Canadian Ingersoll-Rand Co.

LIMITED

813-820 BANK OF HAMILTON BUILDING,

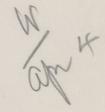
TORONTO, ONT.



April 1, 1921.

File: Personal.

To; General Sales Manager, Montreal.



Dear Mr. Winslow; -

I have your favor of the 30th ult. and will be very glad to have Mr. Davis here as soon as convenient. He will look after the Department of Highways work; that is both the quarries which they are themselves operating, and also keep in touch with their contractors. I anticipate that it will take most of his time to look after this work, but if he has any spare time, I will get him to look after Eastern Ontario mining, such as it is, and Lime Brick, and the other quarries outside of road work.

Mr. Traver is going to give his entire time to the Hydro Electric and canal work at St. Catharines, and will not be available for anything else for at least three months, or until we feel that the Hydro Electric have bought all the drills and other equipment they are likely to need.

Mr. Planck will be at the disposal of your montreal branch from now on, as can be arranged. There is some re-awakening of the motor car work, and the next week or so Mr. Planck is going to visit all the motor car plants. He will

Sething though

grotale R

E beller

May 4th, 1921

To the Editor of the Gazette.

Dear Sir:-

The statement is continually being made that the Canadian National Railways is worth 850 million dollars. There are only two ways that the Road can be valuable, either as junk for the material there is in it or as a going concern for the money it earns or can earn.

The Road is certainly not worth 850 million or anything approaching it as junk. What then is your opinion of its value as a money earner. If it earned 70 million per year one would suppose it could properly be considered as worth 850 million or if the 70 million dollar earnings were guaranteed it might even be considered as worth 1166 million in the class of six per cent bond or mortgage.

On the contrary if the property is to lose 70 million a year or more which it can easily do when we consider that the present Government is relatively honest; that the Railway Board, like a new broom, has been trying to sweep clean, making every possible effort to make a wonderful showing and remembering that as time goes on this initial effort is bound to slacken; If then the property is to lose 70 million a year or more its worth is very clearly a minus quantity and it would be safer for us to borrow 1166 million dollars which would only cost us 70 million a year and pay this 1166 million dollars to some responsible business concern such as J.P.Morgan or the C.P.R. providing

they would take the Canadian National Railways off our hands and give us a sufficient guarantee against all further loss.

Yours truly,

"PESSIMIST"

ESW/ERE

NOT FOR PUBLICATION.

Burners boomy May 9th, 1921 Personal. Mr. Tozer., Mgr., Winnipeg Office. Dear Mr. Tozer:-Things are extremely quiet generally and it is refreshing to have Mr. Southee write us on May 6th from Timmins that:-"Things are most certainly booming up here. Lyons has totaled up the business that is in sight and this seems close to \$100,000.00 This of course includes all our lines It looks like a mighty busy summer." This may not have any immediate effect on your luck but one boom starts another and optimism and confidence are bound to be increased by what is going on in Ontario this Summer. I hope it will soon be reflected in Winnipeg and other territories. With kind regards, Yours very truly General Sales Manager ESW/ERE

OLEASE REFER TO B-51

THE GRANBY CONSOLIDATED MINING, SMELTING & POWER Co., LIMITED

ANYOX, BRITISH COLUMBIA

August 4th.1921.

H. S. MUNROE, GENERAL MANAGER Resona

> Mr. Edward S. Winslow. 260 St. James St. Montreal, Que.

Dear Winslow .-

Emphysical Startant

This is merely a note to thank you for your letter of June 15th. Shortly after its arrival, I left Anyox to examine the Midas Mine at Valdez, Alaska, which is the property of our Company, and this explains my tardy answer. I have just returned after a month's absence during which time I also visited the Whitehorse District in Yukon Territory. It was a delightful trip, I assure you, but never have I passed through a country showing more serious depression than the towns of Alaska. In fact, as you probably know from inference, the immediate prospects are not too bright for copper mining with copper at $11\frac{3}{4}$, but we at Anyox are doing our best to keep things going and have been staving off that blue atmosphere which seems to surround us and practically all of the mining districts in B.C.

It is needless for me to tell you that if you should come to B.C. at any time a hearty welcome awaits you at Anyox.

With kind regards to Mrs. Winslow and with best good wishes.

Yours very sincerely. J. Austen Bauer

Canadian Ingersoll-Rand Co.

LIMITED
27 WELLINGTON ST. EAST,

TORONTO, ONT.

File AA Brumen

September 3rd, 1921.

File: General

ro; General Sales manager, montreal,

sub; - WELLAND CANAL -

SEP - 3

Dear sir:-

The following will give you the existing situation with regard to the Canal work;

GENERAL. - The whole construction is divided into sections, section #1 being the rort weller approach and part of the ship channel. Section 2 takes the canal through one of the locks up to the outskirts of St. Catharines. Section 3 covers the remaining lock section of the canal up to the make Erie level at the Northern outskirts of Thorold.

From there on sections 4 to 9 inclusive cover the remainder of the canal at the Lake Erie level from Thorold to Fort Dalhousie. Section 4 is the first section from the locks at Thorold along to Alenburgh. Section 5 takes the work along to Fort Robinson. From Thorold north the section which is of most interest to us is section 8, where a bend in the present Canal is replaced by an entirely new straightening cut containing heavy rock excavation. I am going to try and get you a blue print of the entire work, but was unable to do so on Thursday owing to Assistant Engineer sterns absence. However, the above particulars will give you the preliminary information.

PROGRESS - The Canal construction began by the letting of sections 1, 2, 3, and 5, by contract to the Dominion Dredging Co., Baldry rerburgh & nutchison, the Confederation Construction Co. (Doheny Quinlan & Robertson) and the Canadian dredging Co. (Pratt-German interests) respectively. During the war Dominion Government took over these contracts, buying the equipment from the contractors, and allowing the contractors to carry on a cost plus basis.



Canadian Ingersoll-Rand Co.

LIMITED 27 WELLINGTON ST. EAST.

TORONTO, ONT.

File AA Briman

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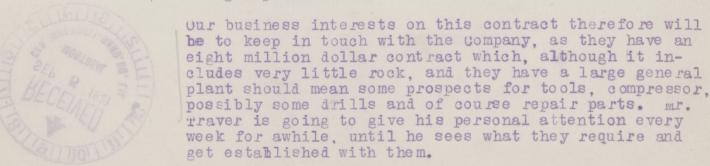
One June 15th the Government stopped work on sections 1 and 2, and called for tenders. Messrs J.P. Porter, Doheny Quinlan & R bertson, and the previous contractors tendered, and the contract was let to Mr. Porter.

It is not decided just what the final name of the firm will be, but at present it is forter, Standifer and Forter Bros., the first name being mr. J.F. Forter, in whose name the tender was put in, and Forter Bros. being messrs. R.B. (Dick) Forter and his brothers.

The contract consists of the completion of sections 1 and 2 comprising the removal by shovel of a large quantity of earth overburden, the dredging of the Lake Ontario approaches, about thirty thousand yards of rock to be excavated next spring, and the placing of the anchors and general completion of these two sections.

They have taken over the old Baldry rerburgh and Dominion Dredging co.'s plants, which they will supplement with their rorter plant from Halifax, as it is needed, and new purchases to complete their requirements.

At the present time we are most interested in their repair orders, which they are now looking into. They may need a larger compressor for their machine shop, but, as they may have a suitable machine in Halifax, may not need a new one. The chances are we should sell them some large piston drills for drilling their anchor bolt holes at the bottom of their lock work next spring. These holes are about 4" diam. 10' deep in shale, so that our 54 should handle them. They have some large Ingersoll drills which could be used after being repaired.



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Our business interests on this contract therefore will be to keep in touch with the company, as they have an eight million dollar contract which, although it includes very little rock, and they have a large general plant should mean some prospects for tools, compressor, possibly some drills and of course repair parts. mr. Traver is going to give his personal attention every week for awhile, until he sees what they require and get established with them.



General Sales Manager,

Section 3 -This contract has been carried on under Government control by Doheny Quinlan & Robertson.

It is generally understood that the Dominion Government were to give notice on August 31st to suspend operations, but when we were on the job yesterday, the contractors had not received any notice. It is almost certain however that steps are being taken to re-let the section, and we hope that the present contractors will be successful.

sometime ago the Government abolished section 4, which contains some rock excavation at the upper end of the lock section, and added the dry rock excavation to section 3 and the wet rock section (submarine and dredge) to section 5.

The new #3 contract therefore will include part of section 4. There are about 250,000 yards of rock unbroken, and about one hundred thousand tons of rock party broken, but to be removed. Very roughly about 70% of the original #3 section book work has been removed, but with the addition of #4 the above work remains to be done.

The contractors are well supplied with plant and Mr. Smeaton Assistant Rock Superintendent considers that they can complete the work pretty well with the submarine drills they already have. We have however every chance of getting their business with the exception of any piston drills which they may require as Mr. A.W. Robertson is financially interested in the Dominion Rock Drill Works at Napanee. However, they are not likely to need any more piston drills, and even with this influence against us we are confident that superiority of our 50 series drills will get us the business.

Just at present therefore the present contractors are carrying on from day to day. Impending political developments, will we think hasten the letting of this contract.

Section 5 - As above this includes the wet holes on section 4. Fresent contract, to the Canadian Dredging Co. has been extended, and the present contractors will therefore continue the work. Their main work is submarine drilling and dredging, and of course they use our machines. As the work advances there turns out to be less submarine drilling to do than was expected. nowever the contractors figure that they will be working all next summer although they could make faster progress if rarliament would pass larger appropriations.

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General Sales manager.

They will likely have considerable repair work to do this winter.

This information is the result of my visit of this week. when we saw the different contractors and checked up my previous information.

There is no mention locally of Government intention of letting anything from section 6 on.

much will depend upon what the Government does before they go to the country this Fall or early winter.

I am inclined to think that since the Dominion needs to conserve its financial resources, that the present work only will be carried along, and then only by stringing it out for a year or two, and no new sections will be let. This policy may be slightly modified by the urgency of the unemployment situation.

in a general way therefore my opinion is that comparatively little new plant will be required this fall and winter. but that we should get some repair business, and of course we will make sure of any new plant that is always liable to be needed suddenly on a work of this kind.

I could not find any evidence of our being negligent in getting into touch with Forter Standifer & Forter Bros. Mr. Keir wrote us as soon as he established himself in the old Baldry rerburgh & nutchison offices, which he took possession of about the 22nd or 23rd, and which were unoccupied when Mr. Traver was there on the 19th.

I look forward to taking mr. winslow over the work sometime later on, when he can spare the time, and can assure you that our name is a household word in the district.

mr. Traver will look after the detail work, and I will also go over it periodically.

yours very truly.

adPower

AABowman/ nn.

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Yours very truly.

SHAMAMAM.

The Window Barriet

Set. 15,1921.

The Granby Consolidated Mining & Smelting Co., Dr. J. A. Bancroft, Anyox, B.C.

Dear Bancroft: -

- Your Reference B-51 -

of August 4th and to know what you have been doing this summer. As usual, I imagine you have had an interesting time in spite of the depression. We were all very pleased the other day to see by the press report that your men at Anyox had decided to accept a wage cut in preference to having you close down. I hope the cut is sufficient to enable you to carry on until times improve.

We also are having quite an anxious time. Not only is there very little business offering but we are having to compete with American firms, who are willing to sell their surplus stockin Canada at almost any price and some of our prominent citizens who profess great interest for Canadian welfare are not very good performers when it comes to putting their preaching into practice. However, the gold mines are keeping up their activities. We had an order this morning for a double parallel drum electric hoist from Hedley. Also the coal mines are doing some development work in Alberta and we are getting a few drills and hoists from them. Of course, the greatest activity is in Kirkland Lake and Timmons, where we are doing more than we have done for years. Down here in Montreal and Sydney, N.S.

things are as flat as a pancake.

I still continue to be principal guide and friend to Japanese visiting Montreal and I am expecting to be knighted or something by the Emperor before long.

My family, as you know, have passed the summer on Lake Memphramagog and I am looking forward to their coming back to town next week. We have had a very successful summer and everyone has been well.

I am afraid I am not going to be able to scrape together the necessary cash to visit the West this summer, but I hope it will be possible for me to go out as soon as things pick up a little. If there is anything I can do for you at any time in Montreal do not fail to drop me a line.

I hope Mrs.Bancroft is enjoying the West. Please give her my best wishes.

With kind regards,

Yours sincerely.

Mr. Winslow - Mtl (Fyle Clegg Personal) Sept 20th/21.....

the Facific Construction Company, we were called to time for supplying dolly springs which were not the right size or shape. On looking them over I decided they must be some new style dolly springs which belonged to some improvement in the sharpener, and told them I would see about replacing them. On returning here, george Wallis claimed that we had never supplied any spring other than standard and that they must be some of J.N.Bell's. We notifed the Pacific Construction Company to get after the right party with regard to their defective springs. It turns out that Mr. Bell has sent samples of these dolly springs to all the mines and construction camps in the country, also offers to sell them to us at 75 cents apiece. We did not inform him that they were no good but he will, no doubt, have found it out by this time.

We are glad to see that you and Mr. Haight spent some time with Dick Williams on his way through Montreal, as he is certainly a fine fellow and did all he could to help us out here before he left. He is absolutely 100% Canadian Ingersoll-Rand and you can be assured he will do everything he can, in Africa or London to sell our compressors and drills.

We have written to Arthur Williams with regard to the #248 drills, but have not heard from him as yet. In any event, I do not see much chance of placing any big drill business with, say Granby or Britannia, in the near future, but there are a great many little prospects opening up with which we are in touch, and others which we are trying to get track of. Most of these are doing hand work at present, but we believe that in the spring they will be putting in small plants and things certainly look bright in the small prospect connection.

Mr. Mathewson went north again and reports that there is very little being done at Anyox now. Only 50 miners are at work and practically no surface gang, and everythe is looking for a shut-down. This is unfortunate as it will be a direct reflection on the business which we are trying to do at Cassidy Coal Mines, which is a Granb y property. As you know, we have up with them a 2000-ft steam-driven compressor, and an air haulage system which was being held up on account of the fact that this property is before the Frivy Council with regard to certain rights. If Granby shut down, the coal mine will no doubt be curtailed as they get their coking coal from this mine, and this will knock our compressor and air haulage on the head. Copper cannot stay down for ever, however, and when it does pick up, we certainly ought to be able to turn in some nice business from this office.

