Society to withhold the paper from publication until I could ascertain if such is the fact. I have pleasure in annexing an extract from a letter since received from Professor Ellery, dated September 19, which is conclusive to the contrary:—

"You will find your magnetical results nearly correct. The magnetic declination has been decreasing since 1865, roughly at the rate of 2min. per annum. In 1866 the declination was 8deg. 40min. E.; now it is 8deg. 6min. (Signed) Robt. J. Ellery."

As the variation at Melbourne was 8deg. 42min. in 1860, and 8deg. 40min. in 1866, we may take it as 8deg. 41min. in 1863, or 1deg. 44min. *less* than the variation at Hobart at that date. If my mean result is correct, the difference now is only 43min. It is, therefore, to be wished that the observations be repeated with a better instrument.

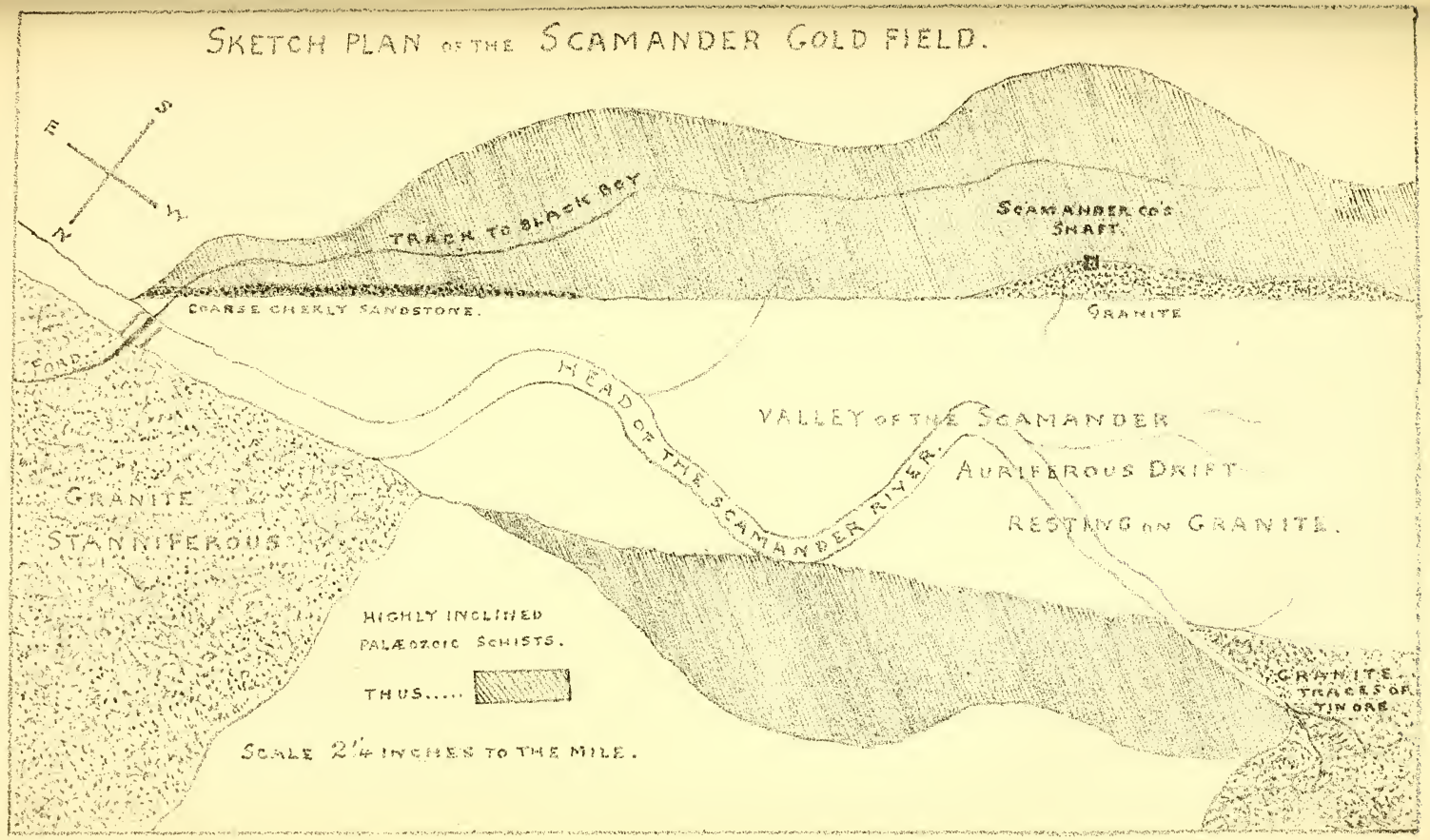
REMARKS ON THE SCAMANDER GOLDFIELD.

By S. H. Wintle, F.L.S.

[*Read* 10*th Oct.*, 1881.]

The Scamander Goldfield, which was discovered about two years ago, is distant from George's Bay between 15 miles and 16 miles in a westerly direction. The country between the Bay on the N.E. and the Scamander River, where it is crossed by the bridle track to the Black Boy, consists of coarse porphyritic granite for the most part, and comprises the George's Bay tin-mining district in the County of Cornwall. A well-defined boundary, separating the granite from the older palæozoic formations, is formed, for a distance of some miles, by the Scamander River. Indeed, so well defined is the line of demarcation that at the north-eastern confines of the Goldfield the granite occupies the fording* place on one side without any sedimentary rock being visible *in situ*, while on the opposite side of the river, a distance of not more than 20 yards, no granite whatever is seen, it being completely covered up by palæozoic sedimentary rock, consisting of hard, cherty, altered sandstone, which in places assumes a slightly gneissose character. This, in turn, in the higher ground, gives place to very laminated, fissile clay schists or slate, so highly inclined as to be almost vertical. The Goldfield is situated at the head of Scamander River, in a valley bounded on three sides by very steep, lofty hills of slate, having a mean angle of about 40deg. As far as is known at the present time, the auriferous area is limited in

* See sketch plan.


