cables are carried in tunnels, which are covered with removable slabs, so that all connections are readily accessible.

A large part of the two lowest floors is set aside for a museum.

The chemical lecture-room is well fitted up for the purposes of demonstration. The lecture table is provided with water, gas and electric connections and down-draft fume ducts. Immediately behind the lecture-table communication is had through the wall with the preparation room in the rear. Blackboards throughout the building are constructed of ground glass, mounted over a black background, with vertical and horizontal strings just behind the glass, which divide the surface into square decimeters—a device which is found useful in plotting curves, etc.

The building contains several chemical laboratories, all of which are equipped with fume cupboards, fume ducts and all the best appliances. The individual cupboards in the tables are neatly arranged so as to accommodate all kinds of apparatus in the simplest manner. Among the various laboratories may be mentioned the gas analysis room, the polariscope and spectroscope room, and the photographic dark-room, besides rooms equipped for the study of the chemistry of combustion, lighting, explosives, and various lines of applied chemistry.

The upper floors are devoted to mineralogy and geology, and contain workrooms and laboratories, besides collections of various kinds. The mineralogy and geology departments of the school have been occupying the new building all winter, the assaying department moved in at Christmas, and the other departments will move into their quarters this month; so that when the fall term opens the chemistry and mining departments will be installed in one of the finest buildings ever put up for that purpose, and the engineering departments will have the advantage of more room in the old building.

ELECTRICAL EQUIPMENT, SCHOOL OF SCIENCE NEW BUILDING.

The new building, known as the "School of Mining and Chemistry," in connection with the School of Practical Science of the Toronto University, marks a decided step in advance in the teaching of scientific subjects to the coming generations of this Province. It is equipped with most up-to-date appliances for demonstrating modern methods, as well as for experimental' and research operations. It may be inferred that an institution of this character, which is sending out as its graduates the future engineers, who will take a prominent part in the development of the mining and power resources of our country, should teach thoroughly the latest methods of production and application of the power of the future, electricity. With



New Chemistry and Mining Building, School of Practical Science.

The mining department is located in a wing of the building, and this is now being equipped with practical working machinery. The mill-room is 53 feet by 72 in area, and the equipment already installed consists of a 15 h.p. motor, a five-stamp battery, Challenge ore feeder, amalgamating plates, a Wifley table for concentration, a clean-up pan, steel settling tanks, a steel tank suspended from the roof girders to furnish a constant supply of water, and a track with travelling crawl to transport ore. The machinery was supplied by the Wm. Hamilton Manufacturing Co., of Peterboro. In the next room there is an equipment for preparing the ore for the milling-room, this including a gyrating crusher of Hadfields' make, and a set of Hamilton rolls 16 inches by 12 inches, besides platform scales, jib crane, buckets, etc. Two other rooms will be used for future additions.

The power and heating plant is located in the rear of the building. The electrical features of this plant will be found described elsewhere in this issue. The building is ventilated by a vacuum system operated by fans in the top story, and the principal ventilation of the laboratories will be accomplished through the fume cupboards. Steam and compressed air will be supplied to the laboratories, and electricity is supplied to all the senior laboratories. that end in view, the "powers that be" decided to instal a plant that would produce a current for light and power in the building, and would also allow the students to obtain a practical knowledge of the construction of the machinery, and the production, handling and distributing of power.

The contract for this installation was given to the Electrical Construction Company, of London, Limited, one of the younger companies manufacturing electrical machinery, but one which is rapidly making a reputation in their line. It seems appropriate that this company should have supplied the machinery, as the managing director, E. I. Sifton, is one of the earlier graduates of the School of Practical Science in Electrical Engineering.

The contract was completed to the satisfaction of the engineers in charge—Messrs. Ross & Holgate—which shows that the experience obtained by the students of the School of Practical Science is of a high order when it enables a student to design and manufacture apparatus of this kind in such a manner as to obtain this contract in competition with the largest and best manufacturers in Canada and the United States.

The entire plant upon completion was subject to a severe test under the supervision of consulting engineers, Messrs. Ross & Holgate, of Montreal, in conjunction with the professors in