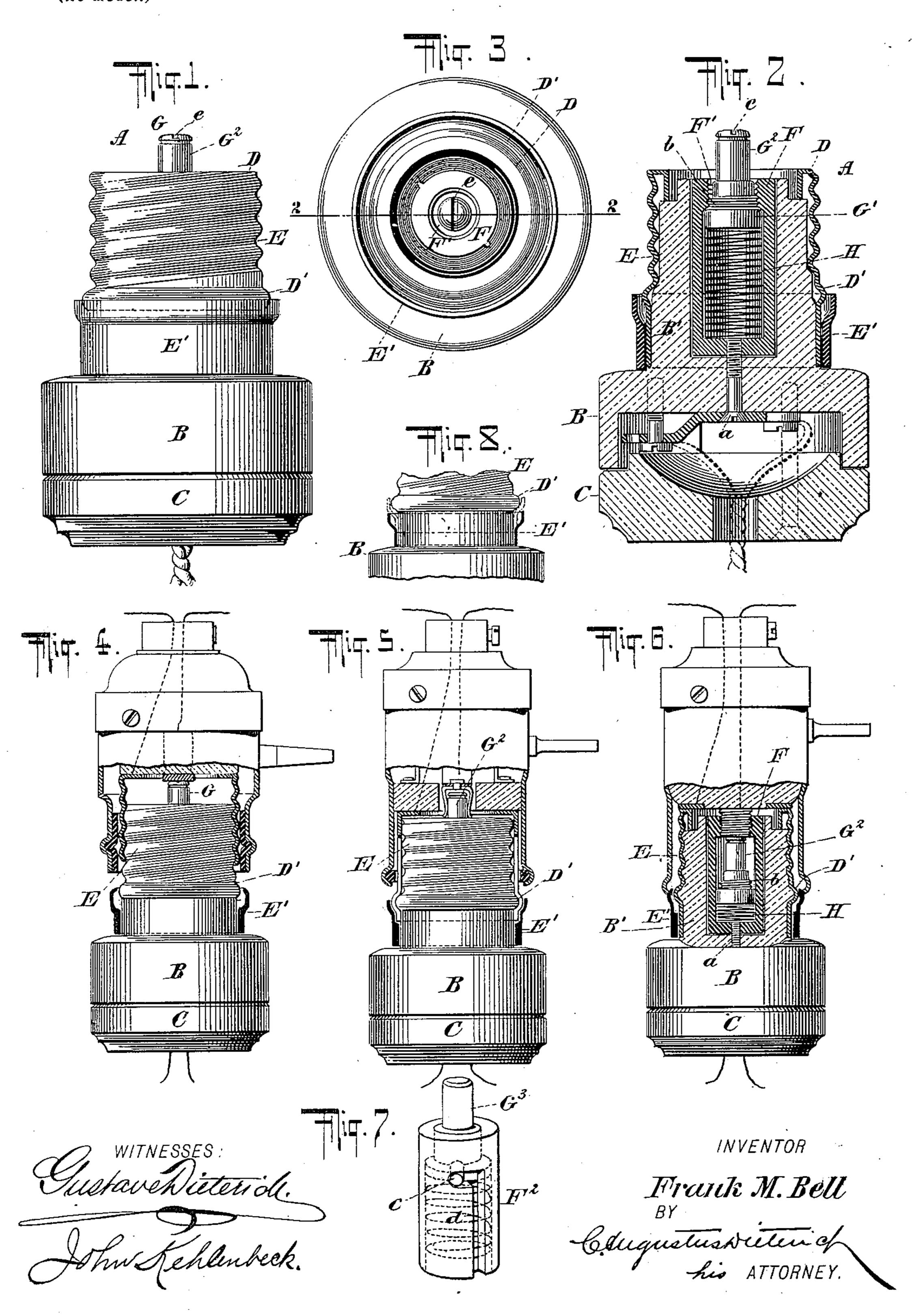
F. M. BELL. TRANSLATING DEVICE.

(Application filed Dec. 19, 1898.)

(No Model.)



United States Patent Office.

FRANK M. BELL, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO WILLMA POLLACK, OF SAME PLACE.

TRANSLATING DEVICE.

SPECIFICATION forming part of Letters Patent No. 662,110, dated November 20, 1900.

Application filed December 19, 1898. Serial No. 699,660. (No model.)

To all whom it may concern:

Be it known that I, Frank M. Bell, a citizen of the United States, residing at the city of New York, in the county and State of 5 New York, have invented certain new and useful Improvements in Translating Devices, of which the following is a full, clear, and exact

specification.

My invention relates to improvements in 10 means for translating electrical energy, and has for its object more particularly to provide a simple, efficient, and inexpensive device for the purpose above named, which when used in combination with an incandes-15 cent electric lamp, fan, motor, or other apparatus will permit of the same being readily inserted in or secured to the incandescent electric-lamp sockets of the various types now in most general use or on sale. These 20 objects above set forth I am enabled to attain by means of my invention, which consists in the novel details of construction and in the combination, connection, and arrangement of parts, as hereinafter more fully set 25 forth and then pointed out in the claims.

In the accompanying drawings, forming part of this specification, wherein like letters of reference indicate like parts, Figure 1 is a side view of a device constructed according 30 to and embodying my invention. Fig. 2 is a section of the same, taken on the line 2 2 of Fig. 3. Fig. 3 is a top or plan view. Figs. 4, 5, and 6 are side views, partly in section, showing the device applied to three different 35 types of incandescent electric-lamp sockets. Fig. 7 is an enlarged detail perspective view illustrating a modified form of fastening device for the center contact, and Fig. 8 is a detail view illustrating a modified form of in-

40 sulation.

