FRESH WATER MEDUSAE IN OKLAHOMA

THE finding of *Craspedacusta ryderi*[1] in an Oklahoma stream seems to be of sufficient general interest to warrant this note. All other records of this interesting form are from localities east of the Mississippi River.[2,3,4,5]

On September 6, 1930, Phillips first noticed the medusae in Lukfata Creek, a tributary of Little River, about one quarter mile north of Broken Bow, Oklahoma (Sect. 27 or 34, T6S–R 24E). Individuals were also seen in Yanubee Creek in Sect. 17, T6S–R 25E. Individuals were at first very numerous and were seen and collected at intervals during the three weeks following their discovery. The number was so great that "the water was almost blue with them."

We are indebted to Mr. Glen R. Durrell, district forester, and Mr. W. H. Mitchell, assistant district forester, for properly shipping us the specimens.

The part of Lukfata Creek where these medusae were taken was a relatively clear pool approximately 200 feet by 25 feet. The depth averaged 4 to 5 feet. The stream is known to have been "scoured out" this spring by floods; since that time the water has remained low. The specimens were found in water at least three feet deep near the center of the pool. The temperature of the water at that time was between 70° and 75° F.

The activity of the medusae consisted of slow movements in a vertical direction. The upward excursion resulted from repeated contractions of the umbrella. The return to the bottom of the pool was brought about by one of two methods; first, by "side slipping," and second, by turning over completely and propelling themselves downward. This cycle was completed about twice in a minute. They did not become active until the sun was fairly well up.[6]

No hydroid has been found as yet, but it is hoped that additional work next year may reveal this stage.

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THE "FIRE STOPPER"

RECENT papers in SCIENCE[1] discussing the use of the divining rod recall to my mind a conversation which took place in my presence, a few years ago, on a topic which was new to me. Nor have I since seen or heard any reference to this subject. The speakers were descendants of the German racial group frequently spoken of as "Pennsylvania Dutch," whose ancestors had migrated to the southwest.

Night had come to the road camp astraddle the Virginia-West Virginia boundary. The bee tree had been cut, the honey secured and the men were drifting back to camp. Among the first was old Paul Straus. He did not like these expeditions. He complained that a bee would fly a hundred yards to attack him no matter how many men there were closer to the bee tree. But at this safe distance in the darkness he became reminiscent.

"Old Jo Kirschbaum," he said, "could go right up to any tree. They never bothered him. I've seen the bees just buzzing all around his head—yellow jackets, too. He used to say you'd be all right as long as you didn't do anything to make them cross."

"Who was that, Mattie's father?" asked Homer Heatwole.

"No, Sam's uncle, old Oscar's brother."

"Oh, yes, I remember now. He could stop fire, too, couldn't he?"

"Yes, he'd just walk through the woods where there was fire coming, and when the fire got up to where he'd been walking it would just stop burning. I wish I knew how he did it. I gave him five dollars once to teach me how and he said he would some time, but he never got around to it. Always busy with something else he couldn't leave. He's gone now. He told me once if he taught it to anybody else he'd lose the power himself."

"Were you down at that fire on the Hunter land that he stopped?" asked Homer.

"No, but I saw the place afterwards."

"So did I. There was one place there where there were dry pine tops piled up and he walked across them and the fire stopped right there in the middle of the pile."

"Yes, I remember seeing that, too. Old Jo certainly had the power. There are not many that have."

The rest of the crew were coming in now with the lanterns and honey and the conversation turned to the subject of past and future bee tree hunts and present drinking water. The discussion was not resumed either then or later.

I wonder whether other readers of SCIENCE have ever come in contact with persons holding this belief. There is of course the possibility that we are dealing with an imaginative story of the type of the "Paul

1 The authors wish to thank Dr. F. Payne for checking their tentative identification of these specimens.

2 C. W. Hargitt, SCIENCE, 26: 638, 1907.

3 H. Garman, SCIENCE, 44: 858, 1916.

4 F. Payne, *Jour. Morph.*, 38: 387, 1924; *Biol. Bull.*, 50: 433, 1926.

5 W. E. White, *Biol. Bull.*, 59: 222, 1930.

6 H. Garman, SCIENCE, 60: 477, 1924.

1 C. A. Browne, "Observations upon the Use of the Divining Rod in Germany," SCIENCE, 73: 84–86, 1931.
I. P. Tolmachoff, "The Use of the Divining Rod in Alaska," SCIENCE, 73: 365–366, 1931.

