N. H. TUNKS.

SIGNALING DEVICE.

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1,305,844.

Patented June 3, 1919.

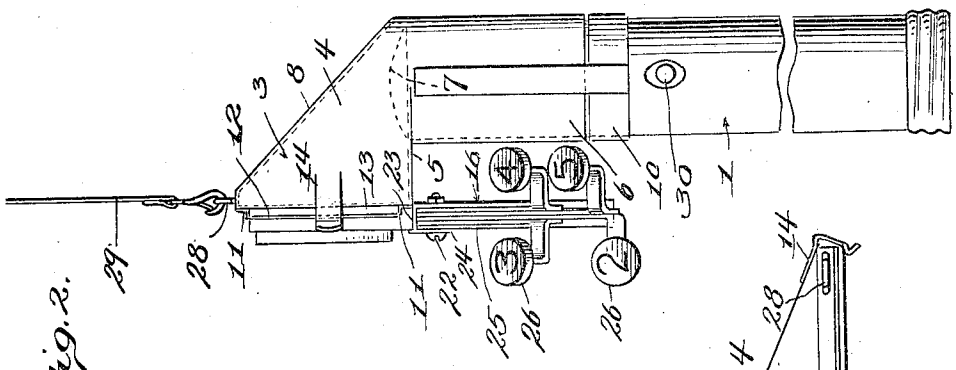


Fig. 2.

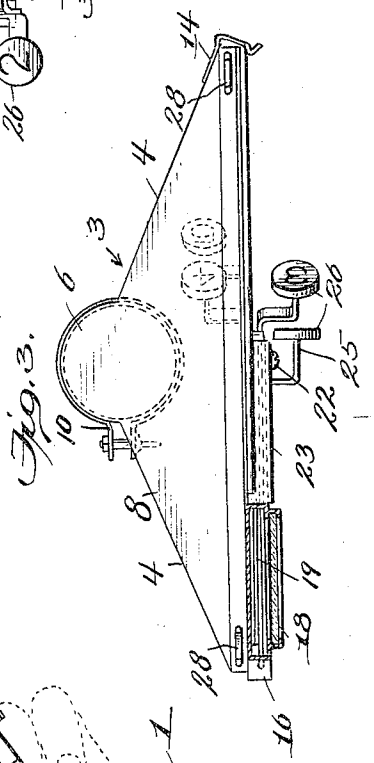


Fig. 3.

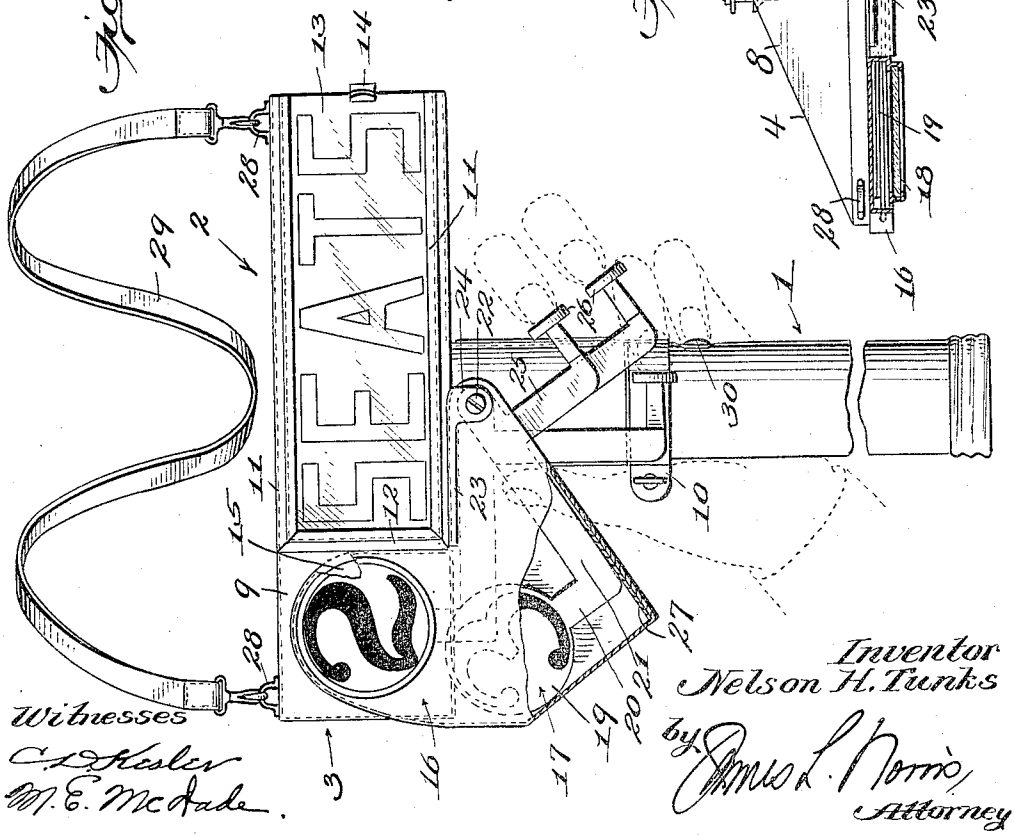


Fig. 1.

