In dealing with the interior region of British Columbia lying between the Rocky and Coast Mountains no mention is made of the actual evidence obtained of a movement of ice from north to south in this plateau district, though it is after-wards incidentally aliuded to in a quotation connected with a proposed explanation of the facts observed. The drift-covered and erratic-strewn character of the country is also ignored; and while the lower terraces bordering the rivers are mentioned, and attributed to fluviatile action—a view doubtless substantially correct—the fact that terraces are found beyond the rivervalleys attaching themselves to the higher parts of the plateau and to the mountain-sides to an elevation of 5270 feet is passed over in silence. The conclusion is then easily arrived at that the "statement" of 1866 is "entirely borne out by an

overwhelming weight of evidence." Turning now to the coast of the province, Prof. Whitney of course admits the marked glaciation of the south-eastern extremity of Vancouver Island, which has been noticed by a number of observers, and which he has himself seen during a hurried visit. He states however that the markings he saw were everywhere parallel to the coast, and appeared to him more like ice-berg than glacier work. Now as the coast is very sinuous in outline, while the main glaciation pursues within a few degrees a uniform direction (S. 11° W.), the two must in some places coincide, but an intimate acquaintance with the south-eastern part of Vancouver Island enables me to state that the glaciating agent has swept completely and steadily over it entirely, without reference to the present coast outlines. With regard to the second statement, I believe that a reference to the description of the character of the glaciation given in one of my papers already referred to (Quart. Journ. Geol. Soc. vol. xxxiv. p. 92) will be sufficient to convince any one who is familiar with ice action that a glacier has done the work. It is of course easier to be personally assured, where so much depends on judgment of local details, than to demonstrate the actual conditions to others; but the parallel grooving and furrowing out of hard rocks in the manner illustrated on pp. 93, 94, and 96, one has been accustomed to consider as characteristic of glaciers.

Further on Prof. Whitney assumes that the "manifestations" of the supposed Strait of Georgia glacier are "almost or quite exclusively limited to its termination." Some evidence to the contrary is however given in the publication to which special reference has just been made, while subsequent exploration—the published account of which Prof. Whitney appears to have overlooked—has brought to light similar and concordant glacier-work at Nanaimo, ninety miles to the north-west of Victoria, and has also demonstrated that a second branch of the great ice mass which choked the space between Vancouver Island and the mainland, comparable in size with that of the Strait of Georgia, discharged north-westward by Queen Charlotte's Sound (Canadian Naturalist, vol. ix. No. 1). In the lately-issued volume of the Naturalist, vol. ix. No. 1). In the lately-issued volume of the Geological Survey (1878-79) additional facts tending to show the importance of ice-action in the Queen Charlotte Islands and extreme north of the coast of British Columbia are given.

Not being in the position of baving any favourite theory of glaciation to maintain, I wish merely to indicate by a few examples the inadequacy of the portion of Prof. Whitney's monograph which is intended to summarise the glacial conditions of Prof. Principles of Princip ditions of British Columbia. Prof. Whitney appears to have been beset by observers "entirely inexperienced in the study of glacial phenomena" to such an extent as to render him unduly suspicious of the evidence obtained by other workers. He states, for example, that in passing to the region north of the boundary of the United States "we have to depend largely on the observations of others," and that "an attempt will be made to sift the evidence offered." Now while it is a little discouraging to find that one must belong to the class of "others," I feel confident that to any unprainding inquirer the facts. I feel confident that to any unprejudiced inquirer the facts already accumulated and published are sufficient to prove the general and pronounced character of the glaciation of British Columbia. It is perhaps not too much to ask that in this matter It is perhaps not too much to ask that in this matter purely negative shall not be put on an equality with positive eviderce. Prof. Whitney's profound distrust of the "others" again appears where he qualifies a reference to my statements by the clause "even if his observations be accepted as entirely trustworthy." It is, however, so far satisfactory to find oneself in good company, for Dr. Hector, who has also had the misfortune to have had something to say about this region which does not conform to Prof. Whitney's hypotheses, is referred to as "evidently quite inexperienced," and one whose "statements must be received with some caution," while Dr. R. Brown for a

similar sin is characterised as "an entirely unpractised ob-GEORGE M. DAWSON Geological Survey of Canada, Montreal, December 22, 1880

