SMELTING IN EXCELSIS
Canada's Only Refining Centre

The Great Smelter at Trail, B.C.

ALTHOUGH, as is well known, a world-wide attention was first directed to British Columbia by reason of the discoveries in the late "fifties" and early "sixties" of alluvial gold in the Fraser river and in the streams of the Cariboo district—and for many years a rich harvest was reaped from these sources—mining as an important basic industry of the Province—and it is now by far the most important industry in British Columbia—was not, fairly launched until nearly forty-five years later; and the building of the Trail smelter in 1896 by that brilliant young American financier and copper king, F. Auguste Heinze, not only made Rossland, whose mines have since produced gold, silver and copper to the value of $70,000,000 in round figures, but had the effect of enormously stimulating mineral development and the investment of capital in mining in other sections of the province. But Heinze was essentially a business man, and in establishing his smeltery was certainly not actuated by philanthropic or elemosynary motives. It was no part of his plan to operate the smelter for the profit of anyone but himself. Hence although he received a land grant from the Provincial Government as a consideration for the construction of the smelter and of a narrow-guage railway to afford connection between the works at Trail and the mines at Rossland, and also obtained an assurance from the Dominion Government of a bonus of a dollar on each ton of ore treated, he also took care that the rate imposed on the treatment of customs ores should be a tolerably stiff one. In fact ere long, as the development of the mines progressed and it became necessary to market ore of a lower grade average, the margin of profit left to the miners after paying treatment charges became considerably restricted; and consequently the satisfaction was very general when in 1898 the reduction works and railway were acquired by the Canadian Pacific Railway, and the rates were at once reduced very materially. It is fair, however, to state that the new owners were in a much better position to undertake to smelt at a lower cost owing to the great cheapening of fuel following the development of the Crowsnest coalfield. In 1906, the smelter became the property of the Consolidated Mining and Smelting Co. of Canada, which also acquired at that time the War Eagle—Centre Star group of mines at Rossland, the St. Eugene lead mine at Moyie and other properties, (which since have been further augmented) and the capacity of the plant was greatly increased, so that the undertaking now ranks as one of the largest and most important of its kind in the British Empire. This is attested by the fact that the smelter has treated to date 5,179,307 tons of ore having a gross value of $94,315,754 and representing 1,778,921 oz. gold, 27,500,350 oz. silver, 458,326,524 lb. lead, 75,047,410 lb. copper, and 23,056,996 lb. zinc.

The site of the smelter was admirably selected having regard to engineering and commercial considerations and requirements on an elevated terrace of gravelly soil overlooking the Columbia river; and only a few miles distant are the magnificent Falls of Bonnington, from which the plant derives its power. Moreover, ore can be shipped for treatment to this centre most readily and advantageously from the various localities in both West and East Kootenay, and indeed from much farther afield. In consequence the Trail smelter has become almost a national if not an international institution, since in recent years it has treated in addition to British Columbia lead, zinc and copper ores, ores from the Yukon, Manitoba, and Ontario, from the United States and from China. From quite small beginnings the works have been expanded until they now cover many acres of ground, and when working at full capacity give employment to 1,600 men, a large proportion of whom are necessarily skilled. In this article it is not proposed to go into technical details, but it may be stated briefly that the main smelting plant consists of from copper blast-furnaces, four lead blast-furnaces, and two 12-ft. basic-lined converters, the product of which is refined locally, employing electrolytic methods. This latter, perhaps, is the most interesting part of the story; and as a national achievement reflects the greatest possible credit on those responsible for its successful establishment. Before the war the only useful metal in refined form produced in Canada was lead, which was exclusively undertaken at Trail; but all our copper and our zinc, both being by the way essential metals in the manufacture of munitions, we shipped out of the country as matte, or in other unfinished state, to be refined, and then to satisfy our own requirements for these metals in finished or unmanufactured form we repurchased at, of course, a vastly enhanced price representing the profits of manufacture in a foreign country plus the import duty. All of which was the reverse of good business. But the war, which has had so stimulative an effect on the national energies in general, influenced action beneficially in this direction also; and upon the urging of the Munition Board those in charge of the Trail Smelter set to work with a will, and succeeded after much experimentation in producing refined zinc electrolytically on a commercial scale. The plant now in operation has a capacity of from 60 to 70 tons of spelter daily, and last year produced 10,000 tons of zinc, having a value of $3,000,000, which, as is stated in an official report, marks "an epoch in the metallurgical history of Canada." So also with the refining of copper, which before the war was on many sides pronounced to be an undertaking that could not economically be conducted in Canada, but which during the past two years has been most successfully carried on at Trail, the two copper converters installed in 1916 enabling the matte from the copper furnaces that previously had been shipped away for further treatment, to be converted into blister-copper, which in turn is refined electrolytecally in a plane which had an initial capacity of 10 tons daily, but which since has been enlarged to handle twice that amount. Other products of the smelter are copper sulphate, lead pipe, shrapnel, wire, gold, silver, sulphuric acid, and hydrofluosilicia acid. In short, it is now as complete a metallurgical works as there is on the continent, and as such has played a most important and useful role in furnishing the metals needed for munition making in Canada, thus contributing materially to the effectiveness of the Dominion's war efforts. Nor does this complete its record for patriotic achievement. Since its proudest boast is that it has an honor roll on which is inscribed the names of something like three hundred of its employees, who enlisted voluntarily for overseas service early in the war. Among these are several members of the engineering staff, all of whom have won distinction for conspicuous gallantry and devotion to duty in the battlefields of France and Flanders.—N. L.

