before us, the Ray Society has been the means of giving to the world a mass of original researches, and of illustrating them by twenty-two lithographed plates, and thereby brought honour on Dr. Carpenter and his coadjutors in the work, and added to the reputation of English naturalists at large among the scientific men of all countries.

ART. II.—Della temperatura delle Orine in diverse ore del giorno e in diversi climi. Ricerche sperimentali del Dottor Paolo Montegazza.—Milan.

On the Temperature of the Urine in Different Hours of the Day and in Different Climates. By Dr. Paolo Montegazza.—Milan. (Pamphlet.)

In connexion with studies and investigations on animal heat, Dr. Montegazza in the present brochure presents the public with a résumé of observations made, in a space of two years, on the temperature of the urine, and he supplements them by a further series during a rapid voyage and return between Bordeaux and Buenos Ayres, including, in point of time with his stay at Buenos Ayres, a period from July 29th to October 10th of the same year.

The observations of Dr. Montegazza on the voyage lead him to the conclusion that during sudden and considerable variations, amounting to 25° Cent. of external temperature, the urine may be subject in the body to a change expressed by 3°-25 Cent. This is the extreme of variation noted by him.

The urine changes correspondingly with marked but not with slight affections of the external temperature; moreover, subjective sensations of heat and cold are accompanied by corresponding changes in the temperature of the secretion. A lengthened exposure to solar heat causes an elevation of its temperature amounting to 1°-1 Cent. Alcoholic drinks, muscular exertion, any degree of pyrexia, even its preceding malaise, raise the temperature of the urine; but not seasickness, as far as he could judge. On the other hand, a notable diminution is apparent after perspirations terminating a feverish attack. The observations on the voyage were 241 in number, and lead to the above conclusions. They are set forth in tables, which bear every appearance of care and accuracy. We may briefly notice the result of the previous observations made in Italy.

1. In a scale of atmospheric variation amounting to 28°-5 Cent. between the months of February and August, the variation in the urine was 1°-55 Cent.

2. The minimum temperature of the urine is during the night.

3. The temperature rises in the daytime from five A.M., attaining a maximum between ten and eleven in the morning. After eleven A.M. the temperature slowly falls, and again rises to a maximum at five P.M. From this point it falls on approach of night. The maximum of morning and that of evening are about equal.

4. Our author has ascertained that these changes are not modified by variation in the hours of meal.
5. The genital function in its exercise does not affect the temperature of the urine.

In accordance with those of our author, the experiments of Damrosch, made with the thermometer in the axillary cavity, are quoted. This observer also found the maximum of vital heat to occur at five p.m., and the minimum at seven p.m., and, moreover, a marked increase of temperature at ten in the morning, with a subsequent depression. The frequency of the pulse, according to the same observer, attains its maximum at five p.m., and declines from that hour to seven p.m. In the morning the pulse preserves a uniform frequency from seven a.m. to ten a.m.; it then increases till one p.m., an interval of time during which vital temperature is decreasing—this augmented frequency being, perhaps, a tardy physiological sequence of the previously augmented temperature. To the industry of other observers we confidently leave the corroboration and comparison of these facts.

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ART. III.—Lectures on the Germs and Vestiges of Disease, and on the Prevention of the Invasion and Fatality of Disease by Periodical Examinations. By Horace Dobell, M.D.—London, 1861.

These lectures were delivered at the Royal Infirmary for Diseases of the Chest, to which institution the author is attached as physician. They are six in number, and, unlike many productions of the medical press, have some novelty in their composition—a quality which, quoad valet, is certainly a recommendation for them. A great portion of the novelty, however, consists in the terminology which the author has invented to express various pathological and etiological relations which other writers and readers have been content to recognise by other names. This terminology, in the construction of which there is much precision of definition, imparts to these lectures a fictitious originality, and at the same time gives their reader much trouble in translating the author’s statements or ideas into ordinary medical language. We are willing to admit some of the terms and phrases to be well chosen and explicit, but whilst doing so we must remark that the author does not advance medical knowledge in a degree at all proportionate with the mass of verbiage with which he invests it.

We are first introduced to the “ultimatum” of animal life, which varies with race, species, age, sex, and conditions of life. Then we have to discover “the determination of force at each epoch of the animal’s career, in that direction essential at the time to the attainment of the ultimatum,” and presently have to make ourselves familiar with a “vitalized mode of force” and a “lifeless mode of force,” respectively represented by three letters, V. M. F. and L. M. F. The V. M. F. obtains a share of physiological discussion and illustration, not without merit indeed, and the

“Scientific conclusions are as follows: that, 1. The V. M. F. may be altered in quantity and quality by numerous causes. 2. That these causes may affect either the existing individual, a succeeding generation, or both. 3. That these