## Lophiomys Imhausi

IN NATURE of January I, 1880, I published a note on the "habitat" of that strange and excessively rare rodent Lophiomys Imhausi; it may interest many of your readers to know that I have recently received from Count Lodovico Marazzani a splendid specimen of that species from a new locality, viz. Erkauid, on the mountains between Suakin and Singat, where it was captured quite accidentally on April 12 last by a shot from a small revolver. It was also secured and preserved by mere chance, for it was found by a small terrier and killed at the bottom of a deep fissure in the granitic rocks, and its value was quite ignored by those who first handled it; thus the skeleton and viscera were lost, but happily the skin was in excellent condition, and the skull had been left attached. It is an adult female and has four teats, two pectoral or rather axillary, and two inguinal; it is rather larger than the fine specimen at Genoa, but does not differ in colour or richness of fur. The luxuriant dorsal mane to which this creature owes its name is separated from the long hairs of the body by a narrow stripe of short stiff greyish green bristles. The iris was dark brown, and the animal emanated no special odour.

This is the fourth specimen of Lophiomys Imhausi that has been secured to science; the first was the type specimen accidentally brought alive by M. Imhaus at Aden and described by Prof. A. Milne-Edwards: it is in the Paris Museum, skin, skeleton, and viscera preserved. The second is the skull accidentally picked up by Dr. Schweinfurth at Maman, north of Kassala, and described in 1867 by Prof. Peters as *Phractomys athiopicus*; it is I believe at Berlin. The third was accidentally killed by a blow on the head with a stick in the Seriba of Beccari and Antinori at Keren in the Bogos country in 1870; the mounted skin and skeleton are in the Civic Museum at Genoa. The fourth is the subject of this note; its skin has been Selenda. The fourth is the subject of this note; its skin has been splendidly mounted by my able taxidermist Signor R. Magnelli, and it and the cranium form an important item of the Florence Zoological Museum. The natives told Count Marazzani that Lophiomys is rare, that it lives in deep holes in the strangely fissured rocks of that country, and that it is a vegetable feeder; the stomach of the specimen I have was much distended with

leaves and young shoots when Count Marazzani skinned it.
The "habitat" of this species is now pretty well defined by lines drawn from Suakin to Maman and Kassala, and thence southward towards the Somali coast.

HENRY HILLYER GIGLIOLI

Reale Istituto, Florence

## Parhelion

YESTERDAY a parhelion or mock sun was seen here. 3h. 20m. I was at the Observatory, and the true sun was sinking in the south-west upon a somewhat dense cloud-bank with light and long cirro strati about and above it. The air was comparatively calm, the anemometer cups moving only occasionally and slowly. The horizon was foggy and misty. The spectral sun appeared as a bright diffused circular spot of light tinged with prismatic colours about 30° to the left (F) and the colours about 30° to the left (F) and the colours about 30° to the left (F) and the colours about 30° to the left (F) and the colours about 30° to the left (F) and the colours about 30° to the left (F) and the colours about 30° to the left (F) and the colours about 30° to the left (F) and the colours about 30° to the left (F) and the colours about 30° to the left (F) and the colours about 30° to the left (F) and the colours about 30° to the left (F) and the colours are colours about 30° to the left (F) and the colours about 30° to the left (F) and the colours are colours are colours are colours and the colours are colours are colours and the colours are colours are colours are colours are colours. colours about 30° to the left (E.) of the true sun, and in a horizontal line with it.

I could trace a segment of a circle having the sun for its centre, for a few degrees above and below the mock image.

To the west I could not trace any false image or continuation of the circle. The phantom image slowly faded away in about ten minutes from its being first observed. The weather has been severe here (something over 200 feet above sea), but hardly so sharp as in some other (probably lower-lying) places. Negretti and Zambra's standard minimum in cage four feet from the ground, II° is the lowest I have registered.

During, however, the past seven days the maximum has only

twice risen above freezing-point, and then but 1°. Guildown, Guildford, January 21 J. R.

J. RAND CAPRON

## Girton and Newnham Colleges

SOME of your readers may perhaps be glad to help the natural science students of Girton and Newnham Colleges to raise about 8001., needed for a physical and biological laboratory.