John E. Hardman, S.B.

MINING ENGINEER,

83 HOLLIS STREET, - HALIFAX, N.S.

Can be consulted on all matters pertaining to the profession The development and management of Gold Properties a specialty.

TO USERS OF THE DIAMOND DRILL.

Diamond Prii. Bits set Promptly by an Efficient Man All Work Guaranteed.

Bort and Carbon Diamonds for sale. Sa terms as New York. Prospecting with American Diamond Drill at per

foot or by the day. OTTAWA.

J. T. DONALD, Assayer and Mining Geologist,

156 St. James Street, Montreal.

Analyses and Assays of Ores, Fuels, Furnace Products, Vaters, etc. Mines and Mining Properties Examined and Valued.

SPECIALISTS IN MICA.

MINERS' AGENTS,

RICHARD BAKER SON & CO.

19 St. Duustan's Hill, LONDON, ENG.

CAMPBELL-JOHNSTON

(of Swansea, India, and the United States.)

METALLURGIST, ASSAYER, AND MINING ENGINEER.

Properties reported on. All assays undertaken. Furnaces and concentrating plants planned and erected.

Treatment for ores given.

40, Vancouver, B.C.

Ores bought and sold. Box

T. D. LEDYARD,

DEALER IN MINES, &c. 57 COLBORNE STREET, TORONTO.

Specialties:

BESSEMER IRON ORES PARTICULARLY LOW IN PHOSPHORUS ASBESTOS.

F. CIRKEL, MINING: ENGINEER.

(Graduate, Academy of Mines, Axchen, Germany.)

Reports on Mica Deposits, Asbestos, Phosphate

78 QUEEN STREET, OTTAWA.

E. E. BURLINGAME'S ASSAY OFFICE AN CHEMICAL DEBORATORY

Established in Colorado, 1866. Samples by mail or express will receive prompt and careful attention. Gold & Silver Bullion Espod, or Purchased. Address, 1736 & 1738 Lawrence St., Denver, Colo.

J. LAINSON WILLS, F. C. S.

MEMBER INSTITUTION MINING AND MEUALLTRGY LONDON, ENGLAND.

12 Old Slip, New York.

INVESTIGATION of MINING PROPERTIES ANALYSES, ASSAYS, &c.

C. V. M. TEMPLE

(Formerly President Megantic Mining Co., P.Q.)

MINES AND MINING LOCATIONS FOR SALE.

CORRESPONDENCE SOLICITED.

Office and Residence:

47 ST. GEORGE ST., TORONTO, ONT.

CANADIAN REPRESENTATIVE :

HENRY DE Q. SEWELL, Dominion and Ontario Land Surveyor, Mining Engineer, etc., Port Arthur, Ont., A. M. Inst. C.E. LONDON REPRESENTATIVES :

LANE GAGGE & ANDREWS, Solicitors, Arundel St. Strand, London. R. C. CAMPBELL-JOHNSTON, (of Swansea, India and the States), Metallurgist, Mining Engineer, Vancouver, B.C.

Crabb's Patent Clip

Endless Rope Haulage

The latest and most efficient Clip in the market: does not damage the rope; cheap, simple and substantial in construction, and certain in action on rising and falling gradients; automatically attaching and detaching itself at Crosses, Junctions, and Terminals; drags the tub or crosses, Junctions, and 1 erminals; drags the tub or wagon on the centre line; requires no adjusting, it being always in position to receive the rope; can be adapted either to the top, bottom or side of the tub. A sample one forwarded for one month's trial, purchase or return, to any Colliery in the United Kingdom, carriage paid.

Further particulars and testimonials may be had on application to

application to

G. H. CRABB,

Bunker Hill, Fence Houses,

DURHAM, ENG.

LEDOUX & COMPANY,

9 Cliff St., New York.

Engineers, Metallurgists & Assayers.

Public Ore Sampling and Storage Works

All the principal buyers of furnace materials in the world purchase and pay cash against our certifi-cates of assay, through New York banks.

By special permission of the Secretary of the Treasury of the United States, cars of ore or Copper matte passing through in bond can be opened and sampled at our works.

Consignments received and sold to highes. dder. Send for circular giving full particularst

Mines examined and sampled. Assays and Analyses of all kinds.

FRANCIS WYATT, Ph. D.

Consulting, Analytical and Technical Chemist

12 OLD SLIP, NEW YORK.

(Near Hanover Square.)



EBEN E. OLCOTT,

Consulting Mining Engineer & Metallurgist. i8 Broadway, Naw, York City.

Cable Address: - - - "Kramolena."

Mines examined and reported on. Will act as pers special advising engineer of mining companies. Special facilities for making working tests on ores

WM. HAMILTON MERRITT, F.G.S.

Associate Royal School of Mines, &c.,

MINING ENGINEER and METALLURGIST,

Will report on Mines and Mineral Properties ADDRESS:

15 Toronto St., Toronto, Ont.

F. H. MASON, F.C.S.

Member of the American Institute of Mining Engineers Member of the Society of Arts, Crafts and Industries, London Member of the Mining Society of Nova Scotia.

PONSULTING METALLURGIST, CHEMIST AND ASSAYER.

Mines and Mineral Lands Sampled, and Assays. ade. The treatment of Refractory Gold Ores and Concentrates, a specialty.

QUEEN'S BUILDING, HOLLIS STREET, - - HALIFAX, N.S.

R. T. Hopper & Co.,

MINERS AND SHIPPERS OF MINERALS.

BOARD OF TRADE BUILDING.

MONTREAL, CAN.

Asbestos, crude and manufactured. Phosphate, Mica, Plumbago, Soapstone, &c.

MICHIGAN MINING SCHOOL

A State School of Mining Engineering, located in the heart of the Lake Superior mining region, giving practical instruction in Drawing, Blue-printing, Mechanics, Mechanism, Properties of Materials, Graphical Statics, Mechanical and Electrical Engineering, Shoppractice, Analytical and Technical Chemistry, Assaying, Ore Dressing, Metallurgy, Plane, Railroad and Mine Surveying, Hydraulics, Mining, Mineralogy, Petrography, General, Economic, and Field Geology, etc. Has Summer Schools in Surveying, Shop-practice, and Field Geology. Laboratories, Shops and Stamp Mill well equipped. Tuition free. For Catalogues apply to the Director Houghton, Mich.



W. PELLEW-HARVEY, F.C.S.

Mining, Analytical & Assay Work undertaken

Information concerning the Mining Industry and Mines of British Columbia given.

ASSAY AND VINING OFFICES: VANCOUVER, B.C.

ORFORD COPPER CO., Copper Smelters

Works at Constable's Hook, N.J., opposite New Brighton, Staten Island. Copper Ore, Mattes, or Bullion purchased. Advances made on consignments for refining and sale. Specialty made of Silver-bearing Ores and Mattes.

-SELL -

INGOT AND CAKE COPPER.

President, ROBERT M. THOMPSON,

Treasurer G. A. LAND.

Office 37 to 39 Wall Street, New York.