Tasmanian Field Naturalists' Club

EASTER CAMP-OUT

1914

To Wineglass Bay, Freycinet Peninsula

TASMANIA

GENERAL REPORT

By Clive E. Lord, Hon. Secretary.

DREDGING OPERATIONS

By Charles Hedley, Assistant Curator, Australian Museum, Sydney.

ENTOMOLOGICAL NOTES

By G. H. Hardy, Assistant Curator, Hobart Museum.

GEOLOGICAL NOTES

By W. H. Clemes.

Reprinted from "The Tasmanian Mail."

PRINTED AT "THE MERCURY" OFFICE, MACQUARIE STREET, HOBART.

SCHOUTEN PASSAGE AND FREYCINET PENINSULA.

LIST OF CAMP MEMBERS

Miss O. Barnard
Mr. R. A. Black
Mr. E. A. Briggs
Mrs. E. A. Briggs
Mr. W. H. Clemes
Mr. C. E. Cole
Mr. T. Cranswick
Miss Cruickshank
Mr. E. Cruickshank
Mr. J. E. Cuthbertson
Mrs. W. F. Darling
Mr. C. Darling
Mr. M. Darling
Mr. W. Darling
Miss D. Dean
Mr. E. Dechaineux
Miss Dunbabin
Miss Elliott
Mr. C. H. Elliott
Professor Flynn
Mrs. Flynn
Mr. E. Flynn
Mr. J. Gibbons
Mr. S. Gilmore
Mr. H. Gray
Mr. F. Greuber
Mr. D. Guilbert
Miss Gulline
Mr. G. H. Hardy
Mr. E. Harrisson
Mr. R. Harvey
Mr. C. Hedley
Mr. E. Heritage
Mr. C. Hope
Mr. J. T. Hurford
Mr. G. Ingles
Mr. R. Inches
Miss Ivey
Mr. A. T. Johnston
Mr. J. A. Johnston
Mr. R. Koch
Mr. D. A. Lane
Miss F. Lewis
Mr. A. N. Lewis
Mr. H. Lewis
Mr. C. E. Lord
Mr. D. K. Lord
Miss C. Marsh
Mr. W. L. May
Miss F. Miller
Mr. Justice Nicholls
Mrs. Nicholls
Mr. H. M. Nicholls
Mr. W. Palmer
Miss Parkin
Mrs. Phillips
Mr. C. Pitman
Mr. T. Propsting
Miss E. Pocock
Mr. R. Pocock
Mr. W. Quinn
Mrs. J. Reid
Mr. J. Reynolds
Mr. L. Rodway
Mr. E. Rodway
Miss A. Rowntree
Miss F. Rowntree
Mr. H. T. Sargison
Miss F. Stanfield
Miss D. Stanfield
Miss C. Stanfield
Miss D. Stockdale
Mr. R. Stops
Mr. W. Stops
Mrs. Sprott
Mr. W. Sprott
Mr. H. Tanner
Mr. W. E. Taylor
Mrs. W. E. Taylor
Mr. R. Tinning
Mr. R. Todd
Mr. W. Todd
Mr. F. G. Tuck
Miss Tuck
Mr. W. Tuck
Mr. B. R. Walker
Miss C. Walker
Mr. G. Walker
Mr. J. R. Walker
Miss J. Walker
Mr. W. Walker
Mrs. W. Walker
Mr. A. E. Weymouth
Miss G. Wise
Miss M. Wise

Assistants

W. Woodward
W. G. Cole
C. Wood
H. Hill
W. Luckman

THE HON. SECRETARY SERVES OUT THE STORES.

MR. JUSTICE NICHOLLS AND PARTY AT LUNCH.

PREPARING FOR AN OUTING.

THE KITCHEN, COOK, AND ASSISTANTS.

