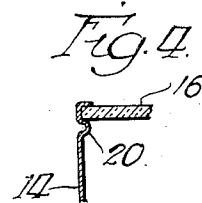
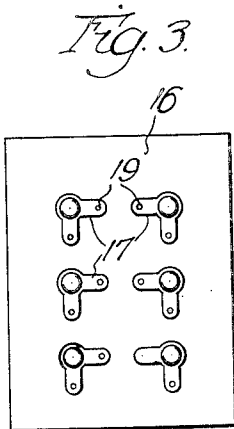
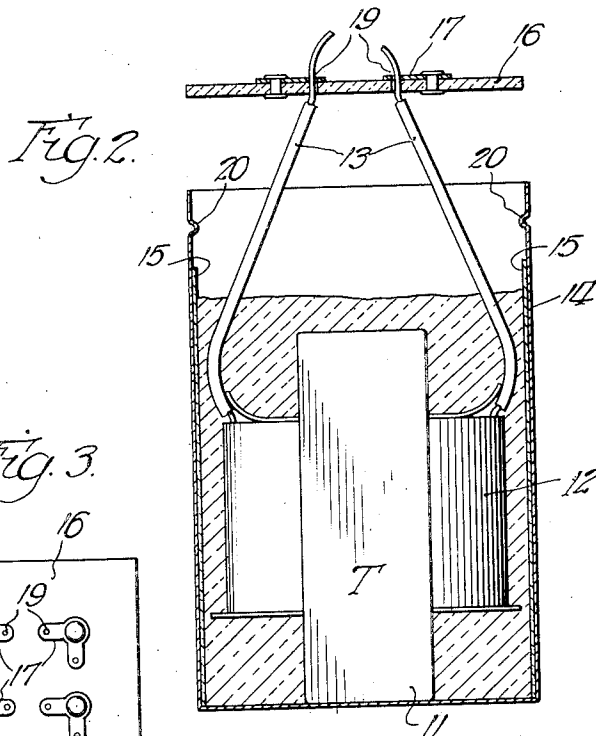
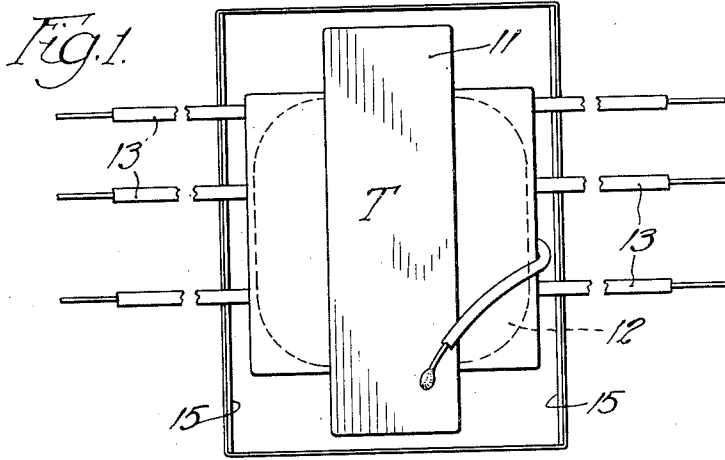


Feb. 12, 1929.

1,702,159

W. C. GRUNOW
ELECTRICAL TRANSLATING UNIT

Filed Oct. 6, 1926



Inventor
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UNITED STATES PATENT OFFICE.

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ELECTRICAL TRANSLATING UNIT.

Application filed October 6, 1926. Serial No. 139,790.

My invention relates to electrical translation units of the character generally employed in B current supply devices for radio apparatus, an object being to provide an improved apparatus of the above character and improved method of constructing the same.

One of the features of my invention is the improved method of constructing and assembling apparatus of the above character such as transformer coil units, condenser units and high inductance choke coil units, whereby a well shielded and well insulated unit is provided in which the translating element itself is rigidly held in its casing and the terminals thereof readily connected to a sealing cover.

For a better understanding of my invention reference is to be had to the accompanying drawing, in which—

Fig. 1 is a top plan view of the device before the terminal cover is placed thereon;

Fig. 2 is a vertical sectional view showing the parts assembled before the cover is put in place;

Fig. 3 is a top plan view of the terminal carrying cover; and

Fig. 4 is a sectional view through one corner of the top showing the method of assembling and clinching the cover in place.

Referring now more in detail to the particular device illustrated, I show a transformer T having its metallic core 11 and windings 12 thereon with a plurality of terminal conductors 13 extending therefrom. A suitable casing 14 is provided preferably of a shielding character and made up of sheet metal with an open top through which the unit T is dropped into the casing. Before placing the unit into the casing suitable insulating facings 15 are placed inside the enclosure and the terminals 13 drawn upwardly. These facings are preferably in the form of sheet fibre.

A suitable cover 16 is provided preferably in the form of sheet fibre and having the proper number of terminals 17 mounted thereon. These terminals are of such a construction that they may be mounted upon the outside of the cover 16 and at the same time permit connecting the conductors 13 thereto. To this end I preferably employ a sheet metal terminal 17 riveted to the cover and having a hole 19 for receiving the conductor 13. Beneath each hole 19 is an opening

through the cover 16 so that the terminal conductor may be inserted up through this opening as shown in Fig. 2 and then bent over onto the terminal and soldered thereto. The conductors 13 are left long enough so that they may be inserted up through the cover as shown in Fig. 2.

Preferably before fastening the conductors 13 to the cover I pour a suitable insulating compound into the casing, so as to surround the translating unit therein and which when hardened will be sufficiently heat-proof to prevent softening thereof and at the same time rigidly hold the coil or other element in the casing and prevent shaking or rattling thereof.

With the terminal conductors 13 secured to the cover as shown in Fig. 2 and after the insulating compound has been poured into the casing, the cover is dropped down into the can to rest against the inwardly turned ribs 20. This leaves a slight portion of the casing wall extending above the cover and it is then placed in a press and these extending wall portions forced down and clinched over the top of the cover, as shown in Fig. 4.

I have thus provided a well insulated and rigid unit having flush faces on all its sides so that the units may be compactly built up for final wiring.

In my copending application for B current supply apparatus, Serial No. 139,788, filed of even date herewith, I have shown a complete unit for supplying B current to radio receiving apparatus, and the present invention is particularly useful in connection with such apparatus where a compact arrangement of the units is desired and where wiring thereof may be readily accomplished.

What I claim as new and desire to secure by United States Letters Patent is:—

1. As a new article of manufacture, an electrical translating device adapted to be held snugly in the casing of an eliminator of which it forms a part, said device including a rectangular casing open at the top with a peripheral internal rib near the top thereof, an electrical translating device in said casing and having conductors serving as leads therefrom, an insulating compound surrounding the translating device and extending below said rib, the conductors extending above said compound, a cover of

insulating material resting on the rib, the casing being bent over to hold the cover in place, and terminals riveted to the cover, the conductors extending upwardly through the cover and being secured to the terminals. 15

2. A transformer adapted to be included as an element of an eliminator and to be secured within the eliminator casing, said transformer including an open topped metal rectangular casing lined with insulating material and having an internal rib near the top thereof, a transformer unit in the casing and having conductor leads, insulating compound surrounding the transformer unit and filling the casing to a point below said rib, a fibre cover resting on the rib and held there by the casing above the rib being bent over to grip the same, and terminals riveted to said cover, the conductors extending upwardly through said cover and having their ends soldered to the terminals. 20

In witness whereof, I hereunto subscribe my name this 11th day of September, 1926.

WILLIAM C. GRUNOW.