

VII.—*On the Encroachments of the Sea along the North Coast of Tasmania.* By RONALD C. GUNN, Esq., F.R.S., &c. [*Read 3rd March, 1854.*]

A COMMUNICATION of mine, "On the Encroachments of the Sea at Circular Head and along the North Coast of Tasmania," was read at a meeting of the Royal Society at Hobart Town on 17th December, 1851. This short paper was the result of observations made during an excursion along the coast from Circular Head to Launceston, in October 1851. I have now to add to the remarks I then made, that in October of this year I had occasion to ride from Circular Head to Woolnorth, the extreme north-western point of Van Diemen's Land, and I observed that throughout that line of coast the sea is steadily advancing and gaining upon the land. At the Old Store and Jetty, close to Maandai Point, the configuration of the shore is very materially altered, although the beach consists of large coarse shingle, and of a description such as one would have imagined likely to resist the action of the sea for a long time. Where the road ran in 1838, not an indication remains.

At Circular Head the encroachments still continue: the sea has advanced considerably since 1851, and I believe that within a few years a large portion of the Peninsula will be swept away. The age and size of the Honey-suckle (*Banksia*) trees which now lie strewed along the shore, and which were alive and flourishing when I lived at Circular Head in 1836 to 1838, indicate that very

many years must have elapsed since the shore upon which they grew had been visited by the waves of the sea. Even so early as 1837, I remember Mr. Curr, the intelligent Chief Agent of the Van Diemen's Land Company, informing me that the sea had made considerable inroads upon the eastern side of the Peninsula, from the time of his arrival there (about 1828).

This he attributed to the greater and increasing prevalence of easterly winds. On the west coast, my recollection did not enable me satisfactorily to determine whether the sea was encroaching or not; my impression is, however, that it was. On the east coast a like result is, I am informed, taking place, and I would be glad to receive information from old residents on the coast east from George Town, and on the east coast of the colony, in confirmation or refutation of the opinion now advanced.

In connection with this subject, I may observe that it is stated that reefs now exist at the entrance of Port Phillip, upon which several vessels have recently struck, not laid down accurately in the charts, and which are believed by some nautical men to be nearer to the surface of the sea than they formerly were. Whether this is true, or whether the present greatly increased traffic has led vessels to go over places not previously examined, I know not; but it is now worthy of consideration whether permanent marks ought not to be made upon rocks in favourable situations, to ascertain positively whether the land at Port Phillip is rising and that of Tasmania slowly sinking.

This was done in Sweden, and I suggested it to be done here some ten years ago. That revolutions of this kind have taken place in comparatively recent times, there is abundant evidence in the raised beaches at Hunter's Island, near

Woolnorth, and several islands in Bass's Straits. The alterations of level at Point Nepean, Port Phillip, have already been observed and recorded by my able friend the late Dr. E. C. Hobson, in the 3rd vol. of the Tasmanian Journal.

VIII. — *On Australian Entomostracans.* By the
REV. R. L. KING, B.A. [Read 12th July, 1854.]

SUB-KINGDOM.

ANNULOSA.

Class CRUSTACEA. Division ENTOMOSTRACA.

LEGION I.

BRANCHIOPODA.

(See "Papers and Proceedings," Vol. 2, Part II., January 1853.)

LEGION II.

LOPHYROPODA.

LOPHYROPA. LATREILLE.

LOPHYROPODA. LEACH, &c.

BRANCHIOPODIS. FRANGE'S (pars) LAMARCK.

Character.—Mouth furnished with organs fitted for mastication; branchiæ few, attached to the organs of the mouth; body having an envelope (either in the form of a buckler inclosing head and thorax), or in the shape of a bivalve shell, inclosing the whole animal; feet few in number; articulations more or less cylindrical, and serving the animal for the purpose of locomotion; two pairs of *antennæ*.