new to us was Senecio adamsii, a small shrub, the inch long leaves covered in white tomentum except for the prominent dark mid-rib, and surely the most viscid plant I have ever touched.

Returning to the Cobb we decided to go out via the Flora Track, which runs over the Mt. Arthur Range. We were told that it was a three day trip. So armed with a map, and a strong hope that an adverse weather report would be wrong, we followed the lake for four or five miles often pushing our way through high teatree scrub. Then we made a steep climb straight up out of the Cobb Valley, up through the limit of the beech forest and on to the tussock plateau which leads up to Mt. Peel. It was now past mid-day and behind us the Cobb was shrouded in mist and before us a curtain of mist rose and fell on Mt. Peel. Later we negotiated with care the steep drop down to the valley near Lake Peel and slowly toiled up to the 5,00 ft. level on the opposite side. Once again we were amongst a different flora. It was on the Mt. Peel ridge that we first saw Celmisia dallii, a handsome daisy, now mostly spent, but still very noticable by the large bracts on the stem and around the head. We dared not linger as the mist was overtaking us, so hurrying over scree and then tussock we reached Balloon Hut just before visibility was blotted out.

The next day started fine and with the lovely Gentians and Celmisia dallii to cheer us on our way we kept to the tableland, lunching at Salisbury hut. From there we followed the track to the Flora hut. This delightful old track has been cut out of a mountain gorge and for nine miles it gently winds up and down with the river rushing, sometimes far, sometimes close, below. Prior to the Cobb Road being opened this track was used by the settlers to take their cattle to graze on the Cobb river flats. The tall trees of the mixed forest, Beech, Rimu, Totara, Quintinnia, Pokaka, etc. were a change from the pure beech of the higher altitudes.

The Flora Hut was a welcome sight and it was especially cheering to find in residence three of our Arthur's Pass party, and to hear that they had just climbed Mt. Arther.

Next morning another nine miles out to the road was done in good time, steady rain discouraging any ideas of botanising, but we were fortunate enough to spy the wee Asplenium trichomanes along the track.

Looking back we realise that so long as there is good visibility on Mt. Peel that this is not a difficult trip but that an extra day is needed to gain a better knowledge of the plants, hence our resolution 'Return we must'.

Miss Joan Dingley's enthusiasm often leads her to prowl in damp and chilly woods in winter where "down from your heaven or up from your mould" develops those odd shaped plants sometimes noisome, sometimes beautiful, so dear to her mycological heart. We on our part are glad to digest in comfort some results of her observations.

But, it might be said, why not collect fungi in spring or summer?

Because they reproduce themselves less commonly then. For fungi have extremely retiring habits. The vegetative (non-reproductive) part of the fungus is often just a tangle of minute tubes that wander in nutritive ground or gradually work their sinister way among the tissues of plants and sometimes animals. But at times the tangle of tubes or mycelium as botanists call this nondescript plant body will produce spores. In many species the spores are arranged on or enclosed in various fructifications of differing shapes, sizes and colours. These fructifications are the fungi we commonly see. The spores of fungi are microscopic but since they are produced with such enthusiasm the fructifications bearing them may be quite large. For instance, a mushroom may have a cap 3 inches across. This is estimated to produce 16,000,000,000 spores at the rate of 40,000,000 per hour, while the Giant Puff Ball, when it really "gets going" is good for seven billion spores. (N.B. The Editor has not personally checked thesefigures experimentally but they come from an absolutely reliable source).

The spores bearing parts, or fructifications suggest names appropriate to their various forms.

The Ascomycetes - the group discussed below - derive their name from a Greek work, askos, meaning a leathern bottle or wine skin - an allusion to the little sac in which the spores are contained. -mycetes is a frequent ending of the names of fungus groups, which is very understandable when we remember that it comes from the Greek, mukes, meaning a fungus. Pyrenomycetes comes from the Greek, pureus, a type of vessel, and mukes, while Discomycetes derives from the Greek, discos, something round or quoit-like. In both cases the name refers to the shape of the fructification.

SOME COMMON FUNGI

J. Dingley.

Part II. The Ascomycetes.

The following are a few notes to help in the identification of some of the more common fungi found in the bush around Auckland. It must be remembered that there are a far greater number of species of fungi than there are of seed plants, but a large number of the species are microscopic and cannot be seen by the naked eye. In this article a few of the more conspicuous Ascomycetes are described. The fruiting bodies of most species included in this group are microscopic, but in some species may be several inches in length and in diameter. The sexually produced spores are formed in sac-like bodies called asci, but unfortunately these structures can be seen only under a microscope. The large species of the group can be divided into (a) the Pyromycetes, in which the asci are enclosed in a flask-shaped fruiting body called a perithecia, and (b) the Discomycetes in which the asci are arranged parallel to one another to form a superficial layer on the upper surface of a cup-shaped fructification called an apothecia, (A cushion-like body on or in which the spore-bearing parts are formed is known as a stroma.)