

Entomology.

The Entomological Society of Canada.

REPORT FOR 1864.

THE Council of the Entomological Society of Canada, in presenting their Second Annual Report, beg to congratulate the members upon the very satisfactory progress that has already been made by the Society. During the past year, two Branches have been formed in connection with it; one at Quebec, C. E.; the other at London, C. W., both of which are now in active operation. This is a course that will, we trust, be followed by entomologists in other parts of Canada, and thus a strong society will be formed, which may successfully carry out the study of the insect fauna of Canada. The Quebec Branch now contains twelve members, and has already formed a goodly collection of native insects; four papers were read during the year, and meetings were regularly held in the rooms of the Literary and Historical Society; its proceedings are published in the "Canadian Naturalist and Geologist." The London Branch was organized on the 1st of July, 1864, and now numbers fifteen members; monthly meetings, at which five papers were read, were held at the houses of members in rotation, and during the season, the mornings of every Monday were devoted to the field excursions. The Parent Society, exclusive of the Branches, is now composed of twenty-one members; the whole number is, therefore, forty-eight, an increase of twelve during the year. Three general meetings of the Society have been held, and several field-meetings also, during the summer months. Six papers have been read, and several valuable contributions to the library have been received. The number of donations of specimens of insects to the Cabinet of the Society, is particularly gratifying,—the whole number now amounting to upwards of 2,500. Moreover, in addition to these, a large number of European insects, of various orders, has been brought out for the Society by the Secretary,—the gift chiefly of Francis Walker, Esq., F. L. S., of the British Museum, London,—these have not yet been arrayed in the cabinet provided for them by the Canadian Institute, but will ere long be put in their proper places. A list of Canadian Lepidoptera, embracing all the Rhopalocera, and the groups Sphingina and Bombycina of the Heterocera has been published; the remainder is under preparation. The Council, in conclusion, cannot refrain from expressing their regret that the Society has been deprived of the active co-operation of Dr. B. R. Morris, of Toronto, who lately left this country for England. His interest in our proceedings will, we trust, be continued as a corresponding member.

CHARLES J. S. BETHUNE.

Secretary.

DESTRUCTION BY SLEGS.—French horticulturists make fierce complaints this year of slugs and snails, the destruction of which has become a serious subject of consideration. It is calculated that 100 slugs eat 2½ lb. of grass per day; therefore, 5000 consume the food of a cow, and as they chiefly select the youngest shoots after sowing time they are more mischievous. General Higouet has established on his farm a systematic war against these invaders by means of an iron cutting instrument attached to a stick, with which he arms his farm servants, and sends them forth immediately after the harvest has been reaped. A single man has destroyed 4000 in one day; thus, on the farm of Veyrac 100,000 are killed annually. From August to October these 100,000 would have devoured 2000 lbs. of grass daily, which is equivalent to 250 kilos of hay, the value of which is 12f. 50c. Multiplying this by 90 days, the result gives 20,250 kilos of hay (value 1125f., or 45l.), which would have been destroyed had not the war been waged, whereas the pay of the labourers employed in eradicating this plague of slugs and snails only amounted to 50f. (2l.) —*North British Daily Mail.*

PRESERVATION OF WHEAT FROM INSECTS.—An experiment was lately made in Paris for the preservation of wheat from fermentation and the attack of insects by enclosing it in a metal vessel and exhausting the air. The experiment was made in the presence of 40 persons, and succeeded perfectly. Ten hectolitres of wheat were placed in a metal vessel, and the air was exhausted. The vessel was opened after 15 days, and the weevils, which were seen quite lively when the wheat was placed in the vessel, had quitted their cells and were dead. They were warmed but did not stir. Being placed on white paper, they were crushed and reduced to powder without leaving any stain on the paper. From various experiments made on wheat under glass, it was found that the weevil retains life longer than any other insect when deprived of air.

USEFULNESS OF THE OWL.—We trust that no farmer, says the *German Town Telegraph*, will allow the owl to be destroyed. They seldom do any damage, while they are of great service in protecting his premises against the depredations of mice and nocturnal insects. The *Western Rural* refers to this bird in the following terms:

Mr. Samuels, in his article on the "Ornithology of New England," in the last report of Department of Agriculture, says: "The food of owls consists almost entirely of rats, mice, and field mice. Many of the smaller species destroy multitudes of nocturnal insects, and but few of the birds are destroyed, comparatively, by any of the species. Those that are most diurnal in habits partake somewhat of the nature of the hawks, and kill birds, which they pursue and capture while on the wing. But the little injury done by these is trifling when compared with the benefits they are constantly doing by destroying the noxious animals, which, as I have already said, constitute the greater part of their food." We all know that mice do infinite mischief during the winter season in girdling trees, hedges, &c., and numerous inventions and appliances have been recommended for the protection of trees against their ravages, nearly all of which are found to be impracticable. A writer in a recent number of the *Canada Farmer* states that a gentleman who had several hundred pear trees just coming into bearing, had them nearly all destroyed by mice. Now should not the owl, which assists the farmer in his labors by destroying animals that are destructive to his interests, be protected and regarded as a friend?

