

large number of 'short clams' (*Venus mercenaria*) were brought into the laboratory to be used in dissection. It was the plan of the instructors to harden a portion of these in such a way that thick free-hand sections of the whole animal could be made, thus to aid in demonstration of the anatomy. To accomplish this result quickly, as we supposed, it was decided to place them directly into commercial alcohol.

About five dozen specimens were, therefore, selected for this treatment; one of the valves of the shell of each was crushed, in order to allow the fluid to penetrate freely into the mantle chambers, and the whole number was then placed in a large aquarium jar and covered with 95% alcohol. This was at about eleven o'clock in the evening of July 15th. The material was not used on the next day, and so lay undisturbed until ten o'clock of the day following, *i. e.*, July 17th, a period of not less than 35 hours. A series of thick sections was then made by one of the students in the course, Mr. N. B. Sloan, of Hillsdale College, and laid out in a dish of fresh sea-water. In order to determine the sex of the specimen so treated, a bit of the gonad was shown by him to be that of a male, in which the sex cells were not only mature but were also showing their characteristic movements in an unmistakable manner. The attention of the instructors was called to this, and the fact that the cells were alive was tested by adding a drop of corrosive sublimate at which all the movements quickly ceased.

These germinal cells were toward the interior of the visceral mass of the clam, and if the influence of the alcohol had reached them at all through the investing sheath they were at least able to resist it and to resume their normal activities under the proper conditions. Whether any of the somatic cells of the same tissues of the animal were also living, such as the leucocytes, was not tested, but even if no alcohol had reached these germ cells, yet under the adverse conditions, inasmuch as the ordinary life processes of the animal had been so long suspended, their vitality is remarkable.

It may be, therefore, inferred that as they reach maturity the spermatozoa of this lamellibranch may possess the ability of withstanding many unusual conditions of the surrounding

water into which they may be shed. But whether it implies a long continued or a temporary vitality was not sought by us; nor was it attempted to show by experiment whether these sexual elements could withstand greater chemical changes in the ordinary sea-water than can the smaller marine Protozoa, for example. It is certain, however, that as far as this species is concerned, great promise is inherent in the spermatozoa for obtaining the necessary distribution.

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THE APPEARANCE OF THE MOON.

TO THE EDITOR OF SCIENCE: The following incident might supplement Mr. Brinton's interesting account of the different pictures different persons see in the moon. I was a member of a jury in an important case a few months ago and the members were much more than ordinarily intelligent. While out for a walk in charge of the sheriff one evening, the full moon was coming over the hills to the east, and I suggested that each man write down the impression it gave him as to size. The slips were deposited in a hat, and when drawn out the comparisons ran from 'the size of a twenty-dollar piece' up to 'twelve feet.' When near to the horizon it struck me as being about eleven inches across, and several put it about that, but the thirteen men made it all sizes, four, six, ten inches, three feet, five feet, etc. One man said it was the size of a flour barrel and another of a buggy wheel, etc.

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RENO, NEVADA.

SCIENTIFIC LITERATURE.

Grundriss einer exacten Schöpfungsgeschichte. Von HERMANN HABENICHT. Vienna, Hartleben. No date. 136 pages, 7 folded plates.

Habenicht has been for many years one of the expert cartographers in the geographical establishment of Justus Perthes at Gotha. His competent and sincere work in this exacting field must secure him a courteous hearing if he has anything to say about the world as a whole, so much of which has come, at second hand, under his fingers; but in the collection of his essays under the above title, the fruit of nearly forty years of professional, morphological study of the earth's surface, the deference that we owe