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SCALE ILLUMINATION
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Fig. 1.

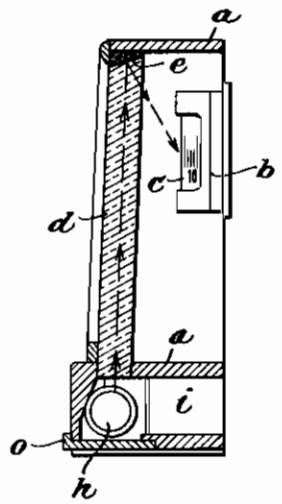
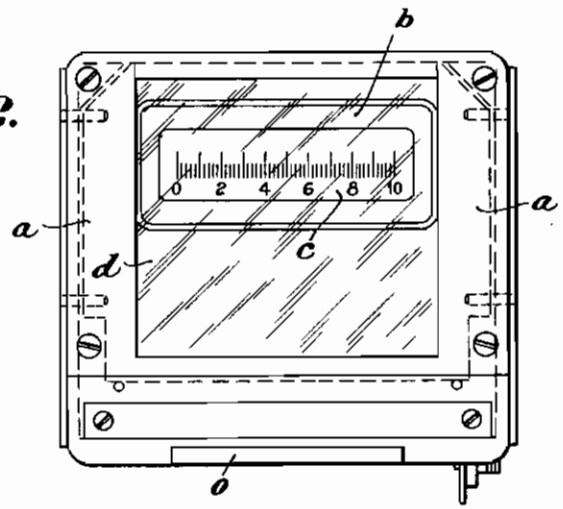


Fig. 2.



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ALIEN PROPERTY CUSTODIAN

SCALE ILLUMINATION

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It is known to illuminate the scales or dials of instruments and apparatus by means of sources of light mounted on the casing. In the majority of cases the light sources are provided outside in front of the protective crystal or pane, for the reason that posteriorly thereof there is too little space. However, whenever the light source is provided, say, laterally in respect to the scale, then the middle portion of the scale is not light enough for the reason that the light rays fail to strike the scale correctly. The purpose of the invention is to arrange the illumination of the scale in such a way that the scale will be illuminated uniformly and with sufficient brightness, without increasing the case of the instrument or the space between the scale and the protective crystal or pane to create space for one or more sources of illumination.

According to this invention adequate and satisfactory illumination of a scale is attained by making the protective pane or crystal of strong glass and by using the same for the guiding of the light-rays issuing from a source of light mounted adjacent to or below the pane or crystal. The glass pane could have a facet by which the light rays are deviated and thrown directly upon the dial. In this way the dial can be brightly illuminated, while the rest of the front plate or panel remains unilluminated, with the result that the scale becomes so much more conspicuous and contrasting. The use of a strog and heavy protective glass pane in front of the instrument or apparatus offers the further advantage that parts of the apparatus alive with high potential current which may possibly not be sufficiently covered by the front panel, will be insured more efficiently than heretofore. In such instrument the source of light (of the stage type) is supported in such a way in the plane of the heavy glass pane that it is separately accessible for replacement, without any necessity or risk of touching any of the high-potential current-carrying parts.

The invention is illustrated by way of example in the appended drawing. Fig. 1 is a cross-sectional view, and Fig. 2 a front elevation of an apparatus equipped with the novel lighting means here disclosed.

Within the casing *a* is housed a measuring or indicator device *b* of any nature at all. There is provided a scale *c*. The casing *a* is anteriorly covered by means of a heavy glass pane *d* which is provided with a polished and shining surface *e*. Opposite the latter, below the glass plate *d*, is mounted a source of illumination. The latter may consist of the stage type lamp *h*. This lamp is lodged in a chamber *i* of the casing *a* so that for its substitution all that is necessary is to open the locker slide o which shuts the chamber from the outside. Hence, the other parts of the instrument which may carry high-potential curent cannot be touched. The glass pane *d* is thus flooded by the light rays of the lamp *h*, these rays being deflected by surface *e* and directed onto the scale *c*. No matter where the dial or such portion of the indicator or reading means on the front panel of the instrument which are to be made particularly conspicuous may be located, it will always be feasible to dispose the facet on the glass pane in such a way that the pencil of light rays will be directed to the area where intensive and bright illumination is required.

ALWIN WEBER.