Tasmanian Field Naturalists' Club

EASTER CAMP-OUT, 1914

(By CLIVE E. LORD, Hon. Secretary)

The Tasmanian Field Naturalists' Club held its tenth annual Easter camp at the Schoutens during the recent holidays, and a record was established as regards the number of members attending. The locality of Freycinet Peninsula has always been a popular one for camping parties, and as soon as it was definitely decided to camp there again this year the committee felt quite justified in chartering from Messrs. Holyman Bros. Ltd. the coastal steamer Koomeela, a vessel of some 200 tons, as it was estimated that about 80 members would attend. But as the date of departure drew near and the trip became more widely known, applications began to roll in, and the ladies' section was soon over-applied for, and numerous intending members had to be refused admission owing to the number being limited. As the time drew on it became apparent that the total membership would reach the utmost number that could be taken, namely, 100, and this proved to be the case, as the lists had to be definitely closed some time before the date of departure.

A private camping party of one hundred members is, it is believed, a record for Tasmania. It comprised many club members and a fair proportion of non-members, whilst two members of the staff of the Australian Museum, Sydney, Messrs. Charles Hedley and E. A. Briggs, came across especially to take part in the camp.

The original intention was to have camped at Cole's Bay, on the western side of the Peninsula, but owing to the wind being strong from the west, with every prospect of continuing, it was decided, during our voyage up the coast, to alter the site to Wineglass (or Thouin) Bay, on the outer or eastern shore, where the camp was sheltered from the wind, and escaped to a very large extent the rain and inclement weather that prevailed in the south-western and other portions of the State during Easter. As it was, the dredging operations had to be curtailed, and the fishing was affected, as the catches were considerably below the records of previous trips to this locality.

Midnight on Thursday, April 9, found 100 members on board the Koomeela, and a few minutes later the vessel set out for the coast. Dunalley was reached about 5 p.m., and the anchor dropped in order to wait for daylight, so as to negotiate the East Bay Neck Canal, which we passed through later with heavy rain falling, and every prospect of a rainy day. However, as we went up the coast we drew out of the rain belt, but the wind freshened considerably, and some of the members experienced the discomforts of mal-de-mer, and consequently found the trip of rather long duration. Schouten Passage was passed through about 1 p.m., and the anchor lowered away in Wineglass Bay shortly before 3 p.m. on Good Friday afternoon.

Wineglass, or Thouin, Bay is situated on the eastern side of Freycinet Peninsula, which, together with Schouten Island, is generally referred to as "The Schoutens." The peninsula from Cole's Bay to the passage is about 12 miles long, and about four miles at its broadest point, but in two places, namely, between Sleepy and Cole's Bays, and again between Wineglass and Hazard Bays, the width is considerably contracted, and two low-lying necks formed, each being only a mile or so across. Schouten Island, which lies to the south, and somewhat resembles a miniature Australia in outline, is very hilly, and has an area of about 8,500 acres. The general character of the country is completely different from that which is met with around Hobart. The greater portion of the district is very mountainous, but the chief characteristic is the granite peaks and boulders which abound everywhere. Their romantic outline and rich colouring, more especially when seen in conjunction with graceful groups of the Oyster Bay pine, form a type of scenery that cannot be portrayed by brush or camera, but needs actual investigation in its natural grandeur for its unique charm to be understood and appreciated.

The boats were at once lowered, and a start made to get the camp impedi-

menta ashore, which, together with the hundred passengers, took some time, but as the tents and other gear had been sent ashore first it was not long before the miniature township began to spring up rapidly in the sheltered scrub behind the high sand dune which ran parallel with the beach, and formed a most excellent breakwind. The ladies' quarters were picturesquely situated at the south-eastern end of the bay, and bounded on one side by the sea, and on the other by a fresh-water creek that has its source at Hazard Lagoon, and at the time of our visit was discharging a fine stream of fresh water into the bay. The men's quarters were situated more to the south-west, but easily accessible from the beach, while the cooks' quarters and dining tables were set up in the centre of the camp. There were about 40 tents erected, including the stores tent and a large marquee that was to have been used in case of bad weather. But although the wind was troublesome at times, we were able to dine in the open during the whole of the camp. The numerous tents ashore, together with the steamer Koomeela and the yachts Hermione, Pilgrim, and Pacific anchored in the bay, gave this usually quiet locality a very populous appearance, and formed a charming scene when viewed from one of the many points of vantage in the near neighbourhood.

