THE PRESIDENT put the main motion—moved by Mr. Gordon, seconded by Mr. Burke, that the Council be asked to draft a letter asking an expression of opinion from the members of the Association in the Province, the Council to report at the Annual Meeting in September. This was carried unanimously.

THE PRESIDENT: There was a report to come in from the Legislation Committee, which was not handed in yesterday. I understand Mr. A. H. Gregg will make a verbal report regarding that.

MR. A. H. GREGG: Mr. Wickson, in order to complete the reports, asked me to state as regards the Legislation Committee that during the past year there has been no special business brought before the Committee, and there was really nothing for them to do, but presumably it would be desirable to have a similar Committee next year as matters might come before them at any time.

On motion of Mr. Gregg, the report was adopted.

THE PRESIDENT: If there is no further business just now we will have Professor Nobbs' paper.

MR. BAKER: The matter of "New Business" is not closed?

THE PRESIDENT: No.

Prof. Nobbs of Montreal University then read his paper on "Architectural Education in Canada. He prefaced the reading by saying: Mr. Chairman and Gentlemen, I may say, to begin with, that I am dealing with controversial matter, perhaps some highly explosive matter, and I therefore asked the Chairman to allow me to speak before this question came up; because I should like to get the benefit of the discussion, both upon the very important motion affecting architectural education and upon these remarks of mine. So I hope, as soon as this paper is read, the motion will be put, and the discussion of that motion and my paper mixed up, and we shall get some benefit out of the discussion.

ARCHITECTURAL EDUCATION IN CANADA

Of the many kindnesses and encouragements I have received at your hands, your president's request to me to speak on "Architectural Education in Canada" is the greatest compliment. I assume it is not an historic retrospect that you desire of me, but rather a statement of what I consider may be done in this field of activity today, with some reference to what we should aim at on the morrow, that was implied by the addition of the words " in Canada " to the phrase "Architectural Education"; for architectural education among us is just beginning, and it is a good time now to consider whether the foundations we are laying are adequate to their future loads. To save your time, and mine, I shall adopt a somewhat dogmatic method of exposition, which I trust will have the incidental result of bringing out some criticism and discussion. I know there is another side to all the aspects of the questions with which I shall deal, and I have the deepest respect for the views of my most direct opponents. What I feel is not so much that we of the Unacademic School misunderstand our Academic friends, as that they are uninformed about our principles. This opportunity is therefore doubly welcome to me.

I shall try to divide the question before us into two parts: (1) College work,

and (2) Outside influences. I use the word " outside " advisedly, for I am here, I know, in virtue of my post at McGill University.

To begin with, I suppose we are all agreed that it is desirable that every professional man should take a college course if he can afford it, an ordinary Arts course if possible. As very few can afford that luxury of time and money, the next best thing is to devise university work in connection with professional study. Of course there are lots of people about a university who can say a good deal to prove that technical and professional training is essentially different from, and of no service to, general culture; and there are lots of professional people who are quite eloquent on the uselessness of theoretical training in comparison with what they call "practical work." Still, the compromise has much to be said for it. It all depends, like the cherry, on the spirit in which it is offered. Now, a *"School of Art,"* as the term is understood to-day, is a different thing from a *"Department of Architecture"* at a self-respecting university, and yet the department of architecture has to do some school of art work.

By a school of art we mean a place where young people (for the most part of inferior education, I am sorry to say), are taught to be very skilful at drawing in various media, charcoal, water color, oil paint, and at modelling in clay and wax and at designing imaginary buidings and representing their intentions in black and white; a school of art is, in fact, a place where people learn a good deal of sleight of hand and sleight of eye, and very little about things in general, past, present and yet to be.

Now, of course, we all know that one cannot either study, gain experience in or achieve architecture to-day without great skill in drawing, and this takes an unconscionable time to acquire. Some departments of architecture at American universities try to be just schools of art in this sense, and I think their success as schools of architecture is in inverse ratio to their success as mere schools of art. The public, alas, understands by the word art just drawing, and I have used the word so far in this narrow and vulgar sense.

The school of architecture should require a very fair performance in draughtsmanship of those who come to it to study; its teaching must, of necessity, be largely conducted through the medium of drawing and its graduates should incidentally go out far better draughtsmen than they went in, but it is no part of its business to teach drawing as a thing in itself, or to teach anything by drawing which can be taught in a more rapid way by other methods. The graduate must be turned out ready to be a useful office hand, but the success of the school is not to be gauged by the good office hands it turns out, but by the progress of these good office hands to positions of trust and responsibility and independence after leaving college. Design, and not drawing, is the main end of such a department. Those things which tell in later life when a man begins to think for himself are what the school of architecture has to do with. Drawing is a matter for the school of art and the office to teach.

