F. E. CARLSON.

PROTECTIVE DEVICE FOR ELECTRIC UTENSILS.

APPLICATION FILED APR. 13, 1917.

1,264,868. Patented Apr. 30, 1918.

Fig. 1.

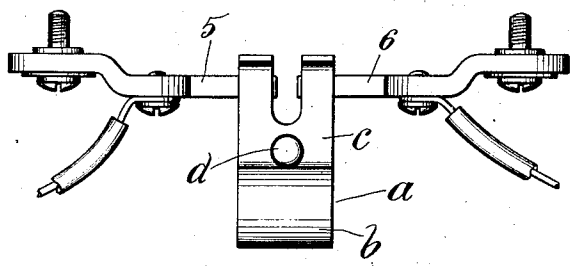


Fig. 2.

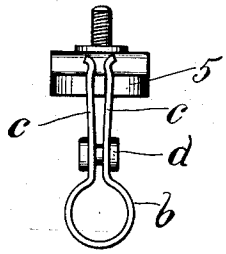
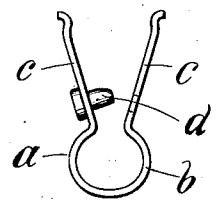


Fig. 3.



INVENTOR.
Frederick E. Carlson:

BY Hellart

his ATTORNEY.

UNITED STATES PATENT OFFICE.

FREDERICK E. CARLSON, OF NEW BRITAIN, CONNECTICUT.

PROTECTIVE DEVICE FOR ELECTRIC UTENSILS.

1,264,868. Specification of Letters Patent. Patented Apr. 30, 1918.

Application filed April 13, 1917. Serial No. 161,869.

To all whom it may concern:

Be it known that I, FREDERICK E. CARLSON, a citizen of the United States, and a resident of New Britain, county of Hartford, State of Connecticut, have invented certain new and useful Improvements in Protective Devices for Electric Utensils, of which the following is a specification.

The object of this invention is to provide a novel means for breaking the circuit in case the utensil becomes overheated.

In the drawings,—

Figure 1 is a side view of the protective device.

Fig. 2 is an end view.

Fig. 3 is a view showing the device after it has operated to break the circuit.

The utility of protective devices in electrically heated utensils to prevent the destruction of the utensil or the heater is well known to manufacturers and users of such goods. By my invention a very simple device is provided capable of being most easily placed in position, effective in its operation and extremely inexpensive to manufacture.

The device made in accordance with my invention consists of a sheet metal clip, indicated generally at *a*, bent midway between its ends to form the spring loop *b*, from which project the spring fingers *c*, *c*. The spring fingers are drawn together against the action of the spring loop *b* by a fusible rivet *d* or the like, this binding of the fingers together giving them the spring action which permits them to spread when they are forced over the adjacent ends of the circuit members 5, 6, insuring a perfect contact. If the utensil becomes overheated, the fusible rivet will be melted, and then the spring loop *b* becomes effective to spread the spring fingers apart, and the device will drop out of position and so break the circuit.

In addition to the simplicity and economy of manufacturing this device, and the simplicity of the method of attachment, a minimum of fusible material is used. Thus there is no considerable quantity of this fusible material which when melted would be apt to run down onto other parts of the utensil.

It will be further observed that the device as here illustrated and described provides two separate spring actions,—the spring of the fingers for gripping the ends of the circuit members is quite independent of the spring of the loop tending to spread the fingers apart. Normally the spring action of the loop is not affected, but it is of important consideration for the purpose of breaking the contact whenever a utensil becomes overheated.

In accordance with the provisions of the patent statutes I have described the principle of operation of my invention, together with the structure which I now consider to represent the best embodiment thereof; but I desire to have it understood that the structure here shown is only illustrative, and that the invention can be carried out by other means.

I claim as my invention:—

1. An article of the character described comprising a spring bow provided with cooperating diverging fingers formed integrally with said bow, and fusible means to draw said fingers together and hold said bow under tension.

2. The combination with a pair of spaced terminals of a connector adapted to engage and complete the circuit between said terminals, said connector comprising a spring bow, a pair of coöperating diverging fingers formed integrally with said bow and provided with bifurcated ends, and a fusible member drawing said fingers together and holding said bow under tension.

FREDERICK E. CARLSON.