

removal of dust from buffing and grinding wheels. Here a Sturtevant exhaust fan, with a special form of Sturtevant hood enclosing the wheels, insures the withdrawal of all of the dust and fine chips. This system maintains a perfectly clear atmosphere within the room, separates the chips from the dust, and prevents the discharge to the outer atmosphere of dust-laden air, with the attendant disagreeable results.



CANADIAN SOCIETY OF CIVIL ENGINEERS.

The sessions of the Canadian Society of Civil Engineers have closed for the season, which has been very successful as to attendance and the quality of the papers read.

On the unanimous recommendation of the council His Excellency Earl Grey has been elected an honorary member of the society.

By an arrangement between the society and the Canadian Mining Institute the institute has had its library and headquarters moved to the society's building in Dorchester Street, Montreal.

The following new members have been elected since the publication of the last list:

Associate Members.

John Bray Cochrane, of Kingston; V. Hector Dupont, of Montreal; Edwin Stanton Fraser, of Bristol, Tenn.; John Ernest Hardman, of Montreal; John Lyle Harrington, of Montreal; Francis Toy Peacock, of Montreal; Francis Ferguson Busted, of Winnipeg, Man.; John Preston Forde, of Revelstoke, B.C.

Associate Members.

David Williams Burpee, of Fredericton, N.B.; Lorne McDougall Cairnie, of Montreal; Erasmus C. H. Dowson, of Montreal; Alan Travers Fraser, of Pembroke; Arthur John Gayfer, of Winnipeg; Richard Alexander Harry, of Parry Harbor, Ont.; Joseph Paul Leclaire, of Montreal; Mather Byles Almon, Jr., of Kingston, Ont.; James Edward Beatty, of Sarnia, Ont.; Richard M. Charlton, of Montreal; Craven Garnett, of Quebec, P.Q.; St. George James Harvey, of Montreal; James Valence Nimmo, of Paspebiac, P.Q.; Edward Horace Pierce, of Ottawa, Ont.

Transferred from the Class of Associate Member to the Associate Member.

William Duval Baillairge, of Quebec; Walter William Colpitts, of Moncton, N.B.; Thomas Robert Henderson, of Capetown, S.A.; Newton James Ker, of Ottawa; Edmond Antoine Hebert, of Oaxaca, Mexico; Joseph O. A. Laforest, of Levis, P.Q.; Henry Robertson Lordly, of Montreal; Charles Nicholas Monsarrat, of Montreal; Phillips Bathurst Motley, of Montreal; Darcy Weatherbee, of Halifax, N.S.

Transferred from the Class of Student to the Class of Associate Member.

Hugo B. R. Craig, of Kingston, Ont.; Harrie Miles Dibblee, of Victoria Harbor, Ont.; Garnet Burk Hughes, of Parry Sound, Ont.; John Herbert Jackson, of Niagara Falls, Ont.; Yorke de la Cour Kirton, of Durban, Natal, South Africa; Richard Herbert Squire, of Brantford, Ont.; Archibald Sinclair Cook, of St. Catharines, Ont.; William Alexander Duff, of Walkerville, Ont.; John Taylor Farmer, of Montreal; Henry John A. Haffner, of Calgary, Alta.; Henry P. Rust, of Niagara Falls, Ont.

Students.

Frederick William Anderson, of Montreal; Winthrop Pickard Bell, of Montreal; William Godfrey Banks Brown, of Montreal; Archibald Burnett, of Montreal; Ernest Edward Clawson, of Montreal; Lionel Heber Cole, of Montreal; George Edwards Cole, of Montreal; Reginald Percival Cowan, of Montreal; Patrick Davis, of Montreal; John Goodall Dickenson, of New York; Frank George Dunning, of Montreal; Sydney Edward Farley, of Hull, P.Q.; Harry L. Forbes, of Montreal; Paul Roderick Gransaul, of Mont-

