

CORRESPONDENCE.

[Letters are invited for this department on subjects related to the building interests. To secure insertion, all communications must be accompanied by the name and address of the author, not necessarily for publication. The publisher will not assume responsibility for the opinions of correspondents.]

Editor CANADIAN ARCHITECT AND BUILDER.

In a recent issue of your weekly edition, the CANADIAN CONTRACT RECORD, "Data for Steam Fitters," 1st item is not correct. A gallon of water contains 276 48, and the weight 10 lbs. The gallon given in the paper is the old wine gallon and used in the States only. You had an item copied from some other paper last year in reference to the sun taking the temper out of steel tools exposed in shop windows, and I submitted it to a well known firm, makers of fine steels, and they confirmed my own opinion that it was perfect nonsense.

Yours truly,

JOHN H. BIRKETT,
Kingston, Ont.

BRICK EFFLORESCENCE.

Editor CANADIAN ARCHITECT AND BUILDER.

SIR,—We have read with much interest the article in your April issue on the above subject, which is one of considerable importance to brick manufacturers, architects, builders, and every person in any way interested in building.

We must agree with you that the effect produced by the appearance of this efflorescence on the walls of fine buildings, is very displeasing, and it is most desirable that every means should be tried for its prevention.

A variety of opinions seem to exist as to the cause of the efflorescence. So far as our knowledge goes there is no process at present in use which will entirely prevent it. Under certain circumstances it is said that a certain chemical preparation if mixed with the clay will serve to prevent its appearance, but we question if it will do all that is claimed for it.

After having been engaged for twenty-three years in the manufacture of different kinds of bricks, we find that some of the buildings erected with our material will never show efflorescence, while in the case of others, the opposite is true.

There are no bricks made in America to-day which will not effloresce under certain conditions of the atmosphere (except vitrified brick) but while we cannot altogether prevent it we should make use of such means as we have of checking it.

We would be glad to hear more on this important subject from some of your readers.

Yours truly,

THE BEANSVILLE PRESSED BRICK CO.

PERSONAL.

M. Alfred Wood, until recently a designer for Mr. David Roberts, architect, Toronto, is reported to have fallen heir to a very large estate in England.

M. B. O'Bryne, late inspector of works on the new legislative buildings at Toronto, is superintending the erection of the asylum for the insane at Brockville, Ont.

Mr. Milton Cathro, a prominent contractor of Toronto, was married on the 7th inst. to Miss Caroline Oswald. Mr. Cathro and his bride left shortly after the wedding ceremony for an extended visit to Chicago and the Northwest. We extend to them our congratulations and best wishes for a happy future.

A severe calamity has fallen upon Mr. Edward Burke, architect, Toronto, whose only son met with an accident which resulted in his death on the 6th inst. The lad, who was about twelve years of age, while riding a bicycle on one of the principal thoroughfares, came in contact with some material which projected from a wagon, and was thrown to the pavement with such violence as to cause a fracture of the skull, resulting in his death a day or two later. The deepest sympathy of many friends is being extended to Mr. Burke and his family in view of the unexpected and severe loss which they have sustained.

AN interesting experiment with shingles was tried a short time ago, says a writer in an English journal. A green 6-inch shingle, fresh from the saw was measured and weighed, care being taken to get both exact. It was found that it weighed 7 ounces. It was then dried and again weighed and measured. It had shrunk nearly $\frac{1}{2}$ inch, while the weight had decreased from 7 ounces to 3. It was then submerged in water 24 hours, and the size had not changed a particle, while the weight had increased about one ounce, demonstrating the superiority of cedar shingles over others, as when once dry they will neither shrink with excessive heat nor pry one another off the roof in wet weather.

QUESTIONS AND ANSWERS.

[Readers are invited to ask through this department for any information which they may require on lines consistent with the objects of the paper. Every effort will be made to furnish satisfactory answers to all such inquiries. Readers are requested to supply information which we will assist us in our replies. The names and addresses of correspondents must accompany their communications, but not necessarily for publication.]

W. A. F., Hamilton, writes:

Do you know of any acid or wash that will clean Ohio stone that has been built up for nearly 40 years and is very much discolored?

ANS.—We have no knowledge of any acid or wash which might be effectually used for this purpose, and enquiries made amongst quarry men and stone dealers of large experience met with the reply that the only satisfactory method of cleaning the discolored surface of stone is by re-dressing.

DESIGN IN METAL-WORK.

UNDER the auspices of the Technical Institution Committee, Mr. W. A. S. Benson recently gave an address on "Design in Metal-work" in the Mayor's parlor, at the Manchester Town Hall. Mr. Benson said the two primary conditions that the designer had to acquaint himself with were that metals were fusible, and that they were malleable. It was the combination of these two qualities that distinguished them from other materials so far as structural considerations went. The designer must not forget the nature of metal. As to its strength and tenacity, which enabled thinner sections to be used, that was a mechanical consideration. Then its lustre, so different from any glaze or resinous polish, altered the effect produced by the actual form, so that very different mouldings were required from such as looked well on terra-cotta or oak timber. The brilliant reflective power of polished metal gathered up the lights into points and rings and lines, so that nothing but habitual observation and experience enabled one to forecast the effect of any given form. Nor should it ever be forgotten that when the nature of the work was such that a polished surface could be maintained in high perfection, no beauty or profusion of ornament could compensate for the loss of the mirrorlike beauty of the material itself. The beautiful art of embossing deserved more than mere mention, and that none the less because the very perfection of our technique has gone far to destroy its artistic value. There was perhaps no decorative process which so directly responded to the taste of the craftsmen, which demanded so accurate a feeling for line, for surface and for relief, soft and flowing and yet precise. It was lamentable to see how a piece of genuine Queen Anne or early Georgian silver stood out from the productions of the modern smith, though they in turn were surpassed by many older works. There was no good reason why we should not produce such work again. It only wanted brains and goodwill in the purchaser and the producer. Of course there were some arts which had had their day. We no longer required Damascened sword-blades or etched-steel cuirasses, but we actually did produce, and some paid for, embossed wares by the hundredweight, and it seemed a pity it should not be good. Three elements went to design. First, the physical properties of the material; secondly, there was the tradition or history of man's mastery of it, and thirdly, the need which the product had to serve. The good designer got these three things thoroughly engrained in his mind, and the result was that his work looked as if it had grown. The road to artistic wisdom lay in external nature rather than in authority and tradition. The endless variety of beautiful lines, colors and contours to be found in the growth of vegetation, in animal forms and in the sweep of sea and land and heaven above and around us must ever remain the standards of beauty for man, and in the loving observation of these would be found the ultimate education for that seeing eye which was the final court of appeal in matters of taste.

A GOOD RED DIP.—One of the best red dips known consists of the following:—6 lbs. of red oxide of iron, 3 lbs. of Cornwall stone, $\frac{1}{2}$ lbs. of borax, $\frac{1}{2}$ lb. of barytes. Lynn sand can be used in the place of barytes, and scarlet red in the place of oxide of iron. In preparing the above, mix them well together, then calcine them in a pot or saggar. They can then be ground together into a slip. Take one quart of stain to ten of the clay slip, varying it according to the strength of the clay, to bring up the bright red. For large articles, paint the stain on with a brush when they are black hard.