

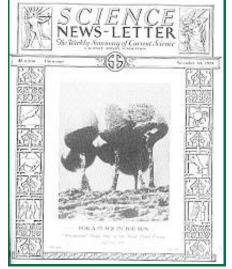
From the November 30, 1929 issue

FOR A PLACE IN THE SUN

The futuristic mushroom-like objects pictured on the cover of this week's SCIENCE NEWS-LETTER are not mushrooms at all, but the spore-boring bodies of one species of the lowest of all plants (or is it animals?), the Mycetozoa, as seen through the enlarging lens of Cornelia Clarke's camera.

SOLAR SYSTEM RUSHING THROUGH SPACE

The Earth and the rest of the solar system are rushing at a rate of some six miles a second toward the portion of the sky in which is seen the constellation of the Dragon, Dr. Dayton C. Miller of the Case School of Applied Science, Cleveland, has discovered.



That there are at least 12 different experimental evidences of such a cosmic motion of the solar system is announced by Dr. Miller for the first time in a report to the National Academy of Sciences. Among these are the famous ether drift tests that he has been making for the past decade. This year's tests were made at Cleveland within 300 feet of the location of the original Michelson-Morley experiment on ether drift upon whose supposed negative result Einstein supported his theory of relativity. Dr. Miller, on the basis of reinvestigation of the original test data and thousands of observations of his own on Mount Wilson and at Cleveland, concludes that the original experiment of 1887, cited in every textbook as proof that there is no ether, in reality shows the same sort of motion that he has found in his much more extensive repetitions of the experiment.

NEW BAKING POWDER LEAVES NO RESIDUE

A baking powder which does not leave a residue in the finished bread or cake has just been worked out in the chemistry laboratories at the University of Wisconsin by Edwin O. Wiig. This new leavening agent has as its active agent acetonedicarboxylic acid, which during the baking process disappears entirely as gases.

The formation of carbon dioxide, the gas which "raises" the cake, is only part of the story of baking powder. The other part concerns the product which remains in the cake as a residue. The various commercial baking powders on the market at present leave as residues saline cathartics, such as sodium tartrate, Rochelle salt, disodium phosphate, sodium sulfate, or aluminum hydroxide. There is still a question as to the possible ill effect of some of these materials upon health. Hence the advantage of a baking powder which leaves no residue whatsoever. Acetone is the only other substance formed besides carbon dioxide, and the acetone completely evaporates at baking temperatures.

QUANTUM THEORY WINS

Quantum mechanics, one of the latest developments in physics, won another victory over the

older ideas of physics when Dr. Philip M. Morse of Princeton and the Bell Telephone Laboratories reported to the National Academy of Sciences that the quantum mechanical theory of the electron, the particle of matter and electricity, explains not only the general effect of scattering of electrons when they are shot at crystals, but also small peculiarities in the experimental results that appear when electrons are considered to be just like X-ray beams in their action.

Timeline Archives