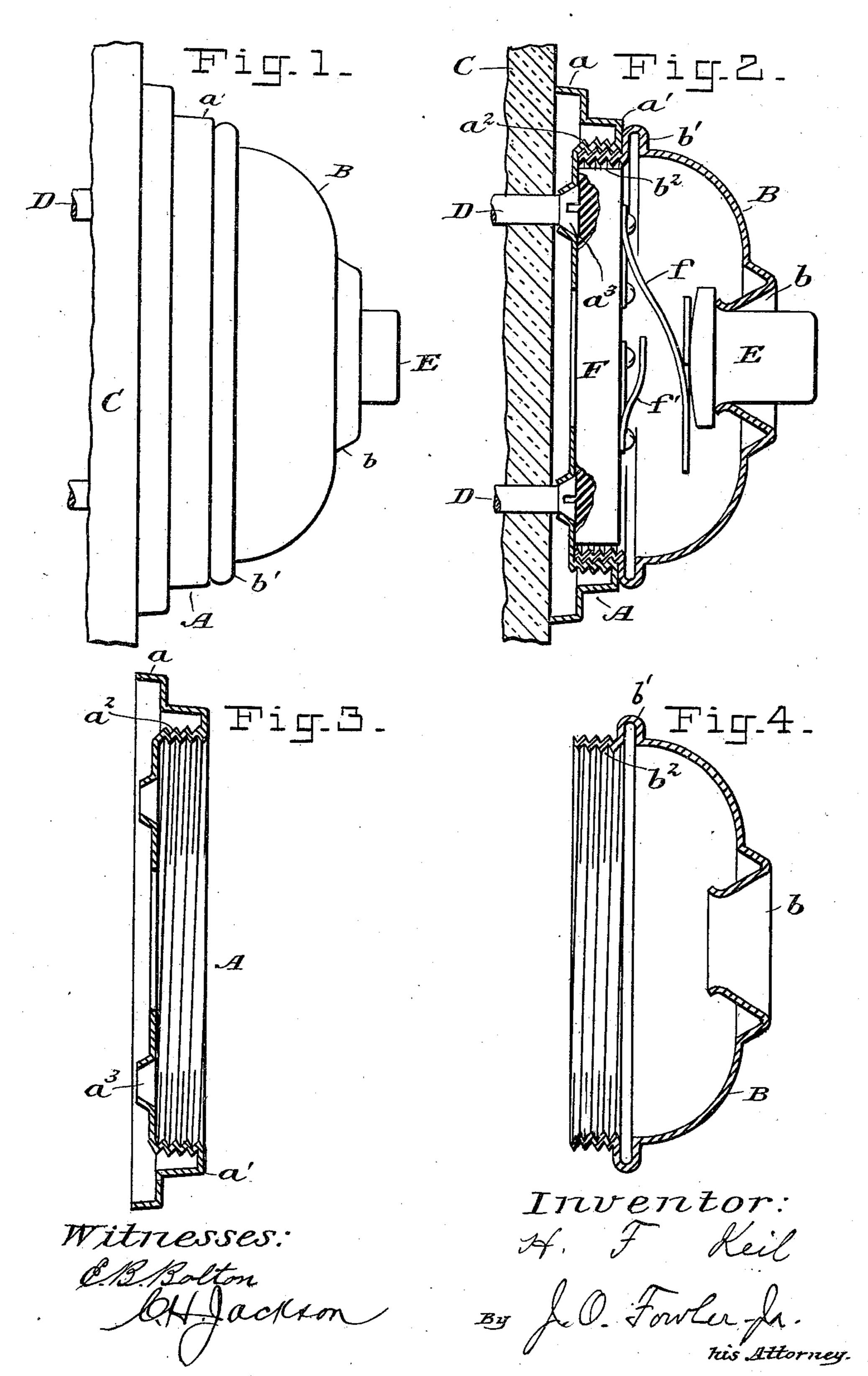
H. F. KEIL.

SUPPORT FOR ELECTRIC PUSH BUTTONS.

(Application filed Feb. 13, 1901.)

(No Model.)



UNITED STATES PATENT OFFICE.

HENRY FRANCIS KEIL, OF NEW YORK, N. Y.

SUPPORT FOR ELECTRIC PUSH-BUTTONS.

SPECIFICATION forming part of Letters Patent No. 685,614, dated October 29, 1901.

Application filed February 13, 1901. Serial No. 47,124. (No model.)

