

Corythuca ciliata Say, formerly known as *Tingis hyalina* H. Schf., is, I believe, the one so common on the button-wood, *Platanus*. I have a species taken from the paper mulberry *Broussonetia* and another species from *Stophylea*, both new to me.

In the family ACANTHIDÆ and sub-family CIMICINA we have *Acanthia lectularia* Linn., which is very abundant and well distributed all over our city. In the family CAPSIDÆ we are quite well represented. *Plagiognathus obscurus* Uhl. is very common. *Episcopus ornatus* Reut. is quite rare; I have only taken about a dozen specimens. *Garganus fusiformis* Say is rather common, and *Hyaliodes vitripennis* Say is exceeding rare.

Capsus ater Linn. is also rare, but is conspicuous on account of its shining black color. *Orthops scutellatus* Uhl. is very rare indeed; I have only taken about half a dozen specimens. *Comptobrochis grandis* Uhl. is also very rare. *Poecilocapsus goniphorus* Say. is very common; this has been known as *P. dislocatus* Say. and *P. melaxanthus* H. Schf. *P. lineatus* Fabr. is more common than *goniphorus*, and destroys a great variety of plants. *Poeciloscytus basalis* Reut., formerly known as *P. sericeus* Uhl., is also common. *Lygus pratensis* Linn., which much resembles the last, is exceedingly common; this was formerly known as *L. lineolaris* Pol. Beauv. and *L. oblineatus* Say. *Calocoris rapidus* Say. is common, and was formerly known as *C. multicolor* H. Schf. *Neurocolpus nubilus* Say. is very rare with us; I have but three specimens representing it. *Phytocoris eximius* Reut. is also very rare, and a species of *Phytocoris*, not determined, more common. *Lopidea media* Say. is very rare, as is *Resthenia insignis* Say. *Collaria meillearii* Prov., which Uhler gives as *Trachelomiris meillearii* Prov., is quite rare. *Leptopterna dolabrata* Linn. is common everywhere where there are grass and weeds. *Miris offinis* Reut., formerly known as *M. instabilis* Uhl., is not common. *Trigonotylus ruficornis* Fall. is rare with us, making about twenty species of CAPSIDÆ taken here, which is probably only about one-third of the species that occur with us.

OBSERVATIONS AT BOSSEKOP.¹

THE close connection between the Aurora and magnetism induced Herr O. Baschin to accompany Dr. Brendel to Bossekop for the purpose of observing this phenomenon. On January first of this year they entered the Alten Fiord, at the end of which lies Bossekop. It is built on the slope of one of the raised beaches so common on the shores of the fiord and in the adjacent valleys. An elevation of the shore amounting to 43 inches is said to have taken place during the last fifty years, but the calculations are not beyond suspicion. Dr. Brendel succeeded in obtaining photographs of different forms of the Aurora, the only ones at present in existence. Violent magnetic disturbances have often been observed during displays of the Northern Lights, and the close relation of these phenomena is further demonstrated by the fact that the centres of the arcs of light lie on the magnetic meridian, and that the corona, the most splendid form of Aurora, lies in the magnetic zenith. The most remarkable disturbances took place on February 14, accompanied by an unusually gorgeous display of the Aurora, when the magnetic declination was observed to vary more than 12°—the greatest deviation ever noticed—within eight minutes. At the same time the disturbances in Europe and North America were so great that most of the self-registering instruments were unable to record them. It is not possible at present to determine with certainty the cause of these striking phenomena, but it seems probable that the great sun-spot, seventeen times as large as the surface of the earth, which was at

the time visible even to the naked eye, was connected with the disturbances mentioned.

The meteorological observations also presented much that was interesting. The temperature on the west coast of Norway does not fall nearly so low as might be expected in such high latitudes. Even at the North Cape the mean of the coldest month is only 23° F., whereas in West Greenland on the same latitude the temperature sinks every winter to -40°. As, however, the distance from the coast increases, the temperature falls rapidly. The minimum observed at Gjesvar, near the North Cape, is -2° F.; at Bossekop, 33 miles from the open sea, -22°; and at Karasjok, further south but 120 miles from the coast, -60°. Thus the influence of the Gulf Stream, which prevents the fiords from freezing over, does not penetrate inland. The fall of snow in winter is not very large at Bossekop, but also increases towards the interior. In very cold weather the snow does not come down in flakes, but takes the form of crystals of ice, which, having no cohesion, are blown about by every puff of wind.

