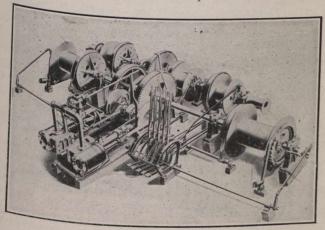
LARGE ENGINE FOR DREDGE.

There has just been completed the special 10 x 12 double cylinder, 70 h.p., non-reversing engine for gravity-swing, orange-peel, dredge, illustrated in the accompanying photograph graph. This engine has two main drums to operate the orange-peel bucket and boom, three smaller drums for raising the ing the spuds, and two winch-heads for shore lines. main drum shaft is 4-7/16 inches in diameter by 28 feet in length length. The spud-raising drum shaft is 3-11/16 inches in diamet. diameter by fifteen feet long, and is geared to the main drum shaft shaft with bronze-bushed clutch, allowing the spud-raising shaft to be thrown out when not required. The main drums



View Showing Engine.

are operated by regular screw thrusts, the spud-raising drums by interest by regular screw thrusts, the spud-raising drums by internal oscillating cam thrusts. All drums have brake-bands bands. The distance from centre to centre of the main drums: drums is 23 feet, and the over-all distance of the engine, 30 feet All 23 feet, and the over-all distance of the engine, 30 feet All 23 feet, and the over-all distance of course, is all feet. All friction heads are of cast steel; as, of course, is all gearing gearing. The gear on the main drum shaft is 42 inches in diameter. diameter. The shipping weight of the entire engine is about of Duby.

The shipping weight of the entire conduction works, of Duby.

This engine was made by the Clyde Iron Works, of Duluth, Minnesota, to the special order of Doullut and William, Williams of New Orleans, and is a larger size of the same engine which was originally designed and made by the same Company, to the order of the Phillips Land Company.

PROGRAMME TWENTY-SECOND ANNUAL CON-VENTION CANADIAN ELECTRICAL ASSOCIATION.

The annual meeting will be held at the Chateau Laurier, Ottawa, Wednesday, Thursday and Friday, June 19th, 20th and 21st, 1912.

Wednesday, June 19th.

Words. —Opening session. Address of welcome by His Worship the Mayor, at Chateau Laurier. Minutes. President's address. Secretary-treasurer's report. spondence. General business.

11.30 a.m.—Report of Membership Committee, D. H. McDeugall, chairman. Report of Membership Committee, L. V. Webber Webber, chairman. Report of Meter Committee, Thomas B. Report of Commercial Committee, Thomas F. Kelly, chairman.

12.30 a.m.—Adjournment.

Afternoon.

2.00 p.m.—"Recent Developments in Lamps and Reflectors,", J. G. Henninger, illuminating engineer, National Electric Lamp Association. "The Influence of Ice on Water Power Devil Association." Power Development," Professor H. T. Barnes, D. Sc., F.R.S., McGill T. Systems for Out-McGill University, Montreal. "Distributing Systems for Outlying Districts and Smaller Plants," S. Bingham Hood, Toronto Electric Light Company.

Evening.

7.45 p.m.—Special electric cars will leave Chateau Laurier for Victoria Hotel, Aylmer, where an informal dance and garden party, tendered by the city of Ottawa, will be held. Supper will be served at 11 p.m. and cars will be waiting for return trip at 12 p.m.

Thursday, June 20th.

10.00 a.m.—"Watthour Meters—Past and Present," C. W. Baker, Canadian Westinghouse Company. "New Business," Thomas F. Kelly, Hamilton Electric Light and Power Company. Report of Committee on Rates and Forms of Contract, Parker H. Kemble, chairman.

12.30 a.m.—Adjournment.

Afternoon.

2.00 p.m.—Executive session (Class "A" and "B" members) for election of officers.

2.30 p.m.—Automobile drive from Chateau Laurier to various points of interest in the city, including government system of parks and drives, the Experimental Farm, Governor-General's residence, etc. Light refreshments will be served at some point on the route.

8.00 p.m.—Banquet at Chateau Laurier for the registered members of the C.E.A. and guests, and the local committee with ladies accompanying them. Tickets will be furnished by the secretary on application.

Friday, June 21st.

10.00 a.m.-"Power Factor-Its Influence and Effect," D. H. Ross, Wagner Electric Manufacturing Company. "Commercial Electric Heating," McAllister Moore, Belleville. "Underground Construction" (illustrated by moving pictures), G. M. Gest, New York.

12.30 a.m.—Adjournment.

Afternoon.

2.00 p.m.—Report of Committee on Uniform Accounting, D. R. Street, chairman. Report of Public Policy Committee, W. C. Hawkins, chairman. Report of Committee on Standardization of Line Construction, R. G. Black, chairman. Naming of Standing Committee. Next place of meeting. Unfinished business.

3.00 p.m.—Special electric cars will leave Chateau Laurier for baseball grounds, where a game will be played between two C.E.A. teams, one representing the manufacturers, and the other the operating companies.

Evening.

8.00 p.m.—Smoking concert in the Chateau Laurier. Mr. A. A. Dion, Ottawa, is the president and Mr. T. S. Young, 220 King Street West, Toronto, is the secretarytreasurer.

PERSONALS.

MR. E. O. FUCE, engineer of the municipality of Galt, Ont., has handed his resignation to the town council. He intends to join Mr. Walter Scott in Calgary, Alta.

MR. CUTHBERT C. WORSFOLD has been appointed resident engineer of the Department of Public Works for the province of British Columbia. Mr. Worsfold has been engaged for the past fourteen years as chief assistant to the late Mr. Keefer. He was born at Dover, England, and came to Victoria many years ago, after graduating.

MR. W. ALMON HARE B.A.Sc., president of the Hare Engineering Company, Limited, Toronto, has left for England and the Continent on a business trip. He will be absent about six or seven weeks.