

garded as an endorsement of merit and a recognition of the author.

"In subdivision 'Admission, Transfer and Expulsion of Members', a clause is introduced to agree with the law in the province of Quebec, and slight changes are made in wording which are considered an improvement on the present by-laws.

"In subdivision 'Fees', no change is proposed except in the clause 'Arrears', which has been drafted to conform to that of the American Society of Civil Engineers with slight modifications.

"In subdivision 'Meetings', an important and, your committee believe, a most promising innovation is made. It is proposed that the annual meeting shall be considered as the general business meeting of the society, but general professional meetings of the society are to be arranged for in various districts, conducted by the members resident in those districts. Such meetings will provide a means of presenting papers before the society as a whole and, it is anticipated, of encouraging our membership to meet, visit works, improve their acquaintance and in general increase their interest in the society. Such meetings would also have the effect of bringing the society more before the public and should assist in increasing the knowledge which the public at large possesses of the work of this society. Your committee feels that, on account of the great extent of Canada, meetings could be advantageously held which would not be restricted in any way to the local membership, as they would be open to the membership at large but would be conducted by its local officers, assisted by the secretary of the society so as to ensure their success.

"In subdivision 'Branches' and 'Provincial Divisions', the by-laws referring to branches and provincial divisions must be considered together, as they include important changes in the constitution. This committee has endeavored to define an organization which will meet the following requirements:

"1.—The society should be equally desirable and valuable to engineers belonging to any branch of the profession.

"2.—Without discussing the question of whether the society would best promote the interests of its members by working for an open or a closed profession, a discussion which the committee recommends should not enter into the consideration of the proposed by-laws, the society should afford a means through which its members may represent the engineering profession either locally by a branch or provincially by a provincial division. The committee considers that the important factor in the development of the society is the branch, and the by-laws are drafted on the assumption that a Montreal branch will be formed and that headquarters meetings of the society will be abolished, although the premises will be available for the annual meeting of the society, any general professional meetings of the society which may be held in Montreal and for the meetings of the Montreal branch.

"No rebate of fees is made to the Montreal branch, nor is any change made in the fees of the resident membership, so that the present financial arrangements are in no way disturbed.

"The sections which previously existed at headquarters are abolished, and in their place the branches may organize sections within themselves wherever such sections can be advantageously established to afford engineers belonging to any branch of the profession an opportunity to meet together and discuss papers or exchange views on subjects they are particularly interested

in. The sections may vary in size or enterprise, but to ensure all engineers feeling that their branch of the profession is regarded in the same light as any other, the sections in any branch should be placed on an equality with respect to their organization.

"Apart from the organization of the sections in the branches, these by-laws recognize no difference between engineers, whether mechanical, civil, electrical or belonging to any other branch of the profession. They are all engineers. If elected to office, they are all representative of the engineering profession and not of any branch of it. It is considered that this argument will increase the opportunity for local development. A branch is in position to attract engineers of every kind and afford them an opportunity to meet together with other engineers engaged in the same line of work.

"Apart from their professional meetings, all engineers are on the same footing in the branch and the branch is thus in a position to represent the engineering profession as a whole, and the branches and engineers resident in a province can, through the formation of a provincial division, represent the engineers in their province as a whole.

"The rebate for the branches has been made twenty per cent., as upon investigation this was found to be sufficient.

"In subdivision 'Nomination and Election of Officers', the present geographical districts have been revised and rearranged and called 'electoral districts', as they only exist for the nomination and election of officers. The by-laws are so arranged that the councillors are only elected by the votes in their own electoral districts, although they are nominated by the nominating committee as a whole, which should tend to bring forward the best class of men for the office. Several other modifications in the by-laws, which were considered desirable, have been included.

"In subdivision 'Amendments', a new clause is presented which it is thought will be satisfactory. It provides an opportunity for any amendment to be accepted in the form desired by the proposers, yet prevents amendments being modified in a haphazard way at the annual meeting. This clause is the result of a great deal of study on the part of the committee, and they believe it is worthy of a careful trial.

"In conclusion, the committee earnestly suggest that if these by-laws are approved of by the council, the corporate members be requested not to object to them as a whole on account of any particular clause which may be objected to by any individual member, but that if as a whole they are considered desirable, the corporate membership be requested to adopt them and subsequently introduce amendments to modify any particular clause which they consider should be modified or improved upon."

A successful method of raising sunken vessels was witnessed at Havana recently, when the sixty-ton two-masted barge "Regla" was brought to the surface. Four specially constructed tanks, divided into two sections, one section containing acid and the other water, were attached to the hull by divers. When all was ready a valve in each of the tanks was opened by means of lines, allowing the water in one section to mix with the acid in the other. The gases thus formed expelled the water converting the tanks into buoys, the lifting power of which was sufficient to bring the craft to the surface and maintain it there. Although only a few feet of one of the masts was visible above the water, the moment the valves were opened the barge began to rise, and within a minute it was floating erect.