With best regards, I am

Yours very truly

MANAGER VANCCUVER/BRANCH

BDC/GTW

THE LOWEST PSC. Vice President

J.H.Jowett Esq., Vice President, Ingersoll Rand Company, 11 Broadway, New York, N.Y.

Dear Mr. Jowett:

I have just returned from a visit to Cobalt, Kirkland Lake and Timmins and find your letter of October 31st on my desk.

I am very glad to know that we have a friend in Mr.S.C. Thomson and that you have been working with him on our behalf.

During my visit I spent some time at practically every producing mine in the above territories and I cannot speak too highly of the friendly terms on which our representatives appear to be at all points. For example: You know Mr.Brigham's attitude against having too many service men and salesmen around his property. When I asked their Mine Superintendent whether he would or would not like to have our demonstrator spend some time with them, Mr.Emery was very emphatic in saying that he was glad to have Britton on the property at any and at all times. Moreover, I found Britton has turned down an invitation to go on a hunting trip with Mr.Young, who is in entire charge of all rock drilling equipment.

At the Tough Oaks, where Mr. Thomson is Consulting Engineer, they have a 1500 cu.ft. type XB-2 compressor and one of our 1382 cu.ft. type RR-3 compressor. They have two Leyner sharpeners, one No.88 drill, two No.60 dreadnoughts and four Sullivan DR-6's. For some reason this

Page two.

No.88 drill has caused no trouble whatever and is unique, I regret to say in this respect. Mr.McDonald - the Mine Captain - spoke in the highest terms of the No.88 machine and said that he could not understand why other people in the camp were having trouble with them. We should undoubtedly get their next order for drills.

At the Lakeshore Mine, I found our demonstrator occupying the best bed-room and getting his board and lodging from the Mine Manager, Mr.Coffey.

At the Ontario Kirkland, the Manager, Mr.Herd, insisted on Mr.Lyons and me being his guests for the two days we were at Kirkland Lake.

went to the camp without staying with Mr. Wendy, Manager of the Wright-Hargreaves, and so I could go over the whole list including Dome, McIntyre and all the rest, and yet we are a poor second in the drill business. When it comes to fast drilling, regardless of expense, we control such business with the No.88 against the Turbro and there are practically no mines where the No.88 is not represented. On account of the piston breakage, we turn to the No.248 and we sold one of these to the Comfort Kirkland. This machine is used with 100# air pressure, 1-1/8" steel, anvil block chuck and it is being used by a contractor in competition with a Waugh No.69. It broke the first piston in two weeks and a second piston in ten days, and to tell you that we are disappointed is putting it mildly. The rock is not considered particularly hard. In a power of the competition of the competition of the piston in ten days, and to tell you that we are disappointed is putting it mildly. The rock is not considered particularly hard.

Page three

No.248 drills on trial, they have been running for ten days and they have not yet broken a piston. If they can stand up for another thirty days, we will quite possibly get an order for ten machines from the Hollinger and they usually order about ten machines per month.

In general we are up against a buyers' strike as far as the No.88 pistons are concerned and every new property opening up either buys No.60's on the start or else buys our DDR's and then it is easy picking for the Waugh people to come along with the No.60 and beat us out.

Led by the Hollinger, there is a very strong tendency to standardize on the use of 1-1/8" hexagon hollow steel exclusively and the short lengths and the broken lengths are what is used for pluggers and stopers. At the Hollinger they carry it to such an extreme that if they want a drill for 1 ft.plug hole, they would take a BCR-430 anvil block machine and 1-1/8" steel with 2" starter bit to do the work.

We have got to bear this practice in mind in all our work.

property or an old property desiring to sink a shaft will take 4 or 5 of these machines and successfully stave off all competition. At the completion of the shaft they may have the intention to set the machines aside, but in practice they will be short of drifters in a few days and the 60's will be brought out and put to work. They are a moderately good machine and there are enough men able to drill off a round with these machines and which they say is all any machine can do, so that very considerable numbers of them are worked in.

I was very much surprised to find that practically three

Page four

out of four mines in these three camps had No.60 dreadnoughts with a scattering of No.88 Turbros and Sullivan DR-6 machines. Also in one or two instances we got quite a large number of No.88's sold and these are still being used more or less under protest of the management on account of repair part cost.

As I told Mr.Gilman, we are treated up there like a younger brother gone astray and everyone without exception is keenly anxious that we should stage a come back. In my opinion prospects for drill business in Northern Ontario were never as good as they are to-day. Sentiment in both the gold and silver camps is exceedingly optimistic and while some properties will hold back their purchasing until Spring, there is quite a lot moving at the present time.

Yours very truly,

CANADIAN INGERSOLL RAND CO. LIMITED.

General Sales Manager.

ESW: EMW

CANADIAN INGERSOLL-RAND CO.,
LIMITED
MONTREAL, QUE.

a Tim Truran

LE GRAND HOTEL.

Calais, le Dec.6/1921.

Dear Art:

Just a line or two to say that I am still on earth. Dick and myself have been in France for a week. Dick returned to London last night. I am remaining here until the Crown Agents decide whetheror not they will purchase any of the machinery from here. Dick and myself have been to Amiens, Bolougne, Rouen, Havrie and Andrique, also many otherplaces which I have forgotten the name of. We have looked over the machinery which was sent here during the war. Say, Art, the quantities of all kinds of machinery at those various stations is enough to stagger a person who was not in France during the war. I have seen an awful lot of Ingersoll Rand compressors (small ones) and also a lot of pneumatic tools of the Rand make. The plant i is not decided on yet but I rather think it will be internal combustion engines. Dick and I want the Canadian Ingersoll Rand compressors but its a matter of price which will decide, We have nothing to do with purchasing. The Crown Agents for the Gold Coast are the ones who decide on what is to be purchased. Stewart & McDonnell are to do the work on percentage. We can recommend anytging we think would be suitable, but cannot decide, therefore we are unable to give orders to whom we would like to, however, we are doing all we can for the C.I.R. I have seen some wonderful sights since I have been in France. We have been taken to the various places by auto. I am not sure when I will be leaving for the G.C. but will likely leave during the latter part of this month.or early in January. Several of the organization are leaving tomorrow the 7th and there is another bunch to leave the latter part of this month.

Page two.

London is a wonderful old city but I hate the way the streets are laying. It put me in mind of a person throwing a handful of pins of a glass top desk. The various angles the way the pins lay to each other is a pretty good picture of London streets. Well, Art, I hope you are getting along all right also the little kiddies. I will write you again after I get down to the G.C.

Wishing you a very happy Xmas and New Year.

Very truly yours

TIM TRURAN.

Canadian Ingersoll-Rand Co.

803 - 804 BIRKS BUILDING

VANCOUVER, B. C.

Fyle: General.

March 8th/22.

Mr. E. S. Winslow, General Sales Manager - Montreal - Que.

RE; TRIP TO NELSON TERRITORY.

Dear Sir; -

The writer got back Sunday from a week's visit to Nelson.

In company with Mr. Arthur Williams, we visited Rossland, going underground in the Centre Star and Le Roi Mines. At Rossland we saw two #98's in operation and talked with the drill runners, shift bosses, mine foremen, mine superintendents etc. They all seemed to feel that the #98 drill was the machine which they should adopt as standard.

Frank Endiker, who ran the first #98 in Rossland claimed it drilled as fast, if not faster than the #88, and that it was just as good an all-round machine.

There seems to be a little doubt in the minds of some of the others, however; some of them feeling that the #88 was the slightly faster machine, but they all agreed that there was very little difference. In the Centre Star mine we examined the piston of the #98 drill which had been put to work on December 19th and had worked two shifts per day continuously since then, and found that the striking end of this piston showed absolutely no wear whatever. On the other hand, an #88 full-cushioned machine, on the same bar, since December 23rd had had to have the striking end of the piston ground as it had

started to cup. These machines were working in the same ground, the same air pressure and practically the same length of time, and certainly everything was in favour of the #98 as regards stand-up of the piston.

Mr. Peters felt that they should change over to the #98 as soon as possible. Mr. Archibald was also of the same opinion.

In view of the above, I feel that a #98 should be the next machine to go into Anyox, as I believe that if there is any difference in the drilling speed, it is more than off-set by the cheaper cost of up-keep and certainly that is a point which ought to please Mr. Tuttle.

At Kimberly, Mr. Montgomery was very much interested in the #98 and said he would order parts to change over one of their full-cushioned #88 machines, to a #98.

A feature which they were using at Le Roi Mine, and which the writer is going to try out at Anyox, is the elimination of the outer tube. This gives a greater blowing effect and it is claimed they never have a stuck steel due to this. This ought to help considerably at Anyox. Mr. Williams is sending the writer an adapter as used in Rossland.

On the whole, the Consolidated are favourable to the #88 but the cost of maintenance seems to be the sore point, pistons being the worst offenders. It looks as though the #98 will solve this and make nice clean drill business in that camp.

While at the Sullivan Mine we saw two DX-61 Sullivan drills at work and as nearly as we could judge they were drilling about the same rate as the #88 would. We had nothing to compare them with, however, as the two machines were on the same bar and an #88 was not working near there.

The outstanding features of the DX-61, are; the fact that they claim it only takes 105 feet of air, and the fact that their piston looks

Callyon of Old April 19th, 1922.

General.

Mr. B. D. Clegg, Manager, Vancouver Office.

Dear Bruces

Subject: Orill Business.

sharpener business on the coast. What I have got to say has particular reference to Grandy, because I am personally familiar with that property but it will apply to a greater or less extent to all other properties in your territory subject to your usual discretion.

SHARPENER:

we have had a lot of sharpener experience recently. The Hollinger people were persuaded by Waugh to run a demonstration. They put in a Waugh sharpener; Ingersoll Rand put in a No.50 sharpener and we equipped one of our latest No.5 sharpeners with a valveless hanner cylinder and with the new piston type throttle valve making up what I think we are going to call our #550 sharpener. For two or three weeks until the nevelty were off the Waugh sharpener was the favorite. The Ingersoll Rand No.50 with its main cylinder did not appeal to customer as being materially better than the old No.5's. We then came along with our No.550, as mentioned above, and this machine made a hit right from the start. It did the best work and was considered the best all round machine on the job. Finally they had a day when their pressure dropped to 70% and none of the othermachines under this condition did the work satisfactory to customer. The No.550 did not

Page two.

some to have any trouble. We were accordingly given an order for two of these machines while the Waugh and the Ingersoll Rand No.50 were rejected and returned.

Now, I know Granby are not in any hurry to spend money just now. On the other hand we have five of these sharpeners in stock and in place of shipping one outto you at Vancouver, I want you to get permission if you can to have us ship it to anyox with no obligation for them to purchase unless they find it entirely satisfactory and no obligation to come to any decision in advance of their normal requirements. The only thing we want them to do is to run one of these machines for a month or six weeks so that they will know what it can do and can be in a position to tell their friends, the Premier or anyone else what they think of the machine. After they have run it for a month or six weeks, if they still do not want to place an order, the machine can be set aside until they are ready or until you wish to demonstrate it somewhere else.

-- DRILLS --

Our classes of drills can be divided into drifters, stopers, hand sinkers and pluggers.

DRIFTSHS:

the \$88 non-cushion machine; have established the reputation as having the fastest drilling machine but the machine having the highest record for repair part costs, consequently we have got all the business in most sections for drilling and cross-cutting where work is generally on contract and men lock after and are responsible for their machines. We have lost a large percentage of business where drills are used in stopes. Here there is

Page three

less supervision. The drills get poor attention and there is not the necessity for getting a certain definite number of rounds per shift. Consequently a less powerful machine has frequently won out. Fortunately we now have our No. 188 anvil block, fluted chuck, cushioned type machine and in the Cobalt territory there is an entire change of feeling and we have walked away with nearly all recent orders which have been placed. We have also the #98 lug type, cushion muchine for the Western territory and we are delighted to hear that the up-keep cost of the first two machines which started in December has been next to nothing and both of the original pistons are still in the machine. Our only complaint is that we are not getting them introduced for trial quickly enough. This is the machine we want you to push at the present time. We want you to get permission from the Granby to send them one on exactly the same conditions that we made above in connection with the sharpener. With this amobine you can keep on full rotation and still not hit the steel or you can hit the steel any strength of blow you wish, depending on how close you crank.

Turbro has posuliar advantages and that they drive a steel down to the bettem of the hole and then turn on the rotation and commence drilling, but every time that you or I or enyone has checked this up, we find that this method is almost entirely an imaginery one; that in practice a great deal of the down hole work in question is done with #60 dreadnaughts, which are much inferior in every way to the #98 and that where the Turbro is used, the drill runner is not so foolish as to attempt driving a steel to the bottom of a deep hole on the off-chance that he is going to be able

the the second place is not to engineer the

Pere four

to turn it with a wrench or with the machine once the steel reaches the bottom. We firmly believe the No.98 machine will be ideal for the Granby conditions and we are most anxious to ship them a machine so that they may see what it can do.

STOPERSI

At the Nipissing in Cobalt where they have really hard close grained rook, they will only get 4" or 5" of drilling with a steel running dry. We sent them one of our CCW-111's with the double tube and this machine easily outdrilled not only their Sullivan and their Waugh stopers but also their heavier CC-21 and drilling wet it is now the regular thing to get a full 18" run with their steels. This drill was, therefore, purchased and we expect to got an order for a second one during the present month. In the meantime, we are producing the #111 parts as fast as we can and are changing over practically all the dry stopers which we have running in the Northern Ontario territory. We propose to do this both with the CC-21's, which we make into CCW-21's and the CC-11's which we make into CCW-111's. It is immaterial to us which drill you decide to use in the Vancouver territory. In fact we would prefer you to use the 21's because the #11 with the light head and 1" Quarter octagon steel is preferred in the Cobalt district. We are willing and anxious that you should demonstrate some of these drills either by running demonstrations of new machines or by supplying the necessary parts to convert existing machines. We are conscious that stoping drills are now very little used except in raises, but there is a considerable volume if we go after it and these new improvements should give us a great chance for business as they render

Paga five

many of the old style stopers absolutely obsolete.

naught particularly in small properties, where they bought one or two drills to sink a shaft with the idea of later converting to mounted drills. The No.38 machine can easily outdrill the No.60, but nevertheless they secured a certain amount of business in this way. We have, therefore, brought out what we call our No.288. We have found that by actual test that the No.288 machine running without a hand on it at all can outdrill the dreadnaught even when the men on the dreadnaught machine is holding down his full strength. This drill has a very neat oradle and uses the standard shell for converting it into a drifting machine. It weighs 100% as a hand sinker. It should show to advantage for example at Britannia, where we saw a large number of #65 dreadnaughts running and giving remarkably poor service. These old machines could be beaten.out by the #288 on a very comfortable margin in our opinion.

we would like you to make a real effort to demonstrate this machine.

with regard to the DDR, I do not know that there is anything which I can say which is not already known to you.

with regard to the DCR. This machine is on the border line between a hand sinker and a plug drill. A short time ago Ingersoll Rand found that by enlarging the ports, they were able to get about 10% in drilling speed, thereby a little more than equalling the drilling speed of the Waugh Clipper. In Canada we took this machine and found that by adopting the puff blower, which Ingersoll Rand are not able to use in the

States, we were able to make a further increase in drilling speed of over 10%. This machine is very low in up-keep cost. We have commenced manufacturing in Canada and the first machines are now ready for sale and the price has been reduced to \$230.00.