The Lapps may be divided into two classes,—the very poor fishermen of the coast and the nomadic Lapps of the mountains, who often possess considerable property. Of late years a third class has sprung up, which has settled in two inland places, Karasjok and Kautokeino. At the beginning of March the Lapps gather to a great fair at Bossekop, where many thousand ptarmigan, several tons of reindeer flesh, besides butter and tongues, change hands. Herr Baschin drove to Karasjok in a reindeer sledge, a vehicle that requires a deal of management, in order to inspect the dwellings of the Lapps settled there. The village is situated on a stream of the same name, one of the headwaters of the Tana, the second largest river of Norway, and contains about 200 inhabitants—all, with few exceptions, Lapps. Their dwellings are conical tents, 13 to 16 feet in diameter, with openings at the top to let out the smoke from the fire in the centre. Many Lapps own 2,000 to 3,000 head of reindeer. These people are not so powerful, intelligent, and honest as the Eskimo, and give the Norwegian Government much trouble through their propensity to steal reindeer. In Karasjok Herr Baschin found Balto and Ravna, the two Lapps who accompanied Dr. Nansen on his journey across Greenland, and on his voyage home he inspected that explorer's new vessel, which is being built at Laurvig. It has a nearly semi-circular cross-section, and is rigged as a three-masted schooner. It is of 250 tons register, and is constructed almost entirely of German oak. A small engine will enable it to make six knots an hour during calms.

LETTERS TO THE EDITOR.

*** Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.

On request in advance, one hundred copies of the number containing his communication will be furnished free to any correspondent.

The editor will be glad to publish any queries consonant with the character of the journal.

Laboratory Teaching.

IN a recent number of *Science* there appeared an excellent article by Professor Chas. F. Mabery upon "Aims of Laboratory Teaching," in which occurred the following sentence: "Probably the earliest attempt in this country to give systematic laboratory instruction, to classes of any magnitude, was made in 1865 at the Massachusetts Institute of Technology."

Professor Mabery is surely in error upon this point, as such instruction had been given the students of the Rensselaer Polytechnic Institute for many years previous to the date quoted. Our present laboratory, which is very complete and accommodates seventy-six students at a time in analytical chemistry, was built in 1862, to replace the one destroyed by fire in that year. Permit me to quote from a letter just received from Professor James Hall, geologist of the State of New York, who graduated from this institution many years ago: "In regard to systematic laboratory instruction in chemistry, I can only say that when I entered the Rensselaer School in 1831 there were already laboratories fitted up for giving systematic instruction in chemistry, and each student of the class

¹ From the Scottish Geographical Magazine.

was required to do laboratory work, and to prepare himself his material and apparatus, to give each day during the course an extemporaneous lecture, illustrated by experiments, and full explanation of the phenomena and the laws governing them. Every student was well grounded in the principles and elements of the science, and by a method of teaching never surpassed, if ever equalled, by any other."

WILLIAM P. MASON.

Troy, N.Y., July 29.

AMONG THE PUBLISHERS.

THE ninth annual issue of "The Year-Book of the Scientific and Learned Societies of Great Britain and Ireland" has recently been issued by Charles Griffin & Co., Exeter Street, Strand, London. The present issue gives a well-edited chronicle of the work done during the past year by the learned societies of Great Britain and Ireland, together with lists of the officers and a brief statement of the history and purposes of the organizations. The lists of the papers are quite complete, most of the society secretaries having given the needed information, and make a showing of scientific and literary activity with which we have as yet but little to compare in America. The hand-book is well made for its purpose, and would prove an excellent book of reference in American libraries.

Reading Matter Notices.

Ripans Tabules cure hives.

Ripans Tabules cure dyspepsia.

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International Entomological Society, Zurich-Hottingen, Switzerland.

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The Journal of the Society appears twice a month, and consists entirely of original articles on entomology, with a department for advertisements. All members may use this department free of cost for advertisements relating to entomology.

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The new volume began April 1, 1892. The numbers already issued will be sent to new members.

For information address Mr. FRITZ RUHL, President of the Societas Entomologica, Zurich-Hottingen, Switzerland.

NEO-DARWINISM AND NEO-LAMARCKISM.

By LESTER F. WARD.

Annual address of the President of the Biological Society of Washington delivered Jan. 24, 1891. A historical and critical review of modern scientific thought relative to heredity, and especially to the problem of the transmission of acquired characters. The following are the several heads involved in the discussion: Status of the Problem. Lamarckism. Darwinism. Acquired Characters. Theories of Heredity. Views of Mr. Galton. Teachings of Professor Weismann. A Critique of Weismann. Neo-Darwinism. Neo-Lamarckism. The American "School." Application to the Human Race. In so far as views are expressed they are in the main in line with the general current of American thought, and opposed to the extreme doctrine of the non-transmissibility of acquired characters.

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To exchange; Experiment Station bulletins and reports for bulletins and reports not in my file. I will send list of what I have for exchange. P. H. ROLFS, Lake City, Florida.

Finished specimens of all colors of Vermont marble for fine fossils or crystals. Will be given only for valuable specimens because of the cost of polishing. GEO. W. PERRY, State Geologist, Rutland, Vt.

