

UNDERGRADUATE HUMOUR.

Australian universities, in their comparative simplicity, and absence of ostentation of expense, have much in common with those of Scotland. But they have contrived to avoid the intrusion of politics, which causes so much excitement and even riot at each election for "Rector" in Scotland. Only the other day, for instance, Glasgow was asked to decide between Mr. Austen Chamberlain and Mr. G. K. Chesterton as nominal head—neither of them having any real connection with it. This is the scene which followed:—

During the night, large quantities of eggs, over-ripe fruit, and hundreds of cods' heads, in addition to large quantities of flour, pease-meal, soot, and ochre, were transferred to the University grounds by the respective parties, and before polling began several conflicts took place for possession of entrances to the voting hall. The undergraduates were soon unrecognisable, their clothes being covered with soot, flour, and other mixtures. Eggs, thrown with unusual skill, made the battle ground one sticky mass, and several students were hurt before an armistice was declared at noon.

The result, if it matters, was a narrow victory for Mr. Chamberlain. It is difficult to see why this kind of thing should be tolerated; and altogether impossible to imagine its happening in Adelaide, on a contest between (say) the Chief Justice and Mr. Denny. As a matter of fact, even the innocent exuberance of undergraduate processions through the principal streets has been found fault with by some citizens, on the score of vulgarity—an elastic term which takes a varying significance in different minds; what to one would seem vulgar may strike another as harmless buffoonery, and to a third may seem really funny. All young animals must gambol in the sheer enjoyment of life. So long as the gambolling is confined to a procession got up for the purpose, or to a theatre evening thoroughly advertised in advance, it would be ungracious to object to it.

Times change rapidly, and it takes a long memory to recall the scenes of disorder which used to be considered inevitable at the annual Commemoration of our own University. No actual harm was done, but the conferring of degrees was made farcical through being inaudible, owing to constant interruption. The valuable oration of some professorial expert would be fatally interfered with by the whirr of alarm clocks, concealed beforehand in locked cupboards—the scene was the present Library of the University—and nicely timed to go off at the wrong moment. Every degree conferred was accompanied by a running fire of shouted comment. There were two schools of thought among onlookers not directly interested. Some pleaded that young people will always be thoughtless, and this was their one day of the year. Others thought it intolerable that leading citizens should be asked to be present at a pandemonium, that a venerable Chancellor should be deliberately flouted, or that the attaining at last to a degree, as a result of years of hard study, should be made a farcical thing for proud parents and all concerned.

Compromise is the law of life. It seems difficult to credit at this distance of time, but a definite agreement was made with the undergraduates; they were to keep silence for the few seconds while each degree was actually conferred by the Chancellor, and then the official proceedings would wait while they sang such comments, friendly or ribald, as occurred to them concerning the new graduate. Very clever some of these verses were, and each old programme containing them, printed but entirely unofficial, must now have historical interest for a number of prominent citizens. However, a compromise seldom endures for long. A new generation of undergraduates arose, knowing nothing of the honourable understanding. They rendered their own programme, but they did not abstain from interrupting

That was putting the qualifications for a forestry student rather higher than the forestry experts generally deemed necessary; and at the Sydney conference they considered it quite enough to demand of a candidate for admission to the forestry school that he should satisfy a "board of examiners" of his fitness. There is no doubt that, as Mr. Poole maintains, the proximity of a forest must be a valuable asset to a forest school; but, as Sir Douglas Mawson pointed out yesterday, no school from this standpoint could be better located than that of the Adelaide University, which is within easy reach of the forest of Kuitpo, comprising 15,000 acres planted with soft woods and hard woods in every stage of growth, in the ranges near the city.

Seeing that the standard of instruction at the Adelaide school is as high as that of any British university, that proficiency will qualify for the degree of B.Sc., that facilities for a practical training are afforded by the Kuitpo forest, where the vacation, amounting to four months a year, may be spent in working under supervision, and that, if students prefer, arrangements are made whereby they may spend one or more vacations in the plantations of the other States, everybody, it might have been supposed, would recognise that the Commonwealth had here the possible foundation of a truly national school of forestry, which, with improvements and extensions, might have been made one of the finest institutions of its kind in the Empire. It is no wonder, therefore, that Sir Douglas Mawson describes as "a bolt from the blue" the decision of the Federal Government to ignore all that has been done by the Adelaide school for the past thirteen years in placing forestry work on a scientific foundation, and to start de novo with another school at Canberra. The decision from every standpoint is denounced by Sir Douglas as a blunder, the less excusable because made "without correspondence or discussion" with the experts and officials whose judgment in this matter should at least have carried some weight. If it is an argument against the Adelaide school that it is situated in a State worse off in the matter of forests than other States, Sir Douglas replies that the lead South Australia holds over all other States in afforestation, having, indeed, a "considerably larger planted area than all the other States together." It should have counted for much more than it appears to have done. But if it is essential to the success of a forestry school that the State in which it is situated should present to the student "all the phenomena of importance and interest" to the forester's calling, then, as Sir Douglas points out, no State has the qualification, and it would be necessary to abandon the national school project altogether, leave the various universities free, singly or in combination, to make such provision for forestry instruction as they can with financial aid from the Commonwealth, such aid perhaps including provision for travelling scholarships, which would render forest schools and areas abroad accessible to qualified students. Sir Douglas has earned the gratitude of the community by his address, which is fertile in valuable suggestions. His mastery of the subject lends special weight to his proposal for giving a new value to our "heritage in the hills," by planting them with soft woods, which would not only enhance their beauty enormously, but convert them into an unfailing source of revenue to the community.