We would like to see some of these machines demonstrated in your territory. They will not only give you good service as hand tools but if you have any narrow stopes or light work to do, they will make a very near and serviceable machine when mounted.

You will notice that we can now supply both the BCR, DCR and the DDR machines with anvil block, fluted chucks, if required, which is expected to reduce the up-keep ocst materially over the older type of clutch chuck.

To are now getting out some literature on these new drills and later improvements and we hope you will be successful in getting the machines shown in a favorable light to all your important customers.

Please acknowledge this letter and tell us what action you propose to take.

Yours truly,

W

GENERAL SALES MANAGER.

EST:EMT C25AT C2GRS.

August 9th. Frank Carroll Esq. c/o Ingersoll-Rand Co. 834 Higgins Bldg., Los Angeles, Calif. Dear Mr. Carroll: Was more than pleased to receive your letter of July 31st. It had been my intention for sometime back to drop you a line. Everytime I see Marcel at the Dome, your name comes up among other things, and I always tell Marcel as soon as I get back to Cobalt I will write you. He told me that he had received one letter from you since your return to the West that you arrived back safely. The day after you left Cobalt we had a beautiful snow storm, and I am sorry that you missed it. It snowed 48 hours without stopping, and the traffic was delayed for a matter of three or four days. The next time you come up, we will have to arrange to show you one of these storms. We got the order for two #5 Leyner Sharpeners at the Hollinger, and we also sold the McIntyre another #5. Business in general has been extremely good, and we are striving to get command of the drill business again, although it is going to be a tight pull. The RA-71 drill is in Sherbrooke, and will be sent up here to me in a few days to be tried out. This might help some, but I am of the opinion we need something a little stronger and heavier than this machine. Recently we have tried out some of your #48B62 pistons in our 88 drills, and so far

Frank Carroll Esq.

they seem to work alright. It has practically been decided to discontinue the type of piston we were using in the 88 drill when you were up here, and this looks to be a step in the right direction. It looks as if we would standardize on the 48B62 type of piston with separate rifle bar in all our 88 drills. Although we have sold a number of machines since you were here, the situation is not altogether to our liking. At the Hollinger, they are still sticking to the Denver Dreadnaught in preference to everything. They only purchased a few European made machines, and these have not proved satisfactory. The little European Jackhamer seems to be alright, but the heavy drifting machines is no good.

open their mine around Sept. 1st, and this will mean more machinery. The Dome is going along strong, and are talking of increasing their mill. The Hollinger is milling over 4000 tons per day, and are increasing to 7000 tons. The entire district is looking fine. The producing mines are all expecting to enlarge, and new prospects are coming into the field every day. This is going to be a big mining district, probably one of the largest within the next few years. As far as the labor situation is concerned, we have felt no shortage of labor here as yet, but the demandright now is just about equal to the supply, so if you are short of miners down through the South-west, you will probably have to go out to the bush to get them.

Note what you say concerning the opal which you promised

Canadian Ingersoll-Rand Co.

LIMITED COBALT, ONT.

Oetober 6, 1927

M. 6. S. Wurslow:— Meneral Sales Manage 22 Dear Sir: -

business up here would be disong anged for a few days oring to trig fires. Railroad swing communication to the North is dead and remain so for a few days. The town of Staileybares is a thing of the pash & ince probably were build up again. North Cotall & up to the town limits of Cobalt is swept clear & it look extremely bad for Cotalt serveral times. Rain has been falling for a few hours now other danger appears to be over. Naturally, the excitement is intense. Cotalt is full of refugees and we are all helping out as much as possible. By monday excepting should be normal again. We do not know exactly what-Lawage has been done further North, but understand Scerbland & Tuenenis are safe. Englehart was in a bad way at one time, he have no more news from here & one hoping that excepthing is are right there. It was a dandy while it lasted to the commative is Colalt was almost a panie. I got all our folks asome others over on the Nepessing hill as this appeared to be the safest sport. Mis Heard was with us. We don't know how her people made out in Haileybury but expect to find out today. What helped

Ganadian Ingersol-Rand Co.

COBALT, ONT.

for wake it worse, was that the worst scare came at about 7 r'clock in the evening when it was dock.

Everything will the moving again in thes office today. We share fush arranged to but up a family in the rooms at the devokes varehouse until they can get something better.

yours truly

October 14th, 1922. Personal. Mr.J.P.Cotter, Sydney Office. My dear Cotter:-Enclosed please find statement of orders booked for the month of September. It is very pleasant to see Sydney coming up strong again with an amount of total orders booked over \$21,000.00. We are still looking forward, as you are, to the time when some of your big compressor deals go through but apparently you have no furtherword on this matter. With kind regards, Yours very truly, GENERAL SALES MANAGER. ESW: EMW

2. William Nelson- William 800di.
Page two. Says business 8/22.

is not very surprising that there has been difficulty in handing out drawings and machines off the shelf. By the beginning of the New Year we believe that matters will have more or less settled down and that the situation will be well in hand.

I see the following paragraph on page two of yourletter:

"The only business I can see that we are badly handicapped in is the question of centrifugal pumps. We cannot hope to get this business until we have a pump factory in Canada. It is useless for us to quote on this business."

The pump businessor any other business is not learned in a day. Our Canadian-made Cameron pumps are being produced in the original end of No.2 Building where the shrapnel shells were made. The section, as you know, is 200 ft.sq. It is large enough to produce the entire number of centrifugal pumps of all sizes which are sold in Canada by all manufacturers combined. It is a slow business getting into the high grade pump line but the difficulty is not mainly in the manufacture. We are ready and willing to carry in stock all sizes for which the Sales Department can find a market. The balance we have got to continue importing and it should be remembered that as regards importing the other pumps, other manufacturers are in the same boat as we are.

Regarding prices. In order to give an opportunity to our inexperienced selling efforts, we have just recently changed the price of all Canadian-made pumps so that we are selling these in Canada at exactly the same figures as the Cameron Company sell the duplicate article in the States. This is not the case of any other article of our manufacture. It is undoubtedly a fact that Canadian users of pumps have been satisfied with an article inferior on the average to the article demanded in the States and we without much experience have got to try and teach

Page three

ourselves and then teach others the advantages of the higher grade article.

As an example. We lost an order yesterday for a \$6000.00 pump for the American Cyanamid Company and the Sales Office in question sincerely felt that they had made a creditable sales effort but on investigation, however, we found the following:

Our competitor was quoting on a pump which was acknowledged to be inferior to our pump, that is to say it would take not less and probably more Boiler Horse Power per gallon of water delivered. The steam turbine end of the outfit, moreover, figured as follows:

Steam per hr. for Wait Turbine....32 lbs X 240 Horse Power = 7680#

" " " Terry "29.6 lbs X 240 " " = 7104#

Excess steam per hour required..... 576#

Extra Boiler Horse Power required ... 576 - 34 or 17 B.H.P.

17 B.H.P. at \$50.00 per year gives an extra cost per year for steam to operate of \$850.00.

This saving would justify an investment of \$8500.00 to obtain.

Our extra price was only \$1500. (extra) which would be wiped out by the saving every two years. There is no doubt in iur minds but that if we had had a salesman as well versed in pump matters as he was in compressor matters that he could have swung this pump deal in our favor without any difficulty.

In the case of the 65 pumps supplied the Internation Paper Company at Three Rivers, we have been amazed ourselves at the practically perfect results obtained from this entire installation.

Page four.

The new installation for the Hollinger (Pulp and Paper interests) at the same point, amounted to about thirty pumps is going to prove an equally satisfactory installation and I venture to say that no lot of 100 compressors has ever put out which has given as little trouble as these 100 Cameron Centrifugal pumps which are operating 24 hours a day. We sell many more centrifugal pumps in a year than we do air compressors and it is surprising to me that while we have the usual number of complaints, service engineers services and requisitions for credit, I am able to practically forget a pump as far as troubles are concerned from the moment that the installation is completed.

We cannot get this class of article without paying for it and I venture to say that when you have got the first few Cameron pumps in operation in your territory you/have very little difficulty controlling this class of business with customers who are able to pay for what is best and most efficient.

with kind regards,

Yours truly,

GENERAL SALES MANAGER.

ESW: EMW

Capy to 4.1 m.

Dec. 5th/22.



Frank Carroll Esq., c/o Ingersoll-Rand Co., Los Angeles, California.

Dear Mr. Carroll:

I have been intending to answer your last letter, but thought it would be better to wait until I had something real definite to say to you. I have seen L.P. Marcel at the Dome two or three times within the last few months, and you can also expect a letter from him very shortly. He is going to write you in connection with some work that is being carried on in your country. He seems to be getting along very nicely at the Dome, and has done some very good work there.

The last time I wrote you, I told you that we were going to try out some of your 48B62 pistons in our 88 drill to see if these would give us better service. The results we have obtained so far are very encouraging, and we have practically eliminated our piston breakage with this piston. We have about 75 or 80 of our machines in operation now in this district equipped with the 48B62 piston, and in a short time all our machines will be so equipped. The first piston was put into a machine here in Cobalt sometime around the first of July, and we have gradually changed over altogether about 80 drills. Altogether we have only broken about four pistons. Some of the pistons have been in operation for a period of over three months, and the average, I suppose, would be approximately two months. So far, the change has worked out very nicely, and we are beginning to see the result of this.

The RA-71 drill was received here, and has as yet not been put to work. We are waiting until we get some place where we feel that a machine of this type is wanted, and we are expecting to get good results. The spring handle which we designed for the 88 drill is working out nicely, and the machine equipped this way is a very good competitor of the Waugh 60.

Recently, we have sold a number of DDRW-13's equipped with collared steel, and have gotten very good results, especially in the harder rocks. We have also designed a spring handle for the DDR-13 which is very

Frank Carroll Esq. satisfactory, and goes a long way towards relieving the vibration on this machine, which was its worst feature. At present Britton is away from this district. The work got too light for him so we sent him down on the Welland Canal, where all he has to do is to stand up on a scaffold 40 ft. above the ground and punch flat holes 12 ft. deep and 4" in diameter into some rock they have down that way. After he gets through with this, a couple of 88's wont bother him at all. This is about all the news at present. We have had a fairly busy summer, and prospects look very good. This country is going ahead all the time, and is going to be one of the big mining districts on this Continent. The weather is very mild for this time of the year, so if you are thinking of making another trip, I would suggest your waiting until around about the last of January, when we will probably have an occasional flurry of snow. Trusting this finds you well, and with kind regards. Yours very truly,

M. & Syd. General. General Mgr. Mr. E.W. Gilman. Dec. 8th/22.

Sieved Colle

m = 2 mm

they gave us six months to decide this on. In regard to the Drills and equipment which we shipped to Wabana, I feel quite certain in saying that we will get an official order to cover a complete equipment.

Dealing with the third paragraph of your letter in which you say that Mr. Sellars reported that the business will probably go to the X-70 or S-80. In this we cannot agree with Mr. Sellars, for if we have the goods in our #98 Drill, that is if it will stand up in this endurance test at least equal to the other Drills, I would put the very last dollar I had on it. It is true the X-70 is a faster driller to a small extent, but the #98 has other advantages; it is a better favorite with the miners, it is lighter and the extra difference in price is too much compared with the extra drilling it does. If the decision is made in favor of the independent rotation machine, we believe the X-80 will take it, but personally I believe that the rifle bar type of rotation will eventually win out.

The reference to the fourth paragraph of your letter, we note that New York feel that we should do different about Newfoundland, that is, covering Newfoundland from a sales point of view. Please remember that conditions in Newfoundland have only very recently changed, and we would like to ask anybody who knows Newfoundland conditions, what there is in Newfoundland in our line besides the Wabana Ore Mines, and pickings around St.Johns, and small pickings at that, the writer for one would not want to depend on it for his bread . T. . Syd. General. General Mgr. Mr. I.W.Gilman. Dec. Sth/SS.

they gave as six months to decide this on. In regard to the Drille and equipment which we chipped to Vabena, I feel quite certain in equipment which yet an official order to cover a complete equipment.

Dealing with the conservation of the contract of the business will probably so to the L-VO or 8-80. In this we cannot serve with MT.

Sellars, for if we have the goods in our #98 brini, that is if it will stand up in this endurance were at least equal to the other Drille, I would put the very lest collar I had on it. This true the L-VO is a factor driller to a small eitent, but whe #98 has other advantages; it is a better fewerive with the miners, it is lighter advantages; it is a better fewerive with the miners, it is lighter advantages; it is a better fewerive with the miners, it is lighter and the compared with the extraction it does. If the decision is add in favor of the independent

dent rotation machine, by believe the K-80 will take it, but personally nally I believe that its ear type of rotation will eventually win out.