Bunyan" yarns. But my observations of those men at other times would indicate that they were not given to this type of exaggeration. Apparently they were sincere in their belief that the incidents actually took place. And if they were, the question remains to be answered: What was the basis of this belief?

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INTERNATIONAL PHYSIOLOGICAL CONGRESS FUND FELLOWSHIPS

AT the annual meeting of the Federation of American Societies for Experimental Biology in Chicago in 1930, the American Committee for the Thirteenth International Physiological Congress presented to the federation the surplus funds collected for the congress and in accordance with the suggestions of the committee, the International Physiological Congress Fund was established by the federation. The action was as follows:

"The income of the International Physiological Congress Fund shall be used triennially for the appropriation of funds in units of $250 to defray the expenses to international physiological congresses abroad of promising young workers in the field who would not otherwise be able to attend the congress, who shall have creditable papers to read before the congress, whose ages shall be below 35 years, and who shall not yet have attained the rank of full professor. These fellowships are to be allotted by the executive committee of the federation.

"Furthermore, within the judgment of the same executive committee it may be permissible to grant to any candidate an additional sum of $250 provided such candidate desires to spend three months of study in a foreign laboratory. Generally speaking, the executive committee should be guided in the selection of individuals with due regard to the relative numbers of the present membership in the four different societies which constitute the federation. By unanimous vote of the executive committee the rules may be changed at any time governing the amounts of money to be granted to any individual.

"It is furthermore suggested that if and when another international physiological congress shall be held in the United States the principal of this fund shall be turned over to the authorities duly appointed by the officers of the federation to receive it and shall be used for the promotion and support of that international congress."

There will be available for the Fourteenth International Congress to be held in Rome from August 29 to September 3, 1932, four International Physiological Congress Fund Fellowships of $250 each. One fellowship will be awarded in each of the branches of biological science represented by the four constituent societies of the federation: namely, The American Physiological Society, The American Society of Biological Chemists, The American Society for Pharmacology and Experimental Therapeutics, and The American Society for Experimental Pathology.

The conditions for the award of these fellowships, in accordance with the vote of the executive committee of the federation at their Montreal meeting in April, 1931, were fixed as follows:

(1) Each candidate must be recommended as worthy by some member of the society representing the field of study or by some other individual familiar with the character of the candidate's work.

(2) Candidates must be under thirty-five years of age and must not have yet attained the rank of full professor or its equivalent.

(3) Each candidate must present with the application a draft of a meritorious paper to be presented to the congress.

(4) Applications must be made before *January 1, 1932,* to the *secretary* of the society which includes the field of study.

(5) These applications are to be considered by the councils of the respective societies, who shall submit to the executive committee of the federation an approved list of nominees.

(6) Final selection of fellows shall be made by the executive committee of the federation.

It was the consensus of opinion that fellowships should be awarded only to those persons having meritorious work to present to the congress and who would be unable to attend the congress without some financial assistance in the form of a fellowship or other subsidy. It should be noted that membership in the federation is not necessarily a condition for the award of a fellowship.

Applications should be made to the secretary of the society in whose field the work to be presented at the congress lies: for Physiology, Dr. Arno B. Luckhardt, University of Chicago, Chicago, Illinois; for Biological Chemistry, Dr. Howard B. Lewis, University of Michigan Medical School, Ann Arbor, Michigan; for Pharmacology and Experimental Therapeutics, Dr. V. E. Henderson, Medical Building, University of Toronto, Toronto, Canada; for Experimental Pathology, Dr. C. Phillip Miller, Jr., Department of Medicine, University of Chicago, Chicago, Illinois.

HOWARD B. LEWIS, *Secretary*
Federation of American Societies for Experimental Biology