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school receives no Government aid, desiring to maintain a certain independence, and having aims somewhat different from those of the polytechnics. The school is devoted to the building industries. It admits none but workmen and apprentices. The director, Mr. Banister Fletcher, explains this exclusiveness—which gives great satisfaction to the working-class—by saying, any one can nowadays attend technical evening schools; that is an evil, for it only augments the number of inferior workmen, whereas our aim should be to improve those who belong to the trade, so that they may become more competent workmen. In its present form the school is in its third year. It is always growing. On an average there are 150 students in attendance.

The teacher of the painting class says, "We do not seek to fill the mind of the student with superficial knowledge to enable him to gain marks at examination. He must do one practical exercise well before he goes on to the next. A house painter will have to get his living with his hands, not by answering difficult technical questions. It is only by practice that he will acquire

manual skill, so as to be a good workman and a capable foreman."

In the mason's class the pupils learn not only to cut a stone and work it properly, but also how to treat a piece of architectural work and to follow the drawings in such a way as to satisfy both the designer and the artisan. The more advanced receive lessons in matters more complicated

than any that belong strictly to the mason's trade.

The teacher of joinery says the students may be classed under three heads—(1) Boys between fourteen and eighteen with little or no knowledge of the use of tools; (2) those between eighteen and twenty-two who know how to use their tools, but who have not knowledge and experience enough for the workshop, and carpenters who want to learn joinery; (3) young men from twenty-one to thirty who are competent joiners, but who wish to learn the more difficult parts of the trade, or to prepare for examination.

In the moulding class the pupils learn to make their own moulds. The classes in coach-

building and plumbing do very thorough work.

The school differs from most of the London technical schools in having no social side. The best

pupils can use the library of the Carpenters' Company.

2. Westminster Technical Institute: Here, again, there are pupils only, and there is no separate social organization of members. Most of the technical schools, though intended for the instruction of working-men, have more or less deviated from their original purpose to meet the needs of other classes. Here, however, there has been no such change. The programme is less expensive than in other technical schools, but the results are in no way inferior. The coach-building class is probably the best in London. There are classes for the various building trades, classes in needlework and cooking, science and art classes, and in French, shorthand, and book-keeping. There is a very large attendance of police officers for the study of writing, composition, arithmetic, and other subjects. The workshops have become too small for the growing number of students. It has been found necessary to divide the cutting-out class. A two years' course is necessary in certain trades, and to such classes none but workmen are admitted; one year is enough in the sewing-classes.

The school is conducted on a modern scale, and this renders its statement of accounts the more

The school is conducted on a modern scale, and this renders its statement of accounts the more interesting: Expenditure—Salaries, £783 18s.; appliances, £99 9s.; materials, £25 2s.; general expenses, £160 6s.; repairs and maintenance, £463 6s.; management, £303 1s.; sundries, £4 3s.: total, £1,839 5s. Receipts—Fees for trades classes, £74 10s.; for other classes, £110 2s.; sales from kitchen, £3 1s.; sale of old materials, £13 4s.; sale of journal, £3; Forest and Grinsell Charities for scholarships, £20; Townsend Trust for scholarships, £228; contribution from St. Stephen's Primary School, £60. Grants: County Council, for materials, £16 16s.; for tools and apparatus, £48; for finishing, £50; in proportion to number of pupils, £238 4s. City and Guilds, £30; Science and Art Department, £36 14s.; Education Department, £203 9s. Total receipts, £1,135. The Baroness Burdett-Coutts makes up the deficiency (about £700 a year); last year she gave £1,500, and this year £500. The teachers are working-men, who are paid from 7s. to 10s. each per night. In the strictly technical (trades) classes the salaries come to about £470 a year, the pupils paying only about £70. A pupil who takes a course of plumbing, and a course of geometry, pays only about £5s. The Townsend is an old trust for the benefit of the working-people. At the time of its foundation there were no technical schools. The trustees set up a free primary school for workmen, one of the earliest schools of that class. The income is now devoted to scholarships held in the Westminster Technical School.

[The rest of this part is occupied with,—(1.) A reference to the Camden School of Art, which is taken as a type of a large number of art schools of a purely academic type, though intended principally for working-men; (2.) the technical work done at King's College and University College; (3.) members of the Royal College of Science, the Normal School of Art, and the great schools founded by the City and Guilds of London Institute, described in Part III.]

## PART V.—PRINCIPAL ESTABLISHMENTS OF TECHNICAL EDUCATION IN THE NORTH OF ENGLAND.

## 1.—MANCHESTER TECHNICAL SCHOOL.

The Manchester Technical School is, perhaps, the very largest of the popular polytechnic institutions. In London the work of technical education is scattered, and divided among many institutions; in Manchester, the second city in England, it is concentrated in one neighbourhood. The school has outgrown its old habitation, and now occupies more than half a dozen different buildings not far apart; but new premises are in course of construction, where the whole institution will find accommodation, and where its great extent will be more impressively manifest. The school may be said to comprise four distinct institutions—a school of manufactures, a trades school, a school of secondary education with a technological bias, and an art school.

3—E. 1D.