The majority of the members retired to their tents early the first evening, after the tiring events of the day, but the next day the camp woke early to the varied calls of the bush and the roll of the slight surge upon the shore. The weather, although cold, did not stop many from taking their morning dip in the sea, and several parties were to be seen thus engaged each morning before the two signal guns and the sound of an improvised gong denoted that breakfast was ready.

On Saturday a large party was organised and an excursion made to Cole's Bay, while smaller parties made trips to the numerous places of interest in the locality, such as Mts. Freycinet and Hazard, and the many picturesque bays, lagoons, etc., of the district. Some went just for the excursion, others for the sake of pursuing their divers hobbies, and during the remaining days each party, hearing of the advantages of places not yet visited, made every endeavour to see all that was possible in the only too short time that was at our disposal. Some were more inclined to keep in the vicinity of the camp and quietly enjoy the scenic beauties that abounded near at hand.

On Sunday the Koomeela made a trip to Schouten Island, and afterwards trawling operations were carried out in the Bay. Although not many edible fish were secured, yet the scientists of the party obtained quite a wealth of matter for future investigation. But perhaps of even more interest were the treasures in the shape of specimens that were raised from the ocean's bed on the following day (Monday), when the steamer took a small but intensely eager and interested party several miles out off the coast in order to carry out dredging operations.

The fishing was not up to the standard of previous years, mainly owing to the weather conditions. Flathead, crayfish, and barracouta were exceedingly numerous, but trumpeter were not caught in any number, while other species were in no case very plentiful, although enough were obtained for several meals for all members, and mention must also be made of a rockcod of most noble proportions and weight that was captured in the kelp near the camp.

The whole party rallied round the camp fire each evening, when enjoyable socials were held. Mr. Charles Pitman was usually in the van in these events, which caused the evenings to pass most pleasantly, especially as there were many of the party who possessed considerable musical talent.

It was decided to make an early start on Tuesday morning, in order to make sure of getting through the canal in daylight, so at 5.30 a.m. the steamer's whistle, aided by the camp signal guns, roused all members, and an immediate start was made to break camp. To the credit of all concerned, this was done in good time, the final load being aboard the Koomeela by 8.30 a.m., when the return trip was commenced. This proved a long journey for some, as a stiff southerly breeze caused a considerable roll, and a delay, the canal being reached at 5.30, but an adverse tide and a prominent sandbank detained us for half an hour or more, town being finally reached at 10.45 p.m. on Tuesday night.

The natural history work will be dealt with by the experts concerned, but before closing this report I would again like to draw attention to the advisability of permanently reserving Freycinet Peninsula, and having the flora and fauna properly protected. There is no doubt that at present great destruction is going on, and large tracts of the country have been swept by fire, while the fauna have greatly diminished since our last visit to this locality. An interesting specimen in the shape of a Tasmanian devil was observed on Mt. Freycinet, and a few kangaroo and wallaby noted. It is the intention of the club to bring this matter prominently before the authorities, and it is to be hoped some action will be taken before it is too late.

GROUP OF MEMBERS

HO ATTENDED THE CAMP.

DREDGING OPERATIONS.

(By C. HEDLEY, Assistant Curator Australian Museum, Sydney)

In the programme of the field naturalists a prominent place was given to the study of marine life. Former excursions had made many valuable contributions to our knowledge of life under the sea, and preparations were made to prosecute these researches and to obtain further knowledge.

A persistent westerly gale opposed the efforts of those interested in deep sea dredging. Sheltered though the camp was by mountain and forest, the keen westerly whistled by tent and table, and its force could be gauged by the driving scud overhead and the white-topped waves in the bay.

Each day plans were made and remade, a start was arranged for daybreak, then for after breakfast, finally, but in vain, for the afternoon. Barometers were watched, but refused to rise as persistently as the watched pot refuses to boil. Weather prophets hardened their hearts when the conchologists or ichthyologists besought a favourable forecast and declared that the gale must "blow itself out," whatever that may mean, regardless of scientific needs.

