# SPONGES USED AS HOUSES BY MANY SEA CREATURES

Sponges are the bee hives of the sea. This curious discovery has been reported to the U. S. Bureau of Fisheries here by Dr. Charles J. Fish of the scientific staff of the New York Zoological Society's steamer "Areturus" cruising in tropical waters.

The "bees" which Dr. Fish found inhabiting the canals of sponges were whole colonies of the tiny snapping shrimp, Alpheus. These gregarious shrimps, he discovered, swim freely about but always return to the individual sponge which is their hive-like home.

Numerous other forms were also found to use these subway passages as a haven of refuge at the approach of danger. One sponge-hive with its homing shrimps was secured and placed in annaquarium aboard ship where the colony continued to flourish.

This discovery makes known another of Nature's queer partnerships; for the sponge which the shrimps use as a home is itself a marine animal, although it spends its adult life fixed to the rocks in one place, like a plant and the canals which shelter the shrimps are the many mouths through which the sponge gets its food.

## SAME LAMP GIVES LIGHT OF TWO DISTINCT COLORS

Remarkable decorative effects have been made possible by a new lamp arrangement presented to the French Academy of Sciences by M. Georges Claude. Two different colored lights are produced in alternate sections of the same lamp at the same time. By forming a neon and mercury lamp in the shape of a tube containing constrictions, the orange glow of neon is obtained in the larger parts of the tube while the white light of mercury shines from the narrowed parts. If these lamps are made as uniform cylindrical tubes, however, only the yellow light of neon is seen.

## COLLEGE STUDENTS PREFER FAIRNESS TO BRAINS

The college instructor who would be popular with students need not thrill them with his brilliance, but he must be fair in grading and courteous, according to a test made with 40 seniors at Purdue University. Tact, sympathy, and cooperation are the qualities which thestudents regarded as most essential to popularity.

Prof. George C. Brandenberg, who reports the results of these tests in a coming issue of the "Journal of Applied Psychology", expresses surprise that the students do not demand intellectuality in anninstructor as one of the first desirable qualitites. But he concludes that "after all, students are only human and apparently crave first the same humane qualities in their instructor that they demand in their classmates".

The ten qualities most agreeable in an instructor were rated by the students in the following order: honesty and fairness in grading, courtesy and consideration, liberal and progressive attitude, cheerfulness, clearness, punctuality, generosity, cleanliness and neatness, morality, intellectuality.

The students held that the ten most disagreeable traits an instructor can have, in order of their importance, are: lack of courtesy in the classroom, unfair practices in grading, disagreeable qualities of disposition, egotism, irritating personal habits and peculiarities, lack of cordiality, lack of punctuality, lack of dependability, lack of public spirit, and untidiness in dress.

## GERMANY TO GREASE WHEELS WITH COAL TAR PRODUCTS

Petroleum oil may be supplanted as a lubricant in most German industries by oils produced from lignite and coal tar. Dr. Baum of the Commission on Mining Engineering, Heat and Power Utilization, estimates that 80 per cent. of Germany's requirements can be supplied at less cost by improvements of lubricants which were produced during the war when Germany was cut off from sources of Russian and American lubricating oils. These tar oils are not suitable, however, for the librication of steam engine cylinders, air compressor cylinders, or turbines.

#### TRY FOR ACCURACY AND YOU'LL GAIN SPEED IN TYPING

Development of accuracy is more important than speed in learning to do certain mechanical operations, according to Dr. Garry Cleveland Myers, of Cleveland, Ohio, who will report a new series of experiments in a forthcoming issue of The Journal of Personnel Research.

Typewriting was done by two squads of seven girls each, practising three minutes a day for thirty-six days. One group was instructed to work for speed and were reminded by their instructor at each trial to speed up all they could. The other group was cautioned at each trial to take great care that no errors were made

At the end of the period the accuracy group had not gained much over the speed group; but later, after four months without practice, when each group copied, for speed, unfamiliar material for ten minutes, the speeders wrote an average of 383 words, while the accuracy squad wrote and average of 451 words. The average of the accuracy workers was 1.2 words wrong per hundred; that of the speeders was 2.2.

A later series of experiments corroborated the finding that if attention was directed solely to speed, accuracy tended to diminish. On the other hand, if attention was directed solely to accuracy, speed tended to increase.

#### JADE DISCOVERED IN SOUTH AFRICA

An important discovery of jade has been reported from a farm near the town of Brits in the Transvaal. The stone was found in the various shades of blue, white, pink, and green, and in quantities large enough to warrant commercial exploitation. The discovery was made during prospecting operations for chrome iron.

A company has been formed with headquarters in Johannesburg, and has obtained permission from the government to bring in Chinese jade experts as cutters and polishers so that the jade may be marketed as beads and art ornaments.

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