

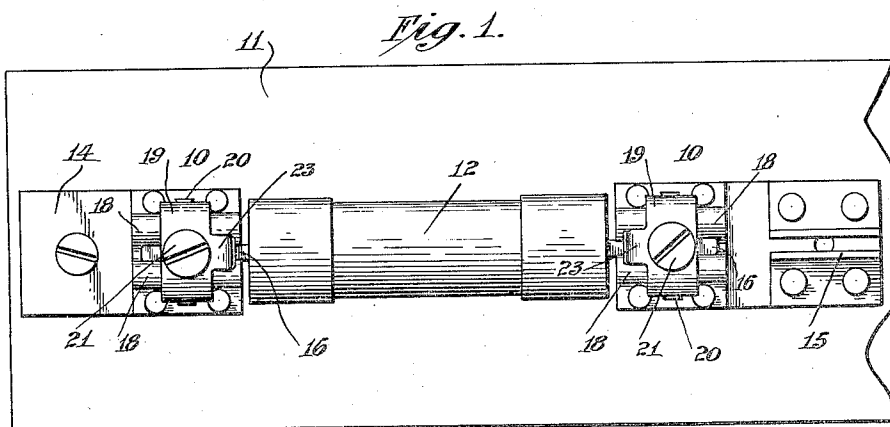
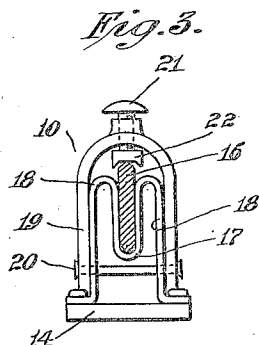
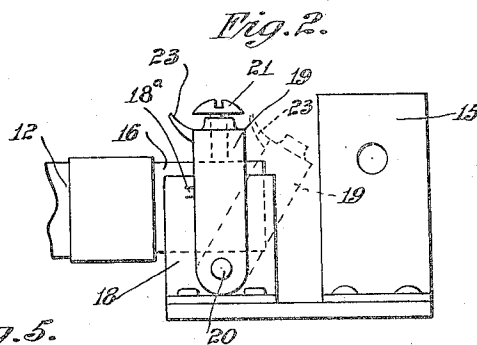
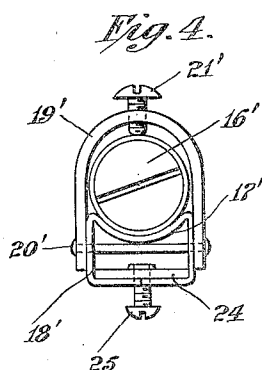
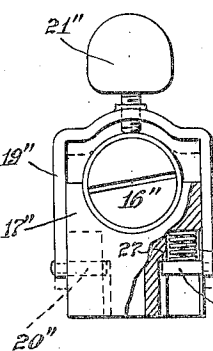
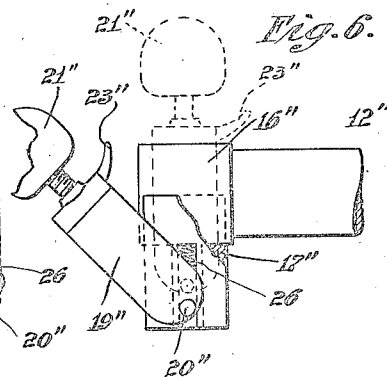
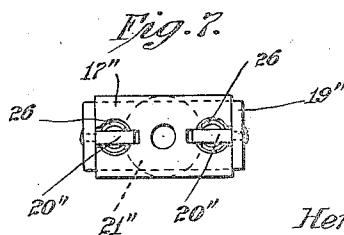
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TERMINAL CLAMP FOR ELECTRIC FUSES, ETC

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TERMINAL CLAMP FOR ELECTRIC
FUSES, ETC.

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9 Claims. (Cl. 200—134)

My invention relates to what are sometimes called "fuse clips" or terminals intended to receive and hold the ends of protective fuses and relays for electric circuits.

5 The main object is to provide a clamp which is simple but yet rugged and capable of providing a positive locking connection with the end of a fuse or the like.

10 A special object is to provide a holder into which the fuse end can be readily inserted and then readily clamped or locked positively or vice versa.

15 Another object is to provide means for automatically forcing the fuse end to its seat while applying the clamping device.

The same basic idea is applicable to fuses having blade-like terminals and to fuses of the type which have cylindrical ends or caps.

20 Fig. 1 is a plan view showing one arrangement of my invention.

Fig. 2 is a side view of one end clamp with a fuse mounted in it and also showing in dotted lines the clamp retracted.

25 Fig. 3 is an end view showing a clamp with a fuse terminal blade in place.

Fig. 4 is an end view of a modified form adapted to receive a cylindrical end cap.

Fig. 5 is an end view of another modification, part being broken away and part in section.

30 Fig. 6 is a side view of the form of Fig. 5 with the clamp member retracted.

Fig. 7 is a bottom view of the device of Fig. 5.

35 The clamping devices 10, 10 are suitably mounted upon a base or support 11 and adapted to receive and hold a fuse 12.

Each device has a base plate 14 and one form may also have an adjacent switch blade post or jaw 15 not involved in this invention.

40 The fuse of Figs. 1, 2 and 3 has a flat blade terminal 16 and the holder has a U-shaped socket part 17 designed to receive and support the blade 16. This socket 17 is integrally connected to side arms or posts 18 which are secured to the base plate 14. The side portions of the socket 17 and the arms 18, 18 are preferably somewhat resilient.