W. H. BUNT

Agent for

Dominion Pianos and Organs

FLESHERTON, - ONTARIO.

Notice to Creditors

In the matter of the Estate of Robert Price Fawcett, late of the Township of Euphrasia, in the County of Grey, farmer, deceased.

Notice is hereby given, pursuant to "The Trustee Act," and amendments thereto, that all creditors and others having claims against the estate of the said Robert Price Fawcett, who died on or about the twentieth day of March, A. D. 1918, are required on or before the Fifth day of October, 1918, to send by post prepaid or deliver to Irwin A. Fawcett, Feversham, Ontario, one of the executors of the last Will and Testament of the said deceased, their Christian and Surnames, addresses and descriptions, the full particulars of their claims, the statement of their accounts and the nature of the securities, if any, held by them.

And take notice that after such last mentioned date the said Executors will proceed to distribute the assets of the said deceased among the parties entitled thereto, having regard only to the claims of which they shall then have notice, and that the said Executors will not be liable for the said assets or any part thereof to any person or persons of whose claims notice shall not have been given by them at the time of such distribution.

Dated the 30th day of August, A.D. 1918

—WRIGHT, TELFORD & BARLOW
Owen Sound, Ont.

Solicitors for Irwin Andrew Fawcett and William T. Ellis, Executors.

Notice to Creditors

In the matter of the estate of Jane White, late of the Village of Flesherton in the County of Grey, Married Woman, deceased.

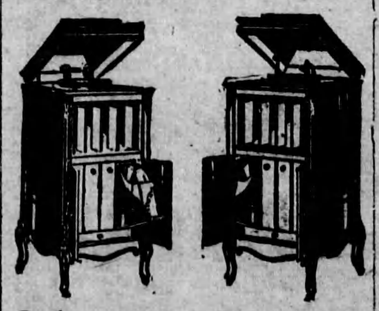
Notice is hereby given, pursuant to Trustee Act and amendments thereto, that all creditors and others having claims against the estate of the said Jane White, who died on or about the 16th day of May, 1918, are required on or before the 19th day of October, 1918, to send by post prepaid or deliver to William A. Armstrong of the Village of Flesherton in the County of Grey, one of the executors of the last Will and Testament of the said Jane White, deceased, their Christian and Surnames, addresses and descriptions, the full particulars of their claims, the statement of their accounts, and the nature of the securities, if any, held by them.

And further take notice that after such last mentioned date the said Executors will proceed to distribute the assets of the deceased among the parties entitled thereto, having regard only to the claims of which they shall then have notice, and the said Executors will not beliable for the said assets or any part thereof to any person or persons of whose claim notice shall not have been received by him at the time of such distribution.

Dated the 16th day of September A. D. 1918.

—WRIGHT, TELFORD & BARLOW,
Solicitors for the said William A. Armstrong and Leslie Norris, Executors of the last Will and Testament of Jane White, deceased.

Columbia Grafonolas



Columbia Records !

