

whatever size or colour, is a Poland fit for exhibition, with some people, apparently. Some specimens of top-knotted fowls were the most wretched mongrels that can well be imagined. The Brahmas and Cochins were villainously caricatured by two pairs of old birds, one of each breed, so called; and by two pairs of white chicks, whose only affinity to Cochins consists in dim traces of feathering down the legs. The judges, by a reprehensible stretch of benevolence, gave prizes to these miserable creatures, when they ought to have labelled them "execrable." We advise their owners to wring their necks forthwith; or, if they cannot find it in their hearts to do that, to take care they never show face at an Exhibition again. Some nice pigeons—carriers, pouters, tumblers, Jacobins, barbs and trumpeters, were shown by Messrs. Robertson, Cliff, and Carson, of Kingston; and some half lop-eared rabbits by Messrs. Briggs and Henderson, of Kingston.

Canadian Natural History.

Natural History Department of the Exhibition.

CANADIAN Natural History has been generally very poorly represented at the Provincial Exhibition, and the show of the present year was no exception in this respect. We hope to see a growing interest in this most pleasing study, which farmers have special facilities for pursuing, which would afford them, if they once entered into the spirit of the pursuit, a rich fund of untiring delight, and would deter many young people from seeking relaxation in grosser and less healthful recreations.

The exhibition at Kingston had only a few entries in this department. Mr. N. Leonard, of Kingston, was an exhibitor in this class, with a neat case of stuffed birds. The collection embraced varieties from all countries, and was very fine.

B. White was also an exhibitor in native stuffed birds, and Mr. Bayns, of the same city, had another lot of the same kind, very neatly arranged and classified with technical names. Mrs. Craig was also an exhibitor in the natural history class, showing a fine stuffed beaver, very much admired. Mr. Thomas Wilson entered among those a case of native birds, a very nice lot, displaying taste in arrangement, as well as correctness in the taxidermist's art.

The Apiary.

Bee-hives and Honey at the Recent Exhibition.

THAT has been about the usual competition in this department. G. Bennet, of Cobourg, exhibited a hive in the Agricultural Hall, made on the Langstroth principle, though Mr. Bennet claims to have effected some improvement upon the original idea he has adopted. Directly in front of the main entrance to the Crystal Palace, so as to be the observed of all observers, Messrs. Henry, of Oshawa, and Thomas, from Brooklin, located themselves, and illustrated the merits of their hives, by showing the live bees occupying and working in them. Mr. A. N. Henry exhibited hives on the moveable comb principle, and, in fact, after the advance made of late years in the science of bee-keeping, it is of little use to exhibit any hive to intelligent apirians unless it be constructed with moveable frames. The chief peculiarity of Mr. Henry's hive consists of an inner lining of straw, which, he maintains, renders the hive warmer as a winter abode for bees, and also absorbs the moisture that collects within it. He has also, in connection with his hive, a mat made of flags to put over the bees in winter, which answers the same purpose as filling the cap or cover with clean straw. Mr. Henry also exhibited a stock of Italian bees and an observing hive containing several queen cells, which he showed to the crowd and explained to the curious and observant among them. He obtained a

second prize for his hive. Not far distant, Mr. J. H. Thomas, of Brooklin, was located with his bee palace, bee hives, and stocks of Italian bees, making altogether quite an imposing appearance. The Thomas hive is so well known to our readers that it needs no minute description; suffice it to say that it comprises all the advantages possessed by any other moveable frame hive, while it has some valuable features peculiar to itself, and for which its proprietor has obtained patents, even in the United States, over all other hives of the kind. Mr. Thomas exhibited the advantages of his hive, and his method of managing bees, taming them by smoke, and then removing the cards of comb, and handling the bees in a very scientific and masterly manner. During the whole day large crowds were gathered here, listening to the information given by himself and brother concerning the nature and habits of the bee. He also exhibited a very fine stock of Italians, supposed to contain 35,000 bees, and weighing over 100 lbs. This stock, in a beautifully ornamented and double-boarded hive, was entered as an extra, and was recommended by the judges as worthy of a first prize. He also showed in a glass hive, containing a single frame, one of the brightest colored Italian Queens we have ever seen. As heretofore, Mr. Thomas was awarded a first prize for his hives which really seem to comprise all the conveniences the most fastidious stock of bees or apirians could desire.

There was a fine display of honey, both in the comb and strained. The judges could not resist the temptation of opening the boxes and tasting their luscious contents, a piece of policy which the exhibitors did not admire, as it spoiled the tasteful appearance of the boxes and introduced a new principle of judging, viz., by taste rather than appearance. This course is also objected to by them because it prevents the same boxes being exhibited at other fairs the present season. If honey in the comb is to be judged by tasting, notice to that effect should be given, so that exhibitors may prepare boxes that admit of access to their contents without marring the whole. There were six entries of honey in the comb, and seven of strained honey. The first prize for honey in the comb was awarded to C. Gardine, of Elizabethtown. This prize must have been given for richness of flavour, for in appearance it was the darkest and evidently the oldest in the lot. The second prize was awarded to Mr. J. H. Thomas, of Brooklin; the third, to Mr. G. Bennet, of Cobourg; and the fourth to Mr. H. M. Thomas, of Brooklin. For strained honey the first prize was awarded to Mr. J. H. Thomas, the second to Mr. C. Gardine, the third to Mr. G. Bennet, and the fourth to Mr. H. M. Thomas.

