

## Report On Excursion To Avondale

By J. J. DEASY

The sun shone gloriously at Avondale on Sunday, August 29th. The old Georgian mansion looked a picture in its pleasant setting overlooking the wooded valley of the Avonmore. Once the home of Charles Stewart Parnell, it has been since 1904 the State Forestry School.

At noon over 60 people had gathered on the lawn to attend the Society's first Sunday excursion — among them foresters who got their early training at this school in the first decade of this century.

Mr. M. O'Beirne, the Society's President and Instructor-in-charge of the Forestry School, acted as convener. Mr. J. O'Carroll, District Officer, welcomed the party on behalf of the Minister for Lands.

Mr. H. M. FitzPatrick, Councillor, gave the gathering a resume of the history of the estate, as outlined in Vol. III, No. 2 of this journal.

The party then got moving and were conducted through the courtyards, where they saw an experimental timber-drying kiln in the course of construction, to the nursery close by. With an area of  $2\frac{1}{2}$  acres this walled-in nursery, once a kitchen-garden, has a N.E. aspect and a light loamy soil. Visitors were impressed by its spick and span condition and by the vigour and quality of the young trees. Among the rarer species were *Abies Amabilis* from W.N. America, Cedars from the Himalayas, *Pinus Pinaster* and *Pinus Pinea* from South Europe, Snake-branch Spruce from Scandinavia, *Ginkgo biloba* from China and *Cryptomeria Japonica*.

In some lines of Poplars raised from cuttings were *P. Serotina*, *P. Regenerta*, *P. maximowiczii*, *P. Yunnanensis* and *P. Generosa*. The convener mentioned that the last named was interesting in that it was the first hybrid between a balsam and a black poplar produced artificially. It was derived from a cross made by Professor Henry of a male *P. Trichocarpa* with a female *P. Angulata*. An extremely fast grower, it is very liable to break in strong gales and is susceptible to canker. Therefore the planting of it on a large scale is not to be recommended. He mentioned that, generally speaking, *P. Serotina*, one of the Black Italian Poplar, is one of the safest to cultivate.

Members were shown 19 different species of one-year-old Eucalypts derived from seed presented by the Forestry Department of New South Wales. None of those species was represented at Avondale up to this, but it is hoped that most will prove hardy as the seeds were collected from trees grown under climatic conditions approximating as closely as possible to our own.

From the Nursery to the Forest Museum, where much interest was displayed in the specimens of the various timbers, some wavy, grained Oak, and a spiral-grained log of Scots Pine which had been

dug out of a bog. Having brushed up their knowledge of Irish history of the past 200 years as chronicled on the cross-section of an Oak tree, the party left the museum and proceeded to inspect some plots and specimen trees of Cricket Bat Willow, *Pterocarya Caucasic*, *Acer negundo*, *Quercus rubra* and various *Poplars*. Lunch was served and members appreciated the service provided by the Matron, Mrs. Devane, and the students. This was followed by a visit to the Parnell Museum, which occupies one of the rooms of the House.

The party then began a tour of the woods beginning with the plots of *Eucalypts*. (For notes on these plots see "Irish Forestry," Vol. II, No. I, May 1945). Then on to the main ride, glancing on the way at such members of the Birch family as *B. lutea*, *B. lenta*, *B. papyrifera* and *B. Maximowicziana*, and examining some plots of Elms, comprising English, Wych, Chichester (which seemed to have made the best growth) and American Elm.

Having reached the main ride the party halted for a brief spell at a vantage point. In front of them lay the magnificent ride 3 chains wide, flanked on either side by 60 one-acre experimental plots. At the end, where the ride widens to form a circle, was seen a "cairn" which was erected in 1909 to the memory of Parnell on the suggestion of Mr. T. P. Gill, the then Secretary of the Department of Agriculture.

Among the species in the experimental plots, two in particular towered above the others. These were *Abies Grandis* and *Pinus Radiata*. The former plot was 10 chains long by 1 chain wide and on either of its long sides lay plots of *Abies Nordmanniana* and *Abies Nobilis* respectively. The members were deeply impressed by the crop and by the following details given by the convener:— In 1905 the plot was planted with *Abies Grandis* and *Abies Pectinata* at a spacing of 4' x 4' in 25/75 mixture, the former intended as the main crop. The latter, which suffered severely from frost, was killed off by disease at an early date.

