argues. But this could not have been done at the shore near Hissarlik, because there is not room for the camp and the maneuvers.

Disagreeing with this view, in *Antiquity*, Miss Winifred Lamb, British archaeologist, declares that M. Vellay demands geographical accuracy from a poet whose very identity is obscure. The Iliad has its roots in the folk-memory of the dark ages, she says and was often pruned before it grew to its final form.

Although she dismisses M. Vellay's geographical argument as not strong enough to wreck Hissarlik's reputation for being the scene of Troy, Miss Lamb states that the important region around Hissarlik is too little known, and should be further explored.

Science News Letter, April 2, 1932

EVOLUTION

Would Study Effect of Radium Find on Evolution

DO THE GREAT deposits of radium ore recently discovered in northern Canada have any effects in speeding up the rate of evolution of the plants and animals in their neighborhood?

This question has been raised in *Science* by Prof. W. C. Broadfoot of the University of Alberta. Prof. Broadfoot calls attention to the now well known ability of X-rays to speed up evolutionary change, first demonstrated to the scientific world by Prof. H. J. Muller of the University of Texas. The effects of radiations from radium and other radioactive substances have also been the subject of numerous experiments, and of observations on living organisms in regions of high natural radioactivity in the earth.

In the latter localities there have been some apparently positive results, but of so small a magnitude as to leave the question still in doubt. But the newly discovered deposits of pitchblende have a far higher natural radioactivity than that of any locality so far tested, so that Prof. Broadfoot believes they might throw some light on the question, either through effects on organisms brought in and purposely exposed, or through observation of changes in the natural fauna and flora of the region.

A drawback is the great distance from the nearest centers of biological research, traversable for all practical purposes only by airplane, and the consequent high cost of making such experiments and observations.

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ASTRONOMY

New Long-Time Clock Is Rotation of Milky-Way

Occurring Every Four Hundred Million Years, Revolution Of Great Galaxy of Stars Would Supplement That of Earth

A NEW CLOCK for measuring long periods of time may prove the rotation of the great galaxy of stars in which the solar system is located, Prof. Robert H. Baker, director of the University of Illinois Observatory, suggested in an address during the dedication of the new building housing the great Harvard collection of four hundred thousand astronomical photographs.

The revolution of the Milky Way, which occurs about once in four hundred million years, would supplement the rotation of the earth, which measures the day, and the swing of the earth around the sun, that measures the year.

When the dinosaurs existed, some two hundred million years ago, Prof. Harlow Shapley, director of the Harvard College Observatory, said in commenting, the solar system was on the other side of the galaxy.

The age of the earth is not less than eighteen hundred million years, and probably about two thousand million years, as measured by the radioactive clock, Prof. Arthur Holmes of Durham College, England, told the astronomers. Accurate determinations of the amount of helium in rocks give the geologist information on their age, because helium is given off at a known rate by the disintegration of radioactive uranium and thorium elements in the rocks.

The oldest known rocks exist in North America. Up until a few weeks ago uraninite from the Black Hills, S. D., held the record with 1460 million years of age, but radium-bearing rock from the radium bonanza at Bear Lake in northern Canada has shown nearly the same age, and rock from Manitoba assays an age of eighteen hundred million years. As these rocks were molten when laid down and injected into existing rocks, the rocks around them must be even older.

With increasing age the earth is not getting any feebler in energy, Prof. Holmes observed. In fact, in the Tertiary age, which led up to the appearance of man, the earth seems to have been more active than in earlier ages.

New estimates of the age of the earth have disturbed the astronomer's confidence in the stability of the solar system, Prof. E. W. Brown of Yale declared. Although he feels no concern about the immediate safety of the earth, he cannot tell just what it was doing two thousand million years ago when its crust was formed. Prof. P. W. Bridgman of Harvard warned that it was unsafe to theorize as to what had happened thousands of millions of years in the past and what would happen far in the future because we have only a few hundred years on which to base ideas.

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ETHNOLOGY

Monte Alban Neighborhood Stirred by Ghost Legends

NEW TALES of ghostly doings are stirring the countryside around Monte Alban, scene of recent treasure-tomb discoveries.

Long before Mexican archaeologists entered "Tomb Number Seven" at the ancient ruined city and found gold and pearls and other Indian treasures, there were legends. It was whispered that a hollowed gourd filled with gold could be seen, appearing magically in the middle of a phantom lake at Monte Alban. Other legends told of spirits who walked in the ruins carrying away gold.

Now that treasure has been found, and the Oaxacan imagination has been stirred, new legends are being generated. It is said that the guardians of the ruins see a phantom market which appears at midnight. The scene before them is the old Monte Alban, as it was in ancient times. Those who see and do not believe become enchanted and mysteriously disappear, the story goes. But those who do believe come to no harm.

A soldier stationed with the military guard tells another strange story. A female dog and her puppies come out of a secret passage of a mound, he says, but they disappear when any one approaches.

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