sickness was felt more at about 15,000 to 16,000 feet than at 5,000 feet higher, and it was felt in very different degrees by different individuals. Most of the party suffered from lassitude and fatigue after making slight exertion; some were wholly prostrated for a time, and one coolie died. Other persons were entirely free from any perceptible inconvenience. Among the latter was a Goorkha, who *ran* back over a 20,000-foot pass to hurry up the loiterers. Another member of the party, an Englishman, experienced an increased appetite and gained in weight during the journey. Mr. Freshfield believes that the intense glare and heat on the snow had much to do with the sickness of some of the party at 15,000 feet.

THE KALAHARI DESERT.

A RECENT book on the Kalahari Desert ('Die Kalahari,' by Dr. Siegfried Passarge, Berlin, Reimer, 1904) contains a discussion of many interesting matters of a meteorological and climatological nature. Among these topics the following call for special mention: the climate of South Africa and of the Kalahari, with notes on the progressive desiccation of the country, based on comparisons of the observations of earlier and later explorers (Chap. V.); the orographic and hydrographic conditions of the Kalahari, with the evidence for the desiccation (Chap. XXXI.); the effects of rock-weathering under different climates, especially with reference to deserts (Chap. XXXV.), and the geological effects of wind action. Dr. Passarge's book, based on his own study of the Kalahari region during the years 1896–98, will be found to contain much of interest, especially to geologists, zoologists, botanists and meteorologists.

METEOROLOGICAL OBSERVATORY, NEW YEAR ISLAND.

IN the March number of the *Geographical Journal* Captain H. L. Crosthwait describes a recent journey in Patagonia, and also calls attention to the Argentine meteorological observatory, established in 1902, on New Year Island, in lat. 54°59′ S., about five miles off the north coast of Staten Island. Four Argentine naval officers man the station. Since the observations were begun the maximum temperature recorded is 55.4° F.; the minimum, 16.4°; the annual mean, 41°.

NOTES.

THE International Bureau of the South American Republics has recently issued a report upon 'Bolivia,' in which the climate of that country is discussed in a general way.

A HIGHLY mathematical discussion, by Max Margules, entitled 'Ueber die Energie der Stürme,' appears in the *Jahrbuch* of the Austrian Central Meteorological Institute, volume for 1903 (1905). R. DEC. WARD.

NOTES ON ENTOMOLOGY.

THE varying positions in which insects rest have been but little investigated by entomologists. It is now known that in many groups the position of repose is constant, and of importance to the insect. In the Lepidoptera it often has a direct bearing on the color pattern, and on the question of protective resemblance. Dr. J. T. Oudemans has recently studied the subject and furnishes* many interesting observations on positions adopted, the arrangement of colors, the parts of the color-pattern exposed or hidden, and the cryptic value of the position and color. The photographs furnish many striking examples of protective resemblance, most of which are familiar to the American collector.

MR. PERGANDE'S revision of our phylloxeras, after much delay, has at last been issued.† The species affecting the hickory (being most numerous) are classed by themselves, and arranged in four groups according to the nature and position of the gall. Thirty species and several varieties are recorded from this genus of trees. Descriptions of the gall, stem-mother and larva are given for all species,

* 'Étude sur la position de repos chez des Lepidoptères,' *Verhdl. Konink. Akad. Wetensch. Amsterdam*, X., no. 1, pp. 90, 11 pls., 1903 (1904).

† 'North American Phylloxerinæ affecting *Hicoria* (*Carya*) and other trees,' *Proc. Davenport Acad. Sci.*, Vol. IX., pp. 185–273, 22 pls., 1904.

and various other stages in many of the forms. The complete life history is presented of one species—*P. perniciosa.* Seven other species are treated, on the willow, sour gum, poplar, oak and chestnut. *P. vastatrix,* the phylloxera of the vine, is purposely omitted. The excellent figures show the galls, as well as their inhabitants, but it is very much to be regretted that the colored figures of the galls prepared by the author could not have been published instead of the photographs.

The second entomological publication of the Carnegie Institution is equally as interesting as the first. It treats of the colors of a genus of common wasps—*Polistes.** There are chapters on the origin, development and variation in the color pattern in these wasps; the geographical distribution of certain types of coloration in the United States, and a comparison with the distribution of these wasps in the world; on the chemical nature of the pigments; on variation in specimens from the same nest, and the degree of variability in males and females; and on the correlation in markings between different parts of the insect. These are followed by technical descriptions of the known species, and a bibliography of the subject.

For several years the Entomological Institute at Gifu, Japan, conducted by Mr. Nawa, has published a semipopular entomological paper. It now commences a series of more pretentious publications, the first number of which treats of the Sphingidæ of Japan, by K. Nagano.† It is in folio size and consists of 48 pages in Japanese and five colored plates, with an English translation of 15 pages in the back. Thirty-four species, with their larvæ, are figured on the plates. These are rather too highly colored.

A new entomological journal is *Časopis,* or *Acta Societatis Entomologicæ Bohemiæ.* It is published in Bohemian at Prague; four numbers are issued each year. It is edited by a committee of five Bohemian entomologists, headed by the eminent neuropterist, Professor Franz Klapálek. It treats mostly of local insects.

The entomological literature of New Zealand has been enriched by two valuable books. One of them is a catalogue of all New Zealand animals.* The insects occupy a large part of the work. In the introduction there is a list of the various expeditions that have collected material on New Zealand; and an account of the different elements of the New Zealand fauna, and notes on the geological history of the island. The other book is a systematic account of the Neuroptera.† The neuropteroid fauna of New Zealand is characterized by many peculiar genera of caddice flies; and the author, in an appendix, shows that their larvæ are the principal food of trout.