ervedly. The position in Australia is already serious, this splendid heritage having been dissipated with a wanton disregard for the future, and at a speed scarcely paralleled elsewhere. Already destruction had gone far, but, in some of the States at least, enactments calculated to retrieve the position are now being administered. Judging by warnings emanating from officers of the forestry services, certain of the best known Australian timbers will, within the next few years, practically disappear from the lumber market.

Wood Indispensable.

It has been rightly stressed that, outside food products, no material is so universally used and so indispensable to human economy as wood. Statesmen would do well to divert some of the public energy from over-production along certain lines, and expand in the direction of afforestation, with the ultimate object of eventually rendering the country self-supporting in general timber requirements. For instance, we are suffering to-day from an over-production of currants, and there is little hope of competing in the world markets with this commodity, normally produced under the cheapest labour conditions. Yet the cases in which the currants are packed, although constructed of but the commonest variety of pine, are imported from abroad. Why not grow less currants and more pines?

Forests and Floods.

The role of forests in the economy of nature is diverse, exerting many beneficial influences, which may be entirely overlooked until destruction, having gone far towards completion, introduces new and less favourable conditions. First and foremost is the influence upon the distribution and character of the water-flow. Quoting the French authority Jacquot:—"The layer of dead leaves and humus which carpets the floor of the forest is a soft sponge with an extraordinary capacity for absorption. It absorbs five, six, and even nine times its liquid weight before saturation, when it lets the water seep, drop by drop, to the surface and to the interior of the soil to feed the subterranean streams which result in springs. The small surplus water which is not retained encounters in its flow innumerable obstacles, trunks, roots, moss, herbaceous flora, dead branches, dried leaves, and the inextricable lacework of roots. The flow is divided up, and does not erode the soil. It arrives at the foot of the slope slowly and in small quantities." The forest is thus a controller of floods, and has been aptly referred to as "the sovereign regulator of water-flow." It is quite otherwise with bare, hilly land, for there the sudden flood is characteristic and for control of the run-off and utilization of water costly dams and reservoirs need to be constructed. The steady progress of deforestation of the Mount Lofty Ranges must strongly affect the run-off. Indeed, the unfortunate results are only too obvious in the ever-increasing number and seriousness of the floods recorded in the lower Torrens River, where it traverses portion of the metropolitan area. No country has a greater interest in water conservation than South Australia, yet year by year the holding capacity of our hills is being reduced, and now a great sum of money is to be spent in cutting drains to the sea across the coastal plains. An expenditure largely rendered necessary in order to complete the work of waste begun with the depletion of the vegetation of the catchment areas of the water-courses. Much of the sum of about £300,000 proposed to be sunk in improving the run-off in the lower reaches of the Torrens River might be more profitably spent in the construction of reservoirs in the hills, either in the form of dams or forests. It is certain that here in South Australia every drop of water that can be conserved is capable of application to profitable production, consequently only where conservational measures fail to cope with flood problems should these water assets be hurried to the sea. In flat situations, the roots of trees extending deep into the ground draw moisture from a depth, and tend to lower ground-water level. Thus forests are of value in draining swampy land.

Cause of Washouts.

Next in importance to their agency in controlling the run-off is the service rendered in preventing erosion of the soil. This, of course, only applies to hilly areas. It is a matter of common knowledge that, when the vegetation is removed from the bed of watercourses with an appreciable grade, erosion proceeds rapidly. What we term a washout develops, whereby the soil and subsoil are carried away, thus ruining the land for agriculture and pasture. This destruction once begun may extend rapidly towards the head waters of the streams and up the flanks of the hillsides. In the arid interior of this State, where forests cannot exist, all the higher hills are rocky exposures, stripped bare for want of vegetation to hold the soil. In such regions is presented a picture of the ultimate stage of soil erosion to be realized in the Mount Lofty Ranges, where all vegetation removed. Fortunately, a good turf withstands heat-flood erosion on slopes of low grade, but on steeper slopes only orest suffices. Deforestation results in the drying up of springs, and the conversion of perennial streams to a state of intermittent flow. Floods occur at times of rainfall and torrents tear away and destroy the soils of the hills and, may be, nundate rich meadowland along their lower courses with debris often so coarse in texture and character that the lowlands also suffer. Obviously the more mountainous the area the more effective are these activities, but they certainly

ply with more or less force to all regions. In the older civilized Mediterranean countries the lack of appreciation of the benign offices of forests has resulted in the destruction of land to an incalculable extent. In this new country let us not make the same mistakes. Being forewarned is forearmed.

