

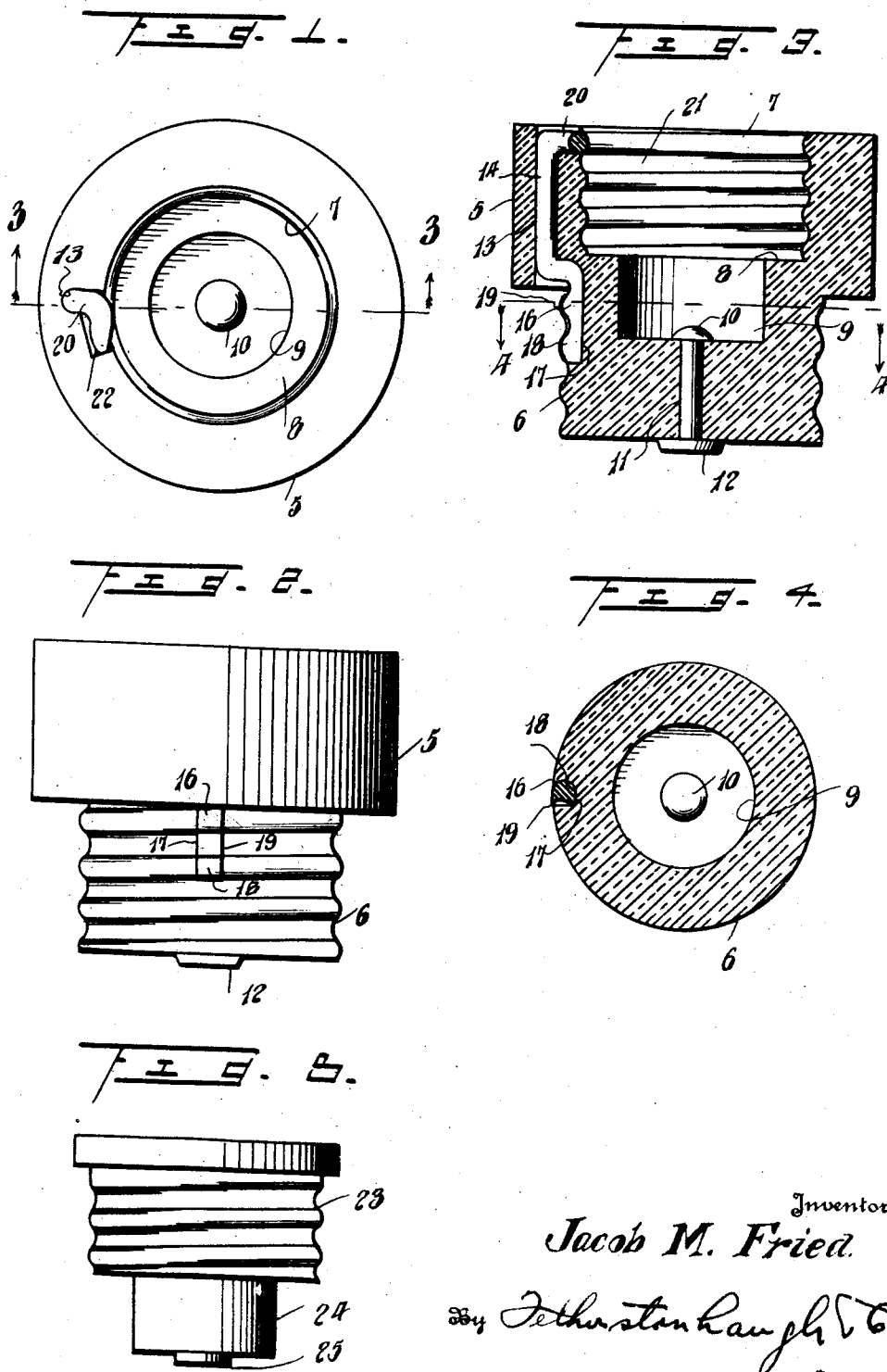
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THERMAL CUT-OUT

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UNITED STATES PATENT OFFICE

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THERMAL CUT-OUT

Application filed August 20, 1929. Serial No. 387,183.

