The following paper was read :—

NOTES ON A LIVING TREE STUMP;

BY

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It is so commonly supposed that the trunk of a tree cannot long survive if it is not allowed to throw out branches or leaves, that I have thought it desirable to place on record an instance that has come under my own observation where a stump of a tree has continued to live for many years although it has neither branch nor leaf.

The specimen to which I refer is the stump of a Moreton Bay ash (*Eucalyptus tesselaris*), and is on the Rodd's Bay run, at a spot about twenty-three miles from Gladstone, near the main road to Wide Bay. I have lately had it measured, and find that its height is 9 feet 3 inches, and its circumference is 4 feet 6 inches. Its appearance is that of a stump which had been left standing when the upper portion of the tree had been snapped off by a strong wind. The bark has grown over the top edges, but in the centre there is a hollow. With the exception of a small patch on one side the bark is as full of sap as that of an ordinary living tree; but it is simply a stump without any appearance of having at any time had a branch growing from it. I may say that when I first observed it, from fifteen to eighteen years ago, its appearance was just the same as it is now, and there was then no sign of the prostrate head which must at some time have been broken off by the wind or some other agency. Why it should continue to live in its present form is a question to which, though many persons have seen it, none appear to be able to give a satisfactory answer. It is one of the peculiarities of the Moreton Bay ash that its bark spreads over any foreign substance of moderate size which is placed on a living example of it, and instances are not very rare where a dead stick projecting from a surface root is covered up in this way, and presents a some-

what similar appearance to that of the specimen referred to, but on quite a small scale; whenever this happens, however, it is always easy to connect the excrescence with the root of a living tree. But in the specimen under notice no such plausible explanation can be afforded; the size of the stump would of itself upset such a theory; and then there is no other living tree of the same kind in very close proximity to it. I cannot suggest any explanation myself, because none has ever occurred to me which commended itself for acceptance. All I wish to do, therefore, is to record the simple fact in the hope that someone else with more extended knowledge of plant life will throw some light upon it. It would be well perhaps to add that the stump is growing in poor soil, close beside a small blind gully, in which the water after a shower does not last for more than a week or two.

Mr. A. J. Turner endeavoured to account for this unusual occurrence by the supposition that the roots of the tree-stump inosculated with those of saplings or other trees which might be growing even at a distance of many feet, and the foliage of which might affect the elaboration of the sap and the assimilation of the food substance on which the vitality depended.

Dr. J. Bancroft, in reference to the tenacity of life of the spotted gum tree, alluded to a curious instance where a whole tree, its natural attachment to the ground having been severed, had maintained its life by intimate coalescence with the tissues of the branches of two neighbouring trees into which it had fallen.

OBJECTS EXHIBITED.

By Dr. J. Bancroft, a series of photographs of tropical Rhizophora, which had been prepared by his son, Dr. T. L. Bancroft, to illustrate the investigations of the former on the nature of lenticels in plants. This subject the exhibitor enlarged upon, especially with reference to his views as to their respiratory function.