

ASTRONOMY

Meteorites Not So Old

► THE ANCIENT PLANET, from which were broken all meteorites found on the earth today, was born less than 60,000,000 years ago.

This finding, which reduces the relative age of the parent planet from a top limit of some 7,600,000,000 years to a mere 60,000,000 years, is reported by Dr. Carl August Bauer of the University of Michigan in the *PHYSICAL REVIEW* (Aug. 15).

Smaller than the earth, this now-disrupted planet once moved in an orbit between those of Mars and Jupiter. This is where the asteroids or minor planets are found today.

This upper limit on the age of the planet can be established because the uranium and thorium contents of the meteorites he studied are sufficient to produce all of its helium in only 60,000,000 years.

Cosmic radiation thus produces helium in meteorites 70 times faster than he had previously predicted, Dr. Bauer explains. This is true because, to agree with his new findings, cosmic radiation has to produce the helium in 60,000,000 years rather than in 4,000,000,000 years, as previously estimated.

"This high rate of production of helium

in meteorites, as compared to the calculated rate just outside the earth's atmosphere, may arise from the effect of the sun's general magnetic field, as suggested previously, or from secondary helium-producing processes that have not been considered," Dr. Bauer reports.

The new findings overcome two difficulties:

1. Difference in the helium content of different fragments of the same meteorite.
2. Difference from point to point within the same fragment.

Five Bethany meteorites, all located in a limited region of Great Namaqueland, Southwest Africa, upon examination were found to be similar in structure and composition. But one has been assigned to a different meteorite fall because its helium content is so much greater than the others.

This difference can be more satisfactorily accounted for by assuming that the helium was produced by cosmic radiation, Dr. Bauer explains. In this manner the difference in the helium contents of the various fragments would arise from the difference in their location within the original pre-atmospheric mass.

Science News Letter, September 18, 1948

Letters To The Editor

Got Our Bees Mixed

Your answer to Mrs. Glick's letter (SNL, Aug. 14) erroneously assigns the role of wood borers to leaf-cutting bees (*Megachile*). Certain species do place their leaf nests in wood burrows previously drilled by beetle larvae or other insects. Their activity in removing frass from the holes

may create the impression that they are boring into solid wood.

It is advisable not to attribute unwarranted destructiveness to a group of insects essentially beneficial as pollinators.

Carpenter bees, which are often confused with bumble bees, do drill their nest burrows into wood and may cause structural damage, especially in tropical areas. How-

ever, they are good pollinators and should not be persecuted for any minor damage they may cause.—George E. Bohart, Entomologist, Logan, Utah.

Doesn't Sound Right

If you were comparing a rich man and a poor man, you certainly would not say that the poor man was 400 times less rich than the rich man. In the article "Hundred White Dwarfs" (SNL, Sept. 4), you use such expressions as "400 times less luminous," "35 times smaller," "40,000 times smaller," and "25,000 times too faint." It just does not sound right.—Clarence E. Mange, St. Louis, Mo.

SCIENCE NEWS LETTER

Vol. 54 SEPTEMBER 18, 1948 No. 12

55,500 copies of this issue printed.

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St., N. W., Washington 6, D. C., North 2255. Edited by WATSON DAVIS.

Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage.

Change of address: Three weeks notice is required. When ordering a change, please state exactly how magazine is now addressed. Your new address should include postal zone number if you have one.

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Printed in U. S. A. Entered as second class matter at the post office at Washington, D. C., under the act of March 3, 1879. Established in mimeographed form March 18, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Indexed in Readers' Guide to Periodical Literature, Abridged Guide, and the Engineering Index.

Member Audit Bureau of Circulation. Advertising Representatives: Howland and Howland, Inc., 393 7th Ave., N.Y.C., Pennsylvania 6-5566 and 360 N. Michigan Ave., Chicago, STate 4439.

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