should "be named and perpetually be known and distinguished by the appellation of McGill College." Owing to persistent opposition by the leaders of one section of the people to any system of governmental education and to the refusal by the Legislature to make the grants of land and money which had been promised, the proposed establishment of the provincial university by the British Government was abandoned.

" In so far as the McGill College was concerned, however, the Royal Institution at once took action by applying for a Royal Charter. Such a charter was granted in 1821, and the Royal Institution prepared to take possession of the estate. - But, owing to protracted litigation, this was not surrendered to them till 1829. Commencing then the work of teaching with two faculties, Arts and Medicine, the record of the first thirty years of the University's existence is an unbroken tale of financial embarrassment and administrative difficulties. The charter was cumbrous and unwieldy, and unsuited to a small college in the circumstances of this country, and the University, with the exception of its medical faculty, became almost extinct. But after thirty years the citizens of Montreal awoke to the value of the institution which was struggling in its midst. Several gentlemen undertook the responsibility of its renovation, and in 1852, an amended charter was secured. The Governor-General of Canada for the time being, Sir Edmund Head, became interested in its fortunes, and in 1855, with the advent of a new Principal, an era of progress and prosperity began."

## HARMONY AND CONTRAST IN COLORS.

THE Upholsterer gives the following list of colors which contrast and harmonize :-

White contrasts with black and harmonizes with grey. White contrasts with brown and harmonizes with buff. White contrasts with blue and harmonizes with sky bue. White contrasts with purple and harmonizes with rose. White contrasts with green and harmonizes with bea green. Cold greens contrast with crimson and harmonize with olive. Cold greens contrast with purple and harmonize with citrine. Cold greens contrast with white and harmonize with blues. Cold greens contrast with pink and harmonize with brown. Cold greens contrast with gold and harmonize with black. Cold greens contrast with orange and harmonize with grey. Warm greens contrast with crimson and harmonize with yellow. Warm greens contrast with maroons and harmonize with orange. Warm greens contrast with purple and harmonize with citrine. Warm greens contrast with red and harmonize with sky blue. Warm greens contrast with pink and harmonize with grey. Warm greens contrast with white and harmonize with white. Warm greens contrast with black and harmonize with brown. Warm greens contrast with lavender and harmonize with buff. Greens contrast with colors containing red and harmonize with colors

containing yellow or blue. Orange contrasts with purple and harmonizes with yellow.

Orange contrasts with blue and harmonizes with red.

Orange contrasts with black and harmonizes with red. Orange contrasts with black and harmonizes with warm green.

Orange contrasts with olive and harmonizes with warm brown.

Orange contrasts with crimson and harmonizes with white.

Orange contrasts with grey and harmonizes with buff.

Orange requires blue, black, purple, or dark colors for contrasts and warm colors for harmony.

Citrine contrasts with purple and harmonizes with yellows. Citrine contrasts with blue and harmonizes with orange. Citrine contrasts with black and harmonizes with white. Citrine contrasts with brown and harmonizes with green. Citrine contrasts with crimson and harmonizes with buff. Russet contrasts with green and harmonizes with red. Russet contrasts with black and harmonizes with yellow. Russet contrasts with olive and harmonizes with orange. Russet contrasts with grey and harmonizes with brown. Olive contrasts with orange and harmonizes with green. Olive contrasts with red and harmonizes with blue. Olive contrasts with white and harmonizes with black. Olive contrasts with maroon and harmonizes with brown. Gold contrasts with any dark color, but looks richer with purple, green,

blue, black and brown than with the other colors. It harmonizes with all light colors, but least with yellow. The best harmony is with white.

Concrete impervious to water can be obtained by paying careful attention to three conditions. These are fine grinding of the cement, balanced broken stone or gravel and thorough mixing so as to eliminate all voids, it being assumed that the proportions are such as to permit the latter condition to be reached.

## EDUCATIONAL WORK OF THE ONTARIO ASSOCIATION OF ARCHITECTS.

Special interest attaches to the report of the Committee on Education, which has been presented to the Council. In this report it is recommended that students be required to pass matriculation before entering an architect's office and to be then articled for a period of five years. As an alternative, students may take the full architectural course (three years) at the School of Practical Science, and will then be required to serve only three years in an architect's office, one of which years may be served during the vacations of said school.

The report also recommends that the course of study for students include three distinct branches. The first of these, the scientific course, would embrace the scientific subjects included in the regular three years' architectural course at the School of Science.

For the students who are articled for five years, a plan has been arranged by which the necessary lectures may be spread over the five years of their studentship and may be attended by obtaining leave of absence from office work, for an average of eight hours a week during the school term. Of course, this plan is practicable only for students in Toronto; for those at a distance the regular three years' course at the school is recommended.

The second branch of study represents the business or craft training. This includes those subjects in which the student may be expected to become proficient in the course of his regular office work, supplemented by the study of technical books as recommended.

The third branch comprises the course of study in design. For this it is recommended that the "Atelier" or studio system, which has proved so successful elsewhere, be adopted, and that a three years' studio course be instituted, occupying three months in each year. This studio work is to be under the supervision of practising architects.

The following is the outline of the full five years course as recommended by the committee. The subjects marked "A" are the scientific subjects ; "B" the business course, and "C" the studio course. It is proposed to hold examinations each year in courses "A" and "B," and in the studio work a progression by members will be required.

I Year. - "A." Analytical geometry, euclid, trigonometry, algebra, history of architecture, chemistry.

II Year .- "A." Calculus, history of architecture, dynamics, statics, descriptive geometry. "B." Elements of construction, technical terms (as applied to practical architecture), practical knowledge of building trades.

III Year.—" A." Descriptive geometry, heat and optics, strength of materials, applied chemistry. "B." Practical knowledge of building trades, foundations, structural iron work. "C." Preliminary studio work (drawing of classic detail and shadows).

IV Year .- "A." Hydrostatics, mineralogy and geology, constructive design. "B." Steel and iron construction, nature and properties of materials. "C." Studio work.

V Year .- " A." Hydraulics, compound stress, mineralogy and geology, applied chemistry, sanitary science. "B." Architectural jurisprudence, practical heat and ventilation, practical sanitary science. "C." Studio work.

This report has been received by the Council and the general trend of it approved. But it is not finally adopted, and in the meantime the regular curriculum is to be adhered to by registered students. One of its most important features, the studio work, it is proposed to inaugurate at once by starting classes in the new Association rooms in September or October. It is also hoped that an arrangement will be made with the Schoo