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(Monographs)**

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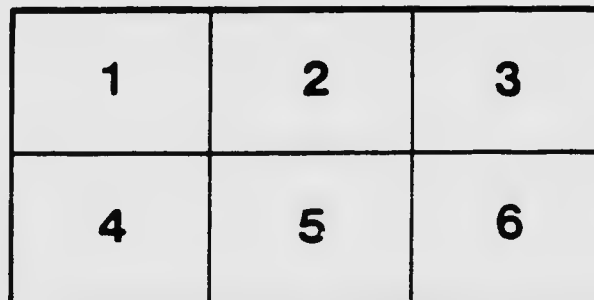
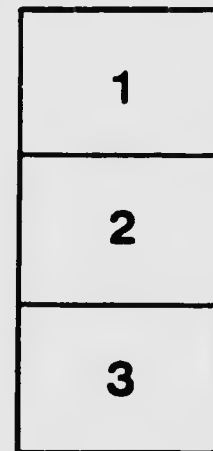
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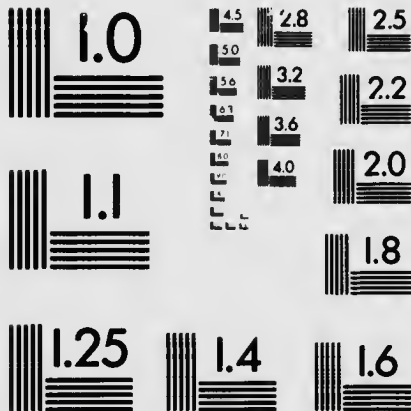
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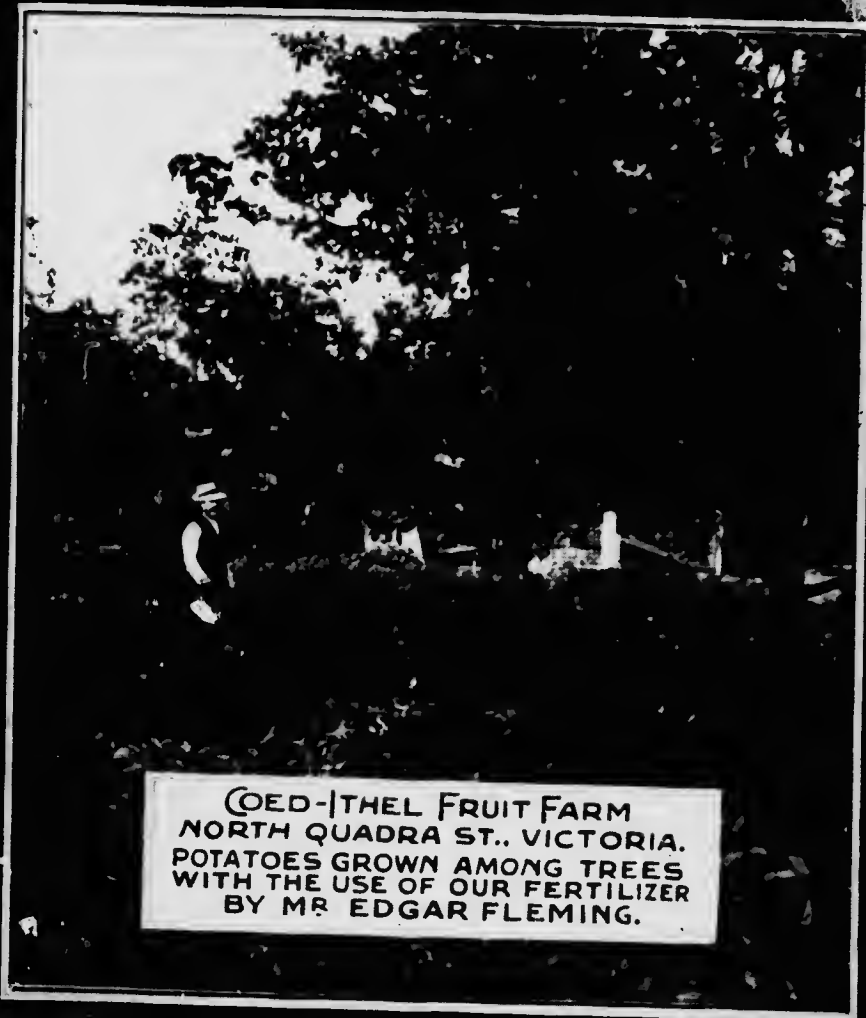
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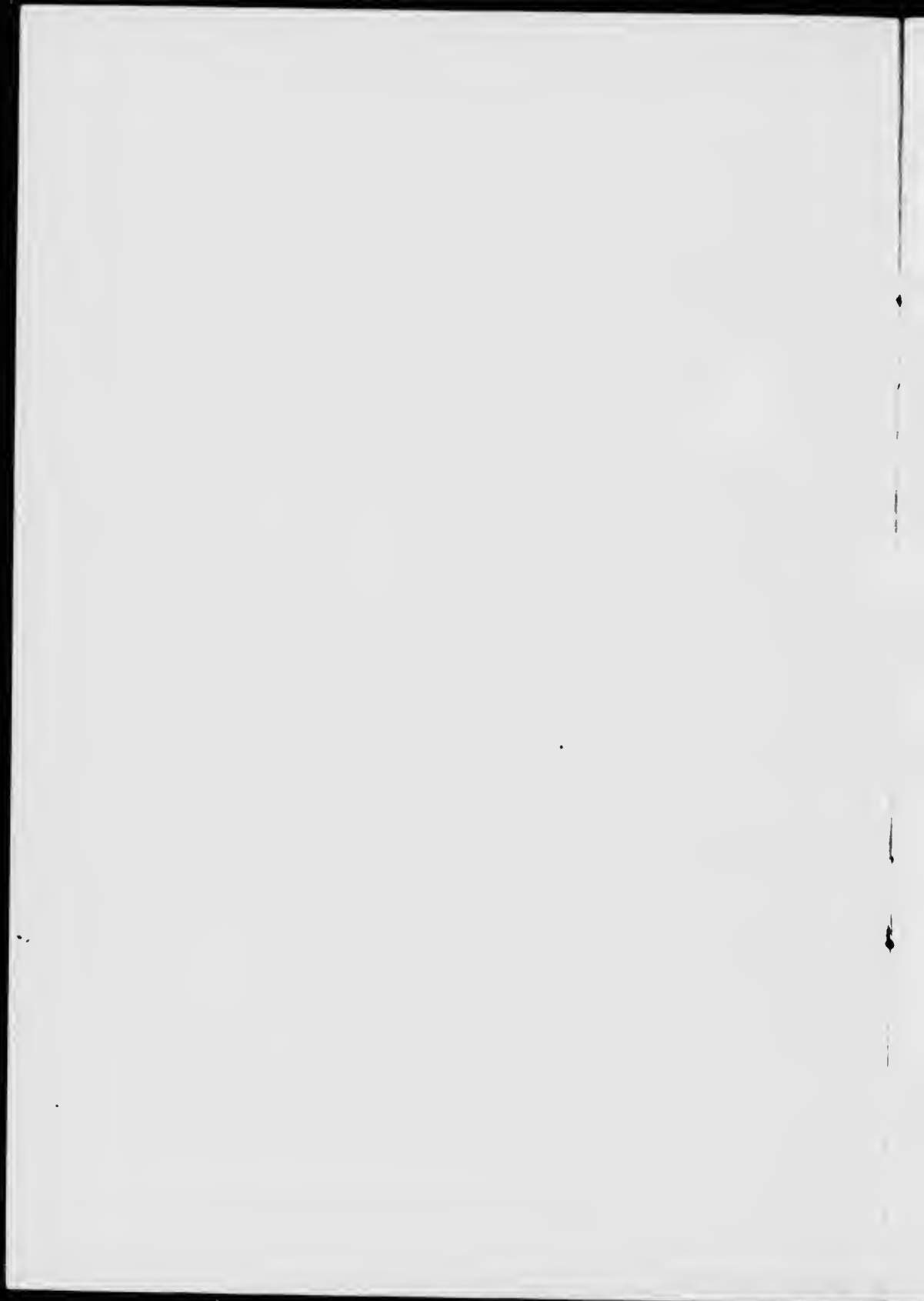
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The Farmer's Hand Book