For the years prior to 1943 there is no available record of the thinnings, but it estimated that, as a result of windblow in 1935, 300 cubic feet U.B. was removed and that in the period 1934-1943 200 cubic feet U.B. was taken out as thinnings. Available records show that from February, 1943, to May 25th, 1944, 1,031 cubic feet U.B. was removed in thinnings. On measuring the plot on that date it was found there were 328 trees standing with contents of 7,872 cubic feet U.B. Heights to tips of trees felled at that time were: (1) 87½', (2) 85', (3) 92', (4) 102'. Between that date and August, 1949, 93 trees were felled or blown with a total content of 2,673 cubic feet U.B. On measuring the plot in August, 1949, it was found that there were 235 trees standing with a total content of 12,064 cubic feet U.B. [At that date the marginal row on the south side contained 48 trees with an average tree of 17½' Q.G.B.H. On the assumption that the mid

Q-G was 12" and the height to 3" diameter 90 feet the contents U.B. of this row was 3,888 cubic feet, which meant that it contained  $1/5$  of the total number of trees in the plot and  $1/3$  of the volume]. Working on the aforementioned figures the total yield from this acre from 1905 to August, 1949, was 16,268 cubic feet U.B.

A stop was made in C.14 at a line of 15 trees of Polish Larch [*Larix decidua*, var *Polonica*, Ostenfeld or *Larix polonica*, Raciborski]. Some botanists maintain that this is a separate species of larch, while others regard it as a form between *Larix decidua* and *Larix siberica*. It is found in a fossil state in Poland. On the occupation of part of Poland by the Wehrmacht the German forest botanists called it *Welchsel-Lärche*, meaning larch from the Vistula. The cones and seed are smaller than those of *Larix decidua*. It is said to be capable of growing successfully in pure or mixed stands, is comparatively frost hardy and practically immune from larch canker. The Avondale trees comprise a row on the margin of a small plot containing Silesian larch [*Larix decidua* var *Silesica*]. *Larix occidentalis* and *Larix dahurica*, the different species separated by rows of *Retinosporas*. The line of *Larix Polonica* stands at the original spacing of 5'. The plants were sent to Avondale by the late Prof. Henry in 1925. In 1949 the average tree was  $7\frac{3}{4}$ " Q.G.B.H.; with a timber height of 50 feet and a volume of 14.27 cubic feet U.B. Of the original 15 two got suppressed but all remained healthy and show no sign of canker. The bark is thick and broadly fissured. As the timber is said to be equal in quality to that of *Larix decidua* it was suggested that the tree has a future in this country.

The party then moved through plots of Thuja, Sequoia, Cryptomeria, past the old giant Silver Firs at the river and then returned to cross the foot-bridge into compartment 8. Here were seen some magnificent Douglas Firs and Norway Spruce 43 years old. This was contrasted with the plantation of D.F./E.L. on the right bank of the river, which when 26 years old, suffered considerable damage from a snow storm. Environmental conditions seemed similar in both plantations which led to the question of the snow damage on one side of the river only. Mr. Clear said the reason was manifest in that in D.F./N.S. mixture the N.S. was partly suppressed leaving the D.F. more room to develop into sturdy trees—an argument in favour of wider planting distances and early and pretty heavy thinning.

The party then recrossed the river and braced themselves for a steep climb through an excellent plot of 43 year old *Tsuga heterophylla* and on through a plot of *Cupressus lawsoniana* of the same age.

On reaching the top of the slope a brief stop was made at groups of *Abies pindrow*—one of the Himalayan silver firs, *Abies squamata*, the Chinese flakey-bark fir, *Pinus excelsa*, also from the Himalayas and *Pinus monticola*, from the Pacific coast of North America. The last-mentioned was badly affected by Pine Blister Rust, *Cronartium ribicola*.

On the way back to Avondale House, the excursionists passed along by the margin of the Pinetum. A halt was called at a group of larches. The announcement at this point by the convener that a new hybrid had been born at Avondale created quite a stir. Mr. O'Beirne explained that the group he was standing at were produced from seed which he collected from a tree of *Larix kurilensis* which grew beside and was partly shaded by a Japanese larch. Early in life these young trees showed characteristics of both these presumed parents and have maintained them to this day. The trees of this group are now 7 years old from seed and some are 15 feet high. In contrast, the Kurile larch parent has made very poor growth. Mr. O'Beirne proposes to name the hybrid "*Larix kurilepis*." The last to be examined were a specimen tree of *Pseudo Larix*, a group of *Larix eurolepis* produced from seed from the Dunkeld hybrids and a group of three trees of *Larix Potanini* (*Larix Tibetica*).

Before breaking up Mr. Clear drew attention to the fact that it would be the last time that their President and Convener would be with them in his official capacity of Forestry Inspector as he was due to retire shortly. He thanked Mr. O'Beirne for the manner in which he conducted the party and wished him many happy years. Mr. FitzPatrick then called for three cheers "for the first Irishman to become a really great forester." Mr. O'Beirne replied suitably and the party dispersed after a most enjoyable and instructive afternoon.