

of Helsinki University had for tens of years past imparted knowledge. The amendment achieved by the statute was that the former forestry examination was divided into five alternative courses, the commercial line being one. In this way it was hoped to preserve a feeling of professional fellowship between foresters working in their special branches. To provide an idea of what is considered of greatest importance in these studies it may be useful to give a brief account of the course of study followed during the student's four years in the faculty.

A young student, matriculating in the University for the study of subjects connected with the timber trade, may often, after the first term or year of study, feel slightly disappointed. In the lectures and text-books he finds nothing of the timber trade—a suitable basis must first be created leading up, at a later stage of study, to the special questions of the profession. Among the basic things to learn is, *e.g.*, botany, as the strength characteristics of wood for instance, determining its commercial value, are based on the anatomic structure of tree plants. And the same applies to chemistry, as a great part of the final products of forest industries are arrived at by chemical processes. Further, it is important that in his first year the student makes himself acquainted with the general problems of national and business economy, which help him later on to understand the special problems of the timber trade. The importance of the study of foreign languages, English, and French or German, is obvious.

In his second, third, and even fourth year of study the student must make himself acquainted with a variety of subjects, many of which, at first glance, seemed to have a very slight connection with the timber trade, but which are nevertheless of the greatest importance both from professional and general aspect. Such subjects include, *e.g.*, economic jurisprudence, wood chemistry, technology of floating, roadmaking and building, rationalization, book-keeping and calculation of costs, wood protection, &c.

Not until his third year of study does the student come into contact with actual professional subjects connected with the timber trade. But apart from that, the student has to follow the same syllabus in forest technology, forest economics, and business administration of forestry as his fellows training for actual silvicultural tasks in other courses of the examination. And he must even make himself acquainted, to a fairly large extent, with silviculture and methods of forest mensuration, although it is the timber trade with its related specialties that requires his main attention.

His holidays, the timber-man-to-be, who will be awarded on graduating the same degree of Bachelor of Forestry as the others passing the forestry examination, must spend on practical training. First he will have to participate in logging and floating, proceed to sawmills and loading tasks, and finally to the study of office work in the timber business. Therefore, on finally leaving his School of Forestry behind him, he will feel he has acquired a quite comprehensive—both theoretical and practical—knowledge, and may confidently apply for employment with timber-exporting companies.

This form of forestry education, in spite of its short term of existence, has already aroused interest abroad, *e.g.*, in the United States and in Sweden. In this branch Finland can no doubt hold out a worthy example. Studies so highly specialized are naturally only possible in a country whose whole life is dependent on her forests and who must consequently devote special attention to the development of her most important branch of economy—

P. Toivonen. Extract from "Finnish Trade Review," July, 1949.

## APPENDIX (2)—SWEDEN

Precis of relevant recommendations submitted by a Committee to report on the development of the Forest Research Institute, and the Royal Colleges of Forestry, Agriculture, and Veterinary Science (1947); and subsequent parliamentary "white paper" No. 177, dated 27th February, 1948. (Translation from Swedish by Mr. M. Grainger, New Zealand Forest Service.)

To take care of the demands of development in connection with research and higher instruction in agriculture and forestry, it is proposed that Parliament should approve a plan for the overhaul and extension of the agricultural schools to come into force on 1st July, 1949, and implying among other things a strengthening of the scientific appointments at the Agricultural, Veterinary, and Forestry Colleges, together with the Forest Research Institute. In connection therewith certain proposals are put forward concerning entrance requirements, tuition arrangements, &c., in these professional colleges.

### *Co-ordination of Research and Education*

(1) It is proposed to set up a co-ordination Committee consisting of representatives of the colleges referred to, and also the Plant Protection Station, Veterinary Station, and the Forest Research Institute.