real; Alfred McLean Hamilton, of Montreal; Arthur Elphinstone Hepburn, of Vancouver, B.C.; Laurence Bradley Kingston, of Montreal; Hugh Allan Lumsden, of Montreal; George Eric McCuaig, of Montreal; Clarence Hobart McDougall, of Montreal; George McDonald, of Moose Jaw, Assa.; Albert McMeekin, of Montreal; Thomas Cottrell Mahon, of Calgary, N.W.T.; Edward Newcombe Martin, of Montreal; Wilfred Rowland Motley, of Moose Jaw, Assa.; Jaspar H. H. Nicolls, of Montreal; John F. W. Owen, of Charlottetown, P.E.I.; Norman F. Pedley, of Montreal; John Garnet Reid, of Winnipeg, Man.; Hope Erskine Scott, of Quebec; Joseph Wilfred Simard, of Montreal; Osmond M. Stitt, of Montreal; Roy Alexander Weagant, of Montreal; Francis Graham Wickware, of Montreal; Charles D. G. Booth, of Toronto; Albert Victor Chase, of Toronto; William Robert Devenish, of White River, Ont.; Sylvio Antoine DesMeules, of Murray Bay; George W. F. Evans, of Quebec; Edward Oliver Fuce, of Galt, Ont.; Edward S. Holloway, of Montreal; Louis E. H. Lippe, of Joliette; Stuart Stanley McDiarmid, of Ottawa; Arthur Kempston MacCarthy, of Montreal; William Wallace McGregor, of Toronto; Gilbert G. Murdoch, of St. John, N.B.; Edmund Neville Ridley, of Belleville, Ont.; Norman Douglas Wilson, of Toronto, Ont.; Frank Scott Winsor, of Montreal.



THE GOVERNMENT TELEPHONE ENQUIRY.

Summary of Evidence.

Since its first meeting on March 20th, there have been almost daily sittings of the Select Committee appointed to enquire into the various telephone systems in operation in Canada and elsewhere. The committee, as has been noted before, is composed of Sir William Mulock (chairman); Mr. Boyce, Mr. Burrows, Mr. Demers, (St. Johns and Iberville); Mr. Grant, Mr. Johnston, (Capt Breton, South); Mr. McLean (York); Mr. Monk, Mr. Roche, (Marquette); Mr. Smith, (Nanaimo), and Mr. Zimmerman.

In outlining the work of the committee, the chairman, Sir William Mulock, stated that information would be presented concerning existing legislation relative to telephones, whether passed by the Dominion Parliament or Provincial Legislatures, also laws of Great Britain and the United States, Australia, and other countries. Grievances there are in thickly settled districts, where companies are now operating, and the operations of these companies will be investigated, but there is also the condition of the rural communities to be considered. The committee will investigate the question whether it is possible to devise a system whereby the people in the sparsely settled districts may have telephone service, not necessarily long distance, but at least local. Sir William submitted for criticism a plan by which telephones should be established for the residents of a municipality by the municipality itself. This he considered more practicable than an attempt to conduct a telephone service throughout the country under the direct management of the Government. Mr. McLean suggested that the telephone system should be centred in the local post office.

F. Dagger, of Toronto, was the first witness called. His evidence showed that the telephone service in Canada is unsatisfactory, principally from the following causes: (1) High rates in large cities; (2) Disproportionately high rates in cities of from 25,000 to 60,000 inhabitants; (3) High long-distance rates; (4) Lack of rural communication. Existing telephone rates were given and shown to be excessive by comparison with records in other countries, notably the United States, Sweden, Denmark, Norway, Switzerland, the State of Guernsey and the municipality of Glasgow. Competition in the United States was shown to be very effective in reducing rates. It was pointed out, however, that the independent companies in the United States are now combining, and there is prospect of the formation of a trust in which stock would be watered and rates increased, with the possibility of the monopoly reverting to the Bell interests. The effect of competition in Great Britain had resulted in the recommendation of the special Parliamentary Committee that licenses should be granted to municipalities desiring to operate telephone systems, with a view of reducing rates by the competition, but that no further