

others, mere country boobys—we shall have hereafter, doubtless from him some very "palpable hits."

Jesters, Clowns, and Fools were, in Shakespere's time maintained in all great families, to keep up merriment in the house, and they were remarkable for petulance and freedom of speech, we trust our youthful *Jester* will be maintained in Montreal to keep up merriment in the city, and we beg to remind him that petulance and freedom of speech, if not kept within certain limits, did not escape with impunity in the reign of Elizabeth, and to conjecture that they will not go unpunished in the reign of Victoria.

In conclusion, we think the term Jester is a misnomer, when applied to the clowns and fools of Shakespere, among whom were some "so deep contemplative," and so capable of anatomizing the wise man's folly. Again, as to the dress of our *Jester*, the clowns and fools who "moralized amid all their fooling" wore motley coats; their weapons were daggers of lath, and their head gear was a hood resembling a monk's cowl, sometimes decorated with asses ears, or else terminated in the neck and head of a cock—hence cockscomb or coxcomb—a silly upstart. The bladder and bawble were the appendages of the German clowns, not the English. It appears that in Queen Elizabeth's time the Archbishop of Canterbury's fool had a *wooden dagger* and a *coxcomb*. In Beaumont and Fletcher's "Noble Gentleman," a person being compared to a fool, it is added he should wear a guarded coat and a *great wooden dagger*. In Chapman's "Widow's Tears," an upstart governor is termed "a wooden dagger gilded o'er;" and Rabelais has made Panurge give Triboulet the fool a *wooden sword*. The dress was generally parti-colored, and guarded or fringed with yellow. In a wardrobe account of Henry the Eighth, there is this item:—Making a coat and cap of green cloth fringed with red crule for William Somers, our fool. A large purse or wallet at the girdle is a very ancient part of the fool's dress. Tarlton, who personated the clowns in Shakespere's time, appears to have worn it. The budget given by Panurge to Triboulet the fool is described as made of Tortoise shell. In a French translation of St. Augustine on the City of God, printed at Abbeville, 1486, there is a print which exemplifies the use of the tabor and pipe by fools; a practice, according to Donce, that seems to have been revived by Tarlton in the time of Elizabeth. It is difficult to determine the exact costume of the domestic fools, court jesters and the clowns of the drama in the 16th century—but it is certain that bells, pendant from "*Vandyke-points*" of the hood, cape, and doublet were not in use. The bells more properly belonged to the Morris-Dancers, who in addition to the bells attached to the dress, had them tied to their ankles. In a work called *La Grande Danse Macabre*, printed at Troyes about the year 1500, there is a portrait of a clown or jester with the monks cowl, no bells, save those about the legs which are arranged vertically from just below the knee to the ankle in bands connected by circular fillets, to which also, bells are attached. What's in a dress? any more than what's in a name? The Jester will, doubtless, were he not called The Jester, exhibit those dear qualities which he inherits from a long, ancient and honourable line of ancestors whose doings and sayings are chronicled in the *Gesta Romanorum*. The jester with his cut and slashed dress and his bells, though the costume is not appropriate, may make those laugh "whose lungs are tickled with a dry cough," may say his mind freely, may show virtue her own feature, scorn her own image, and the very age and body of the time his form and *resemblance*"; nevertheless, we should have liked to have seen him properly habited and with a name more appropriate for a *Censor Morum*.

Your's obediently,

Montreal Feb. 25, 1878.

THE COUNCIL OF TEN.

NOTES ON THE COLORADO POTATO-BEETLE.

(Read before the Montreal Natural History Society.)

(Continued.)

The other parasite attacking the potato-beetle is a minute mite *Uropoda Americana*, it is about the size of the head of a pin, broadly oval in shape and of a yellowish brown color. It is common on various beetles and last summer destroyed many of the striped cucumber beetle, *Diabrotica vittata*, in this neighbourhood, it often covers its victim so thickly that the latter can scarcely be seen, presenting the appearance of a moving mass of mites, and the beetle thus infested languishes and eventually perishes.

In 1873 Mr. H. C. Beardslee, of Paydsville, Ohio, found this mite attacking the potato beetle, and in 1877 Mr. W. R. Gerard found it common on the potato beetle around Poughkeepsie, New York.

Beside these two parasites which infest the potato beetle, many predaceous beetles devour the eggs and larva. These useful little creatures belong to two families, the *Carabidae* or carnivorous ground beetles and the *Coccinellidae*, or lady birds. To the *Carabidae* belong these dull, blackish looking beetles so common under stones in damp places; they are predaceous both as larva and beetles, and destroy great numbers of injurious insects. *Calosoma calidum*, the copper spot, is a large shining black beetle, with six rows of impressed copper colored spots on the wing covers; it is a most useful creature, being especially fond of cut-worms; it is quite common about Montreal.

Harpalus Caliginosus, the smoky ground beetle, is a dull smoke-colored beetle about an inch in length. Prof. Riley states that it is a formidable enemy to the potato beetle; it was unknown in this neighbourhood until last summer, when Mr. Whiteaves found it not uncommon at the Mile End quarries. *Harpalus Pennsylvanicus*, closely resembles the preceding species, but is a little smaller; it has also been found killing the larva of the potato beetle, and is a most inveterate foe to the *plum curculio*; it is abundant throughout Canada.

Lebia atriventris, is a handsome little beetle with steel blue wing-covers and yellowish red head, thorax and legs. Mr. P. R. Uhler found it destroying the potato beetle larva around Baltimore. Unfortunately, it appears to be very rare in this neighbourhood, as I have only found a single specimen; it may, however, become more abundant, now that its slaughter yards are so well stocked.

