9 E.—5.

The percentage increases since 1912 in the various courses, eliminating temporary changes as far as possible where necessary, are as follows: Industrial (boys), 130 per cent.; agriculture (boys), 250 per cent.; commercial and general (boys), 814 per cent.; commercial and general (girls), 1064 per cent.; domestic (girls), 367 per cent. These increases appear to indicate a growing appreciation of the value of this type of secondary school, a type which will, however, only receive full recognition in the educational and industrial life of the Dominion when the trades recognize its value. This will not come to pass until the trades are assured that the instructors have more than an academic knowledge of trade requirements, and that the courses of instruction are adapted to trade needs. The sources from which teachers can be drawn are at present very limited, as so many positions far more lucrative than those offering in technical schools are open to men having the necessary training and experience. It is hoped that the scheme for the training of technical-school teachers now under consideration will, when in operation, help to solve the staffing difficulties with which many controlling authorities are con-

The courses provided at the technical high schools are related to commercial, domestic, industrial, and agricultural pursuits, and the following brief comment on each course will sufficiently

indicate what is being done:

Commercial Course. - This course is attended by 1,635 pupils, of which 1,187 are girls, and while objections may be raised against the large number of girls who are receiving a training to fit them for office-work, the fact that they appear to be specially fitted for this type of occupation must not be overlooked. It is contended that woman's sphere is the home-on what grounds is not quite apparent, except that custom appears to have established it; but where the demands of the home require that every adolescent and adult member of a family must contribute towards its maintenance, an office offers a not unsatisfactory means of livelihood for intelligent girls who may have a quite natural repugnance to the menial drudgery that cannot possibly be eliminated from some phases of housework. Should the office girl desire and have the good fortune to fulfil her function as wife and mother, the systematic training acquired in an office cannot be regarded as other than a fair preparation for the systematic management of the home over which she is to preside. In this connection it is to be noted that the commercial course for girls in all schools includes satisfactory instruction in subjects related to the home. The course of instruction in commercial work aims at a business training which qualifies the students for positions of junior office assistants, and the continual demand of business houses on the schools for assistants (a demand much greater than the supply) appears to indicate that a satisfactory system of instruction is provided. The instructors in most of the schools have an intimate personal knowledge of modern business methods, and this combined with teaching ability enables them to provide a sound elementary theoretical and practical training.

Domestic Course. -It is pleasing to note the gradual increase in the number of girls attending the domestic course. This may, however, be largely due to the increasing demand for teachers of domestic subjects; and the sound practical training combined with a more or less satisfactory basis of elementary science that is provided at the schools prepares a student for entrance on the

domestic-science course at the Otago University, or for assistantships at a manual-training centre.

Industrial Course.—This course provides a sound elementary training for boys desiring to enter the engineering professions, and to some extent for those who propose to make one or other of the branches of woodworking their life-work. Students taking the former course far outnumber those entering for the latter, probably due to the fact that the various branches of engineering are more attractive, the work more interesting, and the opportunities for advancement more definite than in the woodworking trades. The workshops are for the most part equipped with the best types of modern machine tools, which are, however, limited in number, as it is considered advisable in the elementary stages to afford ample practice in the use of the fundamental handtools. The preliminary practical exercises are, generally speaking, satisfactory from the stand-points of both utility and constructional details. The exercises in woodwork are almost entirely confined to handwork, and afford excellent practice in setting out, from drawings previously made by the students, and in carrying to completion, simple examples of joinery and cabinetmaking. A thorough training in mathematics, mechanics, elementary science, and drawing is also provided, and the results of the public examinations in metal-work, workshop practice, and machine drawing appear to indicate that sound work is in progress. Evidences are, however, given of weakness in The difficulties incident to the use of this tool are acknowledged, but it is conthe use of the file. tended that these can be overcome by the average boy in a few lessons, provided that he clearly understands the principles of the muscular action and of the mechanical movements involved in the production of a plane surface with the file. It is also contended that a lad in his second year should be able to file to a standard gauge within the ordinary limits of workshop tolerances.

Agricultural Course. -- It is from some points of view gratifying to record a steady growth in the number of boys taking this course. In 1912 only fifty-eight were in attendance; the numbers for the year under review show an increase of 250 per cent. It is an open question whether it is the function of a technical high school to provide theoretical and practical instruction in subjects related to the primary industries, inasmuch as in most cases a suitable area of land for experimental purposes, and an instructor well versed in the theory and practice of farming combined with a sound knowledge of the scientific principles underlying it, are not always available, and if they were the number of students in attendance at any one school, being comparatively small, would not permit of the appointment of a competent staff to carry out a really satisfactory course in agriculture. The proper course appears to lie in the direction of the technical high schools providing a two or three years' elementary, general, and scientific training for the prospective farmer, and of the Agricultural Department establishing farm schools with the facilities for giving a course in practical farming and the necessary related scientific training. Lads destined for farm life and work would pass to these schools at the end of the technical-school course, and it is hoped that a scheme on some such lines may be evolved. It must be remembered that according to presentday educational ideas it is no part of the function of a technical school to teach a trade; this can only be "learned in the workshop of those who earn their bread by it." And the same may be said of farming: it is a trade. No school, except the farm, exists that can teach it satisfactorily in all its bearings, and to attempt to do so in a technical school, even with a fifty-acre farm

attached thereto, is to court failure.