On the last day, the captain consented to take a party to sea, more because the excursion could not be wholly wasted than because the weather gave much hope of success. A small party was picked for the adventure rather for their toughness than for their science. This forlorn hope was escorted to the beach with befitting solemnity, and despatched with high resolve, either to exact tribute from Neptune, or—to yield it. And, as has so often happened to a desperate sally, they achieved more success than they had anticipated.

Rounding Cape Forestier the wind was found to have drawn a little further to the south than was apparent at the anchorage, so that the towering bulk of Mount Freycinet screened the inshore water from the full force of the storm.

Before leaving Hobart, two wire ropes, each 200 fathoms long, were spliced together, in the hope that this would enable the naturalist to penetrate beyond the continental shelf and to explore a new fauna in the deeper colder water that is yet unknown. Such hopes could not now be realised, and the extra length was not put to service.

For the work a wire rope was first shackled to a bucket dredge, and to the tail of that again was fastened a few fathoms of rope trailing an ordinary dredge. Both were fitted with a swivel link, to prevent the spinning which sadly kinks and strains a rope. About a quarter of a mile from the cliffs this apparatus was lowered overboard. The bucket floated away, and slowly drowned before the steady gaze of seamen and scientists. How loaded would it return, or would it return at all? For a quarter of an hour it was dragged by the steamer drifting seawards before the wind. Then, when it had sunk to a depth estimated at 30 fathoms it was hauled in by the winch. Steadily the rope returned through the yard-arm block, and over the reel, until a red phantom shone in the sea, and a second later broke the surface. A yell from the watchers warned the winchman to slacken speed, and as the bucket dangled in the air the artist, I mean the artiste, with the camera caught it. Another instant and the boathook caught it too, and dragged it inboard, empty, as empty as it went down. Still, there was a second string to our bow, and the manilla was smartly hauled in, hand over hand, till the dredge clattered against the side. But the dredge net was full and plump, and when tipped on the hatch by eager hands, spread a harvest of living closed Trigonia and dead separate Trigonia valves gleaming with beautiful nacre. A mat of Polyzoa, crabs crawling through a heap of sand, a litter of shells, and through this pile quick fingers ran, snatching here and there a prize, naming and guessing, sorting and spying. Even the sailor folk were infected with our enthusiasm, and rough tarry hands strayed over the pile and picked out with admiration the living jewels of the sea.

But our present business is neither to study nor admire, but to gather the harvest. So the catch was quickly swept into bags and buckets. Again the gear was lowered gently and carefully overboard. By this time we had drifted a half-mile further seawards. On the first occasion the dredge had probably been sliding over the beds of giant kelp which clothe the rocky ground below the cliffs. Hence the failure of the bucket to gather material.

On the second return, both came up with a full charge. As the bucket rose out of the sea a Pyrosoma, like a great white cucumber, was seen balanced across the handle. A hand stretched out from the rail to save it, but before the fingers closed on it the bucket swung and the Pyrosoma floated back into the ocean. Now we estimated our depth at 40 to 50 fathoms, the bucket had ploughed into

fine sand, and the dredge had gathered a miscellaneous mass of shells, Crustacea and Echinodermata, but no Trigonia. Several handsome scallops, Pecten Medius, were alive. An urchin was infected in nearly every instance by a gasteropod parasite, a species of Eulima, new to science. In a broken Voluta fusiformis was a red hermit crab with bristly claws.

Again we cleaned up and lowered the dredge. All this time we had been drifting seaward into rougher water. Now we were about two miles off shore, and were losing the shelter of the land. We paid out 200 fathoms of rope, and while it dragged we gave attention to the coffee and sandwiches which the hostess of the party had thoughtfully arranged; but it was a subject which, sad to say, was not equally attractive to all of us. When this was disposed of we ordered the dredge up.

As the bucket emerged from the water, some green mud splashing out of its mouth showed that we had reached down to a bed of glauconite. This indicated that the dredge must have sunk to about 80 to 120 fathoms, a depth supported by the fauna; for we extracted from the meshes of the dredge a number of fine solitary coral, three inches in diameter, a Flabellum by name. Under the cultivation of Professor Flynn, these subsequently blossomed into superb flowers of waving tentacles.

