

But the use of such enormous quantities of gas as would be required seems indefeasible. To use gas is to use material, whereas the production of electricity, where waterpower is available, is a mere matter of the wear of a few engines. Electricity is the available means of lighting. But its possibilities are not confined to strings of lamps, and a hint may be taken from the lighting-up effect of gas.

There are details of the Buffalo illumination which show how lights placed on the retired surfaces, instead of on the projecting surfaces, show up, with delicate tones of light and half light, the places of the building. This by itself would have more in it than the pin-hole system of making out only the leading lines. It is the difference between a line elevation and a perspective in light and shade.

The search light on the tower was also suggestive. The business of the search light was to pick out the statues and fountains in the principal court and show them up against the dark sky. Its efforts were a relief to the monotony of the general illumination. It showed things up instead of concealing them, and showed them up in a striking way. Even the movements of the search light from point to point were worth following. When it was changing its point of application and feeling about for another statue, the green of the grass under its glare was of extraordinary brightness, and suggested how brilliant the scene would be if lighted up by an application of this kind of light.

What is wanted is a combination of methods. There are three that may be used: 1st, the application of diamonds (clear lamps) and pearls (clouded lamps) to the outer surface, as at Buffalo, to decorate such features as should receive particular distinction; 2nd, a general scheme of lighting up surfaces by lamps concealed or withdrawn from view, on reverse or retired planes; 3rd, the use of search lights, that is to say, of lights thrown from an external point, in order to produce pictorial effects, to key up some portions of the scene above the rest, with possibilities of moving or mingling lights and perhaps of a suspicion of colour.

Of these three methods, the designers of the Pan-American Exposition adopted, it may be safely said, that with the least possibilities. We can judge therefore, from the splendour of the Buffalo illuminations, what may yet be done.

W. A. LANGTON.

#### CANADIAN SOCIETY OF CIVIL ENGINEERS.

At the first regular meeting of the season of the Canadian Society of Civil Engineers, a discussion took place on Mr. Cecil B. Smith's paper on "The Sewage Output of Toronto," read at the last spring meeting.

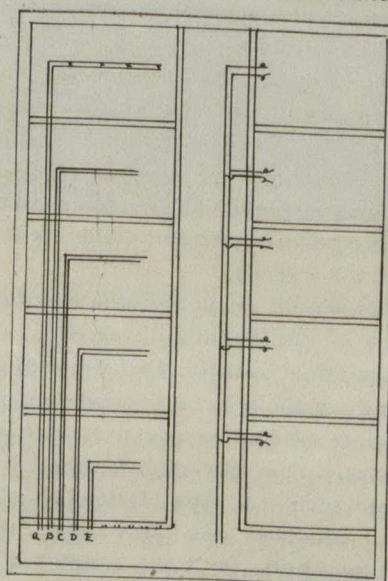
#### LECTURES ON ARCHITECTURE.

Prof. Capper has commenced the delivery of a series of lectures at McGill University upon "Architectural Styles, their Features, Mouldings and Ornament." The course is preparatory for the examinations qualifying for associateship in the Royal Institute of British Architects, the Royal Institute having announced its intention of holding such examinations at colonial centres. It is intended specially for architects in practice, and their assistants, who may be unable to attend lectures during the ordinary working hours of the university. It comprises a study in detail of the three great divisions of historical architecture, Classical, Mediaeval and Renaissance, in accordance with the programme of the Royal Institute, the lectures being illustrated by diagrams, lantern-slides, and casts. The lectures will be given in the architecture class-room, Engineering building, Monday, Tuesday and Thursday, from 5.30 to 6.30 p.m.

#### OFFICE BUILDING WIRING.

The difficulty is constantly arising in office buildings regarding meters for single offices or en suite. Architects find it difficult to foresee who will probably occupy offices in a building at the time it is wired, and it is impossible to know how to arrange the feeds for meters. If a separate feed is put in each room, some tenant comes along and may require a suite of three rooms or more, or possibly a whole flat, and then arises the difficulty of arranging so that one meter will do for all. At present wires have to be run through the walls from one room to another to accomplish this end, which necessitates a lot of unsightly wires and also damage to the building, and then it is not a job.

By referring to the cut it will solve the trouble. On the right hand side of the corridor the wires shown represent the usual method employed. It will show a feed wire running the length of corridor and a tap running into each office. On the left hand side is the



PLAN OF OFFICES

method I recommend, and which, although familiar to some, is not generally known. I have recommended it and installed it in several cases, and it gives great satisfaction.

At some convenient location on each floor, space is either found or provided to receive all the meters for all offices on the same floor, and the letters A, B, C, D and E represent the circuits radiating from this meter board, to each office. By this means any two or all offices, or in fact any combination required, is made in short order behind meter board without any defacing of walls or make-shift arrangements being resorted to. We have in some cases wired buildings and had all the meters in the building in one cupboard in basement. This is satisfactory for small building, but for large building each floor should be equipped as above.

H. F. STRICKLAND.

Toronto, October 10th, 1901.

#### NOTES.

The management of the Central Canada Fair at Ottawa have decided to purchase yearly a number of pictures from among those sent by artists to the Fair, thus in time to establish a permanent art gallery. This year five hundred dollars worth of pictures were bought. The result has been that a number of well-known artists have signified to the secretary their intention to send each year in future not less than four pictures to the collection at the Fair.