

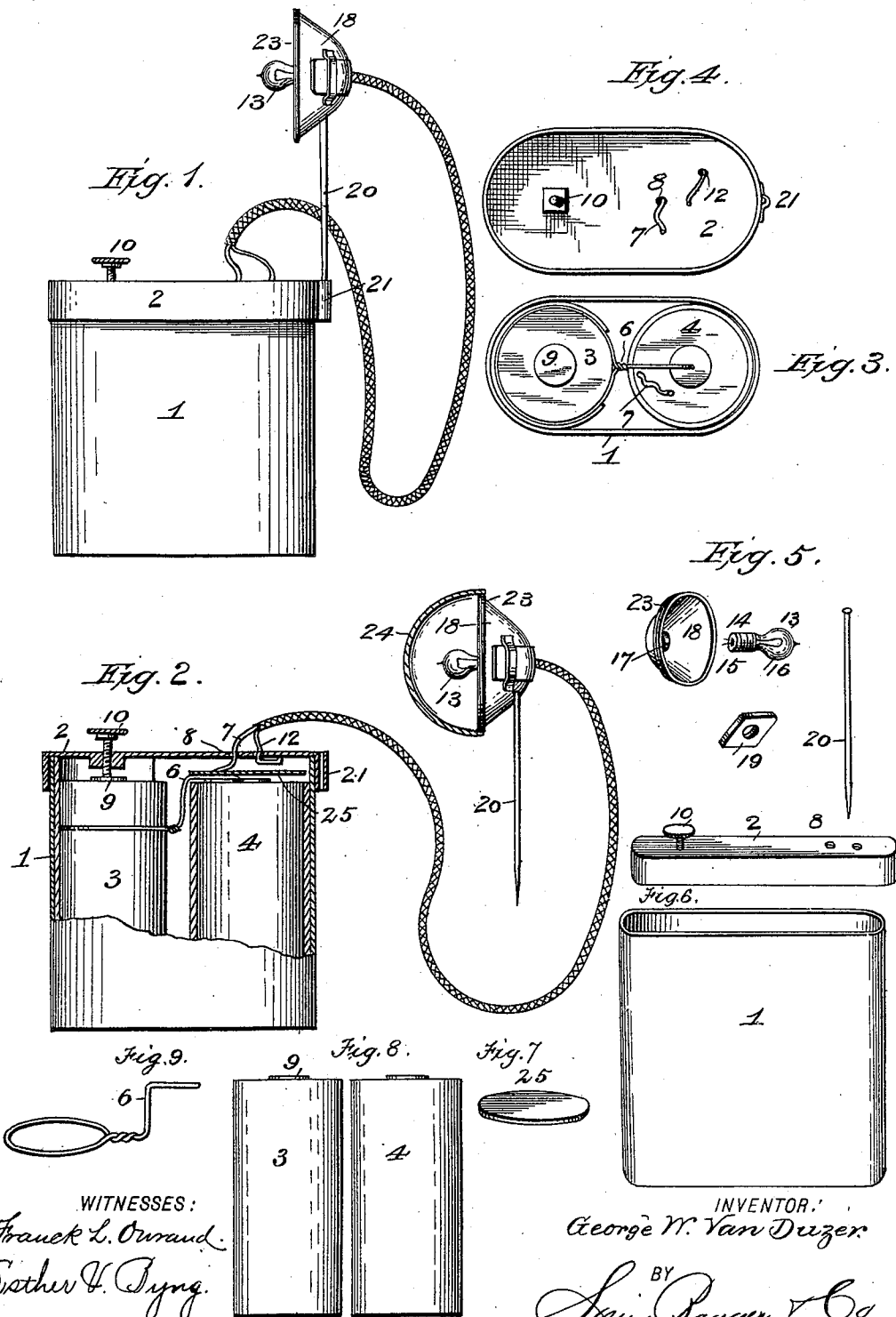
No. 642,648.

Patented Feb. 6, 1900.

G. W. VAN DUZER.
ELECTRIC LIGHTING DEVICE.

(Application filed Apr. 27, 1899.)

(No Model.)



WITNESSES:

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ELECTRIC-LIGHTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 642,648, dated February 6, 1900.

Application filed April 27, 1899. Serial No. 714,727. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. VAN DUZER, a citizen of the United States, residing at Hackettstown, in the county of Warren and State of New Jersey, have invented new and useful Improvements in Electric-Lighting Devices, of which the following is a specification.

My invention relates to electric-lighting devices more especially designed for lighting the sheet music of band musicians; and its object is to provide a portable casing which can be readily secured to and be carried by a person, provided with batteries which are connected by suitable flexible conductors with a small electric lamp of any ordinary construction, which is adapted to be connected with a horn or other musical instrument and which may also be connected with the casing containing the batteries.

