strain which would suffice to account for gravitation. But the outstanding difficulty would be to explain the high velocity of propagation of gravitation which seems to be required by the known behavior of the solar system under the action of the sun's gavitation.

Of course it may be that the failure of the linear relation between ether stress (electric field) and ether strain is associated with ether compression, and it might be possible to explain in this way the high velocity of the propagation of gravitation. The point, however, which we wish to emphasize is that mere ether compression alone is not sufficient to explain gravitation; at least the compressional energy must not be proportional simply to the square of the resultant field intensity, for in this case the compressional energy would not be distinguishable from the distortional energy which gives rise to the ordinary electric attraction and repulsion. If, however, the compressional energy were proportional to the fourth power of the resultant field intensity, then the ether compression would not stand in a linear relation to electric field intensity (ether stress), and the above remarks concerning excess of the electric attraction over repulsion would apply and gravitation would be provisionally explained.

W. S. Franklin.

THE HOMING INSTINCT OF A TURTLE.

To the Editor of Science: The following account from a friend, Miss Victoria Hayward, of Bermuda, may be of interest to your readers. I can vouch for the accuracy of the relater, and know from experience that the locating of an area on the reefs is as easy to a Bermudan as if it were on dry land. Miss Hayward writes:

"My father caught a turtle in June that weighed seventy-five pounds. He placed it in a pond in the harbor of St. George. In August on going to the pond he found that some person had thrown a piece of iron weighing about fifty pounds into the pond and it had broken a large hole in the turtle's back. It had been wounded apparently about a week and was weak and seemingly dead. My father thought he had better kill it, but he changed his mind, and let it go alive into the harbor.

"In the latter part of October he and another man recaptured it in the same place where they had caught it before—about four miles from land, on the flats (reefs) that lie to the north of the islands. The back was nicely healed and the turtle was altogether in excellent condition. You know that it requires no little knowledge of the art of navigation for a turtle to find the way from the southern side of St. George's Harbor through some one of the many little channels to its own special home on the north reefs—four miles out to sea."

C. L. Bristol.

BOTANICAL NOTES.

PEACH LEAF CURL.

According to a bulletin (No. 20) prepared by N. B. Pierce and recently issued by the Division of Vegetable Physiology and Pathology of the United States Department of Agriculture, this disease appears to exist wherever the peach is grown. It is known to occur in North America, South America, Europe, South Africa, New Zealand, Australia, Japan and China. It is due to the presence of a minute parasitic fungus—*Exoascus deformans*—one of the simpler of the sac fungi—(Ascomyceteae). The fungus attacks the parenchyma of the leaves and twigs, enlarging, thickening, curling and distorting them. Eventually the leaves become yellowish and fall off, involving as a consequence the wilting and dropping of the fruit. It has been estimated that the annual loss in the United States from this source alone amounts to between two and three millions of dollars.

Mr. Pierce's paper discusses not only the structure of the fungus and the nature of the disease, but includes records of the many experiments which he made in order to determine what are the most efficient means for preventing or combating the disease in the orchard. He recommends spraying with Bordeaux Mixture of the following proportions: Copper sulphate, five pounds; lime, five pounds; water, forty-five gallons; applying it with what is known as a 'Cyclone Nozzle,' and doing the work from one to three weeks before the opening of the blossoms in the spring.