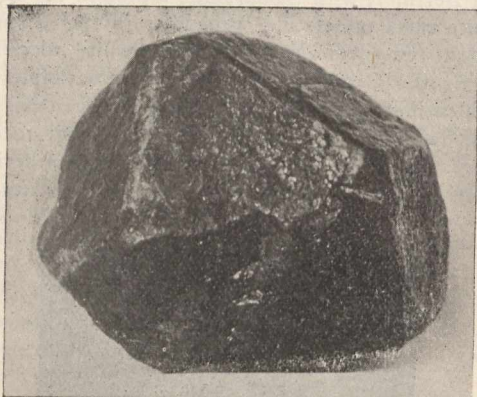


a small amount of mica; it proved to be a non-coking, bituminous coal, yielding considerable gas, which burned with a bright yellow flame.

Volatile matter (including volatile combustible matter and a small quantity of moisture).....	40.185%
Fixed carbon .....	52.59%
Ash .....	7.225%



Crystal of Uranium Ore—Actual Size.

"The ash itself was analyzed, and found to contain 2.56 per cent. of Uranium, based on the coal, which is equal to 35.43 per cent. of Uranium in the ash itself. It is important to note that the color of the ash was olive green, being due to the presence of oxide of Uranium. In another test the coal was not burnt, but was merely finely pulverized, and the powdered coal treated with boiling nitric acid to dissolve the Uranium compounds. It is then interesting to note that the Uranium may be extracted by the direct treatment of the coal with nitric acid."

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## LIGHT, HEAT, POWER, ETC.

Dundas, Ont., is discussing the question of acquiring the gas works.

The I.C.R. is erecting electric plants at Mulgrave and Point Tupper.

Sudbury, Ont., will have electric power in June. It will bring 3,000 h.p. from the Vermilion river, eleven miles distant.

The citizens of Kingston, Ont., on March 21st passed the by-law authorizing the city to take over on April 1st the light, heat and power company at the arbitration award of \$170,373.

Owing to the defective lighting at Stratford, Ont., the city council will employ an expert to examine the gas and electric lighting plants. Cancellation of the company's franchise is talked of.

A branch company of the Victoria Manufacturing Co., Auburn, Me., has been formed comprising: J. H. Whitman, Port Dufferin, N.S.; Mr. Howland, Boston, Mass.; and C. W. Waldron, Auburn, Me., to establish a factory for making acetylene gas generators at St. John, N.B.

The by-law to purchase the plants of the Gas and Electric Light Co., Sherbrooke, Que., for \$233,000 has been defeated by reason of the fact that the aggregate value of property owned by the minority who voted against the purchase was greater than the majority who favored it.

The Stayner Electric Light and Power Co. has been incorporated to develop the water power on the Nottawasaga river, five miles from the town, to transmit light and power to Stayner and other municipalities. The provincial directors are: Messrs. Jos. Knox, M. Gartlan, S. L. Deylin, W. A. Doner and D. G. Bell.

The Collingwood Light, Heat and Power Co., Ltd., Collingwood, Ont., has been incorporated, with \$200,000 capital, to operate the gas lighting franchise granted to E. D. Morris last year. The contracts have been let for a carburetted water gas plant, to be in operation by October 1st. The provisional directors are: W. G. Parsons, W. Postlethwaite and A. D. Crooks, of Toronto.

The Brome Lake Electric and Power Co., Waterloo, Que., contemplate installing an auxiliary steam plant to provide against a shortage of water power.

The first annual report of the Trinidad Electric Company, the third electric plant built by Canadians in the West Indies, just issued, shows gross earnings, \$176,631; operating expenses, \$75,446; bond interest (on \$720,000), \$36,000, leaving net earnings, \$65,186. A quarterly dividend at 5 per cent. per annum on the capital (\$1,032,000) was paid in January, leaving \$55,921 surplus. As construction is not yet completed, this showing is most satisfactory.

On its transmission line from Niagara Falls to Toronto the Electrical Development Co. will use steel towers, 8 or 10 feet square at the base and from 40 to 45 feet high, instead of poles, between Niagara Falls and Toronto. They will be 400 feet apart. The company will commence with four transmission lines of a normal capacity of 40,000 horse-power in all, and an overload capacity of 50,000 horse-power.

Professor R. B. Owens, lecturing before the Insurance Institute of Montreal recently on "Interior Electric Wiring," stated there were three primary considerations to be observed: First, the conductor must be of ample current carrying capacity in order to avoid overheating with consequent danger of fire; second, it must be so insulated as to render it harmless and prevent leakage; third, the best current regulating and pressure limiting devices should be installed. The speaker stated that interior electric wiring had, as far as he could judge, been as much neglected as any other thing of like interest. He knew a few buildings and places in Montreal that were properly wired, but he thought that he could count them on the fingers of both hands.

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## PLUMB BOBS.

F. W. Salmon, C.E., Burlington, Iowa, gives readers of the Canadian Engineer a useful caution about the material in plumb bobs. He says: They may be made of cast brass or bronze or of bar brass, but should not in any case be made of cast iron because at the present time electricity is so common that a cast iron plumb bob is often drawn out of its proper position by some local electrical attraction. For this reason the steel points are made comparatively small. The small cap that screws into the head of the plumb bob and receives the string or line should be knurled on the edges so as to be readily screwed in or out.

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—A great amount of attention is being given to the question of rapid change gear appliances on lathes, both by lathe builders and by lathe users, and an ever-increasing preference is being shown for such lathes over less modern types. It will, therefore, be of much interest to the machine tool trade to learn that the American Tool Works Company, of Cincinnati, have, through purchase, acquired manufacturing rights under the several patents which have been issued pertaining to such devices. This gives them the undisputed right to build without restriction their improved new "American" engine lathe with quick-changing mechanism for thread cutting and feeding. This lathe has previously been shown in these columns, and its merits are recognized by progressive shop managers. The line of sizes in which this lathe is built ranges from 14-in. to 36-in., inclusive, and full information on any size will be furnished by the makers.

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## THE METRIC SYSTEM.

Sir,—Mr. Halsey has invited me to reply to a letter of his on this subject which appeared in your issue for this month. I very gladly do this, though, as a matter of fact, I think that your leader on the question, which appeared in the same number, left very little more to be said. The statement which I made previously as to the survival of old weights and measures, and old names for new weights and measures, was based upon information which reached me from correspondents in different parts of Europe, and I have every reason to believe their testimony to be trustworthy.