Entomology.

A Plant Growing out of an Insect.

MR. GILBERT, of Tibton, Cedar Co., Iowa, sends me a specimen of the common "White Grub," or larva of the May-bug, (*Lachnosterna quercina*), with a root over an inch long, and also a short sprout, growing out of the two corners of its mouth in the place where the lower pair of jaws or "maxillæ" ought to be. So firmly is the plant imbedded in the mouth, that it could not be detached by any reasonable force after the plant had been well soaked in hot water. It is said to have been "found by Mr. Paulding in wet soil, about 1½ inches below the surface, and when found the shoot was of a light green color and thrifty."

But the most remarkable thing is that, as Mr. Gilbert informs me, "there were large numbers of such specimens turned up by the plough, and the root came from the worm in exactly the same part of the body in all; in some there was a shoot starting as well as a root." "Mr. Paulding," it is further remarked, "has planted out some of them to see what they will result in."

If only a single such specimen as the above had been met with, we might account for it by supposing that the larva had accidentally died with the undecayed seed of some plant in its mouth, and that this seed thereupon vegetated and grew, using the body of the larva as manure to aid it in its growth. But how can we account for the "large numbers" of these specimens found in one place, at one time, and by one man? I can only explain these singular circumstances by supposing that some particular kind of seed is poisonous to this larva, although the instincts of the larva do not prompt it to reject such seed as food. Hence it is to be hoped that Mr. Paulding's experiments will be continued, until he clearly ascertains what plant is produced from this vegetative larva. Possibly we might turn such knowledge to practical account, by sowing this particular kind of seed in places infested by the White Grub,

and especially where, as with young trees in nurseries, we cannot conveniently reach our enemy with the plough, the hoe or the spade.—*Practical Entomologist*.

NOTE BY ED. C. F.—There are specimens of a somewhat similar curiosity in the museum of the Canadian Institute in this city, sent some years ago from New Zealand. It is called the Vegetable Caterpillar (*Sphæria sicules*, or *Robertia*), and is thus described by a resident in New Zealand, in the *Canadian Journal*, Sept. 1857:—"It is very abundant in this country, especially upon the West coasts, where it is said that tons might be collected. I am in hopes it may become an article of trade with China, where the fungus is prized very highly, and is used as a medicine. The *Sphæria Robertia*, although bearing much resemblance to a caterpillar, is evidently a plant; the mode of its production is said to depend upon the growth of a sporule of the fungus germinating within the body of the animal while yet alive. Aware of the disease, the caterpillar seeks the shelter of the Ratā tree, and lays itself up to die under it; in due season the fungus shoots out its stem, flowers, seeds, and dies. From the specimens I have sent, abundant evidence of its fungus nature will be manifest. The butterfly that produces this caterpillar is said to be the *Heptalus sericeus*, [a genus of insects whose larvæ bore into wood, and are often very destructive, Ed. C. F.] When the eggs are hatched, the caterpillar seeks the *Kalikaton* tree, and bores into it to a great depth." In the specimens we have seen, the caterpillar, though dry and shrivelled up, is over two inches long, while the fungus that grows from its head is about three inches long, slender and sinuous, and terminating in some instances in a long seed-bearing cap. It is very interesting to observe in how many various ways nature contrives to place a check upon the increase of destructive insects, and thus keep their numbers within due bounds.

The State Entomologist of Illinois.

IS common with others, we have given the State authorities of Illinois credit for an amount of wisdom which it appears by the following extract they did not possess:—

The *Canada Farmer*, in its issue of July 15, 1867, congratulates the State of Illinois on their discernment and public spirit in creating and liberally endowing the Office of State Entomologist, and is "much pleased to learn that the appointment has been conferred upon the talented Editor of the *PRACTICAL ENTOMOLOGIST*." As I find that a similar delusion is very prevalent throughout the United States, and as I do not wish that the State, in which I am for the present residing, should be complimented for doing what in reality it has not done at all, I think it proper to give here the true facts of the case.

On the last day of the regular biennial Session, in the winter of 1866—7, our Legislature, as the *Canada Farmer* correctly states, "passed a Bill authorizing the appointment of a State Entomologist, with a salary of \$2,000 per annum," but only for a period of two years. By the terms of this law, the appointment was vested in the Governor, "by and with the advice of the Senate." On the earliest possible opportunity, namely, at the Special Session held in June, 1867, the Governor accordingly sent in my name to the Senate for the office. But instead of either confirming or rejecting the Governor's nomination, the Senate postponed all action upon it until the next regular biennial Session, in the winter of 1868—9, when, by the terms of the Law itself, the Office of State Entomologist will already have ceased to exist. In other words, they in effect vetoed a law which they, in common with the House, had in the first instance voted for; or, which is the same thing, took such action that the law became, for all practical purposes mere waste paper.

It strikes me that this is a good deal like the platform of the factitious politician, who professed himself to be theoretically in favor of the Maine Liquor Law, but strongly opposed to its practical enforcement.—*Practical Entomologist*.