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M. MESSNER

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CATHODE RAY TUBE

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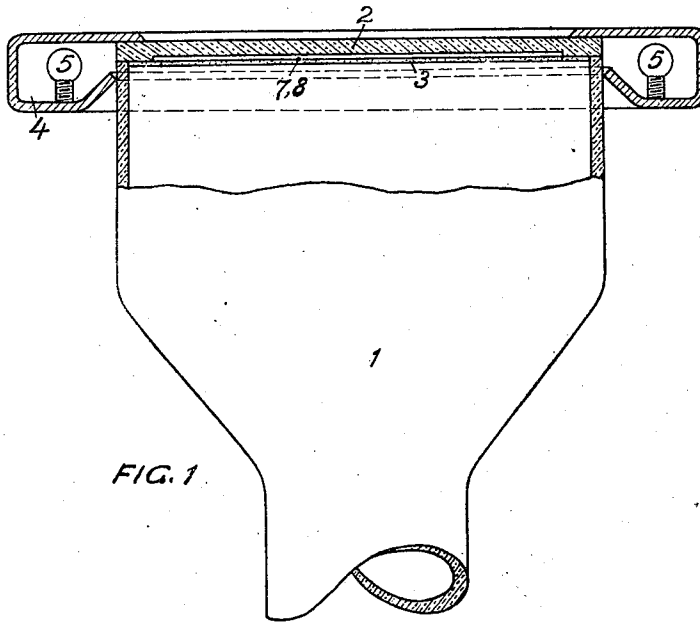
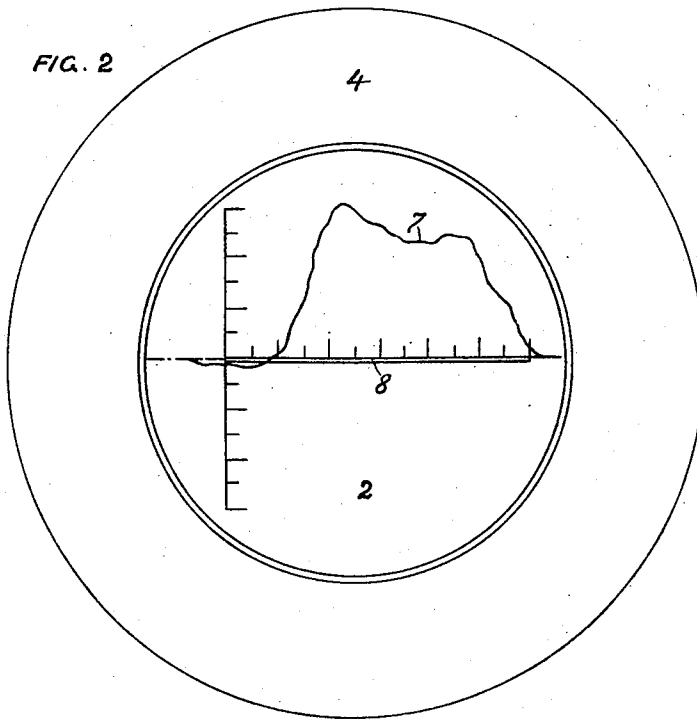


FIG. 2



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CATHODE RAY TUBE

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Application October 10, 1941, Serial No. 414,411
In Germany April 26, 1940

2 Claims. (Cl. 250—164)

Cathode ray tubes are known which are provided with scales or coordinate systems or the like in order to serve as a measuring equipment. In prior devices the scales or coordinate systems are arranged in front of the tube or painted on the bulb thereof. These arrangements are defective inasmuch as parallax errors in observation may arise, especially if the glass of which the bulb consists is of a certain thickness.

The invention has for its object to overcome this drawback and consists in certain features of novelty which will appear from the following description and the accompanying drawing, in which

Fig. 1 is a sectional view showing one embodiment of the invention, Fig. 2 is a plan view of the arrangement represented in Fig. 1.

1 denotes the glass bulb of a cathode ray tube, while 2 indicates the glass bottom or viewing end wall of the bulb. Bottom 2 is provided inside with a drawing that represents a scale 8 and an oscillogram 7. This drawing may be produced by etching or engraving or by sand-blasting, as may be desired or suitable, and is covered with the fluorescent screen 3 or another such coating.

The bottom 2 is surrounded with an annular casing 4 in which glow lamps 5 are arranged to illuminate the bottom 2 by rays entering it laterally, whereby the drawing 7, 8 or any other representation will be distinctly visible, the casing 4 preventing the lamps 5 from shining in other directions.

Preferably, the light entering the bottom 2 is given a colour different from the colour of the light emitted by screen 3. This expedient will add to the visibility of the drawing in the bottom 2.

What is claimed is:

1. A cathode ray tube having a translucent end wall, a scale on the inner side of said wall, a fluorescent screen at said end wall, and illuminating means to illuminate said end wall exclusively in a direction laterally thereof.

2. A cathode ray tube according to claim 1 in which a casing prevents rays from said illuminating means from reaching said end wall from other than said lateral direction.

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