

zymotic disease. It is shown that certain races are on the way to acquire such toleration, and in the presence of alcohol suffer much less than others. An obvious difficulty here is to explain how, under the influence of natural selection, this highly pernicious craving for alcohol arose. Mr. Reid says: "It can have arisen only as a bye-product of mental evolution, a bye-product which, in the absence of narcotics, was harmless, but which in the presence of them is harmful." This surely is a very far-fetched supposition, since it is implied that the craving for alcohol developed in the absence of that substance! To the present writer it appears evident that the human race has no natural craving for alcohol at all, but it has a craving for excitement and other states of mind which may be induced artificially, and that when the natural exercise of highly valuable faculties is denied, as is so often the case in our present civilization, artificial means, often highly injurious, will be resorted to. It will apparently sometimes happen that when an artificial stimulus is persisted in for a long while, and is not in itself injurious, it will become a necessity, just as clothes have become necessary to a large portion of mankind. As an instance of this, we may cite the use of hot flavoring substances (as pepper) by inhabitants of warm countries to promote digestion. It is conceivable also that a race might acquire considerable toleration of alcohol, and at the same time lose the power of acting efficiently except under its influence, so that a member of the race, separated from his bottle, would be powerless! But it is perhaps more likely that the process would be just that which Mr. Reid describes as inevitable, namely, that the desire for alcoholic stimulation would be lost, while at the same time the effects of drinking a given quantity of alcohol would become less. This is regarded by Mr. Reid as very desirable, but what if it means the destruction of a valuable faculty, which, rightly exercised, might have been once more, as originally, of great importance to the race? Put it in this way: The wretched laborer of a crowded city, overworked and underfed, desires to escape from his environment—desires, if only for a brief period, to be free. Alcohol gives him a temporary means of escape, but at a

frightful cost. It is deplorable that he should seek it, but how much more deplorable it would be if he should cease to care—if he should become degraded to a mere machine, accepting without thought the suppression of three-fourths of his natural activities? Surely the remedy is not, as Mr. Reid supposes, to eliminate those who wish to drink, but to find the means of living full and active lives, in the natural exercise of all our functions.

T. D. A. COCKERELL.

MESILLA, N. M., June 8, 1897.

SOCIETIES AND ACADEMIES.

MEETING OF THE NEW YORK SECTION OF THE AMERICAN CHEMICAL SOCIETY.

THE New York Section of the American Chemical Society held its June meeting on the 11th inst., preceded by a dinner, at which thirty members participated, including the President of the General Society, Dr. C. B. Dudley. The meeting was called to order in the chemical lecture room of the College of the City of New York, at 8:30, by the chairman, Dr. William McMurtrie, who then invited Dr. Dudley to preside.

The death of Professor C. R. Fresenius at Wiesbaden was announced, and the Secretary was authorized to cable the regrets and condolence of the Society to his sons. An obituary notice of Dr. Carl H. Schultz was read by Dr. A. P. Hallock, after which the papers of the evening were read as follows:

F. S. Hyde, 'Comparative Tests for Identification of Some Medicinal Carbon Compounds.' E. G. Love, 'Note on Analysis of Cheese.' Benj. C. Greenbergh, 'Determination of Dextrose in Presence of Sugars.' Gustav Volckening, 'Novel Mechanical Arrangement of Fat Extraction Apparatus.' L. Reuter, 'Demonstration of Some Chloroform Compounds and of Some of Baumann's Thioaldehydes.' W. E. Chamberlin, 'Calibration of Volumetric Apparatus.' C. A. Doremus, 'Method of Collecting and Analyzing Gases contained in Canned Goods.'

It was stated by the chair that forty papers had been presented before the Section during the winter, a number considerably in excess of

any previous session, and the attendance at the meetings had averaged about fifty, also an increase over previous records. The Section was then adjourned until October.

DURAND WOODMAN,
Secretary.

TORREY BOTANICAL CLUB, MAY 11.

DR. N. L. BRITTON presided in absence of the President. Three new members were elected. Three successful field-meetings were reported. Resolutions were adopted commemorative of Dr. Emily L. Gregory, the late honored professor of botany at Barnard College, an active worker in the Club. Announcement was made of the recent gift, by President Low to the botanical department of Columbia, of a valuable set of water-color plates prepared by the late lamented Wm. Hamilton Gibson, in illustration of his projected work on mushrooms.

The paper of the evening followed, by Mr. Marshall A. Howe, entitled 'A Preliminary Comparison of the Hepatic Flora of California with that of Europe and of the eastern United States.'

The total number of Californian species now known is 77, of which 45 occur in the Mediterranean region, but only 37 in the Gray-Manual region of the United States.

It was shown that the hepatic flora of California has more in common with that of northern and central Europe than with that of the eastern United States, and is still more allied to that of the Mediterranean region. In particular, species of *Asterella* and *Riccia* are better developed in California and southern Europe than in the eastern United States.

The apparent absence in California of *Bazzania* and *Mylia*, which are especially characteristic of medial and boreal regions, serves to heighten the similarity to southern Europe.

The paper was followed by exhibit of photomicrographs of sections of *Cryptomitrium*, illustrating the development of the archegonia. In the discussion following, Professor Underwood said that the Hepatic species are most numerous in the Amazon region, the eastern slope of the Andes, and in Java. Insular tropical regions have furnished many where

examined, as Cuba and Jamaica. Quite a number are peculiar to Australia. New Zealand is well supplied with species. Many have been recently collected in Africa, and have been described by Herr Stephani, of Leipsic, whose industry has doubled the number of described Hepaticæ. As a whole, the maximum development of the Hepaticæ is tropical, though some genera and certain groups within genera are wholly high-temperate or subarctic.

Professor Britton, remarking the indications of circumboreal and circumtropical distribution of certain species, referred to the argument for an equatorial distribution of flowering plants and of ferns, and queried if there were anything corresponding among Hepaticæ. He expressed the belief that it is the immediate environment which at present exerts the principal influence on distribution, whatever the original cause or mode of distribution may have been.

Professor Underwood referred to the influence of the Gulf Stream in permitting the existence of the subtropical genus *Lejeunia* on the coast of Ireland, a genus not elsewhere found in Europe. Comparing the Hepaticæ of Florida, they are only in part known; a few species are in common with the Appalachian flora; most of the Florida Hepaticæ are close-creeping forms found on bark, as *Frullania* and *Lejeunia*, having water-sacs on their leaves as aids in resisting drought. Some tropical *Marchantiaceæ* occur in Florida, and also, especially, species of *Riccia* and *Anthoceros*. *Thallocarpus* is known only from Florida and South Carolina.

EDWARD S. BURGESS,
Secretary.

NEW BOOKS.

Formation de la Nation Française. GABRIEL DE MORTILLET. Paris, Alcan. 1897. Pp. iv + 336. 6 Fr.

Introduction to the Study of Economics. CHARLES JESSE BULLOCK. New York, Chicago and Philadelphia, Silver, Burdett & Co. 1897. Pp. 511. \$1.28.

Grundprobleme der Naturwissenschaft. ADOLF WAGNER. Berlin, Gebrüder Borntraeger. 1897. Pp. vi + 255.