

D. J. BROUGHTON.
FINGER ACTUATED SIGNAL LIGHT.
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Fig. 1.

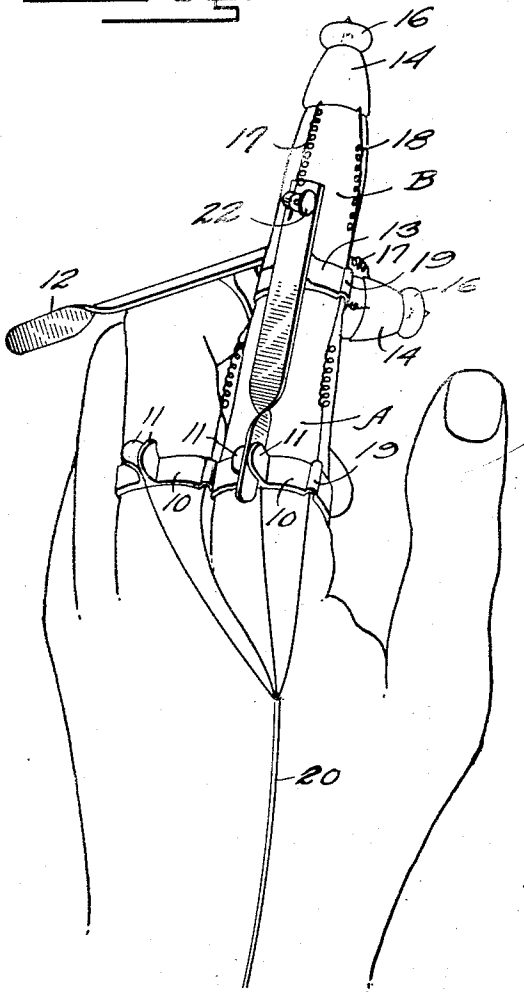


Fig. 3.

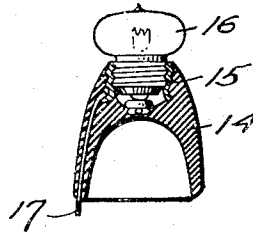


Fig. 2.

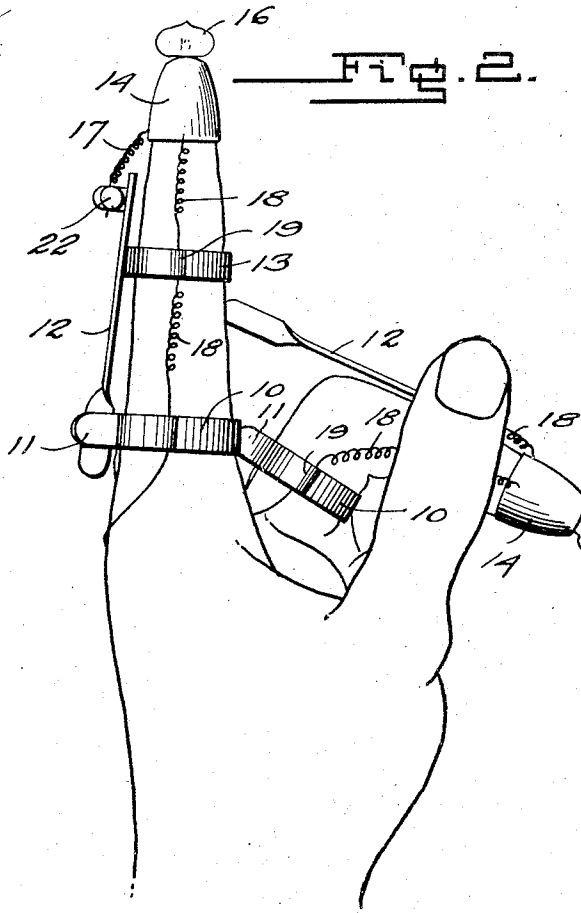
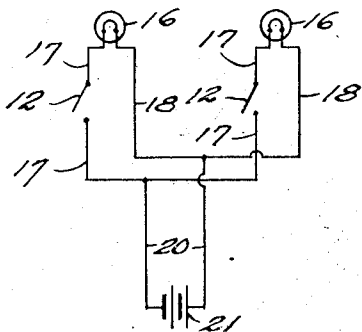


Fig. 4.



Inventor
Douglas J. Broughton.

By *Lancaster and Sullivan*
Attorneys.

UNITED STATES PATENT OFFICE.

DOUGLAS J. BROUGHTON, OF SPRINGFIELD, MASSACHUSETTS.

FINGER-ACTUATED SIGNAL-LIGHT.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, DOUGLAS J. BROUGHTON, a citizen of the United States, and resident of Springfield, in the county of Hampden and State of Massachusetts, have invented a new and useful Finger-Actuated Signal-Light, of which the following is a specification.

The present invention relates to signals, and has for an object to provide a signal adapted to be carried by the hand and actuated by the fingers for indicating in the dark when one or more fingers are raised to denote to persons distant certain numbers.