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To Messes Stewart & Mc Donnell Seccaudes, Gold Coast Colony British West Ofrica Jan 20 /23 Mr F. W. Gilman, 260 St. James St., Mantreal, Can. 2 2 9 83 11.38 201.16 Dear Mr Gilman Better Cate than never, N wish Jon and The whole I Saw Staff a Very Bright & Prespending hew god. Preceived Seen very nice letter of Jug 22" Just was very pleased to have a few lines. From Jace, I also received by the last mail a letter Joan Mr Winslow willing me that things in general throughout Canada have unproved a good deal since and Sincerely hope that the dark cloud of depression will soon fade, away Altogether, and frosperity reign instead

Well Mr Tilman Wave still here in This Count of admost perpetual sunshine and am pleased to be able to say that I am cey aying first rate health Dick is also her sull is holding his own his has not put an any surplus flesh but I am a good bett langer in Circumforence Than when I left Montreal Well Mi Johnson
Dick & myself am very being now so
the machiner from England have only
just recently began to arrive and it appear That everything is crowding in on us much faster han we are able tossemble The machines to get them out of the gard & make room for other machiner however we en close & the sea front So what we find that is not very ungently needed we dump . off on the sand by the railroad track band "tackle" the most needed machines. We have membled Seven Steam Cocomptives, each about fifty tous, also four gasoline locomotives

In: 100 Tou Steam Shovel which we sent out to do her bit towards the Takoradi harbent work We have now in hand an 100 Ton Steam Thouse and a 90 Tou Cocomotive and two more big shovels waiting for as & memble We have two more go ton locamotions but they are loaned to the Gold Coast Railways for a whole & help & haul The harvest of cocoa. Vhave just now completed the installation of the two alley Fractellan dis Compressors of five boilers at the quary site Muile be going & Halrohadi in a feed days from now i justall the pawert plant regrigerating & ice making plant the machine Shop y wood working machines and also a paw mull and at The Dans times I will have in hand The Stone overshing glant at the greavers

It has been a long times to want for The equipment but now its here & a very great extent including the 5 flat cars & air dump cars V think Some real work will soon commence towards trying to file in a part of the South allantie Ocean Col MDonnele has been down her for a few weeks and to returning & Englant morrow. Support by now for have t wear four for med Coat & gloves to try to keep warm, whilst we are wearing as tettle clothing so the taw will permet in order to try to keep cool, What a difference a fled miles makes) he mornings of evenings here are ideal but during the greater part I the day seld Sol shines down in all his glory and robe are frost of aux energy from Journa

Personal.

N july Mark

February 21/23.

Mr.J.P.Cotter, Menager, Sydney Office.

Dear Sir:-

Subject: Your Territory.

Ingersoll Rand have felt for a considerable time that the Newfoundland territory was not being covered as completely as they think it ought to be covered. When I was in New York two weeks ago the matter came up in definite form and it was their feeling that Boston Office should take this territory and handle it through Mr.J.J.Miller working on a commission basis together with occasional trips by their own men. We did not want to lose control of this territory and we finally agreed that it should continue to be attached to the Sydney Office but that we would appoint Mr.J.J.Miller as local agent on a commission basis with whom you could correspond and who would be paid commissions on only such business as he actually handles.

Essential features are these ----

Sydney Office will represent Canadian Ingersoll Rand in Canada in connection with all Canadian-made equipment and nearly all imported equipment, and will represent Canadian Ingersoll Rand in Newfoundland in connection with Canadian made equipment which Ingersoll Rand does not manufacture in the States, this means hoists, crushers, Bird Screens, barking drums and other similar material.

Sydney Office will represent Ingersoll Rend in Newfoundland in

H.V.M. Please note Antum he Story of Compressed air W The Stony 7 old No. Description. Introduction (This will be decided later) 100 words on 2. Animation of Compressor. Caption Air compressors are built in many sizes 23. Cardner Compressor. 8. Sullivan Compressor. 4. Importal Compressor. 8. Corliss Compressor. 6. Bury Compressor. 7 4 C.P.T. Compressor. 0. I-R Compressor. 9. C.P.T. Mine Car Compressor. Caption The rock drill was the first machine to use compressed air extensively. Different designs have been perfected for each olass of work. 20. Hammer drill in chaft. 22. Hammer drill trimming in shaft. 18. Hammer drill working in muchpile and blowing dust.

Banner drill on tripod.

23.

received, 02,707 03 62,750

14.

Drifter at work.

20.

Drifter in heading.

16.

Drifter in column.

27 .

Piston drills in tunnel.

10.

Stoper.

20.

Stoper (Water.)

20 .

Auger Drill.

Caption

Core drills furnish samples of rock from great distances below the earth's surface.

New No. Old No.	Description.
21.	Diamond Drill.
22.	Diamond Drill cores.
Caption	Many Minds of rook drills are used in stone quarries.
25.	Quarry Panorena and drills on bar.
24.	Lewis hole tripod drill.
25.	Lewis hole split.
26.	Hemmer drills on deep holes and general closeup of plug drills.
27.	(to be inserted later) stone working shed.
Castaon	Channeling machines and other large rock drills digging large canal.
20.	Magara Canal and channellers.
29.	Submarine drills.
30.	Canal tripod drills.
31.	Homer drills line drilling.
Caption	The machines which sharpen the rock drill bits.
52.	Drill sharponers.
33.	Sharpeners and furnace.
84.	Sharpeners on twist steel.
<u>Caption</u>	Portable air compressors operated by gasoline elgines or electric motors reduce the cost and speed up all kinds of road and street work.
35.	Portable Casoline Compressor.
Coption	Cutting a trench through rock.
36.	Drilling in trenches.
37.	Drilling in trenches.
Caption	Tearing out old concrete foundation.
38.	Hormer drill tearing out old foundation.

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Men No.	Old No.	Description.
Cer	otlon	Cutting asphalt and breaking out con- crete with Paving Breakers.
39.		Paving Breakers.
40.		Cutting asphalt
Ca	otion	Ramming backfill in trench.
42.		Trench reming.
<u>Co</u>	otion .	Calking pipe.
42.	413	Calking pipe.
Ca	ption	loosening compacted soil.
43.	48	Cley Diggers.
4. 00	ption	Tamping railroad ties.
44.	43	Tie Tempers.
Ca	ption ·	Portable hoists have manifold applications.
45.	43%	Tugger Holets.
Co	ption	A rock loading machine small enough to work in a 6 ft. high tunnel.
46.	44	Id thie Digger.
<u>Ca</u>	otica	Compressed air is extensively used for pumping water and for handling all kinds of chemicals.
47.	48	, Air lift.
	ption	The molding machine is indispensable to the foundry.
49.	46	large moulding machine.
49.	@7	Small moulding machine.
50.	48	Small moulding machine.
51.	49.	Sand Rammer.
58.	50	Sand Rapmer.

How H	0.	old No.	Description.
55.		51.	Sand Piddle.
9	aption		Breaking out cores from iron casting.
64.		52	Core breakers.
9	aption		Chipping hermers are used in almost every industry.
55.		53	Chipping costings.
56.		54	Chipping castings.
57.		55	Chipping on condenser shell.
58.		86	Chipping Billets.
59.		57	Chipping Billets.
60.		58	Chipping plates.
62.		59	Chipping and grinding dies.
4	Caption		Holats save time and labor.
62.		63	Hoist in machine shop
63.		64	Cylinder hoist.
64.		68	Hoist in Locomotive shop.
	Caption		Air keeps the freezing water in motion insuring pure, clear ice.
65.		66	Daking ice.
1	Caption		Grinding valves.
66.		67	Tapping valves.
\$	Caption		Duffing in paint shop;
67.		68	Buffing auto hood.
\$	Caption		Making felt hate and raising the map .
68.		69	laking felt hets.
5	option		Cutting 1000 patterns at once.
69.		70.	Cutting patterns.
5	aption		Cleaning furs.
70.		72.	Cleaning fure.

New No.	Old No.	Description.
Caption		Inflating tires.
72.	72.	Inflating tires.
<u>Caption</u>		Cutting new grooves in solid rubber thes.
72.	73.	Regrooving tires.
Caption		Moistening air in a textile mill.
73.	74.	Humidifying system.
gaption		Nearly all glass is now blown by compressed air.
74.	75.	Blowing glass.
Caption		The compressed air motor is light in weight and very powerful. It is built in many sizes for all classes of work.
75.	60.	√ Motor animation.
Capti on		Grinding castings.
76.	61.	Grinding small castings.
Caption	1	Cleaning castings with wire brush.
77.	62.	Cleaning with wire brush.
Caption	1	Wood boring and driving spikes.
78.	76.	Wood drill.
79.	77.	Wood boring and spike driving.
Caption	1	Drilling, reaming and tapping in metal working plants.
80-	78	Metal boring in locomotive.
81.	79	Riveting on deck plates.
82.	80	Close-corner drill.
83.	81	Putting in stay bolts.
84.	82	Tell-tale drilling.
85.	83.	Reaming on structural forms.
86.	84.	Reaming in boiler shop.
87.	85.	Reaming on ship superstructure.

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New No.	old No.	Description.	
80.	86.	Reaning on ship plates.	
89.	98	Ruming down mate.	
90.	89	Driving stude.	
91.	200	Countersinking condensor heads.	
92.	201.	Operating planer heads.	
Caption		The riveting cum has been in use almost as long as the rock drill.	
95.	67	Rivetor animation.	
94.	88	Portable compressor.	
95.	60	Riveting on steel building.	
96.	90	Riveting up steel bridge column.	
97.	92	Riveting steel ship plates.	
98.	92.	Rivoting on oil still.	
99.	93.	Riviting on gondola car.	
300.	04	Rivet buster.	
301.	95	Riveting dock plates.	
102.	96	Locamotive shop scene D.L.W.	
203.	97.	Compression rivetor,	
Caption		Calling metal joints.	
104.	108	Calking boiler.	
105.	303	Calking deck plates.	
Gaption		Flue cutting and welding.	
206.	204	Flue outting.	
207.	2.05	Flue welding.	
Caption		Beading botler tubes.	
100*	206	Boading boiler tubes.	
Captaon		Oncking condenser tubes.	
109.	3.07	Racking condenser tubes.	

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How He	old No.	Description.
	Caption	Stuffing saucege.
220.	209	Stuffing caucage.
	Caption	Cleaning with the air jet.
222.	209	Blowing chips off machine.
112.	230	Cleaning jets.
	Caption	Send blesting.
113.	222	Sand blasting locomotive.
116.	118	Sand blasting buildings.
	Caption	Painting by compressed air.
225.	113	. Paint opraying.
120,	234	Point oproying.
127.	226	Reint oproying.
	Cootto	Testing containers of fluids for leakage.
110.	236	Testing tanks and radiators.
	Caption	Operating lathe chuck
229.	227	Operating lathe chucks.
	Caption	Compressing springs in the ear shops.
320.	238	Compression car springs.
	Caption	Operating forming hormors by compressed air.
222.	229	Operating forge hanner.
	Caption	Dending pipe.

Bending pipe.

Coment gum.

The cement gum has many uses.

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THE VANDERBILT HOTEL
THIRTY FOURTH STREET EAST AT PARK AVENUE
NEW YORK

THE BON AIR-VANDERBILT

Augusta, Georgia

THE CONDADO - VANDERBILT HOTEL
SAN JUAN, PORTO RICO
HILL-TOP-INN
NEWPORT, RHODE ISLAND

February 27th.1923.

General Sales Manager

Montreal.

Dear Mr. Winslow: -

2 yrs Reind

met 88 "dilla Shawinga

Your data of February 23rd. estamates a \$130,000 month for February bookings. Perhaps we should feel that February is a low booking month but I'm not sure it should be. Of course a \$130,000 month is not good enough for our organization as it is at present.

Soon new you and I will have a complete two years record in detail and we must do something about both offices and men whose record shows them to be dmones living on others.

I wish you were telling me more about Shawingan progress with drills. Iam particularly interested in the behavior of the *88 on the Shawingan job.

I am glad of your plans to present the Compressed Air paper as widely as you are doing.

Sincerely yours

I just telegraphed you I did not feel it necessary to make the trip to Montreal on account of Uncle George's death. I don't feel it will come to Mother as a shock at all. I will however if Mother feels she wants me.

% Stewart + Me Donnell Deceaude Gold Coast Colong British West Offica. Dear art: V received quer letter of Jan 24 Cast mail very glad & hear from Jon again and also I am pleased to hear That beisness with you has been good. I hap? that business will continue ? be good with for Well ant, Vann stile pegging away here in The sunshine I have completed installing The Compress plant at the quarry site, both laintrenove and running very nice but the boilers Am a disquace of the plant of thinks We have installed an induced draft apparatus to Them. We stuck up The ald stove pipes on The boilers to printen them until the induced draft system arrived.

2 I am enclosing a small shots of the plant I would like to be able to Dend Jon a bigger of better view of them tent to nigger photographers are not up to the scratch for taking pectures. I am now going of Takoradi & instale the power plant and a whole lot of other plant, I expect that shortly after we have installed the all other work in my deportment will be at Takorali. All our mail wile be received from at Seccourter. and I expect with be forwarded to us by our awn trains. He Heading - Office will remain her and the Civil Engineering Staff but all alling well move to the new quanters at Tatrovada

Quite a member of the fellows me leaving for home ment every boat recently and quite a number of new ance here & file their places Dick Williams to very anxious to get away first because of same important paisness in BC he want's tattend to, So & gues I am hen for a good lung stay get If he comes back it will be hovember before he arrives hen so I think of my health holds good until he comek back of shall mak, application to remain hor until April I next gras because I don't want to land in England and spend my holidays in winter of I can get out. Wit however there is lots I time & Think I that get I very much doubt Leave swing & my Wige's constition

be for asked me of Jack was still in Seattly 188 his is still them I do receive a letter occasionally from his Wife Jack is as indefferent as ever regarding wreting & believe he is even worse than old Dave for writing. That a letter fam my Dinslow a Jew weeks agd Van going twitz him shortly, I wrote the Tilman a lettle cohile back how that after & get back on leave I may get tired I Old Country ligi and decide & visit Canada of so I will let you know I will have to get my teeth fixed so whether or not of can have it down as well in Ingland femance to be found out. I will regards to Aut Swherland Joenelf & letthe suss, Smooned your Am Truran

J. B. L. McDonald left him several weeks ago, he is not coming back, There is a man han in his place whom you may knows, or at least have heard of frim his was with the Firm for many years, his name is Mannay. Angus Stewart has also left for good D' Kerr and several athur left her a week ago Then are five others leaving & morrow. Col McDonnell y his Wize wen hem for a mouth and left about a mouth ago he seem to be very well pleased with what & have done, and has fromed to take. The matter up will the fracon agents in Southon and will try to get \$200-0-0 gr. year tacked on the my solary. Pau glad & hear that gant lette Kiddies am getting along so well it does not take long for them & grow up Ant I do this powetines that I am quits a gaing fellow, but when I think of this Militren I have and their ages of at chang?



be surprised when I tell you that the breakage of steel amounts to at least 10% of the number of re-dressed steels sent into the mine each day, in other words, the head blacksmith told me that he sent into the mine each day on an average of 250 pieces of 1-1/4" hollow rou d steel and that he had returned to him each day at least 25 pieces of broken steel. ** In this shop, as stated above, two Sullivan Sharpeners and five men are employed in handling approximately 250 pieces of steel per day. This would be only a very small days work for two men and a Leyner sharpener. I mentioned this fact to the man in charge and he agreed with me that the cost of handling steel was excessive. and some days this number reaches 40 or 50 pieces of broken steel. Aside from the business in prospect at Wabana there is a considerable amount of business in sight in connection with the Himber River project, about which I wrote you a few days ago. This business will be handled thru the Newfoundland Government. In addition to this prospect there are some metal mines on the mast Coast of Newfoundland from which lead, silver and copper o es are extracted. With an improvement inthe metal market, these mines, which are now more r less inactive, sould resume operation. In view of this situation, it is my opinion that we should stablish an agency at St. Johns, Newfoundland, and in this connection I will state that while at Wabana I was approached by Mr.J.J.Miller a highly esteemed employee of the Dominion Iron & Steel Co. and very close to the Newfoundland Government, who has a business in St. Johns, known as the Newfoundland Coal & Trading Co. in reference to securing our agency. I am, well informed as to Mr. Miller's standing with both the Dominion Iron & Steel Co. and the Newfoundland Government and I feel confident we would make no mistake in giving his concern the agency. Mr. Miller is alread, in touch with the officials connected with the Humber River project and has offered our equipment with the understanding that we will take care of him on a commission basis. I might mention, in this connection, that without the assistance of someone close to the Government officials it would be difficult, if not impossible, for us to get a look in on this job, as the money is being provided by the British Government and British Contractors are going to do the work and British equipment is supposed to be used. Mr. Weither tells me that all of Newfoundland territory has been put under Boston Office and I can assure you that this move has my hearty approval and I can now feel that this territory will be given the attention it will require in order to recover the valuable business which was lost thru lack of proper attention. It should be remembered, however, that all purhhasing is done at the Company's office in Sydney, N.S. and as Mr. Cotter is very friendly with the officials of this Company, I am inclined to believe you will have to make some arrangement whereby he will receive proper credit for the business secured thru his office. For your information it might be well for me to explain that all the officials of this company are Canadians and so is Mr. Cotter and I do not believe the B.E. Steel Corp. would approve of any transaction that would deprive him of proper recognition on orders placed with his office. Owing to severe weather conditions in Newfoundland during the winter season it will be almost impossible for anyone to make the trip to Wabana until sometime early next spring and Mr. Geither and I are planning a trip together as soon as weather conditions will permit. C.H. Sellars.

