

Prinsep, already mentioned (1833); C. W. Grant (1838), of the Bombay Engineers; J. E. DeKay, in his *Fishes of New York* (1861); Pieter Harting (1861); Sir Emerson Tennent, in his *Natural history of Ceylon* (1861); Count Castelnau, the ichthyologist (1861); E. Warren, of the Natal Museum, South Africa (1909); Alexander Meek, of the Dove Marine Laboratory (1918); and J. D. Ogilby (1907) and A. R. McCulloch (1925), well-known Australian ichthyologists. These men not infrequently narrated these accounts before scientific societies and later published in scientific journals.

Most of the nonscientific observers and some of the scientists had no knowledge of what other men in their own lands and especially in foreign countries had seen and written about. Some of the observers had seen the fishes while falling, some had been struck by the fishes, and some had eaten of the freshly fallen fishes. The mass of evidence is as prodigious in volume as it is widespread in time and space. To disregard all this evidence ranging from hearsay to scientifically attested, and to brand as "credulous" all those who, from personal observation or after much study of published accounts, accept much of it as credible, seems, as I wrote in Article I, to indicate a refusal to consider the evidence offered or an inability to evaluate it.

To my very great regret I have never witnessed a rain of fishes, as I have never seen some of the other unusual and extraordinary things about fishes of which I have written in the past 40 years. But if such things have not been physically impossible, and when after careful and critical consideration of the reports (from hearsay to scientific) from widespread sources the world around and from many reputable observers (some known to me personally)—reports which in detail corroborate each other, then I have ample justification for giving them credence, and so I still believe that:

Fishes fall from the sky with rain.

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### Geopathology or Ethnopathology?

In referring to Francis Dieuaide's article (*Science*, 1945, 102, 656), Frederick Sargent, II (*Science*, 1946, 103, 316) states that "geopathology" is really a branch of biometeorology.

Actually, Dr. Dieuaide's "geopathology" has basically very little to do with biometeorology. True, climate, topography, food, and habit are correlative factors in both; however, they are not the principal factors in "geopathology." Dr. Dieuaide, among others, specifically mentions the "effect of social conditions" and "perhaps hereditary racial traits." In this connection it might also be mentioned that it is somewhat puzzling why Dr. Dieuaide appears to infer that hereditary racial traits are only of secondary importance.

Since we have the opinions of a medical man and a biometeorologist, I wonder if it might not be wise to call upon an anthropologist as an arbiter in this argument. I frankly doubt if anyone would care to lead

with his chin. The fact remains, as Dr. Dieuaide very correctly pointed out, that "Geopathology is in its infancy." Nevertheless, it is my personal opinion that Dr. Dieuaide's article is laudable, in spite of the fact that a few minor comments appear debatable.

First, I believe that *Natural resistance and clinical medicine*, by Perla and Marmorston (Little, Brown, 1941) covers a good many of the problems mentioned by Dr. Dieuaide. Second, I believe that American medicine has been somewhat asleep in this regard. It had been my good fortune to obtain several papers in Japan prior to the war which dealt with some studies and research in this field. As a matter of fact, the Imperial Japanese Armed Forces collaborated in some of those studies.

Finally, in answer to Dr. Dieuaide's proposed term, "geopathology," I wonder if the term "ethnopathology" might not be more specific.

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### A New Pennsylvania Meteorite

Recently one of my students, C. R. Bruce, brought to the laboratory for identification a specimen which had been resting in family cupboards for 61 years. The story was that in September 1886 a man was cutting corn on the Deuthl property, two and a half miles southwest of Bradford Woods, or seven miles northwest of Pittsburgh in Allegheny County, Pennsylvania. He heard an explosion and a rushing noise and ran to the home of George Hillman, who, on going to the field, found the specimen imbedded in the road and still warm. It has been in possession of the family ever since and is now owned by Mrs. Charles Amsler of Baden, Pennsylvania.

Inasmuch as it is in private hands, no opportunity has been afforded for detailed study, but preliminary examination indicates that it is a true stony meteorite or aerolite. As such, it is of considerable interest since it is the first recorded aerolite found in Pennsylvania. R. W. Stone (*Meteorites found in Pennsylvania*. Pennsylvania Topographic and Geologic Survey, Bull. G 2, 1932) lists five meteorites found in the state, but all these were of the metallic type, or siderites.

The Bradford Woods meteorite measures 55 × 65 × 85 mm. and weighs 762 grams. It is shaped somewhat like an old-fashioned pan biscuit with one smooth, curved surface like the biscuit top and three more square faces like the broken faces of a biscuit. The surface has the glazed, varnishlike, pitted surface characteristic of meteorites and is nearly black. It would seem that it is a part of a smooth, pebblelike, elliptical body which, as it reached the earth's atmosphere, exploded, the broken surfaces becoming fused and pitted in the rush through the atmosphere.

A freshly broken corner of the mass made it possible to examine its mineral composition. It is made up of fine-grained, greenish, silicate material which is highly birefringent and has a high index of refraction and an