

tue of which they may devote themselves specially to chemistry, mining or geology.

The Royal College of Chemistry is a distinct institution, situated in a different part of the town, which is a cause of some inconvenience to the students of the School of Mines, who have to attend its lectures and classes in practical chemistry. It was established originally by a private subscription, but has been adopted by Government. Under the able management of Prof. Frankland, it is a useful institution, and always crowded with pupils. It has, however, accommodation for only 42 practical students, and this by no means of the airy and sumptuous character to be found in the laboratories of the continent of Europe and the United States. Crowded among the shops of a noisy business street, it has no room for extension, and its teachers and students have to submit to many inconveniences which might readily be obviated were it removed to a more suitable locality, and provided with a laboratory fitted up with modern improvements. It must, however, be admitted that the utmost possible use has been made of its too limited accommodation.

#### THE DEPARTMENT OF SCIENCE AND ART.

The Royal School of Mines, as well as the Royal College of Science, Dublin, and the Edinburgh Museum of Science and Art, are under the direction of the Government Department of Science and Art; but its largest sphere of operations is in the great South Kensington Museum, and the schools connected with it throughout the country. In its last report these schools and classes are stated at 525 in all, with an aggregate of 24,865 pupils. This represents much science teaching; all, however, of an elementary character, and of small amount relatively to the great population of Britain and Ireland. Much of the teaching is necessarily done by teachers of a very humble grade of scientific attainment; but the most effectual means are taken to ascertain that it is faithfully done, and to give it opportunities for improvement. The principle adopted is that of giving money aids to teachers, building grants, grants for apparatus, &c., scholarships and exhibitions, medals and prizes to pupils. All of these are awarded on the results of rigid examination, conducted by papers sent from London and reported on by examiners, among whom are some of the first scientific men in the country. The aids to teachers are at the rate of £2 per annum for each first-class pupil, and £1 for each second-class pupil; and the teacher, in order to receive aid, if not a University

graduate, must have obtained at least a second class in the advanced grade of these examinations. Of the aids given to pupils a number are in the form of exhibitions in aid of attendance on higher science schools, and in the case of the higher Government schools the fees are remitted in favor of students taking these exhibitions. It would be difficult to imagine a system likely to do more good, and all that is wanted is that it should be further extended and that more thorough means should be adopted for training the teachers.

#### SOUTH KENSINGTON MUSEUM.

The most conspicuous part of the establishment at South Kensington is its museum, embracing a vast collection of objects illustrative of industrial products, art and manufactures, and one of the most popular and useful places of instruction by the eye in London. It is proposed to remove to the extensive buildings at South Kensington the vast Natural History collections of the British Museum, and also the collections of the Geological Survey, so as to promote science study as well as that of art. Art education on an extensive scale is conducted at South Kensington itself, as well as in a multitude of affiliated art schools. More especially, young persons are trained as teachers, and with reference to practical applications to decorative art of every description. As illustrations of these, I was shown large collections of patterns for wall papers, table cloths, pottery, and coloured and engraved glass, prepared by the pupils for competition for prizes offered by manufacturers; while in a gallery of the museum, assistants were busy in arranging a vast collection of drawings and paintings sent in from affiliated schools for competition. In the Art training school I saw hundreds of pupils engaged in all kinds of work from the elements of drawing to studies in painting and modelling from life. In addition to the study in the schools, the students, of whom there are between eight and nine hundred, have access to the Galleries of Art in the Museum, and to an Art Library of 25,000 volumes and a collection of 55,000 engravings and photographs. Last year 107 schools were conducted under the "Department" with 20,000 pupils; and in addition to these, elementary drawing was taught in 1,094 schools to 120,928 children. Though art is distinct from science, I think it proper, when speaking of South Kensington, to refer to its work in art as well as in science. Not only is science the handmaid of art, but art