By this time the vessel had reached water so rough that our captain declined to go further out, so we steamed back to our first station on the Trigonia ground under the cliffs, and repeated our experiences.

Though the party had not fulfilled its aim of reaching unexplored depths, yet it returned to camp with the satisfaction of having accomplished useful work.

THE ENTOMOLOGY OF FREYCINET'S PENINSULA.

(By G. H. HARDY, Assistant Curator Hobart Museum)

The entomology of Freycinet's Peninsula during April at least is very poor. Barking gave the best results, as far as numbers are concerned. Searching under stones gave no results of importance other than ants. Beating was a failure, due to the rough winds, and very few insects were on the wing.

Aptera.—Only one common species of this order was observed, but this was in greater numbers than around Hobart.

Orthoptera.—One grasshopper only was taken, and several very common species were noted. Two common species of cockroaches were also observed.

Neuroptera. — One specimen of the introduced golden-eye or green-lace-wing fly was observed. No native species were observed or taken.

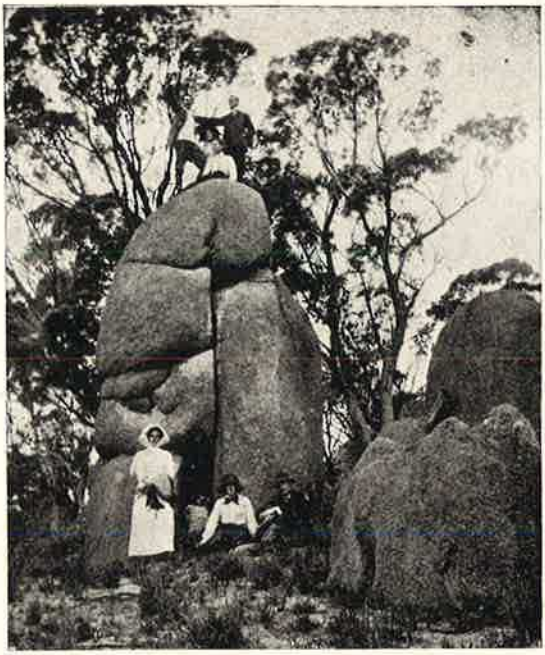
Hymenoptera.—Two species of ichneumons, four bracons (one a new species to the Museum collections), two thynnids or flower-wasps, one pompillid, one apidæ or bee, and one ant were taken. Several species of ants were seen, but all of the commonest species. Even these insects were scantily distributed.

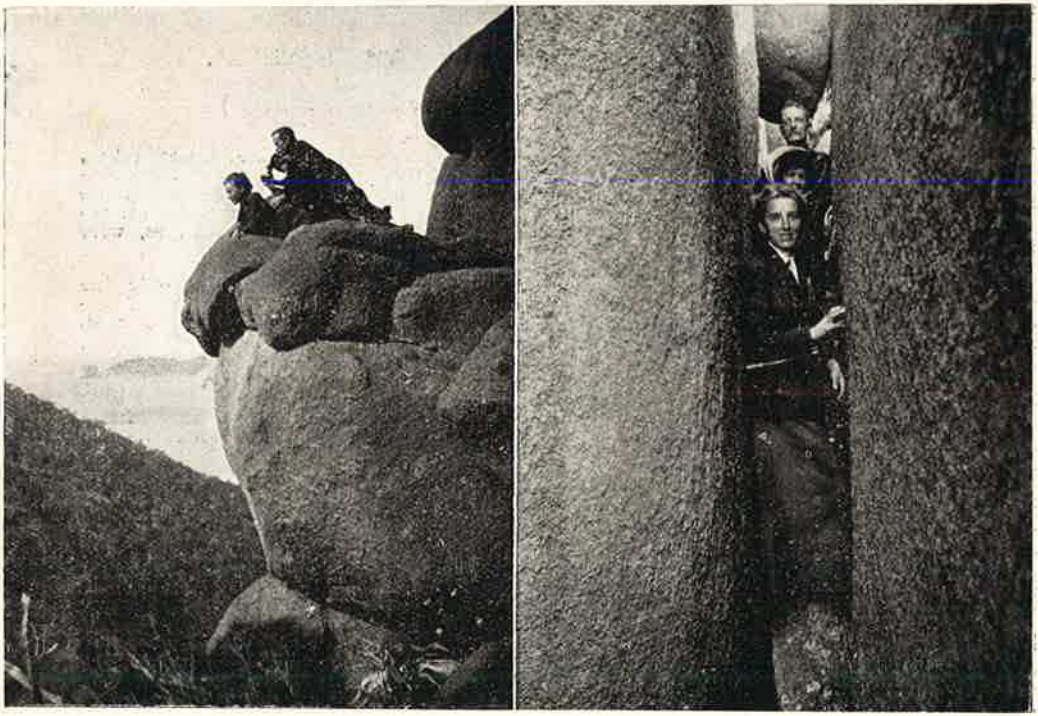
Coleoptera.—No rare beetles were taken, although several new species to the Museum collections were a welcome addition. In all, about 33 specimens, belonging to 20 species and 11 families, were brought back.

