Were we to look closely into the matter, we might find that it is this lack of ethics for the guidance of the employed engineer, that is keeping a large number from becoming members of the society. There is nothing so degrading and disgusting to an engineer when he is applying for a position where the usual request is made, "State salary expected," as to feel that he cannot consider what is a fair value for his services but must consider chiefly as his guide in answering the question, the lowest figure that some other engineer will offer his services for.

Mr. Goldman says that one of the main objects of the "Canadian Association of Engineers" is to raise the standard of ethics among the engineers in Canada. The writer takes it that he means both the consulting and employed engineers, and were it to do that alone, it would be worthy the support of all engineers. But why not go a step further and endeavor to form some rules that would assist in answering the salary question as mentioned above; some rule that would be a sort of general standard to measure the value of an engineer's services? For instance, take the position of a city engineer. Is it not possible to base, in a general way, a standard of remuneration by (a) the population; (b) the difficulties attending sewage disposal; (c) the difficulties of obtaining a pure and adequate water supply; etc.; or may there not be other and better ways that discussion would bring to light? Of course, the question of over-supply will be a great factor with many in deciding the remuneration to be given an engineer in return for his services, and this is a subject that will have to be considered very seriously in the near future.

How would it do for our colleges to publish a syllabus containing a comparative remuneration table, as follows:

Civil engineer—Transitman, \$75 to \$90; resident engineer, \$100 to \$125; division engineer, \$150 monthly.

Locomotive engineer-\$140 to \$175 monthly.

Railway conductor-\$130 to \$175 monthly.

Brakeman—\$125 to \$140 monthly.

Boss carpenter—\$180 monthly.

Boss mason—\$180 to \$225 monthly.

Such a table might not be a pleasing embellishment to a college syllabus, but it would present the naked truth.

WM. CROSS, M.Can.Soc.C.E.

Toronto, Ont., May 14th, 1918.

## Armor Plates in Concrete Road Joints

Sir,—While reading the various interesting articles in your issue of May 2nd, my attention was drawn to an article describing a series of recommendations decided upon by a committee appointed by the American Society of Civil Engineers.

This committee was, I notice, appointed some years ago to consider the whole question of road construction, and in your article we have their findings.

The paragraph referring to armor plates at expansion. joints is the one point to which I take strong exception, and I would like to ask those gentlemen if they ever compared an armored joint with an unarmored one a few years after the work had been executed.

For the purpose of shedding light on the two methods of constructing an expansion joint, I am enclosing two photographs. Both these pavements were constructed in 1913, and are samples of numerous instances illustrative of both methods.

From my viewpoint, when forming an expansion joint, it is desirable to have and retain a perfect arris on both sides of the jointing material, and my experience leads me to the conclusion that this is impossible unless you have some form of plate.

There are, of course, plates and plates; but I submit that if the members of the committee had tried an armor plate properly designed and made from dead mild steel, they would, I venture to think, have returned quite a dif-



Unprotected Expansion Joint. Note Reinforcement Showing Through the Broken Concrete Expansion Joint Protected by Truscon Armor Plate

ferent finding. The photographs sent herewith are not by any means solitary examples. They can be found right here where the writer is located; both armored and unarmored joints may be seen, and a very slight study of the results ought to convince any engineer that it is economy to use armor plates.

A. J. RIDDELL, A.M.Can.Soc.C.E. Walkerville, Ont., May 15th, 1918.

## "Canadian Association of Engineers"

Sir,—Will you kindly allow me space in your valuable paper to place before the engineers of this country the aims and objects of the "Canadian Association of Engineers," so far as the writer understands them. This association has been forced into existence by conditions as they have been in the past and are at present, and intends to carry on a progressive movement to meet conditions in the future as they arise, to the best interests of the engineer.

To remedy the present conditions in the engineering profession in such a manner that the effect will be to give the proper status to the engineer and place him on that plane to which he rightly and justly belongs, and gain for him the respect to which he is entitled and which obtains in the other professions, will require drastic measures.