Mr. Winslow:

The following information may be of interest to you showing the comparison of electric versus pneumatic portable drills.

1	torogo buoguagoro bor ocoro	attito.
Drill Capacity	Weights Van Dorn Electric.	L.D.Pneumatic.
3/16"	$6\frac{1}{2}$ lbs.	
1/4**	$9\frac{1}{2}$ lbs.	9 lbs.
5/16"	$10\frac{1}{2}$ lbs.	
3/84	$14\frac{1}{2}$ lbs.	
1/2"	$19\frac{1}{2}$ lbs.	15 lbs.
5/8#	20½ lbs.	15-24 lbs.
7/8"	32-45 lbs.	24 lbs.
1"	46 lbs.	24-26 lbs.
11/4 19	76-79 lbs.	26-43 lbs.
1½"	80 lbs.	43 lbs.
211	107 lbs.	47 lbs.
21/11-311		55 lbs.
5"		68 lbs.

a could your letter 1 , Kenting In Mrs of any s gane Conventen after will be one long plug to ma lost time again and then you will be home an glad of your attitud re Clubs. his matter out of all proportion ahead of muly lear this subject Ki and 9-L Ring Care of it in are my only aggression genin about, and I want them to be as hey occupy and the wor hey are doing

2. (000 we can review this Whole Setuat . Cars aut cerutory not only in the I am very glad you as 1 then use ecestary an expense or I they are perfer Jorny i 9 wrot me mo offer. Uny effort I ma got copy of my lette I must have situation and par on con seque is have done outsiders in the matter better policy to go a let I have practically decided to than at meter this Summer partly with the same

Interesting reference to clubs, care, salary business man. a young

anadian Ingersoll-Rand Compai ou o Compo

260 ST. JAMES ST.

MONTREAL, QUE. March 14,

1/19

General.

Mr. H. V. Haight, Chief Engineer, Sherbrooke.

- "Story of Compressed Air." -

Dear Sir: -

Answering your letter of March 12th addressed for the attention of Mr. Carter regarding the moving picture film entitled "The Story of Compressed Air.". We are sending this film out to you today by Dominion Express. We attach hereto the list of items in the order in which they occur in the film. We also attach Mr. Winslow's draft of a talk before the Mining Institute.

Will you please return both of the above to Mr. Winslow when you are finished with them.

Mr. Winslow found it advisable in his talk to the Queen's University and (Varsity students to give a very brief introduction, using the first two paragraphs of the draft used before the Mining Institute and adding something to the effect that it should interest the Canadians to know that we are producing in Canada practically every item which will be shown on the film, not the identical item, because some of the pictures shown are of competitive makes, but there is Canadian Ingersoll Rand product corresponding to practically every item which is shown.

Between the first and second films Mr. Winslow

-2-

found it advisable to give his talk on development of compressor design. During the second and third films he gave a talk on the development of rock drills during the past fifteen years. In conclusion he gave a few words about pneumatic tools where time and the feeling of the meeting made it advisable.

Mr. Winslow suggests that during the progress of the film you should stand back ten or fifteen feet in order to properly see the pictures and you will find it advisable to talk more or less continuously as the film proceeds.

Please return all the attached to Mr. Winslow personally but hold the film in Sherbrooke until further advised by us.

Yours truly,

ERE/BB

Pulp & Paper Mchy Dept.

Colwards



the development of rook drills during the past fifteen years. film you should stand head ten or fifteen feet in order to propabsored mili out an elsmouthing assi to ter to be to be settened to be settened to be winglow perGentlemen:

We have seen on the screen a very comprehensive view of the machines used for the production of compressed air and we have seen a large number of the principal uses to which compressed air can be put.

I have only been fifteen years in the compressed air game but, during that time, quite notable changes have taken place.

I do not know that thermo dynamically the air is being produced much more efficiently because we knew the first principles just about as well then as we do now. These first principles are that the inlet passages to the compressor should be large and cool. The ports should be stream lined and ample to cut down friction entry losses. They should be separated from the hot discharge passages so that the air at the beginning of compression should be as cool and dense as possible. The cylinders should be water jacketed on the sides and heads, particularly on the sides to maintain good lubrication and to keep down the heat of compression. The discharge valves should be light and of ample area so that no excessive pressure has got to be developed in order to open the valves and get the air out of the cylinder.

Fifteen years ago, heavy, so-called Corliss Valves, were in fashion for the Intake while rather heavy poppett type Valves were used for the discharge. The Corliss valves were splendid insofar as the thermo dynamic efficiency was concerned but they had to give way to the light leaf valve or plate valve in order to permit of operating compressors like other similar engines at reasonably high rotative speeds.

A certain actual efficiency has been gained by replacing the poppett valves with the present lighter types which probably open

with two or three pounds less excess pressure.

On steam machines the old Corliss Valves have not been improved upon as far as steam consumption is concerned but the use of Meyer Piston Valves gives almost as good steam economy and can be run at present day speeds.

The real development, however, has been along the line of getting more air out of the same size of machine, making the machines more compact, more self contained and more nearly self oiling. Practically all modern machines use enclosed dust proof frames with some form of automatic lubrication.

Particularly noticeable strides have been made in the regulation of air compressors during the last fifteen years. The previous plan on large machines used to be some form of trip on the Corliss gears which was usually cumbersome and caused a certain amount of trouble.

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with two or three pounds less excess pressure.

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Into statistical and commerce in Commerce of Commerce

E. Wine low to Mining Institute March 1923.

THE STORY OF COMPRESSED AIR

The picture which we are going to show you is called the Story of Compressed Air. It is not the history of Compressed Air but is simply a very comprehensive story of its many modern applications.

The picture is not a Canadian production but is one prepared by the U.S. Department of Commerce in co-operation with the Compressed Air Society of New York and it is through their courtesy that we are enabled to show it to you tonight.

Not all of the pictures shown will be directly applicable to mining but as very large users of compressed air I feel sure you will be interested in the miscellaneous uses to which it is put in addition to its principal occupation of operating rock drills.

With regard to the picture that we have just seen, perhaps I may be permitted to say a few words after which I hope there will be some discussion of the points raised.

With regard to Pneumatic Tools,

The developments in this line have been directed towards a larger and larger number of individual sizes so that almost every conceivable operation has been provided with a specially designed tool. The development has also been towards a reduction in the number of parts and a simplification and a consequent reduction in the cost of the wearing parts. Considerably more power has also been obtained per unit of weight.

With regard to compressors

In England the early design of air compressors followed the regular English practice of providing a machine that was essentially strong and heavy. The design was probably influenced by the big steam winding engines in common use at the coal mines. In any event English compressors started out as very heavy long stroke machines with slow rotation speed.

In the United States and Canada we did not go in to the same extent for heavy slow speed machines.

In England when rising costs made it necessary to change from the old design they turned right around to the marine engine for their model and English compressors today are largely the vertical high speed type with a forced feed lubrication. In the United States and Canada on the other hand practically all designers favour the horizontal machine and this has been designed for higher speeds by shortening the stroke in relation to the diameters and by providing compact enclosed frame with automatic lubrication.

I may say here that the principal factor limiting the speeds of air compressors used to be their mechanically actuated valves. Today the valves are not the limiting feature because the advent of the various feather valves, leaf valves and Rogler valves have made it possible to operate the valves themselves at speeds usually far in excess of permissable engine speeds. In Canada the horizontal type is particularly favoured because such a very large percentage of our machines are motor driven and for units over 1000 ft. a very satisfactory machine is obtained by mounting a self starting synchronous motor directly on the main shaft of the air compressor. This results in a floor space almost the same as with a corresponding size of vertical machine and at the same time allows the

parts to be inspected more readily and to be handled without the necessity for an overhead travelling crane. The other development in connection with air compressor design has been in improved methods of regulating power driven machines. There are three methods in common use, -- the unloading which completely closes the suction thereby causing the pistons to act in a vacuum. This system used to result in considerable heating due to leakage of air into the cylinder and continuing compression of this air which was initially hot due to slow passage into the machine. Now_adays, the compression of this air is prevented by leaf valves which operate it simultaneously with the closing of the suction and completely prevents the compression of the sir. The second form of unloading in common use is by means of holding open the inlet valves and this method also allows of the cylinders being kept cool. The disadvantage of both these systems is that they with a two-cylinder compound machine can only operate in two stages, namely, full load and half load. The third method is the system known as the clearance control whereby artificial clearance pockets are put into communication with the cylinder in such a way as to reduce its capacity. When three-quarter load is required, proper size clearance pocket is put into communication with one end of the low pressure cylinder and a corresponding clearance pocket is simultaneously put into communication with the opposing end of the high pressure cylinder. This procedure cuts the capacity at one end of the cylinders in half or cuts the capacity of the whole machine down by one-quarter. This procedure is repeated in connection with other clearance pockets in such a way that the machine may be run constantly at full load, 3/4 load, 1/2 load, 1/4 load or no load without any appreciable decrease in efficiency and moreover a machine may be hand operated and set so that it cannot exceed any desired stop. That is to say, it can be

operated at 3/4 load as a maximum and this is sometimes an important consideration to keep down power costs.

With regard to rock drills.

For mining purposes we can dismiss the old reciprocating type of machine and confine ourselves to the modern hammer drill. And as time is getting on we will leave jackhamers and stopers alone and speak only of the so-called drifting machines.

The factors influencing the drilling speed of a machine are the size of bit and the air pressure, For practical purposes it is moderately correct to say that drilling speed varies directly in proportion to the amount of rock removed by the bit. That is to say it varies as the square of the diameter of the bit. Worked out this means that where a $2\frac{1}{4}$ " bit will cut 10" per minute a 2" bit would cut $\frac{2.25 \times 2.25}{2 \times 2} \times 10 = \frac{12\frac{1}{2}}{4}$ Min.

And one of the most progressive moves at present being made is directed toward a reduction in the change of gauge between each succeeding length of steel.

This of course means smaller starters and smaller bits all the way along.

The other factor influencing the drilling speed is the air pressure. In Africa possibly due to high costs for power and for repair costs the usual pressure is about 70#. In the United States the usual pressure is 80#. In Canada and more particularly in Northern Ontario the pressure is about 90#. The result of this when using identically the same machines is a drill repair cost probably higher than in most other places.

The use of Anvil Block or Tappett construction is quite largely responsible for the use of these high air pressures in Canada. A machine using an anvil block and operating at 90# pressure at the machine might drill

at the rate of 10" per minute. The same machine in the same ground but using leyner shanks striking direct on the steel will drill the same 10" per minute at 80# pressure. I believe the drill manufacturers are practically a unitin recommending the use of leyner shanks and I believe the excess 10# pressure is responsible for 20% excess repair cost.

I understand that American drill manufacturers sell leyner type chucks almost exclusively to consumers having mechanical drill steel sharpener s.

A few well know Canadian mines are at the present time again going into this proposition of leyner shanks and I think this will prove to be a step in the right direction.

In conclusion I may say that in my opinion the trend of present day drifting drill design is towards a bigger, heavier, faster machine and I am afraid that a number of these mines who are getting down to small size steel in consequence of their smaller bit sizes will presently find that they must come up again to the heavier steel.

-(O) PY-COAST HARBOURS. Cold Court, Briliah West Africa. 3. J. Mathewson Mag., Dear Mathemoon: Really I on ashemed of eyeelf for not writing you long ago, but one is always tired here when the days work is done and Jun ay's ite mostly eleep. I have been here now 10 months and expect to go on leave the first week in July, have not made up my mind definitely whether I will so to Charda this time or not. If I do I will wire you if you are still in Winnipeg. We are getting along fairly well with the work and expect to be dumping rook into the breakenter in about three months. I have about 12 white men and 200 natives working on machinery. We have assembled so far 13 locos, 100 cars-(some air dumps), 4 steam shovels, oranes, water tanks, many plant and power plant at Cakoridi. We will have fine quarters at Takeridi, at present come of us are still at Secondoe, the climate le not too had but always hot, plenty of Maleria, some yellow fever and other things always hanging about. So dar I have been fortunate , not be ing off duty one single day since I left Canada. Do you want any Algrette feathers(I mean does your girl) plenty of them here also ivory tooks, leopard skins, sometimes lion skins, surestant feathers, leather work from Higeria ete. I am going to take about 3000 Aigrette feathers to England with me (if I can get them by the Guetone). I opent about four months in France before coming here, was all through the western port from Dundick to Amiene did not go to Poris, haden't time, visited Arras, Monoby, Suches, etc., the country is being built up again, one would not know come if the old places with which he was familiar, while at Arras I saw Mile from Armentiers she to the same old loving sizl. Well San do write and tell me some of the nows. I had a letter from Charlie Sangater come time ago, he was in Vancouver selling life insurance and accord quite contended. incly boy; How is business with you, I trust that you are doing well and that you haven't any dans cheap in price, and quality too. Buglish drille to contend with. The natives here are fine physically, mentally nil, morally about the same. Good-bye. 800- DICE.