Perhaps I have labored this point unnecessarily, but the good of the art must be thought of apart from the good of the existing members of the profession when we talk of education. Cultivated gentlemen cannot be produced except by accident, by a system which prides itself upon teaching all that an architect need know *"par le crayon"*—by the pencil. This question of drawing being disposed of for the present, let us consider the branches of study in an Architectural Department of a University. They are six in number;

(a) Design; (b) Aesthetic; (c) Archæology; (d) Science; (e) Construction; (f) Professional Practice.

DESIGN.—Design can of course, only be taught "by the pencil," and I am of opinion also that it should only be taught by people engaged in the active practice of their profession, and that it is an honor to be allowed to teach it. In this I concur most heartily with the official views of the A.I.A. Also, there is only one best way of running design classes, and that is by the accepted Beaux Arts method of sketches done without assistance, elaborated under criticism and guidance. At the beginning, frequent subjects, though they result in nothing that can be exhibited to passing strangers and give the teacher much to ponder over, lead, I think, to more rapid progress than the elaboration of what must of necessity be poor designs. It is practice in getting ideas together and knocking them into shape that a school of architecture can give. Time enough will be found in offices to learn to make a complete set of drawings.

AESTHETIC.—Aesthetic may sound rather a portentous word, but it is useful as including the theoretic studies which may with advantage be associated with work in design. The elements of architecture, the theory of design, and theory of planning, and, I think, ornament and decoration (if the arts of the ornamentalist are considered in relation to material and technique, and not historically) may be grouped under this head. A sketch of my courses in these subjects will develop the view I take, so I must ask your indulgence while I explain what is, after all, a personal matter of opinion and prejudice.

The things that really matter for the expression of sentiment in building (and that is a fair definition of architecture) are proportion and scale above all things. Next come such matters as refinement, grace, breadth, and all the more or less abstract qualities of character. The meaning of these things should be learned early in order that criticism may be understood and historical examples be appreciated. Then there are the material elements—masonry and roofing and vaulting, etc.—and the physical elements—plinths, voids, solids and features to consider. By the principles of composition, the chief of which is unity, something can be taught of the instinct whereby all these abstract, physical and material elements can be composed in one thing, revealing meaning and emotion, through mere sensuous beauty of line, form, mass and color. That it is what I mean by the elements of architecture.

The theory of design may be taken to mean the first principles of art and their application to practical design. The senses, the phenomena of pleasure and pain and expression explain the art impulse. Beauty and its relation to the arts through subject matter, emotional content and physical media affords a basis of appreciation and criticism. Pure design in nature and in art and ornament, with its moral or significant aspect and its material logic, throw light on the evolution of architectural form. Such matters are in the domain of philosophy.

The theory of planning affords practice in methodical thinking—dimensions, arrangement, scales, aspect, prospect are common considerations for all problems. The study of domestic art illustrates the evolution from simple cottages to complex mansions of what is after all one organism—the house. Ecclesiastical art shows small differences of use affecting vitally the layout of typical examples within one class of problems. Libraries, fire stations, hospitals and the like show extreme specialization of type, while public buildings on analysis afford good illustration of various nationalistic sentiments expressing themselves almost independently of use and purpose. These subjects afford valuable side lights on the work of the design classes.

ARCHAEOLOGY.—Archæology as an architectural subject may be shorn of much of the connotation of Hitites and Babylonian captivities with which recent research has invested it. The traditions of our civilization, however, involve some study of the buildings of the Biblical peoples as well as the Greeks and the Romans. Mediæval France and England have a very special bearing on ourselves, for it was through these countries that Italian art comes to us. France, never as long as she had any connection with this land, quite lost the mystery of her Gothic period, while England in her most classic phases has always retained something of the patent honesty of design which culminated in the fourteenth century. But, perhaps, things being as they are, the Renaissance in Italy and the later art of France and England, contain the main body of tradition for us, and though the Greek and Roman work explains much of these things, I feel very strongly that it is enough for us to direct the chief efforts of our scholarships to France and England, rather than to Greece and Rome. Revivals are excellent influences within reasonable limits; their weakness is their self-consciousness. Roman revivals meant something to fifteenth century Italians; Greek revivals meant something to eighteenth century Frenchmen; French revivals even meant a good deal to nineteenth century Americans; but to twentieth century Canadians, English revivals will have a more real meaning, and there is this to be said for them, that mere imitation in this case is out of the question. The serene sentiment, traditional in English art, we may hope to continue to achieve; we must, however, give up the physical details of mullioned ranges of lights and parapeted roofs—therein there is hope for Canadian architecture as such. It must invent!

