the flame of combustion, over your fire bed the flame of incandescent gas, and no combustion can take place at this point because there is no oxygen and also because carbon dioxide is present. Carbon dioxide will extinguish fire, and you cannot support combustion in the absence of oxygen. If this carbon dioxide can be eliminated, and a supply of oxygen supplied, then this smoke can be burned, and a great saving of fuel, as has been said before, will be the result. Then to burn coal to the best advantage, it is necessary to bring it in contact with two supplies of oxygen, and these must be distributed properly over the fire bed. The point is this, adjust your plans so that you bring heat and air together to consume the gas as it is liberated, and then bring another supply to burn your coke. The conclusion is, that to burn soft or hard coal, burn it from the top, with a top draft, and in this way you can retain it and transmit it to the point where it is to be utilized. At the conclusion of the address the thanks of the meeting were extended to Mr. Chantler.

A writer about town, in The Hamilton Times, remarks: "I don't know George Chantler, but I judge he is a man who does his own thinking. The Stationary Engineers show a good example to other tradesmen."

THE FAILURE OF THE CHAMBLY DAM.

Editor Canadian Engineer:

Sir,—Your photographs and article under the above caption again fully bear me out in my theory, as stated before the Canadian Society of Civil Engineers, published in the society's yearly bulletin, reproduced in your columns, re-echoed in the New York Engineering Record, and again reproduced in an important engineering periodical of London, England, that the weight of a dam, in case of its not being in other respects so tied to its site as to preclude any danger of its being pushed out of position by the pressure or weight of water against it, should be twice that equivalent, not only to the water impounded, but to the total depth of water, inclusive of height or depth of possible overflow. The Bouzey dam in France was carried away bodily, so was that at Austin in the United States, and I now have your photographs and statement to show that so was the dam at Chambly, and for the same reason—want of weight to counteract that against it.

C. BAILLAIRGE.

MINING CONVENTION AT TORONTO.

A convention of mine owners, prospectors, and others interested in mining in Ontario, was held at Toronto, Feb. 17th and 18th. It met in response to a call by W. J. Elliott, acting on behalf of the Mining Exchange, in the hope expressed by some of his clients that proposals would be made to the Ontario Government which would result in legislation to benefit the mining industries of the province. About forty persons were present. James Conmee, M.P.P., was appointed chairman.

As a result of their deliberations, resolutions were adopted: (1) In favor of the removal of the coal duty. (2) In favor of the division of the province into mining divisions, with officers to take charge of each. (3) Declaring for the establishment of a Department of Mines with a responsible Minister at its head. (4) Urging the Dominion and Provincial Governments to provide sufficient transportation to the mining regions. (5) That the Commissioner of Crown Lands should be empowered to sell at a fair value to the discoverer of valuable minerals the pine timber on the location, provided it has not already been sold.

Some opposition was manifested, and during the convention, B. T. A. Bell, secretary of the Canadian Mining Institute, of Ottawa, Major Leckie, of Sudbury, and Eugene Coste, of Toronto, withdrew.

After the convention a committee waited upon the Government in Toronto and presented the resolutions. Hon. G. W. Ross promised to give them careful consideration in those respects in which the matters referred to came within provincial jurisdiction.

COL. HENRY G. PROUT.

Col. Henry G. Prout, who was formerly editor-in-chief of the Railroad Gazette, one of the leading technical journals in the United States, has been appointed First Vice-President and General Manager of the Union Switch and Signal Co., one of the numerous industries in which the Westinghouse Co. is interested. Col. Prout was through the civil war, graduated in civil engineering at the University of Michigan, worked on various railway surveys and construction, was Major of Engineers in the service of the Khedive of Egypt, was signal engineer in the company out of which the Union Switch & Signal Co., grew, and is a good writer, speaker and lecturer.

BOOKS RECEIVED.

The Universal Electrical Directory (J. A. Berly's), for 1903, containing a complete record of all industries connected with electricity and magnetism and the names and addresses of manufacturers all over the world, 22nd year of publication. London, H. Alabaster, Gatehouse & Co., 4 Ludgate Hill. Price 10s., Colonies 12s. This most useful reference book has now reached large proportions. It is a very necessary adjunct to every office having to do with electrical matters.

Continuous Power the Natural result of Converting Heat into work in an Insulated Expansion Engine at Temperature below the normal of the Atmosphere. By J. F. Place, New York, Standard Power Co., 257 Broadway.

General Review of Mining in British Columbia. The Undeveloped Areas of the Great Interior of British Columbia. These are two bulletins of the British Columbia Bureau of Provincial Information and contain much that is interesting to know about that province.

American Railway Engineering and Maintenance-of-Way Association, Bulletin No. 31, containing committee reports on Yards and Terminals and on Wooden Bridges and Trestles. These bulletins will be of much interest to railway men. L. C. Fritch, of 1,562 Monadnock Block, Chicago, is secretary of the Association.

STEAMBOAT ENGINEERS FOR THIS YEAR.

The following engineers have been appointed to the vessels named for the season of 1903:

Deseronto Navigation Company.—Steamer Resolute; John Harrison; assistant, Michael Toppings. Reliance, John Toppings; assistant, John Jamieson. Ella Ross, M. J. McFall. Deseronto, Stanley LeRue. Rescue, Owen Flood; assistant, George Toppings. Armenia, Peter Davis. Nile, Thos. Timlin. Ranger, William Stanhope.

Thousand Island Steamboat Co.—New York, Jas. Noble, second engineer. St. Lawrence, John Dickson; Barney Farrell, assistant. New Island Wanderer, Nicholas Larson, chief. Ramona, O. S. Woodhull, chief. America, James Gillie, chief; Wm. Hartley, assistant. Pierrepont, William Kelly, chief.

Canadian Lake & Ocean Navigation Co., Turret Line.—Turrett Cape, W. H. Dunham, chief; W. Robinson, assistant. Turret Court, Chas. McSorley, chief; A. Kennedy, assistant.