Witnesses
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UNITED STATES PATENT OFFICE.

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SIGNALING DEVICE.

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To all whom it may concern:

Be it known that I, NELSON H. TUNKS, a citizen of the United States, residing at Lima, in the county of Allen and State of Ohio, have invented new and useful Improvements in Signaling Devices, of which the following is a specification.

This invention relates to signaling devices, and it proposes, briefly, an improved implement of the general class or character specified, which is designed primarily for use by ushers or other attendants in moving picture theaters and similar places of amusement, to indicate to waiting patrons the number and location of vacant seats available.

The invention further comprehends a signaling device of the above-described type, which is attachable to the body of the attendant, so as to be carried with him from place to place, and which he can readily operate with a single hand, such operation serving to throw into effective position a digit-bearing element indicating the number of available seats.

The invention still further contemplates a device having the afore-mentioned characteristics, which is constructed as an attachment for a standard, cylindrical flash-light lamp, the switch of which can be closed by the same hand as that employed to throw in the signal element, so that the latter will be illuminated by the rays from the light bulb and can be readily seen at a distance in a darkened room.

An embodiment of the invention is illustrated in the accompanying drawing, whereof:—

Figure 1 is a part-sectional, front elevation of the complete device.

Fig. 2 is a side elevation.

Fig. 3 is a plan view.

Referring more particularly to said drawing, 1 indicates, generally, a cylindrical, electric flash-light lamp of standard make and conventional type; and 2 the signaling device proper, which is used in connection with, and as an attachment for, the said lamp. The attachment comprises, by preference, a deflecting chamber 3, whose side walls 4 flare outwardly, as shown, for the purpose of causing divergence of the light rays, and whose flat bottom wall 5 is provided with a depending, tubular sleeve or neck 6, that is disposed centrally thereof. This sleeve 6 is designed to fit over the front or lens end of the lamp, so that the lens 7 will project slightly into the chamber 3 of the device, with the result that the light rays emitted from the incandescent bulb, (not shown), will strike directly against the upwardly- and forwardly-inclined rear wall 8 of the chamber, and will be reflected forwardly through openings in the front wall 9 of the chamber. Retention of the sleeve in place upon the lamp, may be effected in any desired manner; for instance, by means of a suitable clamp 10.

The aforesaid front wall 9 is cut away for the major portion of its length, and is provided with ribs or flanges 11 and 12 along three of the edges of the opening thus formed, these ribs acting as supports and guides for a removable panel 13, which is held in place by a spring clip 14. This panel is constructed of glass or other transparent material, and has painted or otherwise marked upon it the word "Seats", the letters of which are of a color which presents a contrast to that of the body of the panel, as will be understood.

At the left of the panel, a second opening 15 is formed in the wall 9, across which opening extends the upper portion of a casing 16, whose lower portion projects below the chamber or main case 3, as shown in Fig. 2, and is secured thereto by soldering, or in any other suitable manner. This auxiliary case or chamber 16 is designed to receive the indicating elements 17, hereinafter more fully described, said elements being individually movable from a lower or inoperative position, to an upper position in which the figures or digits borne thereby are visible through a sight opening 18 formed in the aforesaid upper portion of the case directly opposite the opening 15 just referred to in the wall 9, the said figures thus being illuminated by the light rays.

In the construction illustrated, which may be regarded for all present purposes as preferred, the indicating elements 17 are constituted by disks 19, whereon the figures or digits are marked, which are connected by short, depending extensions or necks 20 to two-armed operating members. These members normally occupy a depressed or lowered position, due to the combined weight of the disks and the inner arms 21 of said members, at the lower or free ends of which arms the

numeral-bearing disks 19 are arranged, while their upper ends are mounted upon a pivot 22. The latter passes through the walls of the case 16, the rear wall of which is formed at its upper edge with an attaching section 23, that bridges the space between the rear and front walls and takes over the front face of the last-named wall, at which point it is provided with a depending lug 24 through which the pivot bolt 22 projects. The outer arms 25 of the operating members extend through an opening in the bottom wall of the case, and are disposed slightly to the left of the pivot 22 and at right angles to the inner arms 21, as shown, these arms 25 being offset at their lower ends, and terminating in keys 26, whereon the corresponding numerals are marked, so that the operator can determine at a glance the proper key to actuate.