The study of archæology of our traditions needs a background (and the historical department of any university should be able to provide that) before a beginning is made with the history of architecture. That is the weak point of lectures in ancient architecture to the public or to students in offices. Half the meaning of St. Peter's and Westminster, and the Parthenon is lost if Papal, Edwardian and Periclean policies and the popular forces behind them are not subconsciously applied by those who would learn their secrets.

SCIENCE.—Science for an architect is, after all, not a very serious affair; of course, a thorough scientific training is a very desirable thing, but "*life is short and art is long,*" and literature and history are, I firmly believe, of more importance to an architect. His mathematics may well stop short of the calculus. Physics is vital up to a certain point, but the ultimate constitution of matter will not help him to "build for eternity," as Wren expressed it, or express human sentiment in what he builds. Chemistry bears directly, it is true, on hygiene, but hygiene (from questions of pure air and pure water to those of heating and ventilation appliances) can, I think, be grasped in principle with very little chemical knowledge.

CONSTRUCTION.—Construction may be regarded as the architect's branch of applied science. Possibly elementary construction can be best learned by practical experience, but as it is quite as impossible to teach composition in architecture to people who do not know how roofs and floors and windows are made, as to teach literary composition to folk who cannot parse words and analyze sentences, even elementary building construction (mere technology as it is) has to find a place in a university course. Structural design is a subject scientific enough to be admitted by a university faculty without protest. My own view is that an architect should know just enough about structural engineering to have the fear of death and judgment always by him and induce him to call in the engineer before,

rather than after, things have been built. Familiarity with the stresses in a 100-foot roof truss will certainly not breed contempt for the possibilities and responsibilities involved.

PROFESSIONAL PRACTICE.—Professional practice is a matter on which I should like to say a great deal, but time will not permit. To speak and write the King's English and one other language; to know how to construct a short essay, report, paper or speech; to behave to inferiors, equals and superiors respectively, with courtesy, charity and dignity. These things are expected of a college man, and by hook or crook a good deal can be done even in an architectural department to justify the expectation. It was done by Prof. Ware at Columbia.

Specification writing is very badly done all over the world, and yet no better exercise in form and construction could be undertaken by a student of literature. By lectures and exercises much can be done to show how to say what has to be said, briefly and in order and once only.

Conditions of contract and building by-laws, I almost think, should form a part of any good citizen's education, while certain aspects of law which can be dealt with in university courses to architectural students should prove invaluable in later life.

DRAWING.—In administering to the student the many subjects which fall within the six groups—design, æsthetic, archæology, science, construction and practice—one lecture to three hours of graphical work will be found to work out well.

Eye and hand, and imagination, too can, I think, be trained far more rapidly by modelling than by drawing and for the sake of this technical suavity, modelling all through the course is desirable. Freehand drawing, as such, is hardly a subject.

All sorts of drawing and sketching are connected with the work in design and rapid memory sketching, freehand and mechanical, and elaborate measured drawings, are all involved in the study of archæology.

The ornament and decoration in connection with æsthetic implies a good deal of water color work and free sketching.

Construction gives ample opportunities for practice in the preparation of general working drawings and also for steel plans.

Descriptive geometry, sciography, stereotomy and perspective, besides their scientific value, afford good practice in mechanical drawing and are essentials, in my opinion, in the work of the earlier years.

These (counting the incidental drawing as one) seven parts of architectural education can be begun in a college course, and for an ordinary general practitioner of our trade, is to be hoped that none of them would end there.

Some of these things may be held unnecessary, and I wish I could be convinced of that, for the expense of my department, where these things are all done as I have explained, is a grievous question with those responsible. Some things, such as post-graduate work in Ecclesiastical and Landscape Art, might be thought desirable, but I feel that these can only be studied on the higher plane where they exist, in merry England, happy France and smiling Italy, and this brings me to outside influences in architectural education in Canada.

Outside we have no museums as yet, but we shall have some soon, and it is devoutly to be hoped that the nation's traditions will find adequate representation in them and that they will not degenerate into mere treasure houses of curios, bric-a-brac, pictures and things rich and rare. There is some reason to hope

that at the Victoria Memorial Museum at Ottawa parallel type collections of French and British art (architectural detail and decorative sculpture that is) from 1000-1800, will be installed, together with a library of art, a collection of industrial arts, and a gallery of home industries. But all that is another story, and His Majesty's Ministers have not yet dealt with the petition concerning these things.

Outside we have few old buildings worth measuring, though quite a number that should be preserved. In Montreal there are some examples of the purest Louis XV. and the late Georgian work. Still, our architectural students must go far afield for their direct study of past tradition, and it is high time that every Province had a good scholarship to take a man to England, France and Italy for a year, and that the Dominion had a series of travelling scholarships for special study in the realms of art.