Besides the above mentioned species, there are many other kinds of ground beetles, which, no doubt, destroy the larva of the potato beetle whenever they

meet with it, although they have not actually been seen doing so. The *Coccinellidae*, or lady birds, are familiar to almost every person, and have long been famed for their usefulness in destroying plant lice; several species have been found eating the eggs and larva of the potato beetle. The thirteen spotted lady bird, *Hippodamia*, 13 *punctata*, is yellowish red with 13 black spots; it is quite common throughout Canada.

The nine-spotted lady bird, *Coccinella*, 9 *notata*, closely resembles the last species, but is rounder in shape and has only 9 spots on its wing-covers; also quite common.

The larva of the fifteen-spotted lady bird, *Mysia*, 15 *punctata*, has been found attacking the potato beetle larva by Mr. E. B. Reid, of London, Ont. This species is also found at Montreal, although by no means common, and along with others of its kind, will, if permitted, render great assistance in keeping the potato beetle within bounds. Every farmer should make himself acquainted with the appearance and habits of the various insects which he daily meets with, so that he may not murder his friends, in the belief that he is destroying his enemies.

Prof. Kedzie, of the Michigan Agricultural College, passed a solution of arsenious trioxide through common garden soil and filtered Paris Green in a solution of hydro-chloric acid through dry earth. In neither case could any poison be detected in the filtrate by the severest tests. Soil taken from a field of wheat that had been sown with Paris Green at the rate of five pounds to the acre, showed no trace of the poison when submitted to any or all of the tests which the soil would get by natural solvents in the field, but distinctly showed the arsenic when treated with dilute sulphuric acid. The Paris Green was sown on the ground early in Spring, and was thick enough to give a very distinct green tint to the surface. The grain and straw were submitted to careful chemical examination, as were also cabbages that were grown in soil that had the year before been with potatoes, and received a heavy sprinkling of green, no trace of the poison was found in either, and it was observed that the Chipmunks eat large quantities of the grain without injury. Prof. McMurtrie, of the Department of Agriculture, made a series of experiments which showed that even where Paris Green was applied to the soil in such quantities as to cause the wilting or death of the plants, the most rigorous chemical analysis could detect no trace of arsenic in the composition of the plants.

These experiments point to the conclusion that if proper precautions are taken, Paris Green may be used in quantities sufficient to kill the beetles without injuring the tubers; but if the insects can be kept in check by hand-picking, even at greater expense, it should be persevered in. A sharp watch should be kept for the first beetles that leave the ground in Spring, so that they may be destroyed before they deposit their eggs; a few heaps of potatoes placed in different parts of the field would attract numbers of them, when they might be crushed with ease; the same plan might be tried in the Fall after the crop has been dug and the stalks removed.

That this destructive creature will, in a few years more, become established in Europe, seems to be beyond doubt, as it has already been found on the Bremen dock yards in a cargo brought from New York, and on the dock yards at Liverpool; these specimens were killed, but others may escape detection and deposit their eggs; if so, it will be found as difficult to exterminate it there as it now is in America. Even should the imported beetles be unable to find potato fields, that will not prevent their multiplying, as both larva and beetles feed readily on various other plants. Mr. Henry Gilman, of Detroit, Michigan, states that he observed it feeding on young grass, common thistle, pig weed, hedge mustard, the cultivated oat, smart weed, red currant, common nightshade, goosefoot, lamb's quarter, thorough wort, and black henbane, (the insect was feeding voraciously on a species of henbane around Montreal last summer.) The last mentioned plant has been imported from Europe, where the beetle may yet flourish upon it. As the beetle so readily adopts its self to altered conditions, it appears to be impossible to exterminate it. However, nature's cures, although slow, are sure, and in course of time some of the insects now preying upon it may become sufficiently numerous to prevent its causing any noticeable damage; but until that blissful time arrives farmers must bear in mind that "eternal vigilance" is the price of the safety of the potato crop.

F. B. CAULFIELD.

PROF. HUXLEY AND HIS LATEST CRITIC.

[We would remind our readers that the SPECTATOR is open for the discussion of any and all questions of interest. No article is refused which has something like literary merit. But we are in no way responsible for opinions contained in any article. This attack on the Rev. Joseph Cook is published in the hope that it may induce some one else to defend the Boston preacher, and make his light to shine a little clearer.—EDITOR.]

The attention of thinking people has been somewhat aroused of late by the extraordinary intelligence, that a champion of Orthodoxy has arisen among our cousins across the border, who threatens, nay, who has already demolished, we are told, the whole race of Materialists, Atheists, and Scientists, who have been slowly but surely sapping the vitality of the creeds which are still held by the large majority of the people of two continents. We must confess having felt some astonishment at this confident and not over-modest announcement, as we had hitherto imagined, that, however vulnerable Atheists and others of the *genus homo* might be, at least men of science were reasonably safe from assault in these latter days; and the immense body of ascertained facts they had garnered with laborious difficulty, were really unimpeachable facts, and not mere son of orthodoxy, who had become fearful that they were compromising his now Huxley to begin with, must step down and out together with his Bathybius, David, has vanquished his giant of Gath. Already we hear borne to us the glorious victory over the Philistines, by whom they had lately been sorely beset. Joseph Cook will now, doubtless, lead on his bands to farther victory in the world of thought and vanquish other and lesser antagonists until there remain