Lepidoptera.—Of butterflies, only the large brown species, Heteronympha merope, common everywhere, was observed. Only a few small moths were observed, and the only capture of importance were some larvæ extracted from the seed-heads and stems of the grass tree brought back by various members of the camp. From this source several full-grown larvæ and one pupa were collected.

Diptera. — Diptera offered but scanty selection, only two mosquitoes being captured, unless we count those that other members of the party captured and spoilt in the usual reckless manner indulged in by non-entomologists. The two brought back have been sent to Mr. F. M. Littler, of Launceston.

Another blood-sucking fly, in the form of a Leptidæ (a family allied to the Taba-





VIEWS ON MT. HAZARD.

nidæ, or March-fly, a notorious blood-sucking family) was observed in quantities on the Coles' Bay side of the Hazard Mountains. The blood-sucking habits of the Leptidæ are apparently, not generally recognised, although they are recorded from several parts of the world, and I regret I did not take the opportunity to settle the point on the spot whilst I had the chance.

One species of Anthomidæ, and one Dexidæ, were also captured.

Hemiptera.—Five species, belonging to five families, were taken, but all belong to common species around Hobart.

Taken as a whole, the entomological aspect of Freycinet's Peninsula was very poor indeed, but there were signs, in the form of larvæ and ovæ (eggs), that promise the district having happier times at some other portion of the year. Reviewing the families that should be in evidence at this time of the year, together with those that were actually observed and taken, I was rather struck with the lack of grass moths, the commoner bush-flies, and many families of parasitic and predaceous habits.

Three days in one district, however, is not long enough to form a definite opinion concerning its entomological aspect, but 73 insects only collected in three days, even at this time of the year, is very small.

Since writing the above, I have heard from Mr. Littler about the two species of mosquitoes sent to him, and he informs me that one of the species (Nyssorhynchus annulipes) has only been taken by himself singly on two occasions. He has, however, subsequently had a few more sent to him, and therefore, although rarely taken, it seems to have a wide distribution. The other species is common.

Referring to the caterpillar in the grass-tree seed-heads and stems, he informs me that he has met with a species of Noctuæ having this food-plant, but was not successful in rearing it.

From Mr. White, to whom I have sent full particulars, I have received a reply to my queries concerning the blood-sucking Leptidæ, and the following extract is of general interest:—

"I am much interested by your letter of yesterday, more especially as I have now nearly finished a paper giving a revision of the Tasmanian Leptidæ and the related families. The species that you have discovered is quite new to me. . . . As to the biting habits, you are probably quite correct in your observation; although rare in the Leptidæ, it is not unknown. In the Palæo-Arctic region the only genus accused of blood-sucking is Leptis, and even this is open to considerable doubt. In North America the females of some species of Symphoromyia are undoubted blood-suckers. Coming to Australia, two undescribed species of Leptidæ that are blood-suckers occur in New South Wales. Mr. Austin states that they are allied to Symphoromyia. I am not acquainted with these myself.

