W. MARGRAF.

WEATHER INDICATOR.

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1,387,287. Patented Aug. 9, 1921.

Fig. 1.

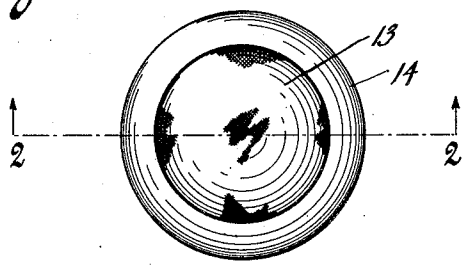
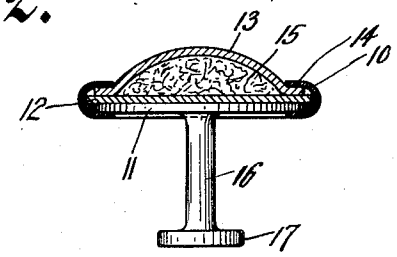


Fig. 2.



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WEATHER-INDICATOR.

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To all whom it may concern:

Be it known that I, WILLY MARGRAF, a citizen of Germany, and a resident of New York, in the county of Kings and State of New York, have invented certain new and useful Improvements in Weather-Indicators, of which the following is a specification.

The present invention relates to improvements in weather indicators, and more particularly to one that is constructed to indicate roughly the change of humidity of the atmosphere. The invention pertains more particularly to a hygroscope of the type that depends on the property some chemical substances have of changing color with varying moisture.

The main object of the present invention is to provide a hygroscope of the type mentioned, which is made in the form of a button, pin or other small article that may be secured to the outer garment of a person, so as to be constantly in view for inspection.

Another object of the invention is to produce a weather indicator of the character specified, which is simple in construction, efficient in operation and which may be manufactured on a commercial scale, or in other words one which is not so difficult to make as to be beyond the reasonable cost of such a contrivance.

With these and other objects in view, which will more fully appear as the nature of the invention is better understood, the same consists in the combination, arrangement and construction of parts hereinafter described, pointed out in the appended claims and illustrated in the accompanying drawings, it being understood that many changes may be made in the size and proportion of the several parts and details of construction within the scope of the appended claims without departing from the spirit or sacrificing any of the advantages of the invention.

One of the many possible embodiments of the invention is illustrated in the accompanying drawings, in which:—

Figure 1 is an elevation of a weather indicator constructed in accordance with the present invention; and Fig. 2 is a section taken on line 2—2 of Fig. 1.

In the drawings, the hygroscope is shown in the form of a button, that is adapted to be inserted into the button-hole of a coat lapel. The head 10 of this button is made in the form of a receptacle, comprising a disk-shaped back 11, on which rests a disk 12 of paper or similar material, against the latter abutting a front 13, made of fabric. The three elements mentioned are connected by a rim 14, that is rolled around their edges. The fabric 13 is convex in shape, the space between the same and the paper disk 12 being filled with an absorbent material 15, that has been saturated with a chemical substance which changes color with varying moisture. To the back plate 11 is attached, or there may be made integral with the same, a shank 16, having upon its free end a retaining disk 17.

The operation of this device is as follows:—The button is secured to the outer garment of a person by passing the retaining disk 17 through a button hole, for instance through a hole in the lapel of the garment. The chemical substance, with which the absorbent material 15 has been saturated, permeates the fabric 13, which will change color as the weather changes, that is to say, when the weather is dry it will have a given color and in damp or moist weather another color. In this manner the device indicates roughly the humidity of air, and thus changes in the weather.

It is obvious that, while herein the button has been shown as comprising a shank and retaining disk, the same may be provided with a pin or other means for attaching it to a garment. It is also obvious that, while herein the device has been disclosed in the form of a receptacle of specific construction, others may just as well be employed without departing from the invention, which lies mainly in the provision of a closed receptacle, one wall of which is in the form of a fabric, confining in the receptacle a chemical substance that changes color with varying moisture.

What I claim is:—

1. A hygroscope comprising a receptacle, a fabric piece closing the same, and absorbent material within said receptacle in con-

tact with said fabric piece and saturated with a chemical substance that changes color with varying moisture.

2. A hygroscope according to claim 1, comprising means for attaching the same to the garment of the wearer.

3. In a hygroscope according to claim 1, said receptacle and its fabric covering being made in the form of a button.

Signed at New York, in the county of New York, and State of New York, this 20th day of June, A. D. 1919.

WILLY MARGRAF.