The indicating elements, as above stated, normally occupy a position in which the numerals borne by the disks 19 are invisible, and are swung upwardly *seriatim* upon the depression of the keys, to a position to display said numerals. They are supported in their normal position by the bottom wall of the case 16, said wall being of angular shape, so that the lower edges of the inner arms 21 rest against one member of the wall, while the disks 19 rest against the other member, as depicted in Fig. 1. If preferred, a pad or buffer 27 may be arranged upon the first-mentioned portion of said wall, to cushion the arms 21 when the keys are released and the indicating elements drop to normal position. The disks 19 and their arms 21 and 25 may be of one-piece construction, and may be made of any suitable material, and the numerals borne by the disks may be formed in any desired manner, provided they are transparent to the light rays; and it may here be noted that said numerals may be other than those actually represented, that is to say, they may range from 1 to 4, instead of from 2 to 5, or may present any combination thereof, as 1, 2, 4, 5, or 1, 2, 3, 5, etc., according as may be found most convenient.

To permit the attachment of the device to the operator, the main case or chamber 3 is provided at its top with eyes or loops 28, to which the ends of a strap 29 are fastened, the latter being adapted to be passed over the head of the operator, so as to suspend the device in place, and thus leave both hands of the operator free when the device is not in actual use. The switch, indicated at 30 is usually so positioned on the lamp that it can be actuated by one finger, while the other fingers are engaged in manipulating the keys 26, so that the current may be kept constantly "on," if desired, or may be switched "on" or "off," as may be preferred.

The operation and advantages of the invention as a whole are believed to be fully apparent from the foregoing, and to require no further explanation; but it is to be understood that no limitation to the structural details shown and described is contemplated, since the invention is obviously susceptible of modification within the scope of the appended claims.

I claim as my invention—

1. A signaling device comprising a reflecting chamber having a tubular neck or sleeve adapted to removably fit over the lens end of a standard flash-light lamp so as to dispose said chamber in the path of the light rays emitted from the bulb in said lens end; and numeral-bearing indicating means movable into and out of said chamber to be illuminated by said rays.

2. The combination, with a standard flash-light lamp and its controlling switch; of a signaling device attachable directly to the lens end of the lamp and comprising a plurality of individually-operable indicating elements having actuating keys arranged in juxtaposition to said switch, for operation by the hand grasping the lamp, to shift said elements selectively into the path of the light rays emitted from the bulb in said lens and so as to be illuminated thereby.

3. A signaling attachment for standard flash-light lamps, comprising a reflecting chamber having a tubular neck or sleeve adapted to fit over the lens end of the lamp, so as to dispose said chamber in the path of the light rays emitted from the bulb in said lens end; and a plurality of individually-operable numeral-bearing elements provided with actuating keys for moving them selectively into said chamber, so as to be illuminated by said rays.

4. A signaling attachment for flash-light lamps, comprising a reflecting chamber having a tubular neck or sleeve adapted to fit over the lens end of the lamp, so as to dispose said chamber in the path of the light rays emitted from the bulb in said lens end, said chamber being provided at one side of its front wall with a panel to be illuminated by said rays, and at the other side with an opening; and indicating means movable into and out of position directly in front of said opening, so as to be illuminated by the light rays passing therethrough.

5. A signaling attachment for standard flash-light lamps, comprising a reflecting chamber having a portion adapted to fit over the lens end of the lamp so as to dispose said chamber in the path of the light rays emitted from the bulb in said lens end, said chamber being provided with a light opening; an auxiliary case connected to said chamber; and a plurality of individually-operable indicating elements mounted in said case for selective movement into and out of position directly in front of said opening, so as to be

illuminated by the light rays passing therethrough; said elements having operating portions disposed externally of said case.

6. A signaling attachment for standard flash-light lamps, comprising a reflecting chamber having a portion adapted to fit over the lens end of the lamp so as to dispose said chamber in the path of the light rays emitted from the bulb in said lens end, said chamber being provided with a light opening; an auxiliary case connected to said chamber and having a portion which extends across the same and is provided with an opening directly in front of said light opening; and a plurality of individually-operable indicating elements mounted in said case for selective movement therewithin into a position directly between said openings, so as to be illuminated by the light rays.

7. A signaling attachment for flash-light lamps, comprising a reflecting chamber arranged in the path of the light rays, and provided with a light opening; an auxiliary case connected to said chamber and having a portion which extends below the same; and a plurality of individually-operable indicating elements mounted in the lower portion of said case and normally resting therein out of range of the light rays passing through said opening, said elements being selectively movable upwardly into a position directly in front of said opening, so as to be illuminated by said rays.

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

NELSON H. TUNKS.

Witnesses:
JOHN L. CABLE,
KATHRYN WERLINE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."