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G. H. FROST

2,943,596

BLANKET CONTROL

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FIG. 1.

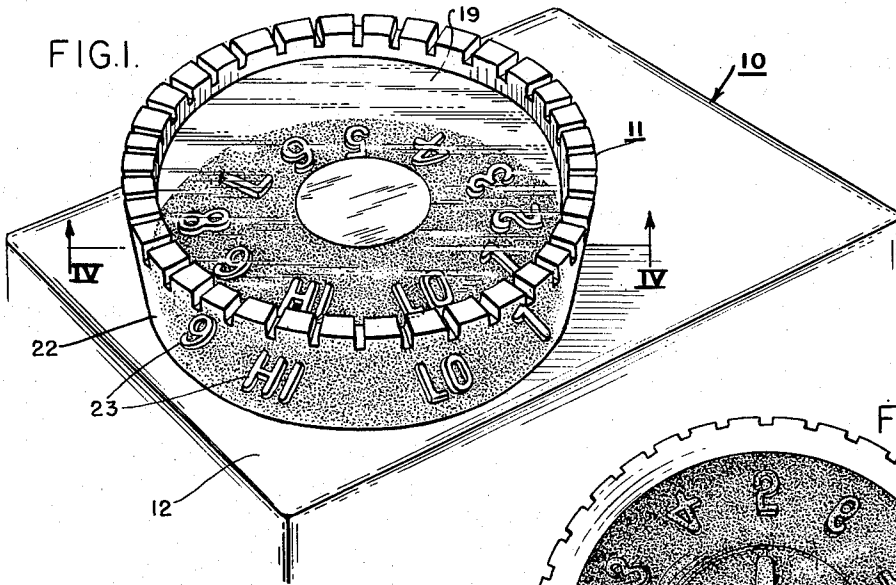


FIG. 2.

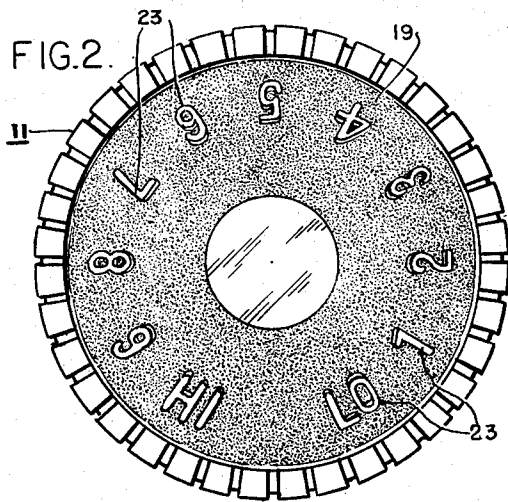


FIG. 3.

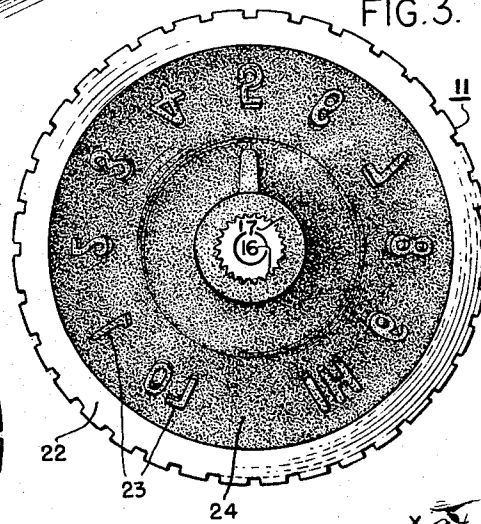
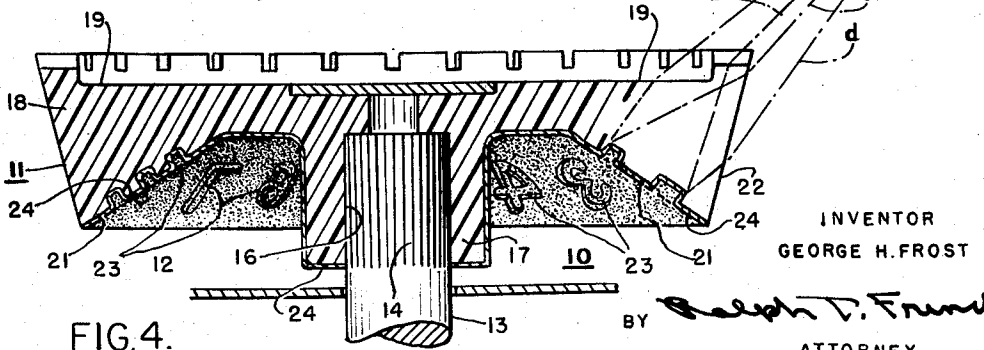


FIG. 4.

INVENTOR
GEORGE H. FROST

BY

Ralph D. French

ATTORNEY

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BLANKET CONTROL

George H. Frost, Ashland, Ohio, assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania

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3 Claims. (Cl. 116—124)

This invention relates to knobs, particularly to manually operable control knobs, and has as an object to provide an improved device of this character.

Another object of the invention is to prolong the usable life of a control knob.

In accordance with the invention there is provided a control knob of clear plastic, or other suitable transparent material, the knob including a rim portion which is wedge-shaped in cross section and defined by top and bottom surfaces which converge toward the center of the knob, and a peripheral surface which joins the top and bottom surfaces. Appropriate indicia are provided on the bottom surface and this surface is coated with a translucent or other non-transparent coating.