To all whom it may concern:

Be it known that I, HENRY FRANCIS KEIL, a citizen of the United States, and a resident of New York, in the county and State of New 5 York, have invented a certain new and useful Support for Electric Push-Buttons, of which the following is a specification.

This invention relates to a shell or case for appliances constructed and arranged to comto plete or break an electric circuit and thereby to vitalize or deënergize an electromagnetic apparatus connected therewith; and it has for its object the provision of a support for a push-button of the kind set forth sim-15 ple in construction, inexpensive to manufacture, and which combines compactness of structure and light weight and also increased durability and efficiency in practical use.

To attain the desired end, this invention 20 consists in the construction, arrangement, and operation of parts herein set forth.

In order to enable this invention to be fully understood, the same will now be explained by reference to the drawings which accom-25 pany and form a part of this specification, in which-

Figure 1 represents a side elevation, drawn on an enlarged scale, of the push-button case. Fig. 2 is a central vertical section of the 30 same, and Figs. 3 and 4 are respectively central vertical sections of the base or collar and cover or shell of the said push-button case.

Like letters of reference indicate like parts

in all the views.

It has been found desirable to produce a manually-actuated electric-circuit controller or push-button by pressing which the circuit of an electric bell may be completed that shall be compact and of light weight, the en-40 gaging parts of the two members constituting the supporting case or shell of the electric devices being constructed and arranged to be somewhat yielding with respect to each other, and an organization constructed ac-45 cording to the invention has been constructed embodying the preferred construction of parts and their mutual relationship, combination, arrangement, and organization in a composite body or structure, as hereinafter 50 described.

Referring particularly to the drawings, A denotes the base or collar constituting one i

member of the case or shell of the push-button, which base is formed by being struck up from sheet metal and is provided with a 55 preferably circular edge a and a raised wall a', the latter having engaging means, as the thread a^2 , and supporting means, as the orifices a^3 , by means of which it may be secured to a suitable support, as C, by means of screws 60 D. The other member B of the supporting case or shell consists of a cover or shell, ordinarily resembling a shallow bowl in contour and also formed by being struck up from sheet metal and provided with a cen- 65 tral orifice b to hold or contain the knob or push-button proper, E, and with a concentric annular hollow flange or rim b' and a threaded edge b^2 , constructed and arranged to engage one face (in the present instance the 70 inner face) of the said groove a', the said edge b^2 being screwed upon the threaded portion a^2 of the said wall a'. The two members A and B being, as stated, struck up out of sheet metal are somewhat yielding and re- 75 silient to a certain degree, whereby in case there should be any inequality in the threaded portions of either of the two members by reason of one of the same becoming bent or otherwise somewhat out of line the said fact 80 will not prevent the two parts from being screwed together, as the other member will adapt itself and conform to the first-named one on account of the fact that both of the said members are, as stated, somewhat yield- 85 ing and resilient, which conformability manifestly could not take place if the two members of the shell or case were cast or otherwise formed of solid metal.

A block F, constructed of suitable insulat- 90 ing material, as hard rubber, is contained within the two members of the shell or case and serves to support two spring-fingers ff', constructed in the ordinary manner.

In practical operation the base or collar A 95 is screwed or otherwise secured in any position required to a suitable support, as C, and the knob or button E inserted in the cover or shell B, which is then screwed down upon the base A. The threads a^2 and b^2 are pref- 100 erably rolled in lieu of being cut in order to insure greater stability and durability of the parts.

As it is evident that many changes in the

construction, form, proportion, and relative arrangement of parts might be resorted to without departing from the spirit and scope of my invention, I would have it understood that I do not restrict myself to the particular construction and arrangement of parts shown and described, but that such changes and equivalents may be substituted therefor and that

• What I claim as my invention is—

1. The combination with a base stamped out of sheet metal provided with a wall having a threaded face, of a superimposed shell provided with a concentric hollow rim and a flange having a threaded edge.

2. The combination with a base stamped out of sheet metal having a wall threaded upon its inner face, of a superimposed shell

provided with a concentric hollow rim and a flange threaded upon its outer face.

3. The combination with a base stamped out of sheet metal having a circular edge and provided with a concentric wall threaded upon its inner face, and provided with orifices for purposes of support, of a superimposed shell provided with means to hold a push-button, and with a concentric hollow rim and a flange threaded upon its outer face.

In testimony of the foregoing specification I do hereby sign the same in the city of New 30 York, in the county and State of New York, this 15th day of January, A. D. 1901. HENRY FRANCIS KEIL.

Witnesses:

CHAS. H. J. DILG, H. BAMMANN.