

SCHEMING CONTRACTORS.

Editor Canadian Architect and Builder

SIR,-As manufacturers of heating apparatus in Canada, we have found for some time past that a considerable difference exists between many contractors throughout the country in the figures that are given for installation of heating plant. We have frequently given the subject considerable thought and have tried to ascertain how it was that such a difference existed between tenders when the architect's specifications stated in detail exactly what quantity of surface was required, and the class of work that was to be done. During the past year in working very quietly to get at the bottom of the matter, we have found that much blame must be laid at the door of the architects, in-asmuch as they call for certain goods in their specifications, ask for the work to be done upon a certain line, and then allow the contractors to skimp the work and put in only 75 feet of radiation where 100 feet was originally specified, and the result of this is that Jones who figured on a certain job at \$1,000 is left out in the cold because Smith takes the same contract for \$750.

We have before our notice to-day a case in which a steam job has been figured on. The architect's specification was handed has been figured on. The architect's specification was handed out to the contractors A and B. A figures on the job and specifies 1724 square feet of radiating surface, and B 1256 square feet of radiating surface. Still the architect lets the contract to B who is short 468 feet of surface on a small job, and A loses the contract feeling that his friend B buys goods considerably less

than he does.

We think that it is nearly time that the architects of this Dominion should insist upon the proper quantity of heating surface being put in buildings; as there are to-day in our estimation a very great number of heating engineers who skimp their work at every opportunity. We could give volumes of reports of work of this kind that has come before our notice, but think that this may be sufficient to direct the airention of architects to the practice and bring about more equitable conditions in the heating trade.

A METHOD OF CELLAR VENTILATION.

A plan by which a cellar may be thoroughly ventilated has recently been worked out by a heating engineer in an American city. The design was made for a billiard saloon in a large cellar situated beneath a restaurant. In this scheme air is taken in through areas in the rear of the cellar, and is to be forced through galvanized iron ducts extending entirely around the bottom of the basement room under a row of chairs provided for spectators, which are ranged round the apartment.

The lower part of this duct—that is to say, that part which lies on the floor of the basement—is provided with openings that deliver the air forced in through corresponding openings through the floor into the cellar below, where, in winter, it is moderately warmed by passing it through box coils, whence it passes through distributing ducts arranged under the floor to numerous registers, arranged around the room, and opening just above the platform for chairs that entirely conceal the main duct. The plenum is obtained by the use of a blower driven by a gas engine placed in the cellar below; but this may possibly be supplanted by an electric engine when the instalment is

SHAVINGS.

New buildings to the value of \$140,000 were erected during the past year at Regina, N. W. T.

'Much regret is expressed at the failure of Mr. Samuel Swanton, who has been in business in Toronto as a contractor for a quarter of a century,

Among the new books recently added to the Toronto Public Library collection, is one by W. A. S. Benson, on "Elements of Handicraft and De-

The Manchester ship canal is to be opened for traffic on the first of the New Year, and it is said that a Nova Scotia vessel laden with lumber will be the first to pass through.

One of the oldest and most handsome houses in the city of St. John, N. B., erected on Waterloo street by the Inte Mr. Carvell in 1864, at a cost of \$45,000, was totally destroyed by fire a fortnight ago.

In a recent test case, the validity of the by-law passed by the City Council of Toronto making it compulsory on contractors for city works to pay their emyloyees a minimum wage of 15 cents per hour, was upheld.

The jubilee of the erection on John street, Toronto, of St. George's Church, was celebrated a few days ago, on which occasion there were exhibited the church seal, the original subscription book, a manuscript history of the church, and the silver trowel used by Bishop Struchan in consecrating the church on the 19th of August, 1844.

The General Hospital Board of the City of Kingston has accepted at the hands of Archbishop Cleary, a statue in memory of the Irish emigrants who clied at Kingston during the plague of 1847. The statue, which represents a life size figure of an angel, was cut in Italy from Carrara marble. The pedestal will be of Sutherland Falls marble.



THE SELECTION OF WALL PAPER.