The invention consists in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a portable lighting device constructed in accordance with my invention, the lamp being connected with the casing. Fig. 2 is a central longitudinal section, the lamp being disconnected from the casing, so that it may be secured to a musical instrument. (Not shown.) Fig. 3 is a plan view, the top of the casing being removed. Fig. 4 is a bottom plan view of the top of the casing. Fig. 5 is a view showing the different parts comprising the lamp disconnected from each other. Fig. 6 is a perspective view of the casing and cover, the latter being removed. Fig. 7 is a similar view of the non-directing plate or disk. Fig. 8 is an elevation of the batteries. Fig. 9 is a perspective view of the conductor connecting the batteries.

In the said drawings the reference-numeral 1 designates a portable metallic casing which can be secured to or carried by a person in any suitable manner. This casing is provided with a removable top or cap 2, which forms a part of the circuit when the current is established, as hereinafter described. Located in said casing are two secondary batteries 3 and 4, which are surrounded by strips of rubber 5 or other insulating material, where-

by they are kept out of contact with the casing. The positive pole of the battery 3 is connected to the negative pole of battery 4 by a conductor 6, consisting of a piece of wire extending around the battery 3 and one end of which is twisted around the body of the wire, which is then extended upwardly and bent over at a right angle, and the other end connected with the said negative pole of battery 4. To the positive pole of the battery 4 is connected a conductor 7, which extends upwardly through a hole 8 in the top or cap 2 and is then connected with an electric lamp, hereinafter described. This conductor is connected with the battery at the lower end of the latter.

Passing through a screw-threaded hole in one end of the top 2 and directly over the negative pole 9 of battery 3 is a contact-screw 10 for making and breaking the circuit. Near the opposite end of the said top is a hole, through which passes one end of the negative conductor 12, extending from the lamp. The end of this conductor passing through the said top 2 is soldered thereto while the other end is connected with the electric lamp.

The numeral 13 designates a small electric lamp, which may be of any ordinary or suitable construction, and comprises the usual screw-plug 14, carbon filament 15, and globe 16. The filament is connected with the said positive and negative conductors 7 and 12, as usual. The said plug 14 passes through a screw-threaded hole 17 in a reflector 18 and is held in place by a nut 19. Connected with the said reflector is a pointed pin 20, which is adapted to be connected with a bracket 21, secured to the top 2, or which can be connected with a horn or other musical instrument or attached to the musician's clothing. The periphery of the reflector is formed with screw-threads 23, with which are adapted to engage corresponding threads of a concavo-convex plate 24. The object of this plate is to protect the lamp from injury when not in use.

The numeral 25 designates a disk of rubber or other insulating material which when the device is not in use rests on top of the battery 3, and thus prevents the circuit from being established by the contact-screw being

accidentally turned, as while in this position it is impossible for the screw to make contact with the pole of the battery.

The operation is as follows: The casing being secured to a person and the lamp connected to a musical instrument and the insulating-plate 25 placed on battery 4, the current is established by turning the contact-screw until its lower end comes in contact with the negative pole of the battery 3. The circuit is as follows: from the positive pole of the battery 4, positive conductor 7, to lamp, and from thence through negative conductor 12 to the top 2, to contact-screw 10, (the top forming part of the circuit,) to negative pole of battery 3, and from thence to the negative pole of battery 4 by the positive conductor 6.

When the device is not in use, the insulating-plate 25 is removed from battery 4 and placed on battery 3, so as to prevent the contact-pin 10 from making electrical connection with said battery 3.

The device can also be used by setting the casing on a table and connecting the pin of the reflector with the bracket of the top 2, as seen in Fig. 1.

Having thus fully described my invention, what I claim is—

1. In an electric-lighting device of the character described, the combination with the

portable casing, the batteries located therein, the removable top, the lug secured thereto, the conductors and the bracket secured to said top, of the lamp electrically connected with said batteries, and the pointed pin connected with said lamp and adapted to be connected with said lug, substantially as specified.

2. In an electric-lighting device of the character described, the combination with the portable casing, the batteries located therein, the conductors connected therewith, and the interchangeable insulating-plate adapted to be placed on either of said batteries, of the lamp electrically connected with said batteries, the reflector having a screw-threaded hole through which the plug of the lamp passes, and said reflector formed with peripheral screw-threads, the detachable concavo-convex plate connected therewith and the pointed pin connected with said lamp, substantially as specified.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GEORGE W. VAN DUZER.

Witnesses:

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