

PAUL BARTSCH: *Our poison gas detector and how it was discovered.* (Illustrated).

Dr. Bartsch first described the nocturnal mating habits of *Limax maximus*, a common garden slug, illustrating the successive acts with photographs taken by flash-light. The slugs, which are bi-sexual, climb trees at night; a pair will twist themselves together, spin a mucous thread, and hang suspended. The genitalia are protruded, and after exchange of products, accompanied by characteristic activities, the pair ascend the thread and retire to their usual retreats where the eggs are deposited.

Some years ago, Dr. Bartsch continued, a number of animals of this species which were under observation in his home, escaped from their box in which they had been confined. Observations on their behavior in the furnace room were recalled when need for a gas detector arose in connection with the great war. A very brief period of experimentation revealed the extraordinary sensitiveness of *Limax maximus* to mustard gas, and in an incredibly short time the information, invaluable for detecting the gas, was in the hands of the Allies and American forces in Europe. The tentacles of *Limax* are sensitive to a dilution of 1 to 10,000,000 of mustard gas, and characteristic responses indicate the degree of dilution. Since man reacts at a dilution of 1 to 4,000,000, *Limax* proves to have ample margin of delicacy. Moreover the species is European, and abundant in the region of the fighting.

Dr. Bartsch pointed out how incidental, even accidental, observations years ago furnished immediate answer to the problem calling for reliable sensitive detectors of certain gases during the war.

The paper was discussed by Dr. H. M. SMITH.

607TH MEETING

The 607th meeting of the Biological Society of Washington was held jointly with the Washington Academy of Sciences in the lecture hall of the Cosmos Club at 8.15 p.m., February 21, 1920. President HOPKINS presided, and 75 persons were present.

Upon recommendation of the Council, Miss DORIS LANGWORTHY, of George Washington University; Mr. K. P. SCHMIDT, of the American Museum of Natural History, and Miss MARION PELLEW, were elected to membership.

The address of the evening was given by Dr. ALFRED G. MAYOR, Director of the Division of Marine Biology, Carnegie Institution of Washington, and Lecturer in Zoology at Princeton University, upon the subject: *The coral reefs of American Samoa.*

The Island of Tutuila in its relation to its marine environment was described, and the distribution of the various reef-forming algae and corals. The island is very old as is shown by geological evidence. The reefs were described, including rate of coral growth, and the conditions prevailing, and the various theories of reef formation were discussed in the light of the observations made at Tutuila. Though none of these