—FOR SALE BY—

W. A. Armstrong

JEWELLER, FLESHERTON

THE MARKETS.

Carefully Corrected Each Week

Butter	38 to 36
Eggs, fresh	45 to 45
Wheat	$2 25 to 2 25
Oats	90 to 90
Peas	3 68 to 4 00
Barley	1 30 to 1 35
Potatoes	$1.25
Buckwheat	95 to 95
Hides	10c to 10c
Ducks	23 to 23
Geese	21 to 21
Chickens	22 to 22
Fowl	16 to 16

District Casualties

KILLED IN ACTION

D Armstrong, Eugenia
S C Steel, Owen Sound
C Cumberland, Owen Sound
T E Abernethy, Meaford
Reuben Cargo, Flesherton

DIED OF WOUNDS

J W Hyslop, Owen Sound
C Trotter, Owen Sound

PRISONER OF WAR

W H Taite, Meaford

MISSING

H F McKeehnie, Markdale

GASSED

J W Cavers, Meaford
M G Williams, Holland Centre
R Thomas, Owen Sound
N A Crowe, Owen Sound
W F Harrow, Ceylon

WOUNDED

B J Walter, Kimberley
A C Struthers, Owen Sound
A Denman, Badjeros
J H Beatty, Owen Sound
R Gibbons, Owen Sound
A H Lyons, Mount Forest
E Trafford, Durham
J Trafford, Durham
A L McComb, Durham
H Rimmer, Mount Forest
C Hamilton, Owen Sound
T H Silverthorne, Meaford
H J Roberts, Tara
R H Hazen, Tobermory
F G Mackay, Owen Sound
P H Speers, Tara
W M Hardie, Owen Sound
G Wilson, Durham
N D Milne, Elmwood
W J Latter, Ravenna
P F McGillivray, Owen Sound

They Are Appealing

There is a little legal war on over Hanover and Walkerton way caused by the manner in which a number of citizens were mulcted in heavy fines for failing to register. Regarding these appeals the Walkerton Herald says :

Of the number Henry Osthoff of Hanover, who is appealing from a $200 fine in Walkerton to the Hanover Division Court, claims, among other things, that being a resident of Grey county that they had no jurisdiction to bring him over to Bruce county and fine him. Herman Miltz and Otto Bluhm of Hanover, who were relieved of $250 each, are protesting on the same grounds. Rev. Ernest Danef, Lutheran minister of Brant, who was fined $250 in Walkerton, and Wm. Huenmorder, a Brant farmer, who was mulcted for $300, are both appealing to the next Division Court here to have the conviction quashed on the grounds that they were permanent residents of the township and were not Aliens within the meaning of the Act, and that they were not liable for non-registering under any act then in force.

Lands at Flesherton Station For Sale

Sealed Tenders addressed to Alexander Cameron, Eugenia Postoffice, Ontario, Administrator of the estate of Elizabeth Magee, deceased, will be received up to 12 o'clock, noon, on Saturday, Oct. 12, 1918, for the purchase of the following lands, namely ;

1 Part of Lot Number One Hundred and Fifty, in the third range southwest of the Toronto and Sydenham Road in the Township of Artemesia, containing two and one half acres, be the same more or less. This parcel is situated at the northeast corner of the said Lot 150.

2 Part of Lot Number One Hundred and Fifty in the third range southwest of the Toronto and Sydenham Road in the Township of Artemesia in the County of Grey, lying to the southeast of the deviation road which runs across the southeast corner of said lot, containing two and one half acres.

These properties adjoin the village of Ceylon.

Terms—Ten per cent. of the purchase money to be paid on the acceptence of the tender, and the balance in thirty days thereafter, without interest.

The highest or any tender not necessarily accested.

The sale is subject to the approval of the Official Guardian.

For further particulars and conditions of sale apply to

ALEX. CAMERON, Eugenia, Ont.,
Administrator

WRIGHT, TELFORD & BARLOW
Owen Sound, Ont.,
Solicitors for Administrator

PACKED BUTTER KEEPS

Seed Corn Situation Is Critical—Select Own Seed Now.

Select Ears From Field for Height, Strength, Leafiness and Earliness.

(Contributed by Ontario Department of Agriculture, Toronto.)

