they intended to abolish the chemical system altogether when the land was all in working order.

If the International system, after years of trial, was such a grand success, why had not the Leicester corporation adopted the scheme in its entirety. The International Company, on page three of their pamphlet, speak strongly against using lime as a precipitant; but the Leicester people use eight grains of lime to six of ferrozone, and by this time will have given up using ferrozone altogether.

One reason why some surveyors and engineers, in England, criticize the International Co.'s sewage system, is because of the high cost of management and plant. Then it is generally understood, in fact the letter they have written for your publication shows, that they use the American methods of securing orders, and cracking up their business. To further prove this statement, I have a communication from Messrs. Duncan & Pickard, engineers, 89 Albion street., Leeds, England, informing me that in November, 1893, the International Company issued a circular, stating on the authority of W. Naylor, the Sewage Inspector to the Ribbe joint committee, that the Carbonizer Refuse Filter System of cleaning sewage only effected the removal of one per cent. of the organic matter, albuminoid ammonia, and that when they wrote to Mr. Naylor calling his attention to the erroneous statement, Mr. Naylor tested the effluent from the same works of the rival company, viz., the Carbonized Reuse System of sewage purification promoted by their clients. and found that there was removed from the sewage by that process over 621/2 per cent. of albuminoid ammonia This statement needs no comment. With reference to expert testimony, I will ask your readers to again look at the third paragraph of my article, page 326 of your March number. There is abundant proof that if a firm be rich enough they can secure plenty of favorable expert evidences. It may at present also be sufficient to show one proof.

On page 117, in the Surveyor, dated January 29th, 1887, printed in London. England, your readers can find that Dr. Riddle states that forty-five per cent, of albuminoid ammonia is removed by the new process lately introduced of cleaning sewage by allowing it to stand for a time in a dark tank. This is called the Septic System. Another noted expert named Dr. Voelcker, states that the effluent from the septic tanks is worse than the inflowing sewage, and that nothing whatever is removed by this process. Query-which of the two experts is speaking the truth?

I could give a large amount of information which I have received from England and Ireland referring to the International Purification Co., but it will be unfair to trespass on your space, and will conclude by drawing your attention to the fact that in none of the three articles on the subject which you so kindly put in your paper have I in any way mentioned the International Company's name; had I done so it would have acted as a free advertisement. Therefore I cannot see any cause for complaint against the paragraph mentioned.

W. M. WATSON,
Dundas street, Toronto.

## LITERARY NOTES

The published Charter, By-Laws and List of Members of the Canadian Society of Civil Engineers for 1897, forms a little book worthy of the importance of that society. The society was established in 1887, and incorporated by Dominion Act in the same year. The statement of membership for the present stands as follows:

Honorary members	8
Members	71
Associate members	45
Associetes	47
Studer s	21
Total 5	87

The officers of the society consist of a president, three vice-presidents, a treasurer, secretary, librarian, the past presidents, styled honorary councillors, and 15 councillors. The objects of the society are to facilitate the acquirement and interchange of professional knowledge among its members, and to encourage original investigation. In addition to this, there is evident a great desire to inspire a proper sense of the responsibility, and the code of thics is admirably adapted to that purpose. It enjoins on every member the duty to perform the work he undertakes to the best of his ability, and in the true spirit of his engagement, feeling it his duty to present all ascertained facts in their true light. He must also loyally obey and support his chief. His reports must be full and explicit on all important points, and exact to the best of his know-

ledge, cloaking nothing, even though likely to show that previous reports have been inaccurate. He is also to avoid connecting himself with schemes of a merely speculative character, bearing in mind that his professional reputation will be judged largely by the inherent merits of the undertakings with which his name may be connected. The meetings of the society are now being well attended, the papers read before it are of a highly instructive and scholarly character, the library is growing beyond its allotted space, and since there is a respectable building fund, the society may ere long be housed in handsome premises, with provision for the growth which may be predicted for so earnest and important an organization.

A first prize of \$500 and a number of smaller prizes have been offered by The Century Co., publishers of The Century Dictionary and Cyclopedia, for the best answers to a hundred and fifty questions covering a broad range of information. A sample question, which is easier than some of them, is as follows. "What is the approximate difference in altitude between the loftiest Alpine summit and the bed of the greatest depression in the Mediterranean basin?" An additional prize of \$500 is offered to any one who can answer 90 per cent. of the questions from any ten pub ished works of reference other than The Century Dictionary and Cyclopedia

We have just received the 1897 edition of the Indian and Eastern Engineer Diary, which is issued gratis to subscribers from 137 Canning St. Calcutta, and 28 Victoria St., London, S.W. It is a substantial quarto volume containing all the internal evidence of a successful publication, interleaved and substantially bound. The information it contains is that which is most frequently required by engineers and the various trades allied to engineering. It includes the Christian, Bengalee, Fuslee and Mohammedan calendars. Indian railway, hotel, bank and club directory, the customs tariffs of Ceylon, China, Corea, England, Japan and Netherland India, English and metric weights and measures. Indian steamship lines, postal information, patent stamp fees and a wealth of technical data for professions and trades.

Walter G. Berg, of the engineering staff of the Lehigh Valley Railway, made an interesting speech before the New York Railroad Club during the discussion on G B. Leighton's paper on "The Profession of the Railway and a suggested Course of Training therefor."

The Colliery Engineer Co., Scranton, Pa., proprietors of The International Correspondence Schools, announce that commencing with the February issue the name of the journal, Home Study, which they publish, will be changed to Home Study Magazine; the page will be reduced to magazine size, but the number of pages will be doubled.

## Mining Matters.

THE gasoline engine is now operating the hoist at the R. E. Lee mine at Sandon, B.C.

THE Anglo Canadian Asbestos Co. has commenced to work its chrome pits at Black Lake.

THE Thetford, Que., asbestos mines are said to possess the largest deposit of that mineral yet discovered.

The discovery of a bed of sand which assays nearly \$500 per tonin gold, is reported from the Parry Soun I district.

A. Dick, M.E., has recently inspected and surveyed the Rawdon gold areas owned by C. H. Dimock, Windsor, N.S.

DR W. T. STUART Toronto, is interesting himself in the introduction of the Beams process of reducing the refractory ores of Hastings county. Ont.

CONSIDERABLE excitement was caused at Selkirk, Man., over some splendid samples of asbestos that were brought in from Lake Winnipeg by gold prospectors.

The lithographic stone from W. H. Casement's quarries, near Lakefield, Ont., is said to be of a good quality, and recent tests pronounce it almost equal to European.

PREPARATIONS are being made for the construction of a 50stamp reduction mill at the Dick and Bannim Water Power, Keewatin, and work will be commenced at once.

THE Joggins mine is now producing daily about 320 tons of coal, mined in such a way as to give perfect satisfaction to a" consumers. Manager Archibald is putting in new boilers.—Amherst