

No. 254

A Science Service Feature

March 5

? WHY THE WEATHER ?

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

SMOKE AS WIND INDICATOR

Observations of smoke rising from a tall chimney are sometimes used as a guide to wind direction and velocity. If one's distance from the source of smoke is known, the velocity of the wind may be ascertained from a measurement of the angular motion of the smoke. A rough measurement of this sort can be made with a pencil held at arm's length.

Smoke as a wind indicator suffers from various limitations, however, as it is difficult to tell in what direction it is really moving. Smoke apparently moving to the right from a chimney in the north may be coming from northwest, west, or southwest. Smoke from two sources in different directions will usually show the wind direction accurately, however. In a calm, smoke will ascend in a column; much turbulence dissipates it quickly. Up and down air currents and gustiness produce the characteristic wavy line of smoke seen by day, and a light, steady wind the straight line seen on a moonlight night.

-----

(Tomorrow: Evaporation of Snow)

All rights reserved by Science Service

Science Service,  
1115 Conn. Ave.,  
Washington, D.C.