

No. 232

A Science Service Feature

Feb. 8

? WHY THE WEATHER ?

Dr. Charles F. Brooks,
of Clark University,
discusses:

THE COLD WAVE

When in winter the weather is moderately warm, with a southerly wind blowing and a low and falling barometer, look out for colder weather soon, perhaps a cold wave. At times a cold wave may come without warning, when a cold wind drops suddenly from uncharted Labrador. Usually, however, the approach is more gradual, allowing the Weather Bureau an opportunity to give warning 24 hours or more ahead.

The cause of the cold wave is a considerable transportation of cold air. It is usually marked by an area of high pressure on the cold, northern plains, with low pressure to the southeast. Nature, in seeking equilibrium, is sending the icy current into the area of low pressure southward. The zone where the cold wave strikes the warm south wind is usually marked by rapid condensation of some of the latter's moisture, and as it passes there is a brief period of rain or snow, sometimes with thunder and lightning, and presently the mercury drops rapidly and persistently to frigid limits. The great cold wave of January 3-6, 1924 advanced now rapidly, now slowly, into the southeast. It was marked not so much by extraordinary cold on its first appearance in the north and a rapid sweep southward, as by the enormous volume of cold air and by an earlier chilling of the ground which resulted in but a moderate degree of warming as it progressed. Thus this cold wave was of extraordinary severity in the southeastern states, though it did not come very suddenly.

(Tomorrow: Summer Heat Warms Winter Cellars)

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