

area storms. By a cyclonic storm is not necessarily meant a cyclone or a hurricane, but simply a storm characterized by an atmospheric pressure below the average, and having a wind system blowing spirally inward, as do the winds of a genuine cyclone. The fluctuations of the atmospheric pressure as indicated by the barometer amount to about four inches. The position of these areas of high and low barometer, especially the latter, is the chief factor in weather forecasts.

The circulating air-currents at the surface of the earth move contrary to the hands of a watch. From this cyclonic action the phenomenon so often observed of the wind blowing in an opposite direction before and after the passing of a storm becomes obvious. In the area of low barometer we have an ascending current of warm air around which gyrates the anti-cyclone of cold air with an inflow at the earth's surface. Although far the greater part of the action of all and the whole of some storms takes place within a mile of the surface of the earth, yet the movement of upper clouds and occasional attendant peculiar phenomena indicate quite clearly that the origin and most important phases of atmospheric changes must be assigned to the upper strata of the air. The formation of depression or low area is probably due to precipitation or formation of cloud, or is at least very closely related in some way to the condensation of aqueous vapour. The motion of the low area probably depends on the prevailing direction of motion in the great body of upper air in the vicinity of the low area.

By plotting the isobars of mean annual pressure over the northern hemisphere two areas of low barometer are found, one over Iceland and the other over Bering Sea. The one over Iceland is the one towards which our Canadian barometric gradients flow. An area of low barometer may be looked upon as a vast caldron towards which and into which the atmosphere is flowing. From this analogy we can see in a measure how the atmospheric currents flowing over Canada toward the sink hole, so to