"As to the systematic position of the species, the venation of the wings, as shown in your sketch, does not (with one possible exception) agree with any of the 23 genera of Leptidæ of which I have particulars. It is almost certainly a new genus, and, from what you say of the habits, probably nearly allied to the two undescribed New South Wales species."

Mr. Austin, mentioned above, is a great authority on blood-sucking Diptera at the British Museum.

Mr. White will describe this species in his forthcoming work on the Tasmanian Leptidæ.

Searching amongst my collection of Tasmanian bees I find the bee taken at Freycinet's Peninsula is new to the collection. It will come as a surprise to many to hear that my collection of bees shows that well over sixty definite distinct species of bees occur in Tasmania. I have a further dozen or more doubtfully distinct species. Only 37 species of bees have as yet been recorded from Tasmania. (This number does not include the honey bee, an introduced species).

ENTRANCE TO WINEGLASS BAY, FREYCINET PENINSULA, EAST COAST

GEOLOGY OF WINEGLASS BAY.

(By W. H. CLEMES)

On the eastern side of Freycinet Peninsula is a deep bay, called Wineglass or Thouin Bay, a gem set in the midst of rugged granite peaks of surpassing grandeur. From our camping site we looked across the deep blue waters of the bay to a magnificent stretch of peaks of rosy granite, with a pure white beach stretching crescent-wise beneath—a picture worthy of the pencil and brush of any artist. It seems almost desecration to analyse such a thing of beauty, and to probe and delve for its hidden secret, but the interests of science must be pleaded in extenuation.

The granite belongs to an almost lost period of time, as far as Tasmania is concerned, situated between the Silurian and Permo-carboniferous periods, when no sediments that can be recognised were laid down. But, fortunately for Tasmania, a great igneous intrusion took place, and huge masses of granite, both on the East and West Coasts of Tasmania, forced and worked their way into the overlying strata, and consolidated deep down beneath the surface, bringing with them the rich stores of mineral wealth that have made our little island so famous. Subsequent denudation has exposed these rock masses, and given us such magnificent rugged scenery as only granite country can give. These rocks for the present have been placed in the Devonian period.

A critical analysis of the rock itself cannot be carried out without microscopic examination. The preparation of the slides is a lengthy process, and so I must content myself with a few general remarks on composition and structure, as viewed in hand specimens. The rock appears to consist principally of biotite mica, pink orthoclase felspar, and quartz. Mr. A. D. Mackay, in a former paper, also mentions Muscovite mica, plagioclase felspar, and chloride as accessories. The rock varies greatly in structure and composition. On the southern side of the bay it is practically composed of a rich reddish-coloured felspar and quartz, little or no mica being present, but on the northern side in places black mica is the predominant mineral, and the felspar is almost white. Quartz is always present in abundance.

Secondary veins are very noticeable, the granite composing them being much closer in texture, due to the squeezing it got in pushing its way up through the cracks and joints in the older rock. The crystals are much smaller than in the normal granite, and approximate more to the microgranites.

In many places the granite was intersected by great veins of quartz, white to rose-coloured, with numerous nests of rock crystals. There were also dykes of diabase (?) cutting across the country in a north and south direction. This rock was highly porphyritic, and studded with great crystals of felspar, which had been absorbed during its passage up through the granite. The great cliffs to the south show signs of internal movement, which probably took place prior to consolidation. The vegetation on the whole is scanty, owing to the poorness of the soil, which is largely composed of quartz.

Along the coastline the bare rock stretches up for a considerable height above high-water mark, an eloquent tribute to the force of the winter gales.

In places the granite appeared as great boss-like masses, with smooth, rounded surfaces curiously streaked by descending waters charged with mineral matter. In others it was columnar and much broken up, with great cracks running in all directions. In fact, the varied forms seemed endless, and the whole district would prove an almost inexhaustible mine for geological research, that would well repay an enthusiastic geologist to exploit, the problems to be solved appearing to be endless and varied.