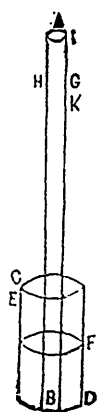


the falling of the mercury was owing to the weight of the atmosphere it obtained the name of weather glass, and by this name it is still sometimes known even at the present day.

The barometer of Torricelli is the one which is generally used, and, although since its invention we have had various improvements, some on a small and others on a large scale, still this one is the most accurate, as the natural simplicity of its construction must defy all improvement.

This instrument being now the most common, and the chief one in use, I shall try and explain it, taking for a guide the annexed wood-cut :—



A B represents a tube of glass $\frac{1}{4}$ of an inch in diameter, and 34 inches in length, hermetically sealed at the point A. The tube A B, being then filled with mercury, is inverted in the basin C D. The mercury then falls to G H, 28 inches, and the highest it reaches is 31 inches. From the surface of the quicksilver, C F, 28 inches must now be measured on the tube A B. This will reach to the point K, which is generally marked stormy. In like manner, the highest part of the scale of variation, I, is placed 31 inches above E F, and is marked very dry, and applies to the summer season, and on the other side to hard frost for the winter. The next half inch below is marked set. fair on one side, and set. frost on the other. At 30 inches from C F it is marked fair on one side, and frost on the other ; half an inch below this, the word changeable is marked, which answers for both summer and winter. At 29, rain on one side, and snow on the other ; 28 $\frac{1}{2}$, much rain, or much snow, and each division, for convenience sake, is subdivided into ten parts. I shall now give a few general principles in relation to prognosticating the weather by this useful instrument, and, in doing so, shall make use of Dr. Haller's rules :—

1. In calm weather, when it is inclined to rain, the mercury is certainly low.

2. In good weather, high.

3. In great winds it sinks very low ; in fact, the lowest of all, though there be no rain.

4. The greatest heights of the mercury are found with easterly winds.