HOP INSECTS.—A prize essay on Hop Cultivation in Worcester, refers as follows to the insect enemies of the plant prevalent there:—

"The hop-plant has a variety of enemies. On the first appearance of the bine, it is frequently attacked by fleas, which check its growth, and makes it look scrubby and unhealthy, but never destroys the crop. Wire-worms are a great pest; the best plan to get rid of them is to cut a potato in half, and place it close on either side of the root an inch below the surface; the potato lures the worm, and, if taken up every other morning for a fortnight, enables you to take a great quantity; I have known of a dozen being taken from one root. The greatest enemy is the aphid—and I regret to say that on the most important subject of its history we are as ignorant as our forefathers; we go to bed leaving our garden free, and next morning we find aphid—from one to ten or twenty—on a small leaf, which, in the course of a week, have increased to countless myriads. These pests are followed by mites and lice, which some seasons multiply so rapidly as to destroy the bine and the planters' prospects. I would here repeat the recommendation which I have already given to the planter, not to work his hops when in a state of blight. When closely watching the blights of 1860, '61 and '62, I have observed that in all cases where the land was best tilled, manured, and cared for, the blight remained until too late in the season for the chance of a crop; on the other hand, where nothing was done, but weeds were suffered to grow nearly half-way up the poles, the bine became yellow and clean, and the result was a fair sprinkling of hops; in such ground, the vermin had left the hop for want of sap and taken to the weeds."

ANTI-INSECT PLANT.—In answer to the enquiry of W. H. Mills, we insert the following extract, from "Knapp's Journal of a Naturalist":

"We have one plant in our gardens, a native of North America, than which none can be more cruelly destructive of insect life, the *Dogsbane*, which is generally conducive to the death of every fly that settles upon it. Allured by the honey on the nectary of the expanded blossom, the instant the trunk is protruded to feed on it, the filaments close, and, catching the fly by the extremity of its proboscis, detain the poor prisoner, writhing in protracted struggles till released by death—a death apparently occasioned by exhaustion alone; the filaments then relax, and the body falls to the ground. The plant will at times be dusky from the numbers of imprisoned wretches."

The Household.

Papering Whitewashed Walls.

ELLEN M. WHITE, of Iowa, writes:—"By putting a little glue in the paste, I will warrant it to stick in every case, without any trouble."

MARIAN M. M., of Ohio, writes:—"If the lady who wishes to paper white-washed walls, will wash the wall with vinegar, she will find the difficulty about sticking obviated."

LIZZIE, of Leasburg, N. Y., recommends the same practice, saying "it is much quicker done than scraping it off, and mother has never known it to fail."

Mrs. I. K. STALL, of Orange Co., N. Y., writes:—"If the lime is broken, I scrape it off. If not broken, I do not scrape. I take strong vinegar, and, with a whitewash brush, wash the walls well. I boil the paste, which is made of wheat flour and water, thirty minutes, after which I apply it to both wall and paper. In this way I have papered walls which have been whitewashed forty years, and am never troubled with the paper falling off."

WELTHIE UXTON, of Mayville, N. Y., washes the walls with strong vinegar, and then makes a good paste of rye flour, and glue. Wets both wall and paper with the paste, and uses a cloth to rub down the paper.

LIZZIE M. THOMAS, of Columbia Co., N. Y., dissolves one pound of alum in one gallon of vinegar, which she applies to the wall with a brush, lets it dry, and puts on the paper with paste made in thin glue water. Says if the wall has been whitewashed only three times, brushing it over with thin glue water and letting it dry before papering, will be sufficient.—*Rural New Yorker.*

HINT TO HOUSEKEEPERS.—The amount of injury done to the tender stomachs of young children, invalids, and sedentary persons, by eating bad bread day after day, from one year's end to another, must be enormous. A cook who cannot make good bread of every description, ought not to be allowed house-room for an hour; and that mother is criminally negligent, whatever may be her position, who does not teach her daughter to know what good bread is; and also how to make it. Alum is used to give whiteness, softness and capacity for retaining moisture. Lime could be employed with equal effect, having the advantage of correcting any sourness in the bread or stomach; besides affording an important ingredient for making the bones strong. Every housekeeper ought to know how to make two or three kinds of bread. The best yeast in the world is made of hops and cold water, nothing else. If lime water is used, it should be water saturated with lime, that is, holding as much lime as it can; if it has for a moment more, it goes to the bottom, as sugar in a tea cup, when the tea can be made no sweeter. Use nineteen pounds of flour and five pounds of saturated lime-water made thus: Put stones of quick lime in water, stir until slack, let it settle and then pour off. Soda [and alkali made of sea salt] and saleratus [an alkali made of wood ashes] are used for the self same purpose, to neutralize any sourness in the bread; one is in no respect better than the other; but as cooking soda is the cheapest, it is economy to prefer it.—*Dr. Hall.*

BREAD FOR THE BONES.—Bread and butter are the only articles of food which we never tire, from early childhood to extreme old age. A pound of fine flour of Indian (corn) meal contains three times as much meat as one pound of butcher's roast beef; and if the whole product of the grain, bran and all, were made into bread, fifteen per cent more of nutriment would be added. Unfortunately the bran, the coarsest part, is thrown away; the very part which gives soundness to the teeth, and strength to the brain. Five hundred pounds of one flour gives to the body thirty pounds of the bony element, while the same quantity of bran gives more than one hundred and twenty-five pounds. This bone is lime, the phosphate of lime, the indispensable element of health to the whole human body, from the want of the natural supply of which multitudes of persons go into a general decline. But swallowing phosphates in the shape of powders, or in syrups, to cure these declines, has little or no effect. The articles contained in these phosphates must pass through nature's laboratory; must be subject to her manipulations, in alembics especially prepared by a mighty power and skill, in order to impart their peculiar virtues to the human frame; in plainer phrase, the shortest, safest, and most infallible method of giving strength to the body, bone and brain, thereby arresting disease, and building up the constitution, is to eat and digest more bread made out of the whole grain, whether of wheat, corn, rye, or oats.—*Hall's Journal of Health.*