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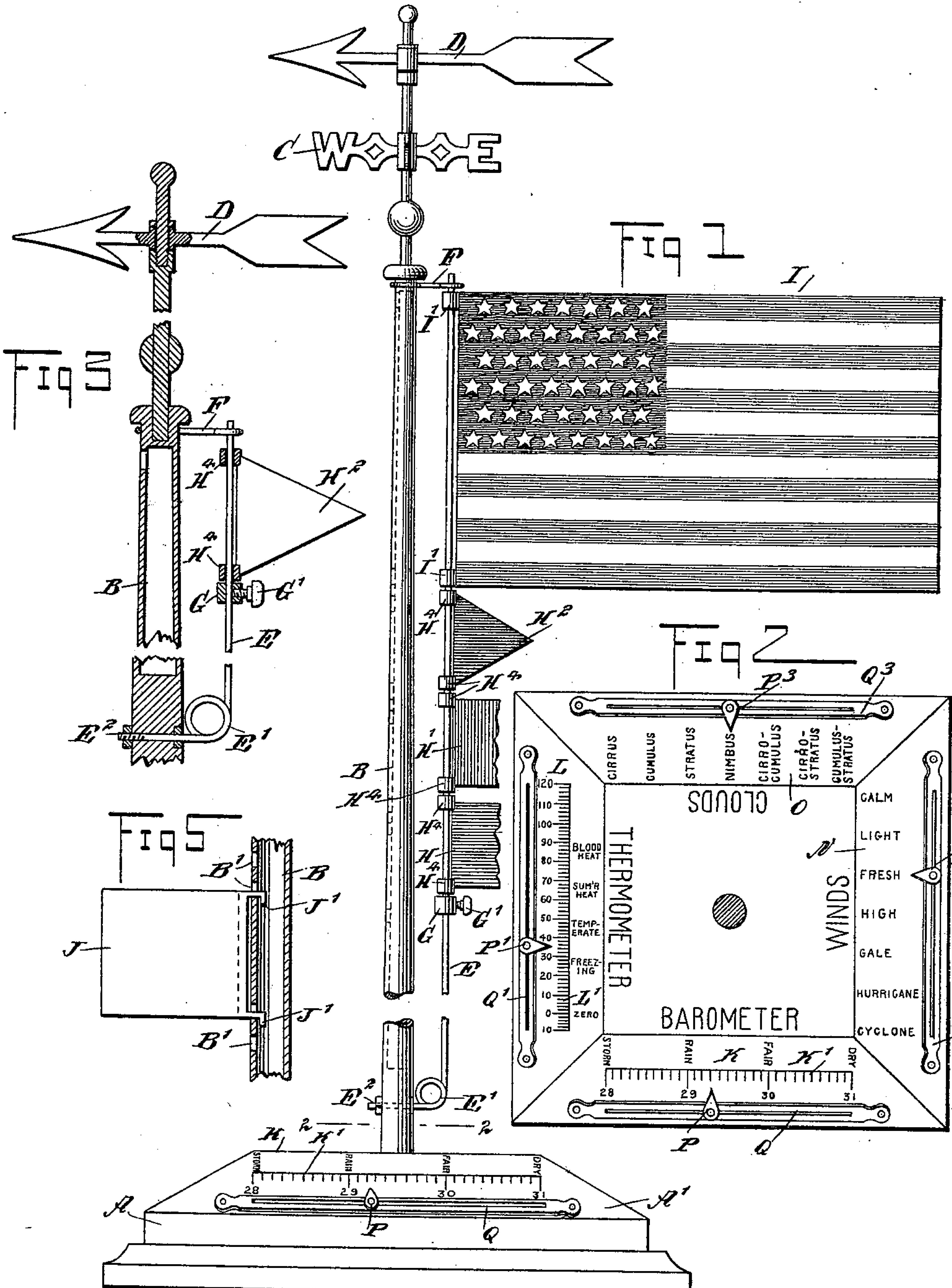
T. A. & H. B. FROEHLICH.