THE first point to observe in the packing of butter, in order to have it keep well for winter use is to have good butter. The best butter for packing is usually made in the months of June and September. It is preferably made from comparatively sweet cream which has been pasteurized. However, on the farm pasteurization is not commonly followed, hence the butter should be made when the weather is comparatively cool and the cream should be churned before it becomes very sour—in fact, the sweeter the cream the more likely it is to produce good keeping quality in the butter, so long as there is sufficient acid in the cream to give good churning results.

The cream should be churned in the usual way, except that the butter may be washed once with brine, which is made by dissolving salt in water, instead of using water at both washings. Salt at the usual rate—but not over one ounce of salt per pound of butter, because salt does not preserve butter as is commonly supposed, except in a minor degree for unpasteurized cream butter. It is a mistake, however, to add so much salt that the fine flavor of the butter is covered up.

Having worked the butter as usual, pack it firmly into crocks, tubs or boxes. If unparafined wooden packages are used, these should be soaked several days in salt water to prevent "woody" flavor in the butter. A better plan is to coat the inside of the tub or box with hot wax, then line with heavy parchment paper, before packing the butter. Glazed crocks which are clean, need no lining.

When the package is full, preferably all from one churning, smooth the top of the butter, cover with parchment paper or a clean cotton cloth, then tie heavy brown paper over the top and place in a cool cellar or in cold storage. Sometimes a salt paste is put on top of the cloth or paper and this is kept moist by sprinkling on water from time to time. This excludes the air and helps to keep the butter.

We recommend packing the butter in solid form which is to be kept for some time, rather than holding the butter in prints, even though these may be submerged in brine.—Prof. H. H. Dean, O. A. College, Guelph.

Select Seed Corn Now.

Unless every precaution is taken this autumn the supply of good seed corn of the desirable varieties will be inadequate for the requirements of 1919. The autumn of 1917 saw the corn crop harvested with an excess of moisture. Wet cold weather followed, during which time the corn did not cure, consequently, when the very cold weather of December set in the corn was frozen and germination was reduced to a very low percentage. This situation which caused the agricultural authorities of North America so much anxiety during the winter and spring of 1918, and which was described by them as "a national calamity," is not yet averted. The problem which that committee had to face was one of supplying North America with seed which would give a fair germination. To secure this seed was no easy task and recourse was made to districts in the United States hundreds of miles to the south of Ontario which produce large, late maturing varieties. In bringing this seed into the country there was little expectation that it would produce much grain, but it was hoped it would produce fodder. The situation in Ontario was so acute that an embargo was placed on the seed grown in Kent and Essex counties prohibiting the exportation from those counties to other districts in Ontario. Some seed of fair germination was available but not sufficient for all their local needs, and as those counties located in southern and western Ontario furnish the chief source of seed for the remainder of the province it was felt that such action was justified in order to conserve those varieties for seed purposes which had proven themselves adapted to Ontario conditions.

There was never a time in Ontario's history when it was more necessary to take every precaution in the selection of seed corn than at the present time. The most satisfactory method of seed selection is that of selecting in the field. The grower can go up and down his rows and select those ears which are early, well developed and possess all the varietal characteristics. When selecting in the field the grower has before him the standing plant. He can select from those plants which possess the height, strength, leafiness and earliness desired. When once the desired type is established in the grower's mind good progress can be made in selecting the ears. This method offers many advantages over that of selecting from the shock or from the crib. The crib is the least desirable, in that it offers only husked ears to select from. With the shock, when husking, the grower has the wilted or matured stalks, while the field selection has everything in its favor, the whole plant and its environment which may mean normal or abnormal conditions for development. — Dr. C. A. Zavitz, O. A. College, Guelph.

BUSINESSCARDS

SOCIETIES

PRINCE ARTHUR LODGE, No. 333, A.F.& A.M, meets in the Masonic hall, Armstrong's Block Flesherton, every Friday on before the full moon. T. Henry, W. M. H. W. Hickling, Secretary.

CHOSEN FRIENDS—Flesherton Council Chosen Friends 314 meets in Clayton's Hall first and third Wednesday of each month 8 p.m. Pay assesments to Recorder on or before the first day of each month. Chief Councillor, W. H. Bunt; Recorder, Mrs. L. A. Fisher.

DENTISTRY

Dr. B. C. MURRAY L. D. S., dental surgeon honor graduate of Toronto University and Royal College of Dental Surgeons of Ontario. Gas administered for teeth extraction. Office at residence, Toronto Street, Flesherton.