JULY 11th, 1923. Ingersoll Rand Company, 11 Broadway. New York, N.Y. Attention Mr.L.D. Albin, General Sales Manager. Dear Sir:-Subject: Mr.C.F.LANE'S ALASKA TRIP Further to my letter of July 10th. Possibly the Seattle Office would be interested in the following information: The two oldest and most important customers in British Columbia are -- Granby Consolidated Mining & Emelting and Britannia Mining and Smelting. We used to sell them what is known as our No.88 drill, which was the Canadian edition of the No. 248 drill. We also sold and still sell them BCR-430 Jackhamers. We have also sold them a few CC-21 stopers. A number of years ago Mr. Sly was interested in the Denver Company and in the Britannia Mining & Smelting Company and this was said to have been the reason for the Britannia Company changing over and using Waugh drills almost exclusively. The Granby Company kept on using a few No.88 drills for a long time and as a consequence some of the smaller properties followed suit. Due to the smallness of the business we have not continuously employed a competent demonstrator in British Columbia and partly for this reason the blacksmithing practice is probably worse than in any other Canadian territory. Not only were the bit sizes made in many cases without change of gauge but the shank ends were badly looked after.

A.A.Paoli Personal. Montreal, October 20-1923. Mr. J. P. Cotter, Sydney Office. Dear Mr. Cotter: Mr. Winslow has left for an inspection of all offices as far West as Vancouver and will not be back for over a month now. I have your letter of the 4th in regard to Mr. Paoli. I am glad to see that you believe he is going to make a good man. A good man in my estimation is a man that sends in good volume of business with a low expense account. I am not in sympathy with this lavish throwing away of the company's funds in entertaining, cigars and that sort of It immediately jeopardizes a firm's case with me to have their representative try and thrust a cigar into my mouth. Years ago it was necessary to do a lot of entertaining and give cigars and all that sort of thing but in the past ten years these days have gone by in my opinion. If a man is sending in a large flow of business there is some excuse for this kind of expense account but where a man only takes an order once in a while and lets week by week go by without sending in an order it is a horse of a different colour. So many young salesmen think if they take one order that they can spend all the money they want for the next two months. I, ofcourse, do not know what you mean by referring to Mr. Paoli's personal affairs in your letter. Mr. Winslow did not say anything to me and it is possible that he has your personal letter with him. Yours truly, EWG: EMW

Canadian Ingersoll-Rand Company

LIMITED

/ Personal.

COBALT, ONT. November 1st, 1923

E.S. Winslow, Esq., Gen. Sales Mgr., Canadian Ingersoll-Rand Co., Limited, Montreal, Que.

Dear Mr. Winslow: -

I want to thank you for your personal letter of October 24th, containing advice which is very much appreciated and which puts a fellow starting out like myself, in a position to consider what he is up against and decide on a personal code to be followed out in business as well as a social way.

I fully realize that drink is the chief handicap to success and in some cases drags a fellow right to the bottom of the ladder. I want to assure you that booze is not in my line. I can join a bunch of fellows and refuse a drink in such a way that no one is offended. I have done this in the past and there is no reason why I cannot continue doing so.

opportunity you are giving me Mr. Winslow and will make every endeavor to show good results and handle matters in the way I amm expected to. If in doubt at any time I will surely ask your advice before proceeding. If I should happen to make an error, I know Head office will put me straight immediately so as to avoid a re-occurance.

I am making use of every minute of my time in Cobalt. I am familiarizing myself thoroughly with the drills

and their respective parts. Mr. Burbank is doing everything he can for me and to this end I have accompanied him to some of the camps which has been to my advantage.

Again thanking you and expressing my sincere gratitude, I remain,

Yours very sincerely.

Chedwards.

E/

Vancouver, B. C., December 18th. 1923. E. S. Winslow, Esq., Can. Ingersoll Rand Co., Montreal. Que. Dear Mr. Winslow: -I have your telegram of the 15th, inst., as follows:-"Reference our various conversations would you care accept immediate management new office being established at Timmins. Ontario, handling such properties as Hollinger, Dome, McIntyre and various smaller mines, We would start you at same rate you received in March nineteen twenty one and there would be prospects of advancement." and herewith hand you confirmation of my reply of the 17th:-"Wait my letter date. Am explaining situation re a contract to be closed January fifteenth which if awarded a certain party might be adviseable me to work with them until plant was contracted for." The reason I thought it advisable to reply to you as I did is because J. W. Stewart is figuring on a section of the Welland Canal. This contract will run into from twelve to fourteen million dollars. As a matter of fact, a certified cheque for \$535,000. has to be put in with the bid so you will see it is an extensive piece of work consisting principally of excavating and rock work. I am certain that if Stewart is awarded the contract that I will have an opportunity of figuring on the compressing and drilling equipment which should run into considerable money. Let me have your idea on this as I am anxious to get to work but feel that I could do a lot of good for the Company in the event of Stewart getting the contract if I was a free lance.

..... -2-December 18th, 1923. E. S. Winslow, Esq. Before receiving your telegram last Saturday, I was called in by one of the heavy stockholders of the Premier Mine in connection with a small developing plant. I recommended Ingersoll Rand stuff throughout, and expect when the order is closed I will get it, and will work in conjunction with the B. C. Equipment Company. Write and let me know just what the situation is in the East. While I want to go to work, I think I could do much more good in this country than I could there, both for myself and for you. With kindest regards to Mr. Gilman and yourself, and a Merry Christmas to you, I remain, Yours very truly, R. P. Meians

(FOR INTER-OFFICE USE ONLY) CANADIAN INGERSOLL-RAND CO., Toronto. February 6th, 1924. FILE NO. Personal. Mr. E.S. Minslow, General Sales Mana TO: - GEO. H. DAVIS -SUBJECT: Dear Sir: Yours of the 4th. If we had a great number of Leyner Sharpeners in operation, and were selling one or more a week, thus necessitating a great deal of sharpener service work, Geo. Davis would be a very valuable man, inasmuch as he is well posted on Leyner Sharpener practice. On the other hand, you must appreciate that we are handling a very diversified line from this branch, and in my opinion, the necessary qualifications for a service man working out of this office are; - (1) Fair mechanic. (2) General knowledge of rock drills and rock (5) Average amount of intelligence.

work. (3) General knowledge of our product. (4) Level headed. We have now reached the point in this district where we have established a definite monthly income from pneumatic tool sales. This means that there is a certain amount of pneumatic tool service work to be done at all times. The sale of portable compressors will grow more. This also means a certain amount of service work. We must average at least one call per week on different customers. desirous of having our service man look over some of our standard horizontal compressors. We are getting more and more equipment of practically all our compressed air line, in operation on the Welland Canal, which demands servicing at frequent intervals. Sudbury field, now that we are about to

-2- Dec 1923 Souther

Mr. E.S. Winslow.

In addition to this mining end of it. some large developments are going to take place shortly on the Welland Canal. where they are going to let the whole contract There is an immense amount of rock work for section #8. on this section, and my hunch is that either my friends the Sir Wm. Arrol Co. or Dick Williams' friends the General Jack Stewart Co. are going to get this job. I have been watching developments closely, and to that end am going over there again this week. In any event, we are going to have to be right on our toes when this job is let on December 27th. and endeavor to make a clean up. If Stewart gets the job, and if Dick Williams is with us, we should be able to capitalize this. I have been endeavoring to look after all the rock work of this district myself, but have found it just a little more than I could handle properly, and give it the attention which it deserves, besides running the office. Of late. I have had Tozer helping me, and he has been doing exceptionally well indeed. Sudbury is coming strong just now, and I believe I have it in excellent shape. still, I have got to make frequent trips there.

In response to your request whether I have a good service man in sight. The best man I know of at the present time would be that young fellow McLean at the Hollinger. McLean used to be in charge of drill repairs at Creighton Mine. He had worlds of experience there, for

VIST OF MINING PROPERTIES IN THE COBALT TERRITORY ON WHICH WORK Feb. 1924

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Mining Corporation of Canada Ltd	Cobalt,	Ont.
Nippissing Mining Co.Ltd.		
Coniagas Mines Ltd.	W	11
Coniagas Mines (Operating Beaver Mine)	W	11
Kerr Lake Mining Co. Ltd. Schumaker, Ont	"	11
La Rose Mines Ltd.	11	11
Menago Mining Co.Ltd	11	竹
Mc Kinley-Darragh-Savage Mines Ltd	11	17
O'Brien Mine	n	11
Genesee Mining Vo. Ltd.	11	11
Oxford Cobalt Silver Mines Ltd.	19	11
Lorrain Consolidated Mines Ltd Silver Centre,		11

Keeley Silver Mines Ltd.

Mining Corporation of Canada Ltd Silver Centre, Ont. Cobalt, Ont.

Canadian Lorrain Silver Mines Ltd.

Silver Centre, Ont.

Silver Centre, Ont.

Northland Gold Mines Ltd. Bidgood Gold Mines Ltd.

Dane, Ont. Haileybury, Ont. Kirkland Lake, Ont. Haileybury, Ont.

Dane. Ont.

Larger Lake, Ont.

Boston Creek, Ont

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11 11

Argonaut Gold Limited

Crown Reserve Mining Co.Ltd. Canadian Associated Goldfield Mines Ontario Solid Silver Mines Ltd.

Barry Hollinger Gold Mines Ltd

Kirkland Lake, Ont. Continental Mines Ltd. 17 17 Harvey Kirkland Mines Ltd Huntin Kirkland Gold Mines Ltd Kirkland Lake Gold Mining Co. Ltd. Tough -Oakes Burnside Gold Mines Ltd. King Kirkland Gold Mines Ltd (closed down) Lake Shore Mines Ltd Lebel Oro Mines Ltd Sylvanite Gold Mines Ltd. Teck-Hughes Gold Mines Ltd. Township of Teck 11 Wright-Hargreaves Mines Ltd. Big Dyke Gold Mines Ltd. (prospect not working) Anglo Canadian Explorers Mines Ltd Lebel Crystal Lake Gold Mines Ltd (prosect not working)"

Baldwin Gold Mining Co.

Kenogami Lake Kenogami, Ont.

Normala Gold huies Blue Quarty Gold mies (FOR INTER-OFFICE USE ONLY)

CANADIAN INGERSOLL-RAND CO.,
LIMITED

Toronto, March 13th, 1924.

FILE NO.

Neg. T-951, Northern Construction Co.

Mr. E.S. Winslow, General Sales Manager, Mtl.

- WELLAND CANAL CONTRACT -

SUBJECT:

- PERSONAL-

Dear Mr. Winslow; -

Please be advised that the C.S. Boone Dredging
Co. of Toronto have secured the sub-contract from Quinlan & Robertson for all the subaqueous drilling on section eight. Tozer and
I are already in close touch, and you will see several letters
from me under separate cover regarding what is transpiring. We
are lining up some nice business. Your suggestion of hiring
Tregoning will work out very nicely, for I will probably use him
in rigging up the scows.

I have also been informed, confidentially, that our friends the Northern Construction Co. have secured the subcontract on the dry work. I have wired Wm. Smaill at Vancouver to confirm this, and will let you know the moment I hear from him. I knew you would be very interested. This is why I am telling you, but would like you to treat the information as strictly confidential, between Mr. Gilman and yourself, until it is made public property through the press. If you hear anything from your end of the line, please let me know immediately, as these people will have to purchase a tremendous amount of equipment.

We are extremely busy here this week. It looks as though this month will beat last months forty thousand. Regards,

Yours truly truly DISTRICT SALES MANAGER.

Mary

(FOR INTER-OFFICE USE ONLY)

CANADIAN INGERSOLL-RAND Co., Winnipeg, Man. March 18th, 1924

property

FILE NO. N & W General.

To: Mr. E. S. Winslow. General Sales Manager.

SUBJECT:

Dear Ed:-

While my trip so far has not been productive of any sales volume I feel that the calls I have made and the investigations I have made more than warrant my coming out here. really believe there is a more optimistic view being taken of conditions both in Winnipeg and especially at the Head of the Lakes.

I feel that we have got to send someone to Winnipeg very soon. I arrived here and found Cross struggling with several portable compressor propositions, and using his own words, he had more inquiries in the last week or so than he has had for some time.

There is no doubt, but that the Pulp Mill trade in the Winnipeg territory has got to be handled from the Winnipeg Branch. When you consider that there is the big mill at Fort Frances, which is in itself quite as big as Brompton. There is the Backus Brooks mill at Kenora which is quite as large as the St. Lawrence Then there are three mills in Port Arthur and Fort William Paper. each one quite as large as each of the Spanish River Mills.

Mining is not as bright as it might be, but there is some business to be done. I found on arrival here that the Manitoba Metal Mining Co Ltd., with Head-office 1511-20 Bank of

from W, Carler angersoll Rand



CANADIAN ACCOUNTING AND AUDITING COMPANY

INCORPORATIONS
COST AND BUSINESS SYSTEMS
INCOME TAX RETURNS
INSURANCE, LIFE, FIRE, MARINE &C.

WILDER BLDG. - 321 BLEURY ST.

TELEPHONES, PLATEAU 2217-8
PRIVATE BRANCH EXCHANGE

CABLE,"HEMMINGUS" MONTREAL

April 14th. 1924.

Dear Sir:

During the past three weeks a committee has been engaged in formulating plans relating to the present serious economic situation in Canada.

This committee will make its report to a number of representative business men of Montreal at a meeting called for Thursday mext, April 17th. at noon, sharp, in committee Room No. 1, Board of Trade.

Your attendance at that meeting is specially requested.

HKSH/G

Yours faithfully,

AK & Hemmine

Montreal, Que., April 14/24.

Winnipeg General.

Mr. T.W. Keating.

Keating's Itemary - Trip West - Whit K

Dear Sir:-

Leave Montreal Monday night, April 14th. You will go to Cobale, and spend three or four days to familiarize yourself with mining and our equipment applicable to mines. You should get into touch with Mr. Burbank and have him give you as much information as he possibly can, see our sharpeners in operation, go underground and see our drills in operation and generally familiarize yourself with mining trade.

