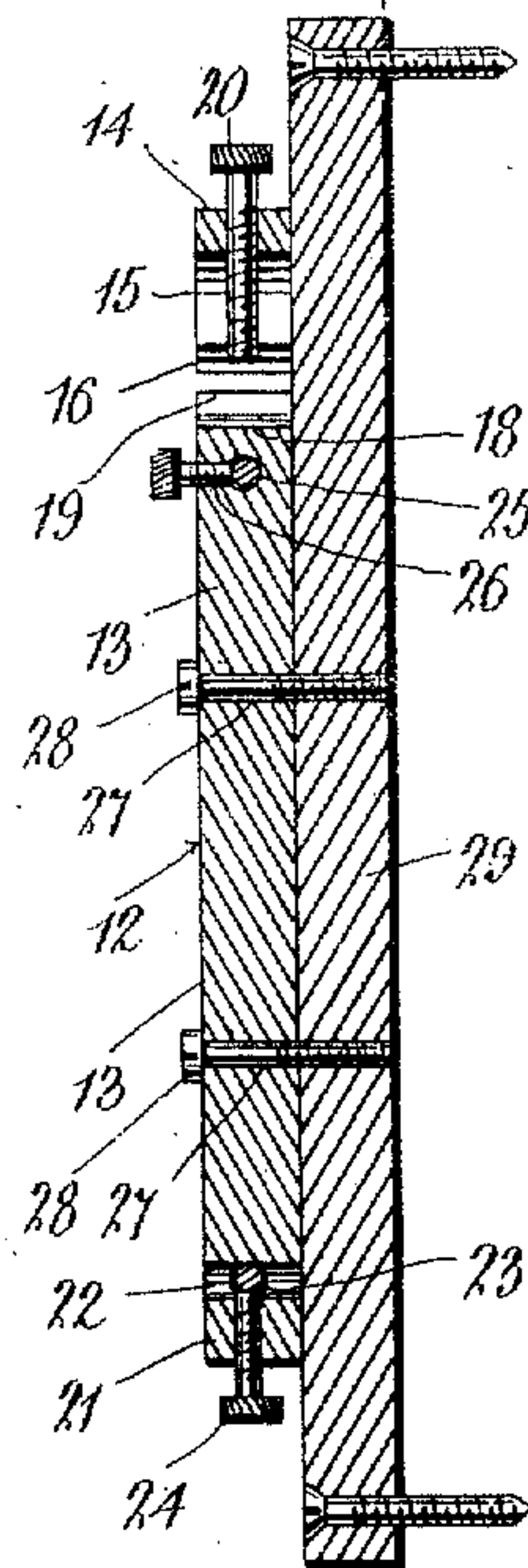


FIG. 4



Witnesses

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# UNITED STATES PATENT OFFICE.

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## COUPLING FOR CONDUCTOR-WIRES.

990,478.

Specification of Letters Patent.

Patented Apr. 25, 1911.

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*To all whom it may concern:*

Be it known that we, AMOS D. DUVALL and WALTER E. DAWSON, citizens of the United States, residing at Atlanta, in the county of Pickaway, State of Ohio, have invented certain new and useful Improvements in Couplings for Conductor-Wires; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to couplings for connecting conductor wires and has for its principal object to provide an inexpensive portable coupling that may be conveniently carried by the lineman and may be quickly secured to the main and lead conductor wires and will make a good electric connection between these wires.

A further object of the invention is to provide a device of this character that may be readily secured to an insulator base so that the coupling may be mounted on a wall for telephone and similar purposes.

A still further object of the invention is to provide a coupling having a wire engaging hook that is formed with a novel stop shoulder to prevent lateral escape of the wire.

With the above objects in view the invention consists of the novel details of construction and combination of parts hereinafter fully described and claimed, it being understood that various modifications may be made in the minor details of construction within the scope of the appended claim.

In the accompanying drawing forming part of this specification, Figure 1 is a perspective view of supported conductor wires with our improved coupling applied thereto. Fig. 2 is a detail perspective view of the coupling. Fig. 3 is a front elevation of the coupling applied to an insulator support. Fig. 4 is a longitudinal sectional view taken on the line 4-4 Fig. 3.

Referring now to the drawing in which like characters of reference designate similar parts in the views shown, 10 designates line wires and 11 lead wires, connections between these wires being made by couplings 12 constructed in accordance with our invention. Each coupling comprises a shank 13 formed of copper or like conducting material and being preferably rectangular in

cross section. One end face of the shank is equipped with a hook 14 which lies entirely within the marginal edges of the face. The bill 15 of the hook confronts the end face of the shank and is beveled as shown at 16. The opposing portion 17 of the shank end face is beveled and coöperates with the beveled portion of the bill to guide the line wire into the hook, these beveled guide surfaces 16 and 17 inclining in the direction of the bight of the hook so that the latter may be readily hooked over the line wire. That portion 18 of the end face opposing the inner face of the bight of the hook, is cut away in the opposite direction from the bight of the hook and forms a seat for the reception of the line wire. A tooth or shoulder 19 is formed by this mutilation of the end face, this shoulder confronting the bill of the hook and preventing lateral escape of the wire from the seat. A set screw 20 is threaded through the bight in the hook and is adapted to engage and bind the line wire securely in the seat.

That end face of the shank remote from the hook is provided with a reduced axial extension 21, and this extension is pierced to provide wire receiving orifices 22 and 23 arranged to intersect each other at right-angles. A set screw 24 is threaded in the end face of the extension and projects into the orifices at their point of intersection, this set screw being designed to bind the wire passed through either of the orifices. By virtue of the orifices intersecting, the lead wire may be conveniently inserted in either of the orifices without requiring time to be spent in bending the wire to permit of the coupling hanging properly as would be the case were only one opening formed in the extension.

That end of the shank adjacent to the hook is pierced by a wire receiving opening 25, and a set screw 26 is threaded through the shank at right angles to this opening and projects into the opening, this set screw binding the wire tightly in the opening. It will now be observed that that portion of the shank lying beyond the opening 25 and remote from the hook 14 may be entirely removed when desired to have simply a small compact permanent coupling, since the line wire may be engaged in the hook and the lead wire in the opening 25, after which the entire coupling may be wound with



tape or incased in gutta percha or like insulating material to form a weather-proof coupling.

The coupling shank is provided with a pair of spaced openings 27 for the reception of securing screws 28, these screws being passed into a wall or preferably being passed into a porcelain or like insulating base 29, when the coupling is designed to be secured to a vertical wall in telephone or similar work. In this instance the line wire may be inserted in the wire receiving opening next adjacent to the hook and the lead wire in the wire receiving opening remote from the hook as illustrated or should this be impracticable the bared terminal of the line wire may be passed lengthwise in between the guide surfaces of the hook and shank when the set screw may be tightly screwed against the terminal of the wire causing the wire to crimp over the stop shoulder and be held against lateral escape.

What is claimed, is:—

A coupling including a shank, a hook in-

tegral with one end face of the shank and having its bill confronting said end face, said end face being cut away in an opposite direction from the bight of said hook to form a wire receiving seat, said end face being further mutilated and forming a guide surface confronting the bill of said hook, said guide surface terminating at its juncture with said seat in an abrupt stop shoulder, a set screw threading through the bight of said hook and confronting said seat for clamping a wire thereto, said shank being provided with a wire receiving orifice, and a set screw threaded in said shank and projecting into said orifice for clamping a wire therein.

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

AMOS D. DUVALL.

WALTER E. DAWSON.

Witnesses:

J. F. WILLIS,

O. Z. DAWSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."