Other Influences.

Our consideration of the value of forests is not complete even when we have referred to its agencies in building up and improving the soil, controlling the run-off, preventing erosion and landslips, and the reclamation of wastes. There are other influences of national importance. To a small extent forests appear to be climate controllers, at least within their immediate precincts, exerting a beneficial influence on rainfall, reducing the temperature in summer, and slightly increasing it in winter. To some extent frosts are stayed, and the chance of hailstorms reduced. Plantations of trees are valuable shelter belts from the wind for stock and agriculture. Also they prevent the evaporation of water surfaces thus conserving surface water. Then we must not forget the hygienic and aesthetic aspects. The beneficial diversion and health-giving features of forests is within the experience of everyone. There appears to be almost universally an accord between healthy human beings and trees. The forest is a reservoir of pure air, and the "poetry and perfume of the earth."

Control—A State Function.

It is clear that the control and maintenance of her forests is a State function of great importance to the community. The French class afforestation as either obligatory, referring to preventive forests such as those of the mountains and the sand dunes, or optional—relating to poor agricultural land or waste land. It is advocated by some authorities that deliberate commercial forestry might be left to private enterprise, whereas State activities might be restricted to the following spheres:—(1) The development of commercial possibilities; and (2) watershed protection, reclamation, climatic, and hygienic forests. Here, in Australia, however "lulled by the lotus" of the inexhaustible and with abundant good investments or capital, there has been, in the past, an unwarranted apathy on the part of private individuals in matters appertaining to timber production. The public has up to recent times been interested merely in exploiting the forests. With such an apathy pervading the public at large it cannot be wondered at that the State Forestry Departments have, with few exceptions, received little sympathy from

the Governments of the day. In the political world, forestry has been a "cat that catches no mice."

Supply Forests for the State.

The remarkably successful growth of Pinus insignis on sandy lands in the south-east, as demonstrated by areas planted and administered by the Forest Department, indicate beyond all doubt the fitness for pine plantation of at least certain areas in that part of the State. The odds are that large areas of low grade land suitable for pine forests exist thereabouts. Other features favourable to south-eastern planting are the low cost of the land, the small amount of clearing to be done, and the general flatness of the situation. All factors, therefore, appear to be favourable for planting for supplying forests, although, on account of remoteness from Adelaide, it is questionable how much of such timber could be profitably transported to the main centre of population of the State. The railway freight charge between Mount Gambier and Adelaide is much the same as the sea freight ruling for lumber between Canada and Adelaide. It seems probable, therefore, that the products of the south-eastern forests, over and above local consumption, will tend to flow towards the fertile south-western district of Victoria. The other outstanding area for afforestation is the higher rainfall region of the Mount Lofty Ranges, lying at the very door of the metropolis. From every part of this area, railway or motor lorry delivery to the centre of consumption can be made at small cost. In the case of pine, the saving in cost of delivery to factory in Adelaide from Kuitpo Forest as against plantations in the neighbourhood of Mount Gambier ranges from 25/ to 40/ a ton, depending upon special features of location. As the production of sawn, marketable timber from a single acre of mature plantation will not amount to less than 35,000 super feet, or 50 tons, in the bone dry state, a saving of from £62 to £100 an acre is indicated on this score, if the produce is to be marketed in the metropolis. It cannot be too seriously urged that proximity to a large centre of population is supremely advantageous in marketing low value by-products, such as thinnings and firewood. In the hills a great variety in soil and drainage is available, so that a wide range of timber species may be cultivated, including some yielding higher grade timbers of double the market value of Pinus insignis. In this connection may be mentioned Pinus ponderosa, and Pinus laricio, whose suitability, judging by results achieved at the Kuitpo Forest, has been proved beyond all doubt.

Reg 17-12-25 SOME ASPECTS OF FORESTRY.

"Twin Sister of Agriculture."

Professor Sir Douglas Mawson delivered the annual address in connection with the commemoration of the University of Adelaide, at Elder Hall, North terrace, on Wednesday. Sir Douglas spoke on "Some aspects of forestry in South Australia." Having lectured on stones and fossils throughout the academic year, he said, he felt that a diversion to something living would be more in keeping with the holiday spirit of the season. Forestry itself was becoming a living subject in Australasia to-day. There were indications on every hand of the germination of a "forest conscience" in at least a section of the public. In this turn of the wheel of fortune the forest school of Adelaide University had suffered unde-