For exchange. Three copies of "American State Papers (the first Sunday Legislation," 1891, \$2.50, new and unused; "The Sabbath," by A. A. Phelps, 1842; "History of the Institution of the Sabbath Day, Its Uses and Abuses," by W. L. Fisher, 1839; "Humorous Phases of the Law," by Irving Browne; or other works amounting to value of books exchanged, on the question of government; legislation in reference to religion, personal liberty, etc. If preferred, I will sell "American State Papers," and buy other books on the subject. WILLIAM ADDISON BLAKELY, Chicago, Ill.

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To exchange Wright's "Ice Age in North America" and Le Conte's "Elements of Geology" (Copyright 1882) for "Darwinism," by A. R. Wallace, "Origin of Species," by Darwin, "Descent of Man," by Darwin, "Man's Place in Nature," Huxley, "Mental Evolution in Animals," by Romanes, "Pre-Adamites," by Winchell. No books wanted except latest editions, and books in good condition. C. S. Brown, Jr., Vanderbilt University, Nashville, Tenn.

—A vigorous statement of the scientific principles upon which the treatment of criminals should be based will open *The Popular Science Monthly* for August. It is by Professor Edward S. Morse, who takes as his title "Natural Selection and Crime." The Warfare of Science papers, by Dr. Andrew D. White, will be continued with a chapter on "Geography," in which are given the various mythological and theological ideas concerning the form of the earth and the proper mode of representing it that have prevailed in ancient and mediæval times. "The Manufacture of Boots and Shoes" will be described by George A. Rich. This is one of the illustrated series of Articles on American Industries, and, in both the text and the pictures, tells a story of wonderful progress. An ethical study on "Veracity," by Herbert Spencer, will be among the contents.

—The Geographical Society of Germany will shortly publish a volume commemorative of the four-hundredth anniversary of the discovery of America by Columbus, which will, it is said, be one of the most elaborate publications ever issued by the society. Dr. Konrad Kretschmer, the editor of the forthcoming work, has visited all the principal libraries of Italy in search of material, and has had access to many rare manuscripts hitherto unused. The memorial volume will contain forty five maps relating to the discovery of America, thirty-one of which are said to have never been published. Emperor William has contributed 15,000 marks

Wants.

Any person seeking a position for which he is qualified by his scientific attainments, or any person seeking some one to fill a position of his character, be it that of a teacher of science, a draftsman, or what not, may have his want inserted under this head FREE OF COST, if he satisfies the publisher of the suitable character of his application. Any person seeking information on any scientific question, the address of any scientific man, or who can in any way use this column for a purpose consonant with the nature of the paper, is cordially invited to do so.

A JOHNS HOPKINS graduate (1892) desires a position as instructor in mathematics and physics. Address A. B. TURNER, Johns Hopkins University, Baltimore, Md.

WANTED.—A collection of postage stamps; one made previous to 1870 preferred. Also old and curious stamps on original letters, and old entire U. S. stamped envelopes. Will pay cash or give in exchange first-class fossils, including fine crinoids. WM. F. E. GURLEY, Danville, Ill.

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WANTED.—The services of a wide-awake young man, as correspondent, in a large manufacturing optical business; one preferred who has a thorough knowledge of microscopy and some knowledge of photography. Address by letter, stating age and references. Optical, care of Science, 874 Broadway, New York.

WANTED.—We want any and all of the following, providing we can trade other books and magazines or buy them cheap for cash: Academy, London, vol. 1 to 28, 35, Jan. and Feb., '89; Age of Steel, vol. 1 to 66; American Antiquarian, vol. 1, 2; American Architect, vol. 1 to 8, 9; American Art Review, vol. 3; American Field, vol. 1 to 21; American Geologist, vol. 1 to 6; American Machinist, vol. 1 to 4; Art Amateur, vol. 1 to 7, Oct., '4; Art Interchange, vol. 1 to 9; Art Union, vol. 1 to 4, Jan., '44, July, '45; Bibliotheca Sacra, vol. 1 to 46; Godey's Lady's Book, vol. 1 to 20; New Englander, vol. 11; Zoologist, Series 1 and 1, Series 3 vol. 1 to 14; Allen Armendale (a novel). Raymer's "Old Book" Store, 243 4th Ave. S., Minneapolis, Minn.

WANTED.—By a young man, a Swarthmore College junior, a position as principal of a public high school in one of the Gulf States, or as instructor in botany, physiology, and geology in an academy or normal school. Address B., care of Librarian, Swarthmore College, Penn.

WANTED.—To act as correspondent for one or two daily or weekly papers. Have worked on paper for about two years. Would like a position on editorial staff of humorous paper. Address GEO. C. MASON, 14 Elm St., Hartford, Conn.

TRANSLATOR wanted to read German architectural works at sight (no writing). One familiar with technical terms desired. Address "A," Box 149, New York Post Office.