

are well wooded. The cliffs are vertical and fringed at their base by the usual talus, which, however, is made up of blocks of unusual size. The cavern is formed by several huge rocks overhanging the water so as to form a comparatively dark hole, and the space between the under side of the sloping rocks and the water varies from about two feet to not more than two inches. The cavern faces the southwest; it is very irregular in shape, and at one point the roof and walls reverberate in response to a deep bass note. The water just at the entrance to the cavern is 33 feet deep, and two or three feet away 40 feet; it is very transparent at considerable depths. As the rocks overhang so close to the water the optical effects can only be seen by a swimmer, and it was while swimming along the shore that I discovered the American Blue Grotto three years ago. As one approaches the mouth of the cavern the bluish color of the water is noticeable, but the beautiful effects are best seen by entering the opening and looking outwards towards the light. The water varies in color from Nile green through turquoise blue and sky blue to deep indigo blue, and in all these shades exhibits the silvery appearance, when agitated, characteristic of the grotto at Capri. A body immersed in the water has a beautiful silvery sheen, similar to the reflection of moonlight. The water has these colors at all hours, but they are strongest when the sun is in the zenith; late in the afternoon the slanting rays of the sun enter the opening and light up the cavern, greatly diminishing the optical effects.

The water retains the characteristic color (but without the silvery sheen) on cloudy days, and even during rain, being especially strong when fleecy white clouds bar direct sunlight. The relation between the different hues, green and blue, to the aspects of the sky, whether clear or overcast, is not evident.

Another pleasing phenomenon must be mentioned. Just below the water line, where the rocky sides are lapped by the waves, the white quartzite exhibits a brilliant siskin-green hue; this bright color is limited to a space about three or four inches below the level of the lake and to certain walls of the cavern. The bare arm immersed in the water partakes of the

green color when the light is reflected at one angle, and of the silvery blue color at another angle. The interior size of the cavern is not easily given, but the face of the overhanging rocks measures about 40 feet and they project about 15 to 20 feet, and it is surprising that so small a cavern can produce such a variety of fine effects.

The writer would like to learn, through the columns of SCIENCE, whether similar blue grottos are common at other American lakes.

H. CARRINGTON BOLTON.

LAKE MINNEWASKA, August, 1898.

'THE DELUSION OF ATAVISM.'

DR. BRINTON'S recent remarks on the 'Delusion of Atavism' recall Dr. Thomas Dwight's paper on the 'Range and Significance of Variation in the Human Skeleton,' a paper which may be read with much profit by those who are bound to find some reversional character in every anatomical abnormality. As Dr. Dwight says, "if all animal resemblances are reversions, the primitive ancestor must have been a very curiosity shop of peculiarities."

F. A. L.

SCIENTIFIC LITERATURE.

Technical Mycology. By DR. FRANZ LAFAR.

With an introduction by DR. E. CHR. HANSEN. Translated by CHAS. T. C. SALTER. Vol. I., Schizomycetic Fermentation. London, Chas. Griffin & Co., Ltd.; Philadelphia, J. B. Lippincott Co. 1898. Pp. 405, with 1 plate and 90 figures.

The appearance last year of the first volume of Dr. Lafar's *Technische Mykologie* relating to fermentations induced by Schizomycetes marks the gradual development of bacteriological science along other than medical lines. The interest that is attached to the study of these micro-organisms in other than their pathological relations is rapidly increasing, and we may hope that such works as these will stimulate investigation and study in a very promising field of research. The translation of this work into English by Salter will unquestionably be welcomed.

The scope of the work is the utilization of micro-organisms in the arts and manufactures.