From Cobalt to come back and go West to Port Arthur.

In Port Arthur and Fort William, you should devote some time to calling on each one of the grain elevators. There are some twenty or thirty odd grain elevators, most of them are equipped with one of our compressors. You will go to the grain elevator commissioner's office in Fort William and they can give you a complete list of the grain elevators in both Port Arthur and Fort William.

Mr. D.V. Whitehead, the Chief Engineer of the Barnett-McQueen Construction Company, Fort William, is a very good friend of ours and purchases our compressors regularly for grain elecators.

I told him that I would give you a letter of introduction to him and he promised to put you in touch with a number of the elevators that are not now equipped with compressors.

It is quite a job to get around to these elevators and in each place you should try and see if you can suggest other uses

able to dispose of this compressor and motor to the Vulcan Iron Works in Winnipeg who need additional air capacity. Mr. Mowett is the man to approach. If you can seel Mr. Hewitson's machine, you can get an order from Mr. Hewitson for a 5 x 5 portable.

C.D. HOWE & COMPANY, Consulting Engineer.

We want you to call end get acquainted with Mr. Howe because he is the designing engineer for the grain elevators and specifies our equipment. See copy of my letter of April 8th to Mr. Howe.Mr. Howe could assit you by telling you what elevators are not prospective. Find letterof introduction.

THUNDER BAY PAPER CO.

Take up with Mr. Smith, Supt., trouble he is having with multi-stage pump. Please get capacity, head and speed the pump is operating under.

I am also giving you a letter of introduction to Mr. Breckenreid, the Local Representative of the Ca adian General Electric Company and Mr. Smith, Local Representative of the Canadian Westinghouse Company. Both of whom can assist you in anything at the head of the Lakes.

CANADIAN DREDGING CO.

Go to the Hotel, Port Arthur and meet Cap. Rogers. See copy of letter that you will receive at Fort William regarding this.

I have taken a copy of the telephone directory of Fort William and Port Arthur and I am going to mark it up to give you a list of the people in both towns that we are interested in, and who are our prospective customers. It will take sometime to do this This will be sent to you in Winnipeg so that you can gradually cover Fort William and Port Arthur and familiarize yourself with them.

v suggestion is that both Messrs. Smith and Breckenreid can help you a great deal.

You have a copy of the Winnipeg negotiations and can familiarize yourself with them when you get to Winnipeg.

The head of the Lakes are probably your best center. So when you go through, you should figure on spending a couple of weeks covering the situation thoroughly each time you are there. There is no object in stoping at either Dryden or Kenora on your way to Winnipeg as the Backus Brooks Company's construction of Norman Dam is still in abeyance. Mr. McLelland having been in Montreal this week and advised us that he did not expect definite word much before the middle of May. Kenora is a very short ways from Winnipeg and you should go down there at the first opportunity.

Mr. McLelland has promised to keep us fully posted on how this matter goes. In Winnipeg the most important thing to get started on his the demonstration of portable compressor to Mr. Glasgow of the Winnipeg Hydro. I am arranging with Mr. T.R.Deacon, of the Manitoba Bridge & Iron Works to put a portable on to one of his jobs and let him test it out.

You also want to get hold of the Superintendent of the Winnipeg Gas Distribution Division and make a demonstration for them.

I will write you this week to Fort William giving you what my understanding is of each of the negotiations in the Winnipeg territory including Port Arthur and Fort William.

Yours truly,

April 14th, 1924.

Mr.T.W.Brackenreid, 142 College Street, Port Arthur, Ont.

Dear Brackenreid:-

This will introduce to you Mr. Tom Keating, who is going out as Manager of our Winnipeg Office. I told him what a good friend you were to Bruce Clegg and the rest of our Boys, and I hope that you will lend any co-operation to him that you possibly can.

With kindest personal regards, I am,
Yours very truly,
CANADIAN INGERSOLL-RAND CO.LIMITED.

WmCarter/LAB.

Assistant General Sales Manager.

for compressed air other than just blowing out motors. You can, we have no doubt, interest every one of these companies in a Midwest air filter because they are all badly in need of them. We think that you can adopt practically one size for all of these installations.

When you are out at the Grand Trunk elevator at the Mission you are close to the Fort William Paper Company. We have a number of negotiations up with them :--

Neg. W-155 - 12 & 12 x 10 FR-1 compressor.
W-143½ Log haul-up and slasher.
W-142½ Barking drum, chip screen, chippers, and chip sparators.

All of these negotiations are particularly marked 'Time pending instructions to proceed with the construction of the sulphite mill' and at this mill you should meet Mr. Turner, Mr. Calvert, Mr. Hubert and Mr. Crowell. They are all good friends of ours and find out what the present status of the mill extension is. Devote some considerable time to Messrs. Hubert, Turner and Crowell on Cameron pumps for the paper Mill.

GREAT LAKES PAPER CO.

The Great Lakes Paper Company are out in West Fort William in the same general direction as the Fort William Paper Company. Here you should meet Mr. King and take up with him, especially the question of closing negotiation W-213, his proposition on a #12 FV stock pump, a duplicate of the one he has installed. He ought to make a decision on this immediately.

When at the Great Lakes Paper Company meet Mr. Pepper of the Barnett McQueen Construction Company and discuss portables with him. We have recently sent him bulletins and you should also discuss these with Mr. D.V. Whitehead, Barnett McQueen's chief engineer.

Barnett McQueen Company are big contractors and build most

of the grain elevators at the head of the Lakes. Their office is in Fort William. You can work this deal up very well through Mr. Pepper. There should not be any doubt that these people should have either a 9 x 8 or 8 x 8 Type 20 portable. They have anew contract just starting for the Mutual elevator.

PROVINCIAL PAPER MILLS. (Neg. W-2121)

These people are considering an additional paper machine and we doubt if any word has been definitely received in connection with this. You might meet Mr. Knickerbocker, Paper Mill Supt., and tell him that I am still waiting for his information and data sheet on Vickery Felt Conditioner.

PORT ARTHUR SHIPBUILDING CO. Mr. J.J.Smith, Manager.

You will receive at Fort William copy of a proposal which I am making to them covering a 5 x 5 Type 20 portable mounted on wooden wheels with rubber tires. We have suggested this machine to Mr. Smith for operating pneumatic tools for general ship repair work around the two harbours. They have a steam plant now mounted on a scow but can only operate this when the boats can give them steam. It is rather an unsatisfactory propositions and you should have no difficulty in interesting Mr. Smith in purchasing a portable compressor. He has all the pneumatic tools he needs, and will need for some years as he purchased a great many of the Hogg Island tools.

Neg. W-234 - J.F. Hewitson.

Mr. J.F.Hewitson, does general contracting but has not very much money. He weeds a 5 x 5 portable but wants to get it by disposing of his 14 & 9 x 12 XB-2 cross compound power driven compressed and a motor. See my letter of April 12th to Mr. Hewitson asking him for further information on the motor. My idea is that you might be

Mr. Frank Carroll, General Western Representative. Ingersoll Rand Company, 108 West Second Street, LOS ANGELES. Cal. Dear Mr. Carroll:-I have not written you since receiving your letter of April 1st but I noticed that you received a copy of Mr. Clegg's letter of April 24th with tabulation attached telling of the successful conclusion of the Britannia M & S Company R-72 demonstration about which you were inquiring. This gives Walter Griffiths an absolutely clean sheet so far on his R-72 demonstrations. With regard to R.P. Williams. That matter worked out splendidly. He is plant engineer for the Northern Construction Co.Ltd. Stewart and Welsh on the Welland Canal work at Port Colborne, Ont. and Mr. Southee has been successful in selling them - One 29 & 18 X 21 PRE-2 compressor together with all their drilling equipment. In fact everything in our line, including six S-80s complete on 16' drilling towers for drilling 40' holes in lime-stone; eight X-70s for drilling holes about 20' deep: a leyner sharpener; pneumatic tools, etc. With regard to how Mr. Sellars is making out, I would say that he has worked hard and conscientiously but we find him rather too over bearing and dictatorial in his methods to be of much assistance to us. I cannot persuade Southee or Britton to use him or work with him at all and

May 15-1924.

Personal

Montreal, June 17-1924.

Mr.D.G.Fraser, Toronto Office.

BUSINESS PROSPECTS

Dear Sir:-

Fortunately our general returns do not indicate that business is taking a "real flop" such as you have apparently been temperarily experiencing. Last month we shipped out of consignment probably more material than we ever did before and this month from present expectations the situation is going to be repeated. We have listened to some gloomy profits from across the border but as far as I can make out Ingersoll Rand are continuing as we are to receive a very fair volume of business and I am in hopes that this will improve as the time goes on.

The Government has done some things that make it difficult for certain industrial concerns but we are not going to be beaten by the new rule of the game which they have seen fit to make. We are simply going to carry on and go after business hard until the rules are put back where they ought to be. In the meantime our salesmen are under no disadvantage and my advice to you is to work harder than ever, giving your customers service and a square deal and I feel sure your sales will come along all right.

Yours truly,

GENERAL SALES MANAGER.

ESW: EMW

COPY OF THIS LETTER SENT TO GENERAL MANAGER.

A.S. CAMERON STEAM PUMP WORKS II BROADWAY NEW YORK June 30th/24 Celler of the (PERSONAL) Wounds JH Mr. E. S. Winslow, General Sales Manager, Canadian I-R.Co., MONTREAL, Quebec. Dear Ed: -Thank you very much for your consistent and traditional courtesy during my recent visit: These Montreal trips of mine are getting to be almost the high spots of my business career; so that I am already looking forward to the next one. In discussing Mr.Gilman's family you mentioned the impending marriage ceremonies, and I in turn mentioned this to Mr. Grace this morning; and he is particularly anxious to know when this event takes place, and I told him that I would find out. Will you be good enough to keep me posted about this. I discussed also the possibility of Canadian I-R being present at the Managers' Meetings at Painted Post and Phillipsburg the latter part of July, and Mr. Keefe is writing you direct extending an invitation to you to be present. this invitation being for you, and not being transferable. Hoping that you will be able to be with us at that interesting time, I am, as usual, Very truly yours JDC Asst.Genl.Sales Mgr. J D Cone 6/30/24

(FOR INTER-OFFICE USE ONLY)

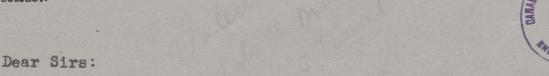
CANADIAN INGERSOLL-RAND CO.,

FILE NO. Trip to Rouyn

Cobalt, Ont. Aug. 14th, 1924.

TO: General Sales Dept.

SUBJECT:



I made a trip into Rouyn by hydroplane, leaving
Haileybury Tuesday morning at 9 o'clock and returning to
Haileybury Wednesday night at 8 o'clock.

If you will refer to complaint of even date,

Noranda Mines Ltd., subject FL-2 compressor #6962, you

will note that I found several other small things wrong

with it, which I took care of. The Noranda Mines will be

in the market almost immediately for an additional plant

for their Horne property. There is a possibility however,

of their taking over the Powell plant, which we sold in

Dec. 1923, to the Nipissing Mining Co.

The Nipissing have discontinued operations on the Powell property, which was under option from the Noranda people. I discussed this matter in Rouyn with Mr. Fletcher, Mine manager, and Mr. Thompson and Mr. Chadbourne, who are the owners of the property. If they do not take over the Powell plant, which is a 12 x 10 FR-1 compressor, they would like very much to duplicate the 14 & 9 x 12 FL-2 which they have, one of which we have in Sherbrooke stock. These two machines will be located about 1500 ft. apart, so it would be extremely advantageous to them if they were identical in every respect. We will have more definite information

regarding this matter in a few days' time.

While in there, I also interviewed Fred Davies, field engineer for the Huronian Belt Co., who have interests at Pelletier Lake. They have 20 men doing surface work there at the present time, and Dr. McIntosh Bell will go in, in a few days and make the decision regarding plant. They may endeavor to purchase the Powell plant, so in any event, we should get one of these units. I will endeavor to get into touch with Dr. Bell at the earliest possible moment.

It took us exactly 45 minutes to go from Osisko

Lake to Haileybury by plane, most of the distance being

covered at a altitude of about 5000 ft., and at a speed

of about 95 miles an hour. This is certainly some improve
ment over the dog-team trip last Winter.

The fare is \$60.00 each way, but it would cost \$35.00 to go by boat, and would take over 2 days each way. I feel that I have saved money for the Company in being able to repair the low pressure air cylinder on customer's compressor. Had this proved to be impossible, we would certainly have had to supply a new cylinder.

Yours very trulyout

Branch Manager

HAB/GH

INGERSOLL RAND CO. (SOUTHAFRICA) LTD. P.O. BOX 1809, CHAIRMAN & MANAGING DIRECTOR: R.W.RUSTERHOLZ. DIRECTORS: C.H. DAVIS, H.F. MACNAY JOHANNESBURG, SOUTH AFRICA. F. M. CECIL. 25th September. 1924. E. S. Winslow, Esq. Canadian Ingersoll-Rand Co. Ltd., 260 St. James Street, MONTREAL Que. Canada. Dear Winslow: -I am ashamed that I have not written you since I left the States, but have been travelling most of the time and really had nothing of particular interest to write you about , but at the same time I fully intended to keep in touch with you while away from Home. I have heard very little regarding the progress you have been making in Canada with our R-72 Machines, but I presume that you are going along alright because you had quite a good start when I left, and I now notice that the R-72 is available for other territories,

so you no doubt are getting sufficient numbers of this machine to take care of your needs.

As yet we have not attempted to introduce the 248 or R-72 in Africa. As strange as it may seem the old #18 Leyner has held its own up until the last year, and now some of the lighter competitive Drills are coming on the market and we, no doubt, will have to supersede the old #18 with a light up to date machine.

This is a great Jackhamer country: we are selling the DCR-23 in considerable humbers, in fact most of the mines are abandoning mounted Drills and using the Jackhamer for all of their stoping work and considerable developement. When one analyses the Drill business in this country as compared with many parts of North America it makes many in that country look very small. Within a distance of about 60 miles on the Reef there are about 7,000 Rock Drills in use, mostly Jackhamers.