This invention relates to thermal cut-outs and is an improvement of the subject matter disclosed by me in my co-pending application, Serial Number 316,553, filed November 1, 1928.

The purpose of the present invention is to provide an adapter through the medium of which the fuse plug disclosed in the aforesaid application can be used with standard receptacles.

Other purposes, advantages and characteristic features of the invention will be more readily understood from the following detailed description and accompanying drawings in which

Figure 1 is a top plan view of the adapter.

Figure 2 is a side elevation.

Figure 3 is a vertical sectional view taken along the line 3—3 of Figure 1.

Figure 4 is a transverse sectional view taken along the line 4—4 of Figure 3.

Figure 5 is a side elevation of the fuse plug.

In the accompanying drawings, 5 designates a body of insulating material having its lower end reduced and externally threaded as indicated at 6. Formed in said body is a socket 7 having a bottom wall 8 in the center of which is a relatively deep recess 9. Resting on the bottom wall of said recess is a contact head 10 which is connected by a conductor 11 to a second contact head 12 engaging the lower end of the body 5. The upper portion of said body is provided at one side of the socket 7 with a vertical passage 13 in which is inserted a conductor 14 having its lower end extending downwardly beyond said passage and offset inwardly as at 16 to lie within a recess 17 provided therefor in the lower externally threaded portion of the body 5. It will be noted that the outer edge of the offset portion 16 of said conductor is threaded as at 18 to form a continuation of the thread 6. As shown to advantage in Figure 4 the thread 18 is formed with a projecting cutting edge 19 for a purpose to be later

disclosed. The upper end of conductor 14 is bent as indicated at 20 to provide a spring contact projecting into the socket 7 and forming a part of the internal thread 21 of said socket, there being a suitable recess 22 provided in the upper edge of the socket to permit the spring contact 20 to be forced back when the fuse plug is inserted in the socket as hereinafter described.

The fuse plug shown in Figure 5 is constructed as disclosed in my prior application previously referred to and consists of a body of insulating material having its upper portion surrounded by metallic threaded sleeve 23 adapted to be threaded into the socket 7, the lower portion of the plug being in the form of an extension 24 adapted to be snugly received in the recess 9 and having a suitable contact tip 25 engageable with the contact head 10, said contact tip 25 being connected to the sleeve 23 by an interior fuse wire not shown. When the fuse plug is threaded into the socket 7 the sleeve 23 is engaged by the spring contact 20 to complete the circuit connection between the plug and the body 5. The lower end of the body 5 is adapted to be screwed into the socket of any standard receptacle. Such receptacles are provided, (as is well known) with a central contact which will be engaged by the aforesaid contact 12 and with a circumferential sleeve or contact which will be engaged by the threaded portion of the conductor 14 thus completing the circuit connections between the plug and receptacle. Once, the body 5 is screwed into a suitable receptacle the removal of said body is prevented by the biting engagement obtaining between the cutting edges 19 of the threads 18 and the cooperating threads of the receptacle sleeve.

Having thus fully described and what I now conceive to be the preferred embodiment of the invention it is understood the various changes may be resorted to within the scope and spirit of the appended claim.

What I claim is:

A device of the character described comprising a body of insulating material, the lower end of said body being reduced and externally threaded, a socket formed in the
5 upper portion of the body and internally threaded, said body having a vertically extending groove, a conductor mounted in said groove, the upper end of said conductor being bent to form a spring contact projecting
10 into said socket and the lower end of the conductor being bent to conform to the externally threaded portion, and a cutting edge formed on the exposed lower portion of the
15 conductor for a purpose specified.

In testimony whereof I hereunto affix my signature.

JACOB M. FRIED.

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