

Released upon receipt  
but intended for use  
April 2, 1931

A Science Service Feature

? WHY THE WEATHER ?

Mailed March 26, 1931

By Charles Fitzhugh Talman,  
Authority on Meteorology.

WHAT IS BALL LIGHTNING?

What are the luminous balls, sometimes seen during thunderstorms, and known to science as "ball lightning"?

Dr. G. C. Simpson, director of the British Meteorological Office, has been recognized for many years as a leading authority on the subject of lightning, and in recent years he has devoted special attention to ball lightning, but he admitted in a lecture delivered last summer at Oxford that he cannot solve the mystery of these curious objects.

"They have," he says, "been explained as masses of ionized air, or as masses of some new and otherwise unknown gas. But all such theories fail to explain how an isolated mass of gas can retain its concentrated form for relatively long periods. Vortex motion is not sufficient. They have been explained as brush discharges like St. Elmo's fire, and as portions of an ordinary lightning channel, which continues to glow after the main discharge has ceased. It must, however, be confessed that all these so-called explanations are little more than guesses, entirely unsupported by experimental evidence. Speaking for myself, after carefully studying the literature of the subject, I cannot see even the beginning of an explanation, and I do not propose to add another guess to those already made."

(All rights reserved by Science Service, Inc.)

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