

July 24, 1962

W. C. JURGENS ET AL
GUIDED CORD WEIGHT ASSEMBLY

3,046,356

Filed Dec. 16, 1959

FIG. 1

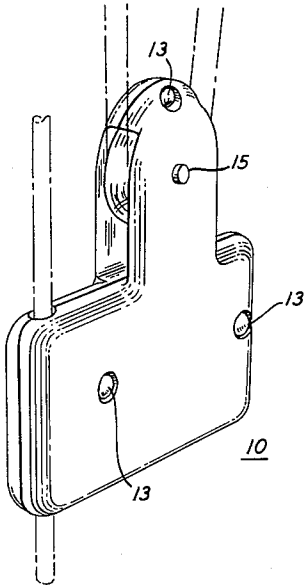


FIG. 2

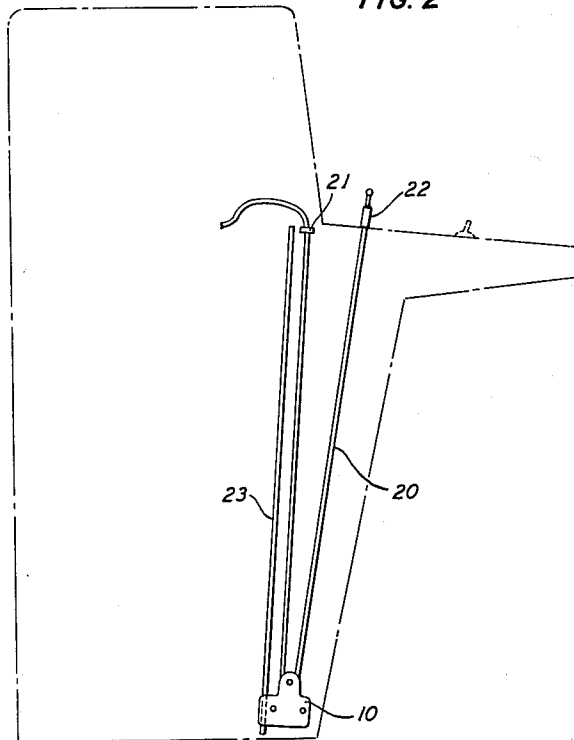


FIG. 3

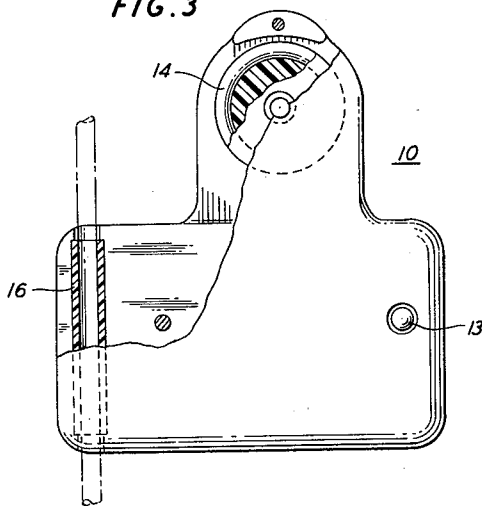
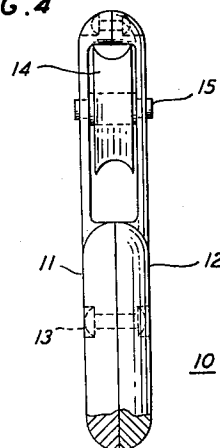


FIG. 4



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GUIDED CORD WEIGHT ASSEMBLY

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Filed Dec. 16, 1959, Ser. No. 859,894

1 Claim. (Cl. 179—95)

This invention is concerned with switchboard cords and, more particularly, with a guided weight arrangement for controlling such cords.

It is old in the art of telephone switching to use weights for retracting the plug terminated cords of manual switchboards. Where a long cord is used for allowing the making of connections to remote parts of a large area jack field, cord handling problems arise.

One way of accommodating a long cord involves raising the switching console on a platform so that the weight will still be above the floor when the cord is retracted. With such an arrangement either high chairs or forwardly extending platforms are required for the operators. Another way to take care of long cords is to use a double pulley assembly with the resulting higher cost, higher friction, et cetera.

It is an object of this invention to improve the operation of switchboards having long cords.

A more particular object of the invention is to avoid the difficulties attendant upon the aforementioned expedients accompanying the use of long cords, and to improve operator comfort.

The novel features of this invention that contribute to the accomplishment of the indicated objects will be apparent from a brief description of an illustrative embodiment of the invention.

A switching console may comprise a cabinet having a forwardly projecting key shelf or counter and a lower panel projecting downwardly and rearwardly therefrom to allow adequate leg and foot room for the operator. An array of jacks occupies the front of the cabinet at the rear of the key shelf. Plugs for making connection through the jacks are arranged in a line or lines along the rear portion of the key shelf. Each plug terminates a cord which passes downwardly through an orifice in the shelf. A portion of the cord at or adjacent its other end is anchored to the console. In order to provide sufficient cord for reaching the furthest jack, a loop of substantial length is needed between the anchor point and the plug. It is this loop that poses the problems that are solved by the arrangement of this invention. The cord is threaded through a weight and around a pulley carried thereby. Each of the weights has an aperture

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for accommodating a guide rod secured to the console in a suitable position and oriented so as to cause the weight to travel in a desired path. In this case the path of travel is roughly parallel to the lower front panel.

The foregoing and other objects and features of this invention will appear more fully and clearly from the ensuing specific description of an illustrative embodiment thereof in connection with the appended drawing in which:

FIG. 1 is a perspective view of the weight and fragments of the cord and of the guide rod to show its relation thereto;

FIG. 2 is a side view of the cord-weight-guide rod assembly showing its relation to a console;

FIG. 3 is a side view of the weight with parts broken away to show detail; and

FIG. 4 is an end view of the cord weight.

As illustrated in FIGS. 1, 3 and 4, the weight assembly 10 comprises two mating halves 11 and 12 secured together by fastening means 13 which may be rivets. The weight halves may be of die cast zinc and the rivets of brass.

A pulley 14 is rotatably mounted between the weight portions 11 and 12 by an axle or shaft 15. A suitable material for the pulley is nylon and for the shaft is steel. The guideway or aperture of the weight is lined with a tube or sleeve 16 which may advantageously be of nylon.

As shown in FIG. 2, the cord 20 is anchored at 21 and is terminated in the plug 22 shown resting on the key shelf. A bight or a loop of cord sufficient to allow adequate scope to the plug depends from the anchor and plug and passes through the cord weight 10. The guide rod 23 is secured to the console structure by suitable means (not shown) and is oriented to restrain the weight 10 to a sloping course behind the lower front panel of the console. As will be understood without further illustration, the plug end and accompanying cord and cord control assemblies are duplicated along the length of the console in accordance with the particular requirements of the installation.

What is claimed is:

A guided cord weight assembly for a telephone switchboard comprising in combination a weight member having an aperture extending therethrough adjacent one end thereof, a pulley member secured to the weight member, a cord passing around the pulley member and supporting the weight member, and a sloping rod extending through the aperture and guiding the movement of the weight member along an inclined path.

References Cited in the file of this patent

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