## SANITATION AND HEALTH

### THE MONTREAL PLUMBING CLASSES.

THE plumbing class in connection with the Council of Arts and Manufactures has just completed its studies for the season, and the committee appointed by the Master Plumbers' section of the Montreal Contractors' Association to examine their work and award the prizes, reports the progress made as in every way satisfactory. The Master Plumbers have given book prizes, valued at twenty-five dollars, for those who won out of twenty-four competitors. The full class comprised thirty-two members, and the winners were as follows :

Attendance—1, A. Clelland ; 2, E. H. Sharpe.
Best joint wiping—1, F. Force ; 2, H. Belanger.
Best lead working—1, W. Skead ; 2 H. Legaux.
Best lead bending—1, H. Sharpe ; 2, J. Williams.
Best fixed work—1, W. Brown ; 2, H. Hillman.
Neatness of work—1, W. Skead ; 2, J. Williams.
General proficiency—1, W. Skead ; 2, G. Wooding.
Best assortment—G. Wooding.

There were 125 samples of work shown, and the examination was oral as well as mechanical. Messrs. Bellevance, Galaneau, Peard, Briggs and J. W. Hughes were examiners, and they congratulated the teachers, Messrs. Horton and Brittan, on their success. They also show the necessity for an increase in accommodation for the class, which is expected to double its members for the next course, and urge, too, that arrangements be made for a second and a third course—the second to be lessons in mechanical and freehand drawing, and lectures on the science of the business ; the third course to be lectures, instruction in arithmetic and elements of bookkeeping, etc.

The Minister of Education for Ontario has decided that Hygiene may be one of the subjects taken at the examination for entrance to High Schools.

Analysis of natural gas shows the proportion of each constituent in 100 parts of the gas to be as follows : Carbonic acid and carbonic oxide, $\frac{6}{10}$ each ; oxygen, $\frac{8}{10}$ ; olefiant gas, 1 ; ethylic hydride, 5 ; marsh gas, 67 ; hydrogen, 22 ; nitrogen, 3.

In reporting upon the sanitary condition of the Toronto public schools, the Medical Health officer suggests that in the construction, or reconstruction, of school buildings, adequate ventilation should be supplied by means other than windows.

An investigation has been made into the sanitary condition of the city hall of Montreal. A number of leakages were found in the pipes through which sewer-gas escaped. An estimate was ordered to be made of the costs to put the place in good order, the tile sewer to be replaced by iron pipes ; a new system of water-closets and a better heating system to be put in.

Attention is called in the report of the Labor Commission recently presented to Parliament, to the defective sanitary condition of many working men's dwellings. The report recommends that the letting as a dwelling of a house in a bad sanitary condition should be forbidden by law, that frequent inspection should be made, and alterations or repairs necessary to health ordered.

The Master Carpenters Association at its annual meeting recently elected the following officers : Messrs. J. J. Withrow, president (re-elected); A. Weller, vice-president ; J. C. Scott, treasurer ; and Wm. Simpson, secretary-treasurer. Committee, Messrs. G. Moir, Wm. Clark, Wm. Forbes, R. Dinnis, and C. R. S. Dinnick. A resolution of sympathy was passed with the bereaved family of Lionel Yorke, late President of the Board of Federated Builders.

Recent experiments of English chemists are said to have shown that lead pipes are rapidly corroded by water containing quicklime or blue clay, or by water and air mixed or alternated, while sand and carbonate of lime afford considerable protection by forming an insoluble lining. The best protection of all is afforded by a mixture of limestone and sand. It is, hence, recommended that when water is circulated through lead pipes, protection from lead poisoning may be secured by allowing the water first to pass through a mixture of limestone and broken flints.

## DECORATION AND FURNITURE

### A FEW POINTS ON HOUSE PAINTING.

IN all outside work be sure the surface you are to paint is dry. If it is a new job and is to have three coats of paint, your priming should consist of two-thirds ochre and one-third lead mixed with raw oil. If you do not procure ochre ground, have it mixed up three or four days before the job is ready.* Strain this thoroughly through a wire strainer, and thin down just as thin as it will flow out and not run. But before you apply the paint see that your work is well dusted and is clean. Be sure and cover all the under edges, and spread your paint out evenly, not leaving any place untouched. When this is dry, putty up all nail holes, split places, bad joints, etc. Putty with a knife, and do not leave any surplus putty on the outside. In second coating, if you can procure a good ready-mixed paint that is composed of lead, zinc and oil, always use it in preference to your own mixture. It will stand longer without spotting or fading, and will cost you less in the end and give much better satisfaction all round. Good reliable house paints are now manufactured by several firms. Select harmonious colors, and always take in the size of the house, the architecture and surroundings. A green house among a lot of green foliage would be out of place ; it would hardly be seen. White is always objectionable save as on a schoolhouse upon the prairie—as a mark of prominence. Remember in trimming that the law of light and shade requires that sunken places and indentations should be the darkest. Follow this out as nearly as possible, and you will add beauty and artistic taste to your work. Keep your paint, your work and your tools always clean. Never put on a pot of paint that has stood open a day or so without straining. It is better to strain every pot of paint before you commence to work ; it will mix it more thoroughly. I never found a can of ready-mixed paint just opened that I could not get some skins out of. See that every part of your work is nicely and smoothly covered. I always trim cornice before painting siding. I run my siding color along edge of cornice, then trim, and then finish siding. I then have done, and no ladder or staging marks or paint spots to touch up. Be careful of your porch floors ; don't get them all spotted ; it dries, and looks bad when you come to finish up. Paint the under edges of all sash ; they will not then rot quickly.

The inside may be finished as the owner or architect may direct. If a natural-wood finish, see article on that subject. Oil the inside frames that are put into the plaster with raw oil.

When you come to painting inside, see that the work is cleaned off perfectly, and that the rooms are all free from dirt of any kind. Have one place to keep and mix your paints, and put down boards or a piece of canvas. Do not dirty up the whole house with daubs of paint. If you use tobacco, have a box or keg or other receptacle to spit in. Do not spit tobacco juice all over the house. When the work is to be painted, use zinc paints as much as possible ; they are not so poisonous as lead. Always prime as nearly the color of your finish as possible. Turpentine may be used more freely inside, but oil will look better, last better and go farther.—*House Painting and Decorating.*

* Ochre unground should never be used, as it is so coarse that the work is not only marred, but becomes a receptacle for dust and moisture and invites mildew.—Eds.

A very handsome memorial window to the late Hon. James Ferrier, will shortly be placed in the St. James St. Methodist Church, Montreal. The subject is "Christ on the way to Emmaus." The figures of Christ and disciples are marked by strength and vigor of drawing, while the drapery has a rich silken sheen secured by a new and ingenious method. The work as a whole is executed in a highly artistic manner, and is a further evidence of the ability of our native designers to meet all the requirements of the market. To Messrs. Castle & Son, of Montreal, belongs the credit of having executed this beautiful piece of work.