Hitherto the main outside influence in professional training has been due to the fact that at no great distance, in the cities of the United States, more work and better work was being done. Thither went, and still go, the Canadian students of architecture, to bring back second hand ideals of the Beaux Arts school, which were, perhaps, better than nothing, but very far from supplying us with national traditions. For what has Canada, either French or English, Lower or Upper, Maritime or Northwest, to do with 19th century Paris? The far flung vault of Beauvais, the jewelled walls of Blois might well inspire a Quebecer, but latter day French academic design, a petrified art lagging behind the emancipation of French painting and French sculpture and oscillating between the Neo-Grec and the Louis XIV.—what, I ask, has that to do with us?

Now we are beginning at last to achieve as good work as our friends to the South, and it is the museums, libraries and design schools of the United States, quite as much as the office work, that still draws so many of our students across the line; and the libraries and museums of Canada will soon, I believe, be adequate to our needs. What about the offices?—for we can do without colleges, museums and libraries, but we cannot train architects without properly organized office experience and practical work.

In older lands, where a thousand years of architectural history stands revered and respected in every city, an apprenticeship or a pupilage system, though apt to shorten the general education of the architects, is adequate, but we, here, must rely on college education, museums and libraries, instead of old buildings, and would make a fatal mistake if we did not organize our office training better in the future than we have done in the past. Of course, supply and demand must be taken into account but I think four or five years, bound to principal, or, in case of college students, say three years, part of which could be done in the long vacation, should be made a universal requirement. The power to do this rests with the Provincial organizations. It is bad for the student to get a little experience here and a little there and it is cruelly unfair to the careful architect whose office has an educational influence, that no sooner has he taught a boy something than he is held up for a rise or given the slip.

The architect who is an artist deserves his help cheaper than the architect who is a commercial agent only, and without cheaper help the best kind of work cannot be done. When things are slack it should not be necessary, as it now is, to disband the office. By the present arrangement the art suffers, the office student suffers, and the architect suffers.

We can only make a good thing of our trade by doing far too many jobs at a time as things are. If an architect could, by exercising some restraint on his

output and by doing things more to his own real satisfaction, at the same time establish a reputation for giving good experience, pupils, apprentices and improvers would help him out, provided such status were recognized and encouraged by the by-laws of the Associations. The assistant paid rather more than he is worth cannot be spared to run about on the job, and cannot be expected to identify his interests with those of his master, when he only sees one end of the work.

There is a tendency among some of my friends here to have a childlike faith in what the university can do. In future let us hope to see the offices doing their *full share* of the teaching, the schools of architecture doing their little part, the local public theirs by providing museums and libraries, and the Government theirs, by endowing scholarships.

The teaching of architecture generally will, I think, undergo some drastic changes before long. The history of architecture has to be approached in a new light—it has been regarded as technical education—as a means for enabling people to forge and imitate past styles in approximate purity. It should, I think, be treated as a purely "culture subject," like Latin and Greek and Anglo-Saxon, as a means of enabling people to understand what the art of design is—the great popular art of expressing national sentiment.

The public at present suffers from that little knowledge which is such a dangerous thing. They know the difference between Norman work and Rococo in a superficial sort of way, by sight, not by feeling, and they think the greatest compliment they can offer one of us is to recognize in our performances some resemblance to past types, and "fellows of the baser sort" trade upon this poor thin semblance of culture and give them modern forgeries, more or less ingenious, of Tudor, or Francis I., or Early English, or what not. If the much abused word "style" could just be stricken from the vocabulary of every architect for a decade, the educational value of the omission to the public would be immense. We would, I think, get some real style into our work without having to break our hearts over it.

Our architecture should be "solid, proportional, according to the rules" (which means that effect should be calculated and not be accidental), "masculine and unaffected." That is how Inigo Jones put it, and "built for eternity," as Wren used to say. Our architecture should be as logical to our climate and our materials as were the flat-pitched colonaded fanes of Greece and the steep-roofed buttressed churches of England. It should be simple, natural, dignified, true to its purpose, whether cottage, house, shop, office, church or town hall;—a fruit of the glorious traditions we inherit from our fathers, with nothing of the "insolent boast" and the "slaves' nightmare" which Morris saw and fought against in the artificial art "all French and fine" which hails from the place and period most away from all our aspirations—the court of Versailles.

MR. BAKER: If I understand Prof. Nobbs correctly there was a motion to be made on the subject of Architectural Education, which he would like to have put at this period so that the motion and paper could be discussed at the same time.

MR. GEMMELL: I should like first to move a vote of thanks to Prof. Nobbs for the very scholarly and interesting paper which he has given us.

PROF. WRIGHT: I should like the privilege of seconding this motion. Personally I have appreciated very much the paper read by Prof. Nobbs in that