

the addition, "will contribute experiments;" there were others who were expected not only to pay, but to "give yearly one entertainment to the Society." Now, I think, it may be said that that we do not indulge these brilliant prospects of entertainments, and do expect all our members to "pay;" but still more confidently may we expect that lively general interest on their parts which will impel all from whom it may be reasonably looked, to "contribute experiments;" that is, to prepare papers upon the subjects of their several pursuits or studies, and induce those who have joined us principally with the kind and generous purpose of assisting objects which they respect, but do not pursue, to give one additional proof of their interest, by occasionally attending our weekly meetings.

It is, perhaps, too much to expect that there can be, at present, any considerable proportion of papers upon scientific subjects elicited from the Society. Not to dwell upon the fact that the production of such papers presupposes the existence of acquirements and of pursuits which we know to be the characteristics of a different state and stage of society from that existing in Upper Canada at present, and which it is our hope and aim to develop, rather than our pretension to embody, we labour under several special disadvantages. For instance, the simplicity and sameness, over great areas, of the geological formations of this peninsula,—their comparative poverty in fossils,—the absence of mountain ranges,—the limited catalogue of its mineral productions; all undoubtedly combine to deprive that delightful study of many of its attractions, and to deprive societies like ours of an allurements and stimulus to individual exertions. The same physical peculiarity limits to a certain extent, I presume, as compared with other geographical provinces of this continent,—the field of the naturalist and botanist, at least in some departments; for entomology and probably ornithology are exceptions. But we should be very wrong to infer from this that there is nothing for the cultivators even of those branches of science to learn, nothing which they may contribute to the knowledge of the world. It was a keen eye in Mr. Hunt which detected in the coarse-grained silicious sandstones of the River Ouelle, belonging to the Lower Silurian formation,—those few, scattered anomalous foreign substances,—the longest fragment about an inch and a half long and one-fourth of an inch in diameter, whose chemical constitution, revealed by his skilful analysis, sustains a supposition which even geology, habituated as it is to have its landmarks carried ever further and further back into the bosom of the eternity behind us, deems almost too extravagant for belief. These bodies consist in great part of phosphate of lime; and every thing about them, save only their startling antiquity, leads him to the belief,—shared also, there is reason to think, by geologists of great eminence,—that they are the bones of vertebrate animals, and that certain nodules of similar constitution accompanying them, are coprolites: thus actually revealing not only the existence but the carnivorous character of races of the animal kingdom which have been heretofore supposed to have had no existence on our globe until a much later period. I do not, however, allude to this discovery—on which Mr. Hunt observes becoming caution, and which the distinguished

director of the geological survey has not, that I am aware of, supported as yet with his own authority,—as if it were established; but refer to it simply as a recent illustration, furnished by a Canadian geologist, of what close observation, prompted by a spirit of enquiry, and sustained by sound knowledge, may detect in an apparently unpromising field. Mr. Abraham's interesting discovery of crustacean footprints in the argillaceous schist of Beauport is another case in point. We might come much nearer home. How many of us have made our daily walks in this busy neighbourhood subservient to the same study? Study Palæontology, collect fossils at Toronto! I can imagine some one to say, as if the idea were preposterous; yet one of our members, Professor Hind, has found a large proportion of those of the Hudson River group, figured in that magnificent work, the Palæontology of New York,—I believe some fifty or sixty at least, and some which are apparently undescribed there,—no further from hence than the banks of the Humber bay. At the late Provincial Fair, held in this city, was there not one thing exhibited, where we should have least expected to meet with it, which suggested to every one who saw it the happiness of a love for natural history, and the astonishing richness of the humblest section of that wide field? I allude to the curious collection of objects illustrating insect architecture, gathered by Mr. Couper, of this city, which accompanied his entomological collection. And it needed but close observation and a love of nature to find the works of instinct, varied to meet a thousand needs, in which the humble yet Divine intelligence of the Architect lived before us, where most of us, perhaps, have found only the pests of our gardens. I know that a military officer, recently in this garrison, who combined the naturalist with the sportsman, formed an extensive ornithological collection, while actually performing his duties here; and most of us have contemplated with interest and instruction the collection of birds, shot I believe entirely in this neighbourhood, which Mr. Doel has exhibited on various occasions. It cannot be said that there is not ample scope for pursuits of natural history even in this neighbourhood. It may require an Agassiz to detect in the *Lepidosteus* or gar-pike of our lakes, that remote reptilian character which distinguishes it from every known fish, and stamps it as the last and only representative of the gigantic race of fish-lizards of the secondary epoch; but we need not such confirmation of the truth which probably no one will question, that our streams, our lakes, our woods, our fields,—all, beyond a doubt,—present, in their inhabitants or their productions, a full proportion of those nice and narrow distinctions from similar objects elsewhere, which form the peculiar study of the naturalist, and are so often connected with the broadest and most important enquiries raised in the progress of science.

In venturing, then, to guard against exaggerated views of what such a society as ours can effect, by remarking that we must not expect that papers on purely scientific subjects can be frequently presented to us, at present, I had in view, chiefly, the circumstance that our constitution is avowedly practical, and, in some measure, even professional; for it was the Professional Society of Engineers and Architects from which it derives its origin; and any one who has remarked the curious descent, as some might call it, ascent