Another object of the invention is to provide a device which is particularly for use by ushers in theaters for designating in the dark the number of vacant seats in the front of the theater to those in the rear without the necessity of walking continuously up and down the aisle. It is customary when there is sufficient illumination to raise one, two or more fingers to designate to the patrons waiting the number of seats vacant in different parts of the house. However, when the lights are turned off this signal cannot be given, and it is the purpose of this invention to provide means which may be used by the usher for giving these signals in the dark.

The invention further aims at the provision of a device adapted to be mounted on one or more fingers of the hand and including an electric light or bulb at the tip of the finger and means for closing an electric circuit through the bulb by merely straightening the finger out in the natural position of indication.

The above, and various other objects and advantages of this invention, will be in part understood and in part described from the following detailed description of the present preferred embodiment, the same being illustrated in the accompanying drawing, wherein:

Figure 1 is a perspective view of a hand having two signal devices constructed according to this invention applied thereto, one of the devices being in the position of illumination, and the other device being in inert position.

Fig. 2 is a view of the same in side elevation, the parts being adjusted in the positions shown in Fig. 1.

Fig. 3 is a detail sectional view of the cap which is mounted upon the outer end of the finger.

Fig. 4 is a diagrammatic showing of the circuits which may be used.

Referring to this drawing, which shows but two of the devices applied to the hand, and where each device is of the same construction, 10 designates a band or ring of spring metal which is adapted to be sprung about the upper section A of the finger and which is provided upon its outer side with a pair of outstanding spring jaws or fingers 11 adapted to receive therein a switch blade 12 which is fixed to the outer side of a second band or ring 13 adapted to bind upon the intermediate finger section B for swinging the blade 12 into and out of engagement with the spring members 11 when the finger is bent and straightened.

A cap 14 is fitted to the outer end of the finger and is provided with a lamp socket 15 in its outer end into which is screwed, in the usual manner, a lamp 16 adapted to project light rays from the tip of the finger. The cap 14 may be formed of vulcanized rubber, or the like, and have embedded therein electric wires 17 and 18 which supply current to the lamp 16, the wires extending along the finger and passing through crimps or beads 19 formed in the opposite sides of the rings 10 and 13.

It is apparent that each finger of the hand may be provided with a pair of these rings and the cap, and it is preferred to collect the wires 17 and 18 leading inward from the fingers into a single cable 20 which may pass up the arm to a portable battery of any suitable type.

In Fig. 4 is illustrated one arrangement of wiring which may be employed. The wires 17 are connected to the outer ends of the switch blades 12, and to the tongues or spring members 11 for completing the circuit through the adjacent lamp 16 from a battery 21.

The switch blade 12 may be in the form of a flat strip of metal which is soldered or otherwise secured to the outer ring 13, and which is provided with a binding screw 22 adapted to engage in a binding post outstanding from the outer end of the blade 12 for connecting the outer section of the wire 17 to the blade. The inner end of the blade is preferably twisted about the longitudinal axis of the blade substantially 90 degrees to fit between the spring tongues 11 and form a good electrical contact therewith.

From the above, it is thought that the

operation will be apparent, for when the finger is flexed or bent inward, the blade 12 will be swung out of engagement with the tongues 11 and the circuit will be broken through the adjacent lamp. This is the natural position of the fingers, and thus the lights are normally out of circuit. When the hand is raised in the natural position for indicating one, two, or more numbers, the same number of fingers are raised. This action of the fingers swings the blades or switches into engagement with the tongues 11 and completes the circuit through these fingers and illuminates the respective lamps. The number may thus be readily determined in the dark.

What is claimed is:

1. In a finger actuated signal lamp, the combination of spaced members adapted to be carried upon the sections of a finger, a cap fitted to the tip of the finger, a switch blade carried by the outermost of the members and adapted to contact with the innermost member when the finger is straightened, a lamp mounted on the cap, and an electric circuit including the lamp, said switch blade and said innermost member and adapted to be closed by the switch blade when the finger is straightened.
2. In a finger actuated signal lamp, the

combination of a cap adapted to be fitted to the outer end of a finger, a lamp carried by the cap, a pair of bands secured to the finger on different sections thereof, an electric wire mounted on the band and extending along the finger from the cap and lamp and adapted to assist in retaining the cap on the finger, a switch blade carried by one band and adapted to engage the other band, a wire section leading from the switch blade to the cap and lamp, and an inner wire section leading from said other band for supplying current to the lamp when the switch blade is in contact with said other band.

3. In a finger actuated signal lamp, the combination of a band adapted to be fitted to the upper section of the finger and having a pair of spring tongues on its outer side, a second band adapted to be fitted to the middle section of the finger, a spring blade secured to the second band and adapted to engage between said tongues when the finger is straightened, a cap fitted to the tip of the finger, an electric lamp mounted on the cap, and an electric circuit including the lamp, the spring blade, and the tongues for supplying current to the lamp when the blade engages the tongues.

DOUGLAS J. BROUGHTON.