

Any detailed discussion of the lithologic and faunal characteristics of these several terranes will be omitted from this paper since Dr. Williams will publish this data at an early date. These are indicated in the section given below which includes all of the formations cut by the Niagara Gorge.

NOTES ON A SHEEP THYROID EXPERIMENT WITH FROG TADPOLES

At the time of the publication of Professor J. F. Gudernatsch's paper on thyroid feeding experiments with the tadpole I was working with some tadpoles and having some extra ones I tried a short but similar experiment. I used

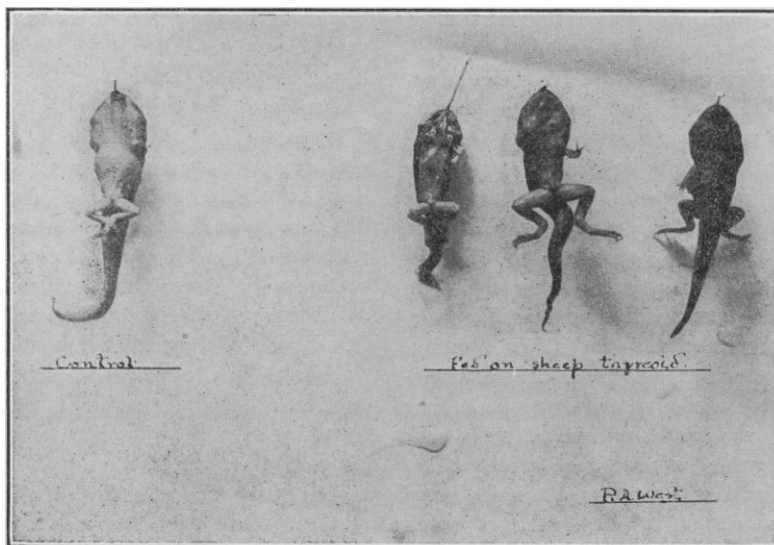


FIG. 1.

Silurian.	}	Lockport dolomite.
		Undifferentiated dolomite.
		Gasport limestone.
		De Cew limestone. ²¹
		Rochester shale.
		Clinton formation. ²²
		Irondequoit limestone.
		Walcott limestone.
		Sodus shale.
		Medina formation.
		Thorold sandstone.
		Grimsby sandstone. ²¹
		Cabot Head shale.
Manitoulin beds.		
Whirlpool sandstone.		
Ordovician.	{	Queenston shale.

E. M. KINDLE

²¹ Name proposed by M. Y. Williams in paper read before the Geological Society of America, January, 1914.

²² The term Clinton has been made to include in certain publications, among them Folio 190 U. S. G. S., the Rochester shale in addition to the beds

the large bull-frog tadpoles which had lain over one winter. The hind limbs had begun to develop and even to joint. They were divided into two lots, the one for control and the other for experiment. The experimental

hitherto known as Clinton. Until satisfactory evidence has appeared however, for such revision of the meaning of an old and well-established name there appears to be no reason for seriously considering either this proposed expansion of the term upwards or its expansion downwards as one geologist proposes. Frequent tinkering with the meaning of well-established names is not likely to serve any useful purpose. When revision of a name does appear to be required it should, in the writer's opinion, be accompanied by a full statement of all the evidence in the case and ample time for its discussion should be given before it is accepted. Such evidence has not appeared in this case.

lot was placed in pond water without any food except for such minute particles as may have been suspended in the water. They were fed daily some two grain Parke Davis & Co. sheep thyroid tablets. The tablets were eagerly eaten by the tadpoles and except for appearing rather sluggish their behavior was normal. At the end of seventeen days the hind legs had developed much more and the fore left leg had come through and begun to joint. There seemed to be a slight development of the right forelimb, but it did not come through the operculum. The control lot which had been under the same temperature and light conditions and furnished with plenty of fresh pond water and food showed a slightly increased development of the hind limbs but no signs of any fore limbs. It became necessary at this stage to stop the experiment and the specimens were preserved in formalin. Unfortunately during moving all except a half dozen of the thyroid fed lot and a few of the control were lost, but these have been photographed and are in good condition. I cut open the opercular wall on the right side of one of the thyroid tadpoles and found a fore leg which had begun to develop but was much shorter and less advanced than on the left side where the limb broke through of its own accord. This experiment was too incomplete to have much significance, but it was interesting to note that the right fore limb only completely developed in every case of the thyroid fed tadpoles and in the control lot neither fore leg developed at all. This experiment may be worth while by suggesting more thorough and complete work along this line. It may possibly also be suggestive of a method for right-handed people to become ambidextrous by eating sheep thyroid.

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SOCIETIES AND ACADEMIES

THE BOTANICAL SOCIETY OF WASHINGTON

THE ninety-seventh regular meeting of the Botanical Society of Washington was held in the Assembly Hall of the Cosmos Club, at 8 P.M., Tuesday, May 5, 1914. Messrs. P. V. Cardon, G.

P. Van Esseltine and A. B. Clawson were unanimously elected to membership.

The scientific program was as follows:

Professor Chas. O. Appleman, "The Physiology of the Rest Period in the Potato Tuber" (with lantern). To be published as a Maryland State Experiment Station Bulletin.

Dr. H. B. Humphrey, "A Recently Discovered Loose Smut of Rye" (with lantern). To be published in *Phytopathology*.

Mr. L. H. Dewey, "The Common Names of Plant Fibers."

Confusion in the names of textile fibers of vegetable origin causes uncertainty, financial loss and injury to the trade. The name "hemp" and its forms in other languages is the oldest name used to designate a plant fiber. This name is now used in many languages as a specific term to designate the true hemp, *Cannabis sativa*, to which in all instances it was first applied, and also as a generic term to designate all long fibers. This double use is confusing. The name sisal is also being used in a similar double sense. The following suggestions are made regarding the choice of names of fibers: (1) Names in most general use are to be preferred, providing they are not misleading. (2) The same term should not be used to designate fibers from different kinds of plants. (3) One name should be used to designate the fiber from one kind of plant, irrespective of the country where the plant is cultivated, or the manner in which the fiber is prepared. (4) Geographic names are objectionable in general terms. (5) Names that may be adopted directly in all languages are desirable. (6) Single words of not more than three syllables are best.

P. L. RICKER,

Corresponding Secretary

ANTHROPOLOGICAL SOCIETY OF WASHINGTON

AT a special meeting of the Society held March 3 at the National Museum, Mr. W. E. Safford read a paper on "The Pan-Pipes of Ancient Peru." Mr. Safford became interested in the musical instruments of the Peruvians during a cruise along the west shore of South America in 1887. At Arica, near the northern boundary of Chile, he found in a prehistoric grave two sets of pan-pipes made of graduated reeds closely resembling the syrinx, or fistula, of the ancient Greeks and Romans. On terra-cotta vases were depicted men playing these instruments. Similar pipes made of bone were also found in Peru and northern Chile. Afterwards an entire orchestra composed of pan-pipes was observed. These were played in pairs, each performer having a mate with a com-