Locating the indicia and coating on the inclined bottom surface not only renders the indicia readily visible through both the top surface and the peripheral surface, but also insures that the indicia and coating are protected from the wearing thereof which would occur if they were provided on either the peripheral surface or the top surface, as is customary, where they would be engaged by the fingers of the users.

The foregoing and other objects are effected by the invention as will be apparent from the following description and claims taken in connection with the accompanying drawing forming a part of this application, in which:

Fig. 1 is a perspective view of a control knob mounted in overlying relation to a housing of an electric blanket control;

Fig. 2 is a top plan view of the control knob shown in Fig. 1;

Fig. 3 is a bottom plan view of the control knob; and

Fig. 4 is a transverse sectional view, taken along the line IV—IV of Fig. 1, looking in the direction indicated by the arrows.

In Figs. 1 and 4 the reference character 10 indicates a housing for control mechanism for an electric blanket, the control mechanism being manually adjustable by a control knob or disc 11 adjacent the top wall 12 of the housing 10. The control mechanism includes a control shaft 13 extending through the top wall 12 of the housing and having an exposed terminal portion 14 adapted to be non-rotatably received within a mating socket or opening 16 provided in a neck portion 17 depending from the control knob 11. In the construction herein illustrated, the mating shaft terminal portion 14 and the control knob socket 16 have their mating surfaces fluted longitudinally to provide a driving connection between the knob and the shaft.

The control knob 11 is constructed of transparent material, such as plastic or the like, and it has been found that methyl methacrylate, having an index of refraction of 1.49, and available under the trade names Plexiglas and Lucite, is a suitable material for this purpose. The control knob includes a rim portion 18, generally wedge-shaped in cross section, the wedge being defined by a top

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surface 19, a bottom surface 21 inclined upwardly and inwardly with respect to the top surface 19, and a peripheral surface 22 joining the top and bottom surfaces.

An annular series of suitable indicia 23 is provided on the bottom surface 21 the indicia herein illustrated constituting the lettering HI and LO and intermediate numbers 1 to 9 inclusive. This indicia will cooperate with a suitable reference mark (not shown) provided on the housing top wall 12. The numbers may be printed or stamped on the bottom surface 21 or, as herein illustrated, they may be formed in the bottom surface during molding of the knob. If printed on the surface they may be printed in a suitable color, or where molded into the surface, as shown, they may be filled with a material of the desired color and then a coating 24 applied to the entire bottom surface 21. Preferably, the coating 24 is of a color contrasting to the coloring of the indicia, so that the latter will stand out clearly. If desired, the coating may be translucent, so that light from any suitable source (not shown) within the housing may be directed through an appropriate opening in the housing top wall 12 to illuminate the figures from beneath. However, it will be apparent that a non-translucent coating may be utilized, as any light from an exterior source will pass freely through the transparent rim 18 to illuminate the indicia.

As illustrated in Fig. 1, duplicate indicia are visible at one point, as the direction of viewing changes between horizontal and vertical. In other words, as the line of view is shifted from horizontal to vertical, the indicia become visible through the top surface 19 before they disappear from the peripheral surface 22, with the result that there is no "blind" area of view of the indicia. As illustrated at the right-hand end of Fig. 4, this results from bending of the light rays *a*, *b*, *c* and *d* as they leave the surfaces 19 and 22, due to the high index of refraction of the material utilized. In the showing of Fig. 4, the angles of the light rays *a*, *b*, *c* and *d* relative to the surfaces 19 and 22 have been exaggerated in order to get the view point X on the drawing.

In previously known control knobs, the indicia have been applied to either the peripheral surface or to the top surface, thereby rendering the control knob subject to the disadvantage that the indicia may eventually become so badly worn from contact with the fingers of the users that the indicia can no longer be readily recognized. With the construction herein disclosed, where the indicia is located on the bottom surface 21, which surface is disposed in close proximity to the top wall 12 of the control mechanism housing 10, the indicia is fully protected from wear which might render it unreadable.

While the invention has been shown in but one form, it will be obvious to those skilled in the art that it is not so limited, but is susceptible of various changes and modifications without departing from the spirit thereof.

What is claimed is:

1. In a control assembly, a housing having a flat wall, a rotatable control shaft extending through, and normal to, said wall, a control knob mounted on said shaft adjacent said wall, said knob including a rim portion of transparent material having top and bottom surfaces joined by an outer peripheral surface, said bottom surface being inclined upwardly and inwardly from said peripheral surface, and an annular series of indicia carried by said bottom surface and visible through both said top surface and said peripheral surface.

2. A control knob adapted for mounting on a rotatable control shaft for manual adjustment thereof, said knob including a rim portion of transparent material having top and bottom surfaces joined by an outer peripheral surface, said bottom surface being inclined upwardly and inwardly from said peripheral surface, and an annular series of in-

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indicia carried by said bottom surface and visible through both said top surface and said peripheral surface.

3. A control knob adapted for mounting on a rotatable control shaft for manual adjustment thereof, said knob including a rim portion of transparent material having top and bottom surfaces joined by an outer peripheral surface, said bottom surface being inclined upwardly and inwardly from said peripheral surface, an annular series of indicia carried by said bottom surface and visible through

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both said top surface and said peripheral surface, and a non-transparent coating on said bottom surface.

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