To all whom it may concern:

Be it known that I, Hugo Brisacher, a citizen of the Republic of Switzerland, and a resident of the borough of Manhattan, city, county, and State of New York, have invented a new and useful Improvement in Clamps or Connectors, of which the following is a specification.

My invention relates to new and useful improvements in clamps or connectors for holding or clamping wires, terminals of electric conductors or other similar purposes, finding special application to binding posts for electric terminals.

The object of the invention is to provide a device which will clamp the wire securely against any accidental loosening by jarring or otherwise while at the same time the wire to be clamped is prevented from spreading out during the tightening of the nut.

Other objects will appear hereinafter in the following description which illustrates the invention, by way of example, to a binding post for electric terminals.

In the accompanying drawings Figure 1 is a side view in elevation of a binding post, and base thereon, embodying my invention; Figure 2 is a central, vertical, sectional view of the device shown in Figure 1; Figure 3 is a plan view of the same, the post being shown in section, the nut being removed; Figure 4 is a detail view of a contact piece adapted to cooperate with the nut in clamping the wire; Figure 5 is a sectional elevation of the spring socket; Figure 6 is an elevation of the post and its supporting plate.

Similar letters of reference indicate similar parts throughout the several views.

a indicates a base, either insulated or of insulating material, to which the binding post may be fastened in any suitable manner, as by means of supporting plate b, carrying post c, and fastened to base a by means of screws d, d. In using my invention in connection with dry batteries the binding post may be fastened thereto in any desirable manner as is apparent to one skilled in the art.

As a contact piece resting upon the upper side of inwardly flanged spring socket g and having projections h, h extending outwardly into slots i, i of the socket. Contact piece e is threaded on post c and serves to clamp and securely hold the socket g to and upon supporting plate b. The projections h, h prevent the socket g from turning axially. The socket g is shown as slotted vertically from top to bottom at a plurality of points, the sides of the socket flaring inwardly and upwardly to a point j of constricted diameter and thence upwardly and outwardly.

k indicates a nut, centrally screw threaded to cooperate with screw threaded post c and provided with a milled head l and a downwardly and outwardly flaring base m, the diameter of the bottom of the base preferably being such that it will contact with the inner surface of socket g when screwed home upon wire n.

The operation of the device will be apparent from the foregoing description. The wire n is slipped over and around post c and nut k is screwed down upon it clamping it between base m of the nut and contact piece e. As the nut is turned to screw downwardly upon the post it comes first into contact with the spring socket g at a point just above the constricted diameter j, and in its further downward movement springs or presses the wings of the socket outwardly, first to the maximum extent, as it passes the constricted diameter j, the wings of the socket closing again as the nut travels downward but preferably always in contact with base m of the nut. The effect is thus to frictionally engage the outer surface of the base of the nut and the inner surface of the spring socket, the pressure increasing as the nut is unscrewed until the maximum pressure is attained at constricted diameter j. Owing to said constant frictional engagement and the constantly increasing pressure coming into effect upon any upward rising of the nut there is no tendency for the nut to become accidentally loosened thus insuring good electrical contact at all times. The wire being restricted against outward movement by the walls of the socket cannot spread out of contact position during the tightening of the nut.

Such device as is described above is of special use in connection with any electric terminals on automobiles or other machines where there is a constant jarring tendency to gradually loosen all connections and to eventually break contact. Such incidents are obviated by my invention.

It is obvious that the details of construc-
tion and arrangement of parts as described above may be varied without departing from the spirit of my invention and I do not restrict myself to such further than the scope of the appended claims demands.

I claim:

1. A connector comprising an upwardly and inwardly flaring spring socket member, a post positioned within said socket and a nut adapted to cooperate with said post and having a downwardly and outwardly flaring base.

2. A connector comprising a spring socket member having its walls flaring upwardly and inwardly to a point of minimum diameter and thence outwardly, a screw threaded post positioned within said socket and a nut adapted to cooperate with said post and having a downwardly and outwardly flaring base of greater diameter than the minimum diameter of the socket and adapted to contact with the walls of said socket beneath said point of minimum diameter.

3. A connector comprising a spring socket member having upwardly and inwardly flaring walls, a conductor in electrical contact with said socket member, a post positioned within said socket member and a nut adapted to cooperate with said post and having a downwardly and outwardly flaring base adapted to contact the walls of the socket when in clamping position relative to the conductor.

4. A connector comprising a supporting plate, an externally threaded post affixed thereto, a spring socket member having upwardly and outwardly flaring walls mounted about said post, a contact piece clamping the socket to the supporting plate and an internally threaded nut adapted to cooperate with the post and having a downwardly and outwardly flaring base adapted to contact the inner walls of the socket.

5. In a connector, the combination of a member having a base and flanges of resilient material extending toward one another, a threaded stem disposed between said flanges and in stationary relation to said base and a nut mounted on said stem and having its base projecting to frictionally engage said resilient flanges and a head extending beyond said flanges.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

HUGO BRISACHER.

Witnesses:

SEABURY C. MASTICK,

H. G. LE ARD.