MEDICAL

J P OTTEWELL
Veterinary Surgeon
Graduate of Ontario Veterinary College residence — second door south west on Mary street. This street runs south Presbyterian Church.

LEGAL

LUCAS, RANEY & HENRY—Barristers, solicitors, etc.—I. B. Lucas, K. C.; W. E. Raney, K. C.; W. D. Henry, B. A. Offices, Toronto, 806-9 Traders Bank Bldg., phone main 1412; Markdale Lucas Block, Phone 2 A. Branch office at Dundalk open every Saturday.

WRIGHT, TELFORD & McDONALD Barrister, Solicitors, &c. Offices, Grey & Bruce Block, Owen Sound. Standard Bank Block, Flesherton, (Saturdays). W. H. Wright, W. P. Telford Jr. J. C. McDonald, L. L. B.

BUSINESS CARDS

MCCULLOUGH & YOUNG
Bankers Markdale
General banking business. Money loaned at reasonable rates Call on us.

D. McPHAIL, Licensed Auctioneer for the County of Grey. Terms moderate and satisfaction guaranteed. The arrangements and dates of sales can be made at THE ADVANCE office. Residence and P.O., Ceylon, Telephone connection. Dec. 6, 07

WM. KNITTING, licensed Auctioneer for the counties of Grey and Simcoe. Farm and Stock sales a specialty. Terms moderate, satisfaction guaranteed. Arrangements for dates may be made at the Advance office or Central telephone office Feversham or by addressing me at Feversham, Ont.

Farm to Sell or Rent

Lot 40, Con 6, Artemesia, containing 100 acres, 80 acres cleared and under good cultivation, good house and barn and young orchard. For particulars apply to —MARTIN PHILLIPS
Rock Mills P.O.

Farm For Sale

Lot 13, con. 19, Proton, containing 120 acres, new farm, mostly cleared, good bank barn and driving shed; frame dwelling, young orchard; three wells and cistern. Must be sold on account of ill health. A bargain for some one. —GEO. OSTRANDER
R R 1 Proton 1oct

For Sale in Eugenia

Brick veneer house and lot, $650, next to Munshaw hotel. For information refer to Mr. Joe Williams, Eugenia, or —M. E. BELL,
301 Farwell Block Detroit, Mich.

Farm For Sale

Lot 160, W T S R, Artemesia, containing 100 acres; good frame barn and driving shed, sheep and pig pen, frame house and small orchard; farm well watered and fenced. For particulars apply to —MARK STEWART
1July18

Farm For Sale

Lot 164, 2nd range E. T. S. R., Artemesia, containing 100 acres. Good buildings, well fenced and watered by hydraulic in house and barn, small orchard. Terms to suit purchaser.
Apply to —JOHN PEDLAR.
Oct1 Flesherton P. O.

Farm For Sale

Lot 2, Con. 12, Osprep, 100 acres, mostly cleared, frame barn and stone house, small orchard, farm well watered, property of the late Thomas Paul. For particulars apply to
—HATTIE WALLACE, Flesherton

LOCAL AGENT WANTED

the Old Reliable

FONTHILL NURSERIES

Thousands of Orchard trees need replacing.

War gardens call for small fruits early bearing fruit trees, asparagus, rhubarb plants, etc.

The demand for ornamental tock in towns and villages is large.

Secure a paying Agency with liberal commissions, experience not necessary.

Stone & Wellington
The Fonthill Nurseries.
(Established 1837.)
TORONTO - ONTARIO

Sheep Strayed

Two ewes from my premises on July 11th, one yearling, one ewe and lamb. Any information as to their whereabouts will be thankfully received.
—ROBT. SWANTON,
12 9 18 Flesherton P O

For Service

One pure bred Shorthorn Bull on lo 36, con, 9, Artemesia. Terms $1.50 for grades. Must be paid within 9 months from date of service.
1 Jan. 19. —R. O. TURNER.

Holstein Bull For Service

A thoroughbred Holstein bull for service on lots 183-184 S.W. T. & S.R., Artemesia; closely related to the world's champion 44-pound cow. Terms: $1.50 for grades, $5.00 for pure breds.
1 July 17 —GEO. MOORE & Son,