In said drawings, A designates the translating device, which is shown in the form of an attaching-plug, comprising a base B, of insulating material, having a hollow upwardly-45 extending portion B' thereon, and C denotes a removable cover portion secured to the under side of the base B.

D denotes a metallic sleeve connected to

one terminal of the circuit and secured to the 50 base B upon the portion B' thereof, said

and downward until the same meets the top of the portion B' of the base B. Upon the outer surface of said sleeve D, adjacent to its lower edge, is arranged an annular rib D'. 55 Intermediate said annular rib D' and the upper edge of said sleeve D are provided screwthreads E.

E' denotes an annular strip of insulating material, which may be either slidably dis- 60 posed upon the sleeve D, as indicated at Fig. 8, or rigidly secured thereon, as indicated at the remaining figures, whereby to insulate the annular rib D' and prevent the same from contacting with the casing of the lamp- 65

socket.

Within the recessed portion of the upwardly-extending portion B' of the base is disposed a cylindrical casing F, which is connected to the other terminal of the circuit and 70 provided at its upper or exposed end with a screw-threaded opening F', and α denotes a screw extending from below through the base B and into the lower end of the casing F to hold the same in position in the recessed portion 75 of the base. Within said casing F is disposed a contact G, comprising a base G', of slightly smaller diameter than the interior of the casing F, and a stem G², extending upward therefrom, provided at its lower end adjacent to 80 the base G^2 with screw-threads b, adapted to engage the threads of the opening F' when said contact is projected, and H denotes a spring arranged within the casing F intermediate the under side of the base G² of the con-85 tact G and the bottom of the casing F.

At Fig. 7 I have shown a modified form of contact, and in this construction the base of the contact G^3 is provided with lugs c and the casing F^2 with slots d, the same consti- 90 tuting a bayonet-fastening whereby said contact G³ may be locked to its projected position.

The operation of the device is as follows and will be best understood by referring to

Figs. 4, 5, and 6.

To use the device in combination with the forms of sockets illustrated at Figs. 4 and 5 it simply becomes necessary after the contact G has been projected by the action of the spring H to insert a screw-driver into the 100 slit e in the top of said contact and give the sleeve D having its upper edge turned inward | same a few turns, thus causing the screw2 662,110

threads b thereof to engage with the screwthreads of the opening F' in the end of the
casing F and secure the contact G to its projected position. Hereupon the device may
be inserted in the socket illustrated at Fig.
4 by screwing the same into the socket until
the contact G contacts with the center terminal of the socket, and thus establish a circuit. To establish a circuit in combination
with the socket illustrated at Fig. 5 it simply
becomes necessary to force the device into the
same, whereupon the spring-fingers of the
center terminal of the socket will engage the
contact G, and thereby establish a circuit.

To use the device in combination with the socket illustrated at Fig. 6 the center contact G must be unscrewed or released, whereupon the device may be inserted in the socket, and by turning the same cause the screw-threaded center contact-terminal of the socket to engage the screw-threads in the opening F' of the casing F, and as screwing or turning of the device is continued cause the same to be firmly secured within the socket, and the contact G of the device to be telescoped within the casing F, as shown at Fig. 6, and a circuit again established.

Without limiting myself to the purposes to which the invention is applicable or to the 30 details of construction which may be varied within the scope of the invention, what I claim as new, and desire to secure by Letters

Patent, is—

1. A translating device comprising a base of insulating material, a cover therefor, a metallic sleeve arranged thereon provided with an annular rib, and above said annular rib with screw-threads; a central contact arranged upon said base within the metallic sleeve but insulated therefrom, said central contact comprising a cylindrical casing having a threaded opening in its exposed end, a stem arranged within said casing provided with a base, and screw-threads adjacent to said base and a spring disposed within said cylindrical

casing intermediate the base of the stem and the bottom of said cylindrical casing, sub-

stantially as specified.

2. A translating device comprising a base of insulating material, a cover therefor, a me- 50 tallic sleeve arranged thereon provided with an annular rib, insulating means provided upon the outer surface of said annular rib, and above said annular rib with screw-threads; a central contact arranged upon said base 55 within the metallic sleeve, but insulated therefrom, said central contact comprising a cylindrical casing having a threaded opening in its exposed end, a stem arranged within said cylindrical casing, provided with a base, 60 and screw-threads adjacent to said base, and a spring disposed within said cylindrical casing intermediate the base of the stein, and the bottom of the casing, substantially as specified.

3. A translating device comprising a base of insulating material, a cover therefor, a metallic sleeve arranged thereon provided with an annular rib, an annular strip of insulating material adjustably arranged upon said 70 sleeve adapted to encompass said annular rib, and screw-threads arranged upon said casing above the annular rib, a central contact arranged upon said base within the metallic sleeve, but insulated therefrom, said central 75 contact comprising a cylindrical casing having a threaded opening in its exposed end; a stem arranged within said cylindrical casing provided with a base, and screw-threads adjacent to said base, and a spring disposed 80 within said cylindrical casing intermediate the base of the stem and the bottom of the casing, substantially as specified.

Signed at the city of New York, in the county and State of New York, this 17th day 85

of December, 1898.

FRANK M. BELL.

Witnesses:

WILLIAM L. POLLACK, GUSTAVE DIETERICH.