SKETCH PLAN OF THE SCAMANDER GOLD FIELD.
E
S
N
W
TRACK TO BLACK BOY
SCAMANDER CO'S SHAFT
COARSE CHERTY SANDSTONE.
GRANITE
FORD
HEAD OF THE SCAMANDER RIVER
VALLEY OF THE SCAMANDER
AURIFEROUS DRIFT
RESTING ON GRANITE.
GRANITE
STANNIFEROUS
HIGHLY INCLINED
PALÆOZOIC SCHISTS.
THUS.....
GRANITE
TRACES OF TIN ORE
SCALE 2¼ INCHES TO THE MILE.

extent, for at a distance of about $3\frac{1}{2}$ miles from the granite country at its north-eastern boundary, and at the fountain head of the river a syenitic granite again obtains, with small quantities of tin ore in the bed of the streams, and in the gullies, but with hardly any traces of Gold associated. All along the course of the river, from the fording place on the Black Boy track, Gold can be obtained in the drift at a mean depth of four feet from the surface, but those who worked the river bed in places, and its tributaries, failed to make it pay, notwithstanding that the Gold is coarse as a rule, pieces having been obtained of several pennyweights. As it is almost impossible to wash a dish of dirt and not get several specks of Gold, I am of opinion that the failure to make the alluvial operations remunerative is to be ascribed more to the mode of working, and the appliances employed, than to the poverty of the washdirt. This alluvial Gold has been derived from veins and lodes which traverse the hills near their base in conjunction with the granite, for at the base of these hills the palæozoic slate and sandstone appear to have no great thickness. In many places where trenches have been cut through these sedimentary strata in searching for quartz lodes, the granite, in a much decomposed state, has been reached at a few feet. The slate and sandstone in the hills is ramified by a reticulation of small quartz veins and strings, many of which are rich in Gold, and as a consequence the surface of the country is covered to a considerable extent with detached fragments of quartz. In the Scamander Company's claim a rich vein of auriferous quartz has been exposed. It traverses both granite and slate (See specimen No. 1). The quartz is highly charged with arseniurets and sulphurets of iron, and frequently with galena, which is argentiferous. The granite in this locality has, without any doubt, been erupted subsequent to the deposition of the stratified formations reposing upon it as elsewhere in Tasmania, although I am aware that one observer, at least, entertains an opposite view with regard to the granite in the Ben Lomond district. The fact of the quartz reefs traversing both granite and overlying sedimentary formations, is, to my mind, of exceeding interest, inasmuch as it affords proof that such lodes or reefs having a subsequent origin would imply a greater antiquity for the granite of this part of the island than I was inclined to ascribe to it. As far as my observations have extended, and which have been conducted on three different occasions, I find that the quartz lode is smaller or "pinched" where it traverses the slate "country" than the same vein is where it runs through the decomposed granite. In the Scamander Company's shaft, which is down about 30ft. in soft, decomposed granite (See specimen No. 2),

the lode is nearly thrice the size it is in the slate about 15 yards away; but whether it will maintain its present size, or increase it at a greater depth where the granite will assume the crystalline condition, or pinch, can only be ascertained by future operations. At the present depth the granite begins to assume the crystalline character; large, rounded blocks, which have escaped decomposition by exfoliation, having been brought to the surface. The quartz at this depth, for the shaft has been sunk on the vein, is from 10in. to 12in. wide, and a recent mortar crushing in Launceston gave the satisfactory yield of $4\frac{1}{2}$ ounces of Gold to the ton. The Gold is plainly visible in nearly every piece of quartz, and I never crushed a piece without obtaining an excellent prospect.

Comparatively little prospecting has been done in this district; not more than nine 10-acre sections have been applied for, and consequently comparatively little is known of the extent of the auriferous country. I am of opinion that it will eventually be found to be a moderately extensive Goldfield; and append a rough sketch plan of the locality.

NOTES ON LEONTOPODIUM CATIPES.

By Baron von Mueller, K.C.M.G., M.D., F.R.S.

[*Read* 15*th Nov.*, 1881.]

In instituting recently a census of the genera of the whole Australian vegetation, I had to give to the remarkable alpine plant, first described by De Candolle as Gnaphalium catipes, a generic place also, its position thus far having never yet been firmly settled. Examining the plant first from localities in the Victorian Alps, I placed it in Antennaria, and described it as A. nubigena already in 1854 (Transact. Phil. Soc. of Victoria, i., 45), alluding already to the likelihood of its identity with Gunn's plant, sent by Lindley to the elder De Candolle; but I had no Tasmanian specimens at that time to establish its sameness with the one of the Australian Alps. In assigning to it a position among the species of Antennaria, I was careful to point out at once that it did not altogether accord with the characteristics of the legitimate congeners, our plant not being strictly dicœcious. Indeed I was then already considering whether it ought not to find its most appropriate place in Leontopodium, notwithstanding the generally solitary capitula, and the biformity of the flower heads. To overcome the difficulty which presented itself, I framed a subgenus "Actina" for the reception of Anten-