

E. B. FEASTER.  
 CABLE FASTENER OR CLAMP.  
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900,717.

Patented Oct. 13, 1908.

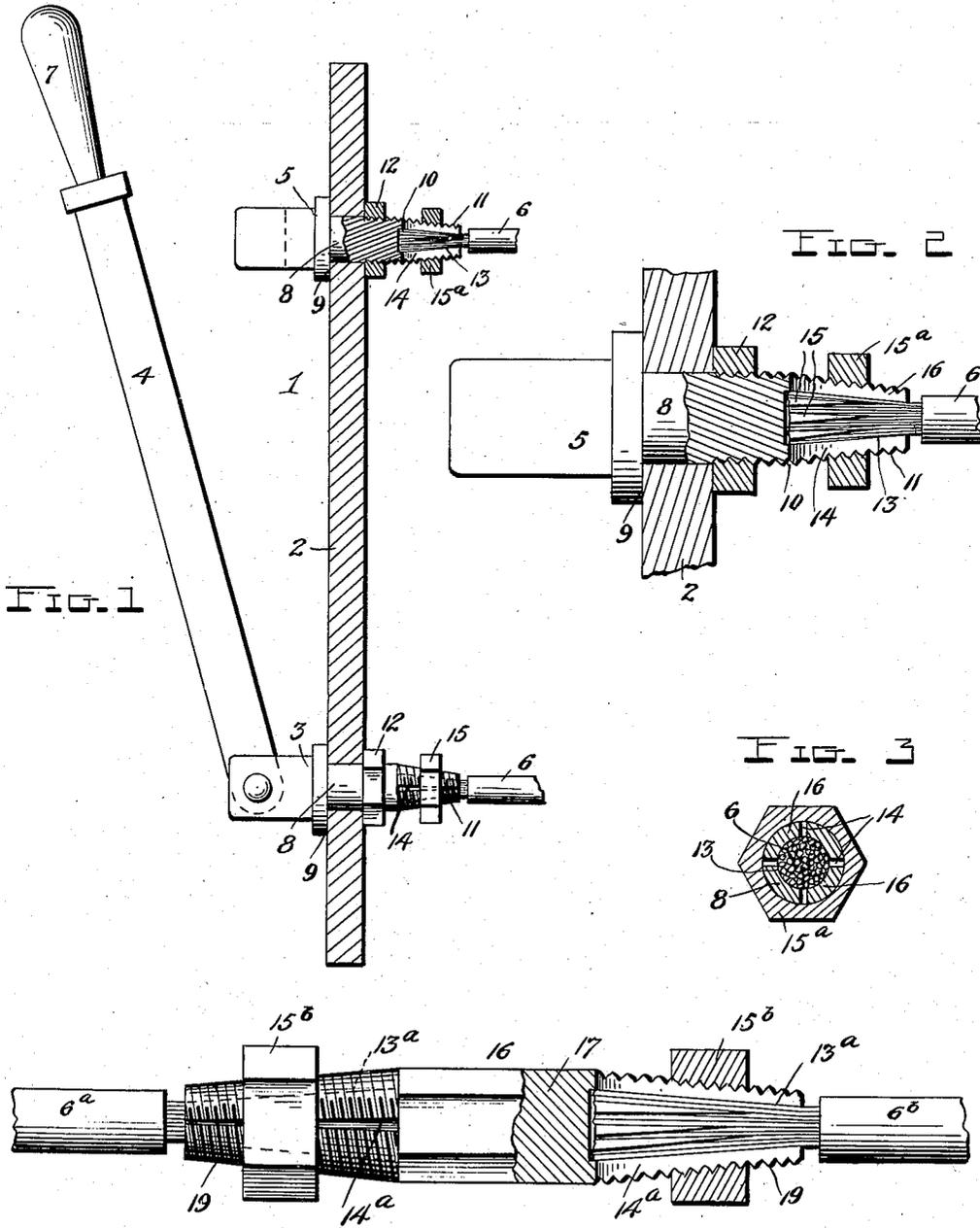


FIG. 1

FIG. 2

FIG. 3

FIG. 4

Witnesses  
*Chas. R. Griesbauer.*  
*L. O. Little.*

Inventor  
*E. B. Feaster*  
 By *Watson E. Coleman*  
 Attorneys

# UNITED STATES PATENT OFFICE.

EDWARD B. FEASTER, OF KANSAS CITY, MISSOURI.

## CABLE FASTENER OR CLAMP.

No. 900,717.

Specification of Letters Patent.

Patented Oct. 13, 1908.

Application filed September 26, 1907. Serial No. 394,747.

*To all whom it may concern:*

Be it known that I, EDWARD B. FEASTER, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Cable Fasteners or Clamps, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to means for fastening or clamping the ends of cables or the like and consists of the novel features of construction and the combination and arrangement of parts hereinafter described and claimed.

The object of the invention is to provide a fastening of this character which will be simple, strong, durable and inexpensive and one by means of which the end of an electrical conductor or other cable may be quickly and easily secured without the use of solder.

The above and other objects are attained in the construction set forth in the accompanying drawings, in which

Figure 1 is a vertical sectional view through a knife switch showing electrical conductors or cables attached to the terminal or contact posts in accordance with my invention; Fig. 2 is an enlarged sectional view through one of said posts; Fig. 3 is a detail cross section taken on the plane indicated by the line 3—3 in Fig. 2; and Fig. 4 is a longitudinal section through another embodiment of the invention, the same being in the form of a coupling for uniting the ends of two cables.