In the selection of wall paper the first thing to be taken into consideration is, of course, the purpose for which the papered room is to be used. The selection of paper in that regard depends says *Painting and Decorating*, mainly on the taste of the buyer. But there is another consideration which does not altogether depend on taste, but has to follow certain rules and laws, and this is the amount of light which a room receives. room which receives only a moderate amount of light it will be receives only a moderate amount of light it will be necessary to paper the walls with a light wallapper, while a room which receives a strong light should be papered the reverse. The next thing to be taken into consideration is the combination of colors, when all the doors of the connecting apartments are opened. It is a main point to have such a combination of different wallappers that a whole line of converging apartments. ent wallpapers, that a whole line of rooms make a harmonious and artistic appearance. The following will make pleasing combinations: Brown-red and olive green, red and green, blue and grey or brown, violet and yellow, but poor and displeasing effects will result if such combinations are used as yellow next to green, violet next to blue, or green next to blue. The same law applies to the selection of furniture stuff, and also in currains and hangings. Harmony in form and color should not only rule in the single apartment, but the different rooms should form an artistic combination, and this can be effected even with the plainest of furnishing.

Now, it is too frequently a fact, and one which practical paper-hangers and decorators will sustain, that in many of the finest houses, where, in regard to furniture and other decorations, the greatest luxury is to be found, hardly any attention is paid to an artistic and harmonious papering and decorating of the walls. There is missing the interest and right understanding of the anere is missing the interest and right understanding of the decorative art. Therefore it is best to employ an experienced decorator and paperhanger and trust to his ability and integrity, until one is enabled through study of decorations and the decorative art to make all needed arrangements personally. It must never be forgotten that it is mainly through the decorations of the walls that the room derives its particular character, be this harmonious, enlivening, sombre or peaceful. It is through the decorations of the walls that the visitor is enabled to form an opinion as to the good or had taste of the owner.

opinion as to the good or bad taste of the owner.

WROUGHT IRON WORK.

SPEAKING of art work in wrought iron the Trefoil remarks: Wrought iron for every purpose is now becoming very popular. It is used for grilles over the door, in the vestibule, for railings and balconies, etc., and wherever found seems to carry with it a recommendation of its own appropriateness.

The dull and yet lustrous color given to iron by the Bower-Barff process is peculiarly quiet and effective, and harmonizes particularly well with both wood and stone.

That the iron is practically rustless, and does not have to be cleaned with that scrupulous and constant care that brass work requires, recommends its use the more, while the artistic merit of grilles now made speaks highly for the taste of the market that requires such work, and stand in strange contrast to the barren lack of even an attempt at any effect whatever in the cast iron models of the past.

The annual Exhibition of the Toronto Art Students' League will open on the 18th inst., and continue until the 23rd inst., in the League rooms, Imperial Bank Building. A souvenir calendar containing poems by Canadian writers and illustrated by members of the League, is to be issued as was done last year.

Mr. Sandford Fleming, C.M.G., is endeavoring to bring about the establishment of a National Gallery of Historic Pictures, and has offered to subscribe a liberal amount annually for ten years for this object, provided there is the prospect that by similar contributions the sum required can be raised within that period.

Mr. Joseph Powell, architect, of Hamilton, is being mentioned as likely to be chosen as a candidate in the approaching election in Haldimand to represent the McCarthy party.

The report of a novel incident comes to us from Ridgeway, Ont. A resident of that town, Mr. Andrew Benner, recently purchased a farm in the locality, and proceeded to make alterations and repairs in the old farm house. Instead of handing the work over to a contractor, he engaged carpenters and acted in the capacity of superintendent of works. thus engaged he discovered securely hidden away behind the plaster, two well filled canvas bags, containing some \$7,000 in gold. The existence of this large amount of money in such an unexpected place is accounted for by the fact that a former owner of the house had thus secreted his wealth with the purpose of keeping it out of the hands of a spendthrift son, and being one day suddenly stricken with appoplexy, passed away without making known the location of the money. Since then the farm is said to have passed through the hands of several owners before being purchased by Mr. Benner, the lucky discoverer of the money.