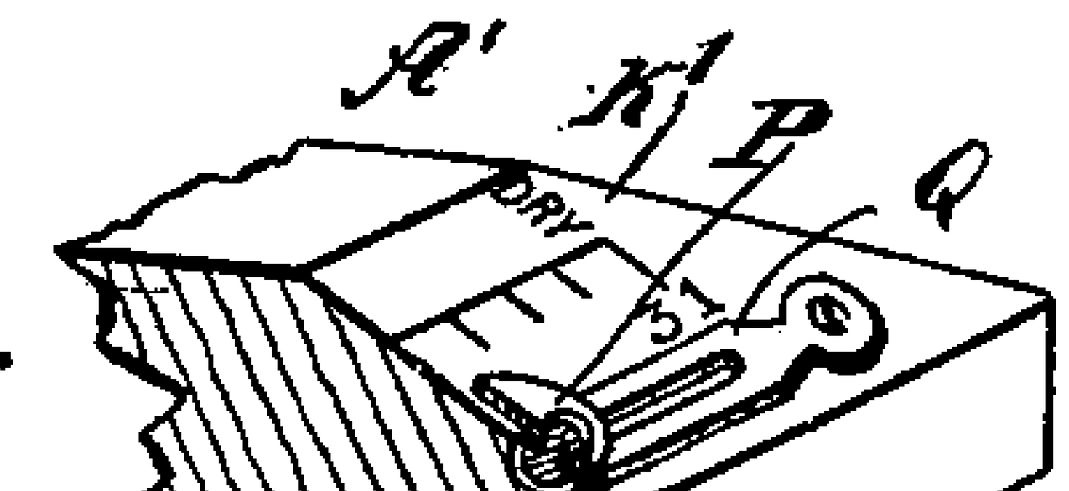
WEATHER SIGNAL INDICATOR.

(Application filed Apr. 6, 1899.)

(No Model.)



WITNESSES:



INVENTORS

Theodore A. Froehlich.

Helen B. Froehlich.

BY

Munn

ATTORNEYS.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

THEODORE A. FROEHLICH AND HELEN B. FROEHLICH, OF NEW YORK, N. Y.

WEATHER-SIGNAL INDICATOR.

SPECIFICATION forming part of Letters Patent No. 631,161, dated August 15, 1899.

Application filed April 6, 1899. Serial No. 711,944. (No model.)

To all whom it may concern:

Be it known that we, THEODORE A. FROEHLICH and HELEN B. FROEHLICH, of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Weather-Signal Indicator, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved weather-signal indicator, more especially designed for use in schools and arranged to permit of conveniently displaying weather-signals according to official reports received as to the state of the weather, the indicator serving principally to enable a teacher to teach meteorological conditions.

The invention consists of novel features and parts and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

A practical embodiment of our invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the improvement. Fig. 2 is a sectional plan view of the same on the line 2 2 in Fig. 1. Fig. 3 is an enlarged sectional side elevation of the post and support for the signal-flags. Fig. 4 is a sectional perspective view of part of the base, and Fig. 5 is an enlarged sectional side elevation of part of the post with a signal-flag secured thereon.

The improved indicator is provided with a base A, adapted to be set on a table or other suitable support, and on said base is erected a post B, supporting at its upper end compass-points C, and a weather-vane D for indicating the direction of the wind on the compass-points C, located below the vane. On one side of the post B is arranged a vertically-extending rod E, formed at its lower end into a coil E′, terminating in a bolt E^2, secured in the post B near the base A, as is plainly illustrated in the drawings. The upper free end of the rod E is adapted to be engaged by a loop F, held on the upper end of the post B to hold the rod normally in a vertical position to allow the operator to disengage the loop from the rod to permit of fastening a series of signal-flags H H′ H^2 on said rod, as shown in Fig. 1. Each of the signal-flags H H′ H^2 is preferably provided with apertured ears H^4 for engaging the rod E, the lowermost ear of the flag H resting on a collar G, secured on the rod by a set-screw G′. The next flag H′ rests with its lowermost ear on the uppermost ear of the preceding flag, so as to display one flag above the other on the rod E, and the uppermost signal-flag H^2 forms a support for a national flag I for enhancing the appearance of the device and stimulating patriotic sentiment. The several flags are made of stiff material—such as cardboard, sheet metal, or the like—and said flags H H′ H^2 are painted and shaped similarly to the signal-flags used by the United States Weather Bureau to indicate meteorological conditions.

