

Released upon receipt  
but intended for use  
October 9, 1931

A Science Service Feature

? WHY THE WEATHER ?

Mailed October 2, 1931

By Charles Fitzhugh Talman,  
Authority on Meteorology

BURNING-GLASS SUNSHINE RECORDS

In America the duration of sunshine is generally registered by means of a special form of mercurial thermometer connected electrically with an automatic recording device run by clockwork. In the Old World, and especially in Great Britain, the instrument employed for this purpose makes its record by means of a burning-glass and is known as the Campbell-Stokes sunshine-recorder. Some instruments of this pattern have lately appeared at certain American airports, where they have aroused much interest.

The first instrument of the burning type was invented by J. F. Campbell, in England, in 1853. Originally the burning-glass was a glass globe filled with water, and in most of the early instruments the globe was mounted in a hemispherical wooden bowl, on the surface of which the sun's rays, brought to a focus by the globe, burned a groove. As the sun's declination changed slightly from day to day, the grooves for different days were in different places, and the wooden bowl was changed only twice a year. Later the present plan was adopted of obtaining the records on a card, ruled with time marks, and changed daily. The card is held in a curved metal frame. As further improved by R. H. Curtis, the instrument is adjustable for the particular latitude in which it is to be used.

(All rights reserved by Science Service, Inc.)

-----  
SCIENCE SERVICE  
21st and Constitution Ave.  
Washington, D. C.