- QUERIES AND ANSWERS.

WILL you please if time and space will allow answer the following: Two years ago I had the supervision of a house which is built in an exposed position. The chimney to the north has always shown signs of dampness from top to bottom. The flue is used in connection with a small, woodburning hot water furnace, and is 9 in. by 9 in. inside. Flue was carefully parged inside with fime mortar. From the outside, the chimney seems to be always saturated from top to bottom, that is, of course, when the furnace is burning. An answer would oblige.

Enquirer.

Ans.—The discoloration on outside of flue is caused by the condensation of the wood smoke. The wall of flue being probably only 4½ inches thick, absorbs the dampness from the exterior atmosphere or from a driving rain, is always cold and damp in weather cold enough to need artificial heat. The smoke striking this cold brickwork, is condensed, forming the well-known inky fluid, which is often seen dripping from stove pipes when of great length. The burning of green wood would probably aggravate the trouble. A flue on an outside wall should have at least 7 inch thickness on exposed side. An absolute remedy would be to build into the flue 9 inch glazed drain pipes, if special flue pipes are not obtainable. The brickwork could be cut out from the exterior, and pipes inserted if the chimney-breast inside is of sufficient size to allow of it.

TORONTO ARCHITECTURAL SKETCH CLUB.

THE housewarming, held in the new club room on January 28th, passed off in a pleasant and satisfactory manner. The large room was filled with a congenial and enthusiastic gathering, who spent the greater part of the time in the discussion of the drawings and sketches submitted in the first club competition, the subject of which was "An Entrance to a Dwelling House." Mr. Frank Darling, the critic of the evening, filled his position in a highly satisfactory manner, his criticisms and suggestions for improvement amply repaying the competitors for their labour.

By the vote of those present, the order of merit was decided as follows: Senior section—1st, Mr. Ernest Wilby; 2nd, Mr. J. A. Radford; 3rd, Mr. Geo. W. Couton and Mr. A. H. Gregg (equal). Junior section—1st, Mr. Alf. Broadhurst; 2nd, Mr. Cecil Tredger.

The meeting held on February 11th, though having a smaller attendance, was most interesting. Mr. R. W. Gambier-Bousfield's illustrated paper on the "Different Styles of Gothic Architecture" was thoughtfully and carefully prepared, and though by no means lengthy, explained the gradual evolution of the styles in a very fucid manner. The remainder of the evening was devoted to "time sketching." The subject, "A Hall Staircase," was given out, and the members were allowed half an hour to express their ideas.

An announcement of interest to all will be that Mr. Frank Darling has very kindly consented to act as permanent "club critic." This is a position he is admirably qualified to fill, as abundant proof was given at the last club competition.

A number of excellent architectural casts have been loaned the club for sketching purposes by Messrs. Holbrook & Mollington, and will prove an attractive feature.

Mr. J. W. L. Forster, the well known artist, who has taken a very lively interest in the club since its inception, is on the programme for the last meeting of this month, and his paper should be heard by all, as it will undoubtedly be a very interesting one. It is desirable that members should bear in mind that the meetings are held on the second and fourth Tuesday of each month.

"CANADIAN ARCHITECT AND BUILDER" SERIES OF PRIZE COMPETITIONS.

REPORT ON PLUMBING ESSAY COMPETITIONS.

**HE essays received in the above competition, four in number, we beg to report as standing in the following order of

ber, we beg to report as standing in the following order of merit:

1st, "Lucidus in Ordo," placed first, is a clear, concise setting out of the reason and urgency for having such plumbing fixtures as may be necessary in one's home done in the simplest and most effectual way, and going on, shows an accurate knowledge of the practical working of the various plumbing and sanitary appliances, with a critical appreciation of the merits of the many claimants for public favor. Among the points made which are

calculated to improve local usage, we would reiterate the following: That concealing work is the cause of bad work; more extensive use of wrought iron; screw pointed pipe; inspection and testing of cast iron pipe at foundries; keeping house drain above basement floors; and that the porcelain urinals are susceptible of much improvement, as by make that would give sufficiancy of standing water with peirodc flush out.

"Aplomb and T Square" may perhaps be bracketed together as showing knowledge of the subject, but failing to treat it as

ion completely as "Lucidus in Ordo."

"Octo" has evidently an exact technical knowledge of plumbing fixtures, but treats the subject almost entirely as an analysis of these in a harrassing manner that can hardly be called essay writing. Having first stated under twenty eight heads the characteristics of the ideal water closet, he gives under numerous heads the points of the four classes of closets now in use, and leaves the conclusion which is the best to our own intelligence and attention. This synopsis occupies two-thirds of the whole. There is very little consideration of the general subject. He concludes with forty one questions about hot water boilers—"just to give an insight to the importance of a boiler." There are no answers given to the questions, which is rather tantalizing. It is to be hoped that "Octo" is open to persuasion to publish the answers to his questions; they would form a valuable paper upon the boiler.

W. A. LANGTON. JOHN GEMMELL. R. J. EDWARDS.

SERVICE PANTRY.

Of three drawings submitted, it is difficult to decide as to the first place between "Spero Meliora" and "Art." "Spero Meliora" has made the best drawing, and has the best plan by the extent of making a pass door between the kitchen and the pantry. His details also have a finish which makes the room more pleasing without giving it any unfitting pretentiousness. He has also considered the question of heating. If he had placed his radiator in the corner opposite, and moved the pass door and flap-table by so much further to the left, he would have been able to utilize the lower part of the cupboard now omitted to allow room for the radiator. There would then be more certainty in his favour as against "Art," whose merit is abundance of accommodation. On the other hand "Art" has by his copiousness of closet, rather skimped the sink room, and so detracted from the real comfort of his plan.

On the whole, considering the superiority of his drawing, we feel inclined to give the first place to "Spero Meliora."

"Lilliput" has committed the cardinal fault of having a pass door between the pantry and dining-room. His details are also rather coarse, and his plan not very clear.

W. A. LANGTON. R. G. EDWARDS. JOHN GEMMELL.

ENTRANCE AND VESTIBULE DOOR.

The competitors rank in the following order: "Circle," "Dono," "Cimarvac," "Linked Squares," "Ont."

All are alike in indicating no shelter for the door way. It may be supposed to be under a porch or other cover.

The two first are almost equally good. Preference has been given to "Circle" on account of the superiority of his detail The quantity of bracketing and projection of moulding in "Dono's" interior finish is a mistake in taste. "Circle" has not considered his plan in drawing his elevation, but this reflects more upon his accuracy than upon the design. "Cimarvac" is also good—better on the outside than on the inside, which lacks refinement.

W. A. LANGTON, R. J. EDWARDS, JOHN GEMMELL.

The names of the successful competitors in the above competitions are as follows: "Lucidus Ordo," (C. H. Acton Bohd), "Toronto; "T. Square," (H. N. Wilkinson), 24 Chomodey St., Montreal; "Spero Meliora," (Ernest Wilby) Toronto; "Art," (James Walker), Toronto; "Circle," (Thos. R. Johnson), Toronto; "Dono," (Ernest Wilby), Toronto.