

## AN ENTOMOLOGICAL TRIP TO COPPER CLIFF, ONT.

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In June, 1892, in company with Mr. Fletcher, who was anxious to obtain *Erebia Discoidalis*, Kirby, I made a visit to the famous Sudbury mining region. Leaving Ottawa on the 15th, at 3.40 p.m., we arrived at Copper Cliff at 5 a.m. the following day. As the hour was so early we tried a little collecting before calling on our friend, Mr. J. D. Evans, manager of the copper and nickel mines, who had kindly invited us to stay with him. Everything was rather moist, however; and but little could be found at this early hour except a few examples of *Banchns flavescens*. After breakfast, and some entomological discussions with our host, we sallied forth again, but showers interfered materially with collecting, and we were able to do little more than gain an idea of the character of our surroundings. The district, which is situated about long. 81 W., lat. 46.30 N., is in general somewhat similar in character to the description given by Dr. Hamilton, in a recent paper, of Sparrow Lake, from which it is distant about 150 miles in a north-westerly direction, while it is about 30 miles north of the Georgian Bay. This region is much broken with small hills and hummocks of Laurentian formation, which formerly were apparently covered by heavy forests of pine and other conifers, but which have been swept by fires, and now are sparsely clothed by a second growth of shrubs and small deciduous trees which are springing up among the burnt stumps and logs; while in numerous places the bare glaciated knobs of rock are exposed. Between the hills are occasional small areas of seemingly fertile soil, but usually these low places are swampy and contain the plants common to such moist habitats. The entrance to the Copper Cliff mine faces on a somewhat level piece of ground of moderate area, which has been converted into an artificial *solfatara*, where the glare of molten slag and the fumes of burning sulphur strongly remind one of a volcanic district. In the immediate vicinity of the roasting grounds, and for a radius of several hundred yards around, especially in the direction of the prevalent winds, vegetation has been completely destroyed by the sulphuric acid, with which every shower drenches the ground. Beyond the denuded area the effects are visible for a long distance in the discoloration and bleaching of the plants, which sometimes produce not unpleasant shades of colour or variegations of foliage. Near the mine a small stream flows down through a beaver-meadow, and further up it has been dammed to supply water for the mine. The stream is fringed with alder, willow,