

A Science Service Feature

Released on receipt
but intended for use
June 11, 1929

? WHY THE WEATHER ?

Mailed June 4, 1929

By Charles Fitzhugh Talman,
Authority on Meteorology.

OZONE

Years ago a great deal was heard about ozone in the atmosphere. This substance is a variety of oxygen, but is more active chemically than the ordinary gas and is a powerful disinfectant and deodorizer. Its presence in the air, first reported by the German chemist Schoerbein, began to be a matter of popular interest after the middle of the nineteenth century. So-called "ozone-papers" were exposed to the air at many places throughout the world. The intensity of the blue color assumed by these papers was supposed to be an indication of the amount of ozone present, but we now know that the color was affected by other atmospheric substances and that such observations were quite worthless. We know, also, that the ozone in ordinary outdoor air is so insignificant in amount that it cannot have the health-giving properties formerly ascribed to it.

Recently, however, this gas has acquired a new and romantic interest on account of the discovery that it is relatively abundant in the upper levels of the atmosphere--probably 25 or 30 miles above the earth--where, through its effects on incoming and outgoing radiation, it is supposed to exercise considerable influence on weather and climate. Observations indicate that ozone is least abundant over the tropical regions, where the amount varies little through the year. The greatest amount is found above the polar regions, where it reaches a maximum in spring.

(All rights reserved by Science Service, Inc.)

SCIENCE SERVICE
21st and B Sts.
Washington, D.C.