In the embodiment of the invention shown in Figs. 1 to 3 inclusive of the drawings 1 denotes a well known form of knife switch consisting of a base plate 2 of slate or other non-conducting material, two terminal posts 3 to which the switch blades 4 are pivoted and two terminal or contact posts 5 adapted to receive the switch blades 4 to complete an electric circuit through conductors or cables 6. The outer ends of the switch blades 4 are connected by a cross piece of non-conducting material from which projects the usual handle 7. Each of the posts 3, 5, has a shank or member 8 adapted to project through an opening in the base 2, and a stop collar or shoulder 9 arranged at one end of the shank or member 8 and adapted to engage the outer face of said base. The projecting inner or rear ends of the shanks or members 8 are tapered from points 10 to their extremities and

they are formed with external screw threads 11 which extend inwardly from their extremities to the rear face of the base 2. Said shanks or members 8 are retained in the latter by clamping nuts 12 which are engaged with the screw threads 11 and tightened against the rear face of the base. In the tapered rear ends of the shanks or members 8 are formed cylindrical sockets 13 and a plurality of longitudinal slots 14, the latter being preferably, but not necessarily, four in number and arranged at equal distances from each other as more clearly shown in Fig. 3. The sockets 13 are adapted to receive the plurality of wires or strands of which the cables 6 are composed and from which the covering of insulation is removed as shown. Before the wires of the cable are inserted in said sockets I preferably insert between them one or more wedges of tapered nails 15 which will space the extremities of said wires apart and cause them to be more effectively clamped in the sockets by clamping nuts 15<sup>a</sup> which are screwed upon the tapered ends of said shanks or members 8. The nails or wedges 15 are preferably about half the length or depth of the socket 13 and a sufficient number of them are used to make the end of the cable about one-third larger than its normal diameter. The nuts 15<sup>a</sup> have their openings tapered and threaded to engage the threads 11 so that when they are screwed upon the slotted and socketed ends of the shanks or members 8 they will force together the plurality of branches or fingers 16 formed by the slots 14 for the purpose of effectively clamping the wires of the cables in said sockets 13. The shanks or members 8 are preferably made of brass or other metal that is slightly resilient so that the branches or fingers 16 will be sprung inwardly to more effectively clamp the wires of the cables.

In Fig. 4 of the drawing I have shown my invention embodied in a coupling for uniting the ends of two cables. This device comprises a socket member 16 having a solid central portion 17 of polygonal shape in cross section so that it may be readily engaged by a wrench or similar tool, and outwardly tapered ends 19 which are formed with sockets 13<sup>a</sup> to receive the wires of the cables 6<sup>a</sup>, 6<sup>b</sup>. The ends 19 of the socket members are also formed with longitudinal slots 14<sup>a</sup> and are externally screw threaded to receive clamping nuts 15<sup>b</sup>. The cables 6<sup>a</sup>, 6<sup>b</sup> are secured in the member 16 in the same manner

in which the cables 6 are secured in the shanks or members 8 above described.

While I have illustrated but two of the preferred embodiments of my invention it will be understood that it may be used in various other ways for splicing or uniting electrical conductors or cables whether for use overhead, underground or in conduits, and also for connecting a cable to a switch of a power board or to binding posts on a fuse board, or in any place where a cable has to be spliced or dead ended to a movable or stationary element.

From the foregoing it will be seen that my invention provides an extremely simple and inexpensive fastening for a cable and one which will be exceedingly strong and durable. The provision of the slotted socket member and the cone-shaped clamping nut dispenses with the need of solder in attaching a cable and causes the latter to be effectively held so that it cannot pull out of the fastening and at the same time insures an almost perfect electrical connection.

Having thus described my invention what I claim is:

1. In a cable fastening device, a solid member of resilient metal having one of its ends tapered longitudinally and externally screw threaded, said end being also formed with a longitudinally extending cylindrical socket having a flat imperforate bottom and said end being further provided with a plurality of transverse intersecting slots extending longitudinally the full length of the socket and dividing said end of the member into a plurality of resilient clamping fingers, a cable of less diameter than said socket and having its end arranged in the socket, a plurality of tapered or wedge-shaped nails inserted between the portions of the strands of the cable within said socket before the cable is inserted in said socket whereby the extremity of the

cable is enlarged, and a clamping nut formed with a longitudinally tapered opening internally screw threaded to engage the screw threads on the body and cause said spring fingers to clamp the strands of the cable, substantially as described.

2. The combination with an apertured member, of a terminal post arranged in the aperture of said member and formed adjacent to one end with an annular stop flange to engage one face of said member, the other projecting end of the post having its outer portion tapered longitudinally and its outer surface externally screw threaded from its extremity inwardly to said member, the tapered outer portion of said end of the post being formed with a longitudinal bore or socket having a flat imperforate bottom and being also formed with a plurality of transverse intersecting slots extending longitudinally the full length of the socket and dividing said end of the post into a plurality of resilient clamping fingers, a cable having its end arranged in said socket, a plurality of tapered or wedge-shaped nails inserted between the strands of the cable before the latter is inserted in said socket, a fastening nut arranged upon the threaded end of said post and screwed up against the face of said member to retain the post in the latter, and a second clamping nut formed with a longitudinally tapered opening internally screw threaded to engage the screw threads on the tapered end of the post to cause said resilient clamping fingers to move inwardly and clamp the strands of the cable between them, substantially as described.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

EDWARD B. FEASTER.

Witnesses:

W. M. TORBERT,  
CLARA TORBERT.