

September 12/

Left Port Elizabeth at 6:40 a.m. en route to De Aar.

We left on the same route covered previously on the way from Barkly Bridge.



g 6. Shows the train with two engines and many freight cars passing out along the bush-covered hills east of Elizabethville. The bush at the right of the train is of the Addo Bush type.





g 7. Shows aloes scattered through the grassland. This type of country looks exactly like portions of the yucca grasslands of Arizona or New Mexico. There are also a few thorn trees shown in the photograph, Acacia horrida and thorn brush. Photograph taken above Coega.



g 8. A general view over the Addo Bush above Barkly Bridge. This is a lower phase of the Addo Bush type, the stand being somewhat dense, but the trees somewhat shorter.





g 9. Part of Sundays river development, photographed just beyond Addo station, showing the clearing, and plowing with tractors. Here a large new irrigation area is being put under ditch. The country is dry at this time, but the soil seems to be of good quality,--a good red clay loam.



g 10. Shows the basins arranged on the contours, basins about 2 rods wide. This also gives a general view in the irrigation ditch.



In this section the buildings all look new and the whole country has the appearance of one just opened up for settlement. In places the bush has developed on soil which seems to have a lime rock subsoil at from 3" to 3' below the surface. All of this country is thorn bush and not a grassland at all.



g 11. Shows a farm made by clearing the brush land. The bush becomes more and more dense as you pass beyond Addo, and continues on to Goerne. The bush continues dense, but the country becomes much more hilly. From this point we saw large groups of monkeys looking at the train from the tops of trees.



Mimosa. Elevation 537 feet. Still in brush, but with a greater amount of Acacia horrida.

Sandflats. A dune area. Here Eucalyptus and Greyia are the principal shade trees. The adjacent country is farmland with a reddish soil varying from sand to loam. Bush cleared in many places. Noticed Arctotis acaulis along the track, also a white flower of about the same size with a very broad leaf. The grasses look very much like our Andropogon scoparius.

We passed on up the hills to Alicedale, where the vegetation is less thorny. Beyond Alicedale it changes somewhat and the country becomes more barren. Tree Euphorbias occur on the hills and in many places the landscape appears red with a cotyledon or aloë. Some distance beyond in the mountains we again passed into thick bush. Apuntia ficus indica is very abundant at times and dominates the vegetation entirely in the deeper ravines. The tops of the mountains appear to be less shrubby.

At Bushman's River there occur small shrubs with occasionally larger bushes scattered throughout. An important plant here seems to be my herb. No. 138. The elevation here is 1123 feet.





g 12. General view. Shows desert shrub and trees. These appear to be on a very shallow soil, rock to within 6 inches of the surface, but this type also covers the low valley bottoms where the soil is 10 feet in depth, rather uniform color.



h 1. Farther up the valley. This particular valley is mostly desert shrub with Acacia horrida scattered throughout. Somewhat more shrubby on the hills.



At the small station just beyond the general appearance is that of the New Mexico desert, with small adobe house and corral of brush.

Comannadagga. Elevation 1663 feet. A desert shrub area. Some distance beyond the country becomes more brushy.

Ripon. Elevation 1532 feet. A desert shrub composed of very low plants.



h 2.



h 3.

Photographs h 2 and h 3 were taken a little beyond this point.

Sheldon. The soil here is very thin and the vegetation consists of low desert shrub with an occasional aloe or low tree.





h 4. Is typical.

The country here has more trees, and a low bush, herb. 143, is quite abundant. Small antelope were seen here and most of the pasturage contains ostriches. The soil in places is very shallow, rock almost to the very surface. Aloe abundant, and Acacia horrida occasionally forms a very large tree. These two plants are the prominent features. One aloe, which is unusually red, is a beautiful plant and stands out sharply, either singly or in clumps.

Middleton. Very rocky and aloe very abundant. There are here scattered trees of Witgatboom or witstam (Capparis albatirunca), sometimes called Shepherd's Tree, the roots of which are used by the natives to mix with coffee. The low bush is mostly the Karoo bush (Pentzia), and may possibly the same as herb. 143.

Harefield. Elevation 1873 feet. Karoo bush and