M. Ch. Kerremans has begun a monographic account of the family Buprestidæ,‡ a group which he has studied for many years. Five parts have been issued, with 160 pages. The introduction contains much ethological matter on geographic distribution, variation, sexual dimorphism, mimicry and protective resemblance, etc.

Dr. Sjöstedt, who a few years ago published a considerable work on the termites of Africa, has now issued an appendix to that work.§ He here gives synoptic tables to all the species, new localities for many old species and descriptions of a considerable number of new forms. He wisely uses the genus *Termes* in the broad sense, ignoring the many new genera which have recently been created from it. There are many notes on the nests and habits of the species.

That the famous *Vedalia cardinalis* is not the only useful species of its genus is evi-

* W. M. Enteman, 'Coloration in Polistes,' Carnegie Institution, Washington, Publ. no. 19, 1904, pp. 88, 4 col. plates, 2 maps.

'Icones Japonicum Insectorum,' Vol. I., Lepidoptera Sphingidæ. Gifu, Japan, 1904.

* 'Index Faunæ Novæ Zealandiæ,' by F. W. Hutton; London, Dulau and Co., 1904, 370 pp.

† 'New Zealand Neuroptera,' by G. V. Hudson; London, West, Newman and Co., 1904, 102 pp., 11 colored plates.

‡ 'Monographie des Buprestides,' Bruxelles, 8vo, 1904–1905.

§ 'Monographie der Termiten Afrikas, Nachtrag,' *Kgl. Svenska Vetensk.-Akad. Handl.,* Bd. 38, 1904, pp. 120, 4 pls.

denced by a paper on an injurious Indian scale-insect by Mr. Stebbing.* The scale-insect is a very large one (10–18 mm. long) that occurs in great numbers on sâl-trees in India. The *Vedalia, V. guerini,* is very voracious and feeds, both as larva and adult, on the scale. The latter, however, is so large that a beetle may suck its fill without killing the scale, which may feed or walk about while the *Vedalia* is sucking out its juices.

A MOST welcome addition to the small amount of good literature on the early stages of our beetles is the recent article by Messrs. G. Dimmock and F. Knab.† It contains a summary of the present knowledge of the larval structure in this family; directions for the rearing of the larvæ, notes on the habits of many species, detailed accounts of the early instars of four species, and a bibliography at the end. The four plates illustrate the larvæ and details of external anatomy.

DR. K. W. VERHOEFF has issued another one of his studies on insect morphology.‡ It is on the Embidæ, and deals especially with the structure of the thorax in this family. He finds further evidence in favor of the compound nature of the segments, and gives a table of the number of segments (33) which he traces in primitive insects. Systematically he would place the Embiidæ in the order Isoptera, dividing that order into two suborders, the Termitina and the Adenopoda, a new suborder for the Embidæ.

IN volume 12, no. 1, of the *Novitates Zoologicæ* Hon. N. C. Rothschild has given descriptions of sixteen new fleas of the genus *Ceratophyllus* from North America, mostly from western Canada. With them are four plates illustrative of the sexual characters of the species.

MR. W. F. KIRBY, of the British Museum, has added another volume to his series of world-catalogues of insects. This time it is the Orthoptera.* This volume treats of the Forficulidæ, Hemimeridæ, Blattidæ, Mantidæ and Phasmidæ. Each species is numbered, and the distribution is given on the margin of the page. Although the specialist will undoubtedly find errors and omissions, such catalogues are the most valuable additions that can be made to entomological literature.

NATHAN BANKS.

† 'On the Life History of a new Monophlebus from India, with a Note on that of a Vedalia Predaceous upon it,' *Journ. Linn. Soc. London, Zool.,* XXIX., pp. 142–161, 3 pls.

‡ 'Early Stages of Carabidæ,' Bull. no. 1, Springfield [Mass.] Museum of Natural History, Dec., 1904, pp. 55, 4 pls.

‡ 'Zur vergleichenden Morphologie und Systematik der Embiiden,' *K. Leop.-Carol. Deutschen Akad. Naturf.; Nova Acta,* LXXXII., pp. 145–205, 4 pls.

* 'A Synonymic Catalogue of Orthoptera,' Vol. I., Brit. Mus., London, 1904, pp. 501.

MEN OF AFFAIRS IN EDUCATION.

MR. FRANK A. VANDERLIP, ex-assistant secretary of the Treasury, and now vice-president of the National City Bank, addressed the students of Girard College on May 20, on the general subject of educational benefactions. He is reported to have said:

> The professional educator is quite as likely to become narrow and provincial as is any other specialist. The president of one of our great eastern universities told me a few days ago that he had been making an exhaustive examination of the history of his institution, and he had discovered that the great progressive steps which the university had taken in 150 years had been against the protest and the opposition of the faculty. The trustees from time to time brought forward new plans of organization, and broader ideas regarding the curriculum. The faculty had in every case voted adversely, and when the changes were made, they were made only by the trustees taking the responsibility upon themselves. Alexander Hamilton, with his consummate wisdom, once worked out a plan of reorganization for the university, only to have it meet with the usual vote of emphatic protest from the faculty, but final adoption by the trustees. Now, in the light of years of experience, these changes have been seen to be wise in the main. The unavailing protests of the learned men who made up the institution's faculty are discovered sometimes to have been based on narrow grounds lacking the impersonal view and judgment that should have been brought to bear upon the questions.