Our Sharpeners are doing very nicely, our strongest competitor being the Denver #8. The #50

E.W.S. notes. Canadian Pacific Hotels Monnyeg Jun 8/25 June 2 Tuesday Kimberley Galabate

June 3 Wednesday Kimberley

June 4th Thursday List K. June 4th Thursday left Timbeley 3 PM. 3 Had the Concentrator, the Tunnel min the light him and the PRE matter in the Pour four to be covered also the Porcepine Gredfills "Stemwarder Mins - How did My from it ends be coved any quech, It was only by luck that I did not have to Sont right letter & Montreal reading "Leaving today spind Saturday can a.g.
Bruckingham Bhandon Sunday monday
Winniped They hatinal to Collabt unless
you advise to Contrary."
They hatinal to Collabt unless
Mr. Gilman must than had the win

stay another day.

Form CF-163-A From Publicity Department TRADE NEWS CLIPPINGS The following item cut from canad Will doubtless be of interest to you: Victoria, B.C.—The Dominion Government has awarded the contract for an air compressor plant for Skinner's Cove drydock to the Canadian Ingersoll-Rand Co., Ltd., Montreal, at \$20,776.

It looks as though this customer should be interested in-Compressors, Stationary Coal Cutters Condensers Compressors, Portable Hoisting Engines Rock Drills Rock Crushers Compressors, Ammonia Core Drills Oil Engines Air Hoists Pneumatic Tools Clay Diggers Paving Breakers Air Lift Pumps Cameron Pumps Pulp & Paper Mill Equipment Tie Tampers & Bridge Repair Outfits

COPY TO FROM
CANADIAN INGERSOLL-RAND CO.

MONTREAL.

UE.

white Earner Brook of Belle do

Name: 90% of rock drills in operation on Humber Construction are Ingersoll-Rand manufacture.

Date of call: April 15-26.

1926

During the past two weeks the writer has made a very thorough canvassof the five Humber camps. We are pleased to report that our investigations show that 90% of the rock drills in operation on the Humber Construction, Corner Prook, Nfld., during 1923 and 1924 are the product of either the Canadian Ingersoll-Rand or our American plant. Statistics compiled by the writer show that the entire development of 100,000 horse power and the construction of a thirty mile transmission line, power house, dam of 27,000 cu.yds. and 400 ton paper mill has put in operation thirty seven rock drills. With one exception these drills are all of the jackhamer type.

PRICE, WATERHOUSE & CO.

145 ST. JAMES STREET

Montreal, November 10, 1926.

To the Shareholders of the Canadian Ingersoll Rand Company Limited:

We have examined the Books and Accounts of the Canadian Ingersoll Rand Company Limited for the year ending June 30, 1926, and find that the attached Balance Sheet at that date and relative Income Account are correctly prepared therefrom.

We have satisfied ourselves that only actual additions have been charged to Property Accounts, and that proper provision has been made for depreciation.

The valuation of the Inventories of stock on hand has been made at approximate cost or market value whichever was lower.

Full provision has been made for bad and doubtful accounts receivable and for all ascertainable liabilities.

We have obtained all the information and explanations which we have required; and certify that, in our opinion, the attached Balance Sheet at June 30, 1926, is properly drawn up so as to exhibit a true and correct view of the state of the Company's affairs, according to the best of our information and the explanations given to us, and as shown by the books of the Company.

(Signed) PRICE, WATERHOUSE & CO.

CANADIAN INGERSOLL-RAND COMPANY

Income Account

FOR THE YEAR ENDING JUNE 30, 1926

Earnings of Properties for the year ending June 30, 1926 before charging Depreciation	. \$501,601.04
Deduct—Depreciation applied directly to reduction of Capital Assets	. 98,848.06
Manufacturing profit	. \$402,752.98
Deduct—Interest on Bonds	. 60,000.00
Net Income carried to Balance Sheet	. \$342,752.98

1926

CANADIAN INGERSOLL RAND COMPANY LIMITED

MANUFACTURERS OF AIR COMPRESSORS, ROCK DRILLS, PNEUMATIC TOOLS, PULP AND PAPER MACHINERY GENERAL MINING AND QUARRYING EQUIPMENT

MONTREAL, CANADA

GEORGE DOUBLEDAY, President E. W. GILMAN, Vice-President

Directors

GEORGE DOUBLEDAY W. R. GRACE

E. W. GILMAN

H. J. FULLER

E. S. WINSLOW

T. F. SULLIVAN

A. SANGSTER,

H. V. HAIGHT

W. R. GRACE, Treasurer

T. F. SULLIVAN, Secretary

R. D. PURCELL, Assistant Treasurer

H. M. MILLAR, Assistant Secretary

CANADIAN INGERSOLL

FACTORIES

Sherbrooke, Que.

DOMESTIC OFFICES

Sydney, N.S.

Timmins, Ont.

Sherbrooke, Que. Montreal, Que. Nelson, B.C.

Toronto, Ont. Vancouver, B.C.

Cobalt. Ont.

AFFILIATED OFFICES

Chicago, Ill. Cleveland, Ohio Pittsburgh, Pa. Philadelphia, Pa. Scranton, Pa. Portland, Oregon

London, England Vienna, Austria Paris, France

Birmingham, Ala. Louisville, Ky. San Francisco, Cal. Los Angeles, Cal. St. Louis, Mo. Seattle, Wash.

Brussels, Belgium Madrid, Spain Melbourne, Australia Kalgoorlie, W.A.

Spokane, Wash.
Salt Lake City, Utah
New Orleans, Cal.
Denver, Colo.
Detroit, Mich.
Buffalo, N.Y.

Sydney, N.S.W. Calcutta, India Bombay, India Rio de Janeiro, Brazil

Knoxville, Tenn. Joplin, Mo. St. Paul, Minn. Wallace, Idaho Boston, Mass. Atlanta, Ga.

Lima, Peru Valparaiso, Chili Shanghai, China Johannesburg, S.A.

Houghton, Mich. Duluth, Minn. Dallas, Texas Butte, Mont. El Paso, Texas Pottsville, Pa.

Mexico City, Mexico Havana, Cuba Honolulu, T.H.

CANADIAN INGERSOLL-RAND CO.,

LIMITED

620 Cathcart Street,
MONTREAL, - - - QUE.

ate- October 19th.1

Attention- Mr. T. F. Sullivan.

File No- Montreal Personal.

To- Secretary, MONTREAL HEAD OFFICE.

Dieser asing in.

Subject-

Expenses re Canadian National Railways Oil Electric Locomotive.

Dear Sir:-

For your information I attach tabulation showing expense accounts of Messrs. Chambers, Coleman and Lemp for May, June, July, August and September. I believe these accounts accurately show the dates on which these men worked for Canada on oil electric locomotive account. The expense per day is higher than we are accustomed to, but I do not see that we can do anything about it, and I have therefore, o.k'd the accounts for payment.

The accounts are high because of long jumps from New York, Chicago and Erie, to Montreal, Toronto, Sherbrooke and Ottawa. The entertaining expense on these accounts comes to a total of \$238.50.

The expenses are distributed as follows - - -

Chambers - 23 days at \$27.13 per day......\$624.23

Coleman - 29 days at \$29.86 per day.....\$866.29

Lemp - 5 days at \$16.14 per day.....\$80.69

TOTAL - - - \$1,571.21

The total sale amounted to \$87,900.00, of which \$43,762.00 covers electrical equipment taken on a no profit basis, leaving a balance of volume for our Company of \$44,138.00, on which the demonstration

Montreal Personal. October 19,1931. Mr.T.F. Sullivan. -2high and sales expense will therefore be unusually half. I hope, however, that repeat orders will result and expect them to be taken at a very much less extravagant expense ratio. I do not know of any other expenses payable to New York representatives until the time comes for putting the unit into service, and I am afraid there will be considerable further expense, but we will do our best in every way to keep this at a minimum. Yours very truly, E. Wmoh. Trags EW-S:JS - Assistant General Manager .-C2: EWGilman. Encl.

Information regarding the Oil- Electric Locomotive

The first 100-ton oil electric locomotive ever built or bought for an American railroad was demonstrated at the plant of the General Electric Company at Erie, Pa., on Tuesday, December 1, for the benefit of a visiting party of railroad officials, engineers and transportation authorities.

The oil-electric locomotive used in the demonstration was ordered some time ago by the Long Island Railroad and will soon be placed in operation on its lines. A 60-ton oil-electric locomotive is already in service on the Central Railroad of New Jersey, and orders have been placed by the Baltimore & Ohio, Lehigh Valley, Erie, and Delaware, Lackawanna & Western And Charles and

The oil-electric locomotive is a self-contained power unit. The basic idea is an internal-combustion oil engine, using low-grade fuel oil, which drives an electric generator, the current from which is applied to motors on the axles of the locomotive. This Diesel principle has effected astonishing economies in the operation of ships and of land industrial plants during the past few years. Its advent into the railroad field promises, according to engineering authorities, to mark a new milestone in the history of American transportation.

The oil-electric locomotive used in the demonstration at Erie is about 46 feet long and weighs approximately 200,000 pounds. The nominal A. I. E. E. rating of the traction motors at 600 volts is 200 horse power each, or 800 horse power for the four motors. The generator is operated by two 300-horse-power

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NEWCOMB CARLTON, PRESIDENT

FOR REFERENCE

GEORGE W. E. ATKINS, FIRST VICE-PRESIDENT

site the class of service desired; OTHERWISE THE MESSAGE WILL BE TRANSMITTED AS A FULL-RATE TELEGRAM Send the following message, subject to the terms on back hereof, which are hereby agreed to Street and No. (or Telephone) Place. SENDER'S TELE-SENDER'S ADDRESS

FOLLOW THIS COMPANY ALL MESSAGES TAKEN BY

To guard against mistakes or delays, the sender of a message should order it repeated, that is, telegraphed back to the originating office for comparison. For this, one-half the unrepeated message rate is charged in addition. Unless otherwise indicated on its face, this is an unrepeated message and paid for as such in consideration whereof it is agreed between the sender of the message and this company as follows:

The company shall not be liable for mistakes or delays in the transmission or delivery, or for non-delivery, of any message received for transmission at the unrepeated-message rate beyond the sum of five hundred dollars; nor for mistakes or delays in the transmission or delivery, or for non-delivery, of any message received for transmission at the repeated-message rate beyond the sum of five thousand dollars, unless specially valued; nor in any case for delays arising from unavoidable interruption in the working of its lines; nor for errors in cipher or obscure messages.

In any event the company shall not be liable for damages for mistakes or delays on the transmission or delivery, or for the non-delivery, o. any message whether caused by the negligence of its servants or otherwise, beyond the sum of five thousand dollars, at which amount each message is deemed to be valued, unless a greater value is stated in writing by the sender thereof at the time the message is tendered for transmission, and unless the repeated message rate is paid or agreed to be paid, and an additional charge equal to one-tenth of one per cent of the amount by which such valuation shall exceed five thousand dollars:

3. The company is hereby made the agent of the sender, without liability, to forward this message over the lines of any other company when necessary to reach its destination. 4. Messages will be delivered free within one-half mile of the company's office in towns of 5,000 population or less, and within one mile of such office in other cities

or towns. Beyond these limits the company does not undertake to make delivery, but will, without liability, at the sender's request, as his agent and at his expense, endeavor to contract for him for such delivery at a reasonable price. 5. No responsibility attaches to this company concerning messages until the same are accepted at one of its transmitting offices; and if a message is sent to such

office by one of the company's messengers, he acts for that purpose as the agent of the sender. The company will not be liable for damages or statutory penalties in any case where the claim is not presented in writing within sixty days after the message is

filed with the company for transmission. 7. It is agreed that in any action by the company to recover the tolls for any message or messages the prompt and correct transmission and delivery thereof shall be presumed, subject to rebuttal by competent evidence.

Special terms governing the transmission of messages under the classes of messages enumerated below shall apply to messages in each of such respective classes

is in addition to all the foregoing terms.

9. No employee of the company is authorized to vary the foregoing.

THE WESTERN UNION TELEGRAPH COMPANY INCORPORATED

NEWCOMB CARLTON, PRESIDENT

CLASSES OF SERVICE

TELEGRAMS

A full-rate expedited service.

NIGHT MESSAGES

Accepted up to 2.00 A.M. at reduced rates to be sent during the night and

delivered not earlier than the morning of the ensuing business day.

Night Messages may at the option of the Telegraph Company be mailed at destination to the addressees, and the Company shall be deemed to have discharged its obligation in such cases with respect to delivery by mailing such Night Messages at destination, postage prepaid.

DAY LETTERS

A deferred day service at rates lower than the standard telegram rates as follows: One and one-half times the standard Night Letter rate for the transmission of 50 words or less and one-fifth of the initial rates for each additional 10 words or less.

SPECIAL TERMS APPLYING TO DAY LETTERS:

In further consideration of the reduced rate for this special Day Letter service, the following special terms in addition to those enumerated above are hereby, agreed to:

A. Day Letters may be forwarded by the Telegraph Company as a deferred service and the transmission and delivery of such Day Letters is, in all respects, subordinate to the priority of transmission and delivery of regular telegrams.

B. Day Letters shall be written in plain English. Code language is not

permissible.

c. This Day Letter is received subject to the express understanding and

agreement that the Company does not undertake that a Day Letter shall be delivered on the day of its date absolutely and at all events; but that the Company's obligation in this respect is subject to the condition that there shall remain sufficient time for the transmission and delivery of such Day Letter on the day of its date during regular office hours, subject to the priority of the transmission of regular telegrams under the conditions named above.

No employee of the Company is authorized to vary the foregoing.

NIGHT LETTERS

Accepted up to 2.00 A.M. for delivery on the morning of the ensuing business day, at rates still lower than standard night message rates, as follows: /The standard telegram rate for 10 words shall be charged for the transmission of 50 words or less, and one-fifth of such standard telegram rate for 10 words shall be charged for each additional 10 words or less.

SPECIAL TERMS APPLYING TO NIGHT LETTERS:

In further consideration of the reduced rate for this special Night Letter service, the following special terms in addition to those enumerated above are hereby

A. Night Letters may at the option of the Telegraph Company be mailed at destination to the addressees, and the Company shall be deemed to have discharged its obligation in such cases with respect to delivery by mailing such Night

Letters at destination, postage prepaid. B. Night Letters shall be written in plain English. Code language is not

permissible

No employee of the Company is authorized to vary the foregoing.

internal-combustion engines using low-grade fuel oil. The generator is of the direct-current, compound-wound, commutating-pole type, developing 600 volts.

Probable this Same engine was the one brought to Cawada by way of Detroit Price, Town to bellawa & Sheebrooke - It was a trial trips and later Some ware made at the Dry, Rad Shope - the engines and assembling being due there of the head lights coming to G. E. - This first trip was a being exciting to interest, trips. There are ware 8.645 mr Cage of C. N. P. & has Coleman g. N. Y. brother by D.C. Coleman horizant

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