45 The clamping yoke or bail 19 may be hinged to the arms 18 by means of a pin 20 so that the yoke may be swung from the dotted to the full line positions of Fig. 2 and vice versa. The arms 18 may have one or more stops 18a for limiting the throw of the yoke.

50 This yoke carries a screw threaded member 21 which may, in some instances, have a shoe 22 on its inner end to engage the edge of the fuse

terminal. The outer end of the yoke 19 and the screw 21 serve as a means for digital engagement and operation.

I may also provide an inclined lip 23 on one edge of the yoke so that it may more readily 5 ride upon and may draw down the end of the fuse blade 16 as the yoke is applied to lock the fuse blade in place. When the screw is tightened it forces the blade into the socket 17 and forces the sides of the socket 17 together against the 10 blade terminal 16 so that the parts are securely held in place and are not likely to be jarred loose by vibration. The yoke or bail 19 may also be resilient so that, when the screw 21 is tightened, the sides of the yoke will be drawn against the 15 sides of the arms 18, 18 and thus assist in the clamping action of the socket 17 against the terminal of the fuse. When the screw is retracted and the yoke 19 is swung out of the way the fuse may be readily removed.

20 In the form shown in Fig. 4, the fuse cap or terminal end 16' is cylindrical and the socket 17' is correspondingly formed. In this case the posts or arms 18' are integral with the socket 17' and may be reinforced by a plate 24 which 25 receives the anchorage screw 25. The yoke 19' is hinged to the pin 20' which also serves to reinforce and support the socket 17'. The screw 21' acts against the cap 16' of the fuse to lock it in place. In this form also the yoke 19' may 30 be resilient so that, when the screw 21' is tightened, the sides of the yoke will be drawn together to bind against the sides of the fuse terminal and assist in more securely clamping the fuse and also increase the carrying capacity of the 35 clamp.

In Figs. 5, 6 and 7, the socket 17'' is or may be solid and provides guideways for the pins 20'' of the yoke 19'' so that the pins can slide 40 up and down.

The springs 26 in the sides of the socket body 45 press against the pins 20'' so as to draw the yoke and screw 21'' down to resiliently hold the fuse end 16'' in the socket. This yoke may have an inclined lip 23'' to engage and slide up over the end of the fuse and facilitate movement of the yoke. The screw 21'' is tightened to lock the 50 fuse in place.

Tightening of the screw 21'' will pull the pins 20'' up against the top of the recesses in which 55 they ride, or will compress the springs 26 to their full extent. When the pins have reached the end of their upward movement for instance by engaging shoulder 27, further turning of the screw will produce a direct clamping between

the screw and the base without relying upon spring pressure. The spring arrangement is provided so that if the screw is not tightened, or is only partially tightened, there will be a resilient clamping action.

Other modifications may be made within the spirit of my invention.

I claim:

1. A fuse clamp having a fuse socket with a resilient fuse receiving wall member, a yoke hinged to said socket at the opposite sides of the socket and a clamp screw mounted in said yoke and axially movable in a direction to and from the hinge axis for engaging the end of a fuse when it is supported on the resilient wall member of said socket whereby movement of said screw against the end of a fuse in said socket will force the said fuse end against said wall member and flex the wall receiving member to cause the latter to grip the fuse end.
2. A fuse clamp having a fuse socket, a locking yoke hinged thereto and having an inclined portion for engaging the end of a fuse terminal in the socket, a clamp screw carried by said yoke for engaging a fuse supported in said socket and a spring for pressing the yoke against the fuse in the socket.
3. A fuse clamp having a fuse socket, a locking yoke having a hinged and sliding connection with said socket and spring means for drawing the yoke against a fuse supported in said socket.
4. A fuse clamp having a fuse socket, a spring pressed locking yoke having a hinged and sliding connection with said socket and a screw for locking the yoke against a fuse supported in said socket.
5. A fuse clamp having a fuse socket, a locking yoke having a hinged connection with said socket and having a cam-like portion for engaging the end of a fuse terminal in the socket and spring means for drawing the yoke against a fuse terminal supported in said socket.
6. A fuse clamp having a socket for receiving

a fuse, a locking yoke hinged to said socket, spring means for resiliently holding a fuse in the socket and a clamping screw carried by the yoke for positively pressing the fuse against the socket.

7. A fuse clamp having a socket with resilient side walls for receiving the end of a fuse, a locking yoke having side arms hinged to said socket and adjacent the sides of the socket and a clamping screw carried by said yoke and movable toward and from the hinge axis of said yoke whereby when pressure is applied by said screw to the end of a fuse held in the resilient side walls the socket is caused to yield and the side arms of the yoke engage the side walls of the socket compressing said side walls against the end of the fuse.

8. A terminal clamp having a socket member with resilient elongated side walls and a narrow inner wall connecting said side walls for receiving a fuse terminal therebetween, a yoke hinged to said socket member and having side arms substantially parallel with said side walls and a clamp screw carried by said yoke in axial alignment with the fuse terminal and axially movable toward and away from the inner wall of said socket and adapted to engage said fuse terminal for exerting pressure thereon so as to draw said side walls towards each other to grip the fuse terminal.

9. A fuse terminal clamp having a resilient socket member with a bottom portion and side portions spaced apart for receiving a flat fuse blade, said socket member having side arm supports connected by arched portions to the spaced side portions, a yoke hinged to said side arm supports and a clamp screw movable axially in said yoke and adapted to engage the edge of the fuse blade and force the same against the bottom of the socket whereby the side walls of the socket are drawn toward each other to embrace the fuse blade.

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