By the arrangement described the teacher is enabled to readily unlock the upper end of the rod E and then conveniently remove the several flags I, H^2, H′, and H and place other signal-flags on said rod E, according to the prevalent weather conditions as reported by the United States Weather Bureau.

The base A is preferably provided with beveled sides A′, containing indicators K, L, N, and O, of which the indicator K consists of a graduated scale K′, representing inches and subdivisions for barometrical pressure, a pointer P being fitted to slide on a guideway Q for pointing on the corresponding graduation on the scale K′ and indicating the prevalent barometrical pressure. The indicator L is for indicating temperature and consists of a graduation L′, having degrees of heat and on which indicates a pointer P′, likewise held to slide on a guideway Q′. The indicator N is for indicating the force of the prevalent wind and is provided with the names of the different winds, and which names are indicated by a pointer P^2, fitted to slide on a guideway Q^2. The other indicator O is for indicating the condition of the clouds and is provided with the names of the different kinds of clouds and a pointer P^3, fitted to slide on a guideway Q^3. By the operator shifting the several pointers P, P′, P^2, and P^3 on their corresponding guideways it is possible to indicate barometric pressure at a given hour, the temperature, the force of the wind, and the condition of the clouds for a certain time.

If desired, the post B may be provided with

sets of apertures B′ on the side opposite to that on which the rod E extends, and these apertures are adapted to be engaged by angular hooks J′, formed on auxiliary signal-flags J for displaying the condition of the weather for the previous day to afford opportunities of drill on the different signals indicating various conditions of the weather, so as to bring the flags H H′ H² in view with the flags J for indicating the changing conditions of the weather from one day to another.

From the foregoing it will be seen that the device is very simple and durable in construction, facilitates education in meteorological matters, and enables teachers and scholars to readily change the signal-flags from day to day, according to official weather reports.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

1. A weather-signal indicator, comprising a base, a post erected thereon, a rod permanently secured to one end of said post and removably connected at its other end with said post, and signal-flags having ears adapted to engage said rod and display the flags at right angles to the rod, substantially as shown and described.

2. A weather-signal indicator, comprising a base, a post erected thereon, a rod permanently secured to one end of said post and removably connected at its other end with said post, signal-flags having ears adapted to engage said rod and display the flags at right angles to the rod, and a collar adjustably secured on said rod to support the flags, as set forth.

3. A weather-signal indicator, provided with a post having apertures in its side, and signal-flags having angular hooks for engaging said apertures and removably supporting said flags on the post, said flags standing at an angle to the post, substantially as shown and described.

4. A weather-signal indicator comprising a rectangular base, a post supported on said base and arranged for removably carrying signal-flags and a manually-operated indicator fitted to slide in the base along each side thereof and adapted to indicate atmospheric pressure, temperature, prevalent winds and the condition of the clouds, substantially as shown and described.

5. A weather-signal indicator comprising a base, a post supported on said base and formed with a longitudinally-extending series of apertures, a rod permanently secured to one end of said post and removably connected at its other end to said post, a set of signal-flags having ears adapted to fit around said rod, a collar adjustably secured on said rod and engaging an ear to support the flags and a second set of signal-flags having angular hooks adapted to enter the apertures in the post whereby two sets of flags may be simultaneously displayed to illustrate the weather indications of different days, as and for the purpose set forth.

THEODORE A. FROEHLICH.
HELEN B. FROEHLICH.

Witnesses:
THEO. G. HOSTER,
EVERARD BOLTON MARSHALL.