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NORTH QUADRA ST., VICTORIA.
POTATOES GROWN AMONG TREES
WITH THE USE OF OUR FERTILIZER
BY MR EDGAR FLEMING.

Victoria Chemical Co. Limited
Victoria, B.C.



The
**FARMER'S
HAND-BOOK
FOR - THE - YEAR - 1915**

BY
M. H. DOBIE



"The man who continually gathers from the soil
and returns nothing to it, until he can gather
no more, changing a fertile, smiling valley
into a sterile wilderness, impoverishes
himself, wrongs his country and
beggars his children."



PUBLISHED BY
The VICTORIA CHEMICAL CO.
LIMITED

Works, Near Outer Wharf
Office: Hamley Building, Cor. Government and Broughton Sts.

VICTORIA, B. C.

NV/b
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GIFT.

NOV 10 '65



Lettuce Heads weighing 5 lbs. each, grown with the use of our Fertilizers by Mr. John Walsh, of Steveston, B. C. Mr. Walsh is a thorough believer in heavy applications of fertilizers, since he knows that plants must be well fed if maximum results are to be obtained.

INTRODUCTION

FOR some years British Columbia has had a "boom" in real estate. To the thinking mind the present result was inevitable, and a period of re-action and re-adjustment simply had to come. Many people blame conditions to the war, and while that has doubtless had some effect, our time of re-adjustment really began some months before. But there is no need for discouragement. Canada is on the eve of an era of prosperity such as she has never before enjoyed, and the new prosperity will be on the sound basis of production. Prosperity caused by enhancement of land values, by the "unearned increment," is economically unsound and cannot be other than transient. The basis of all real prosperity must be the actual production of the necessities of life. And it is well that this is true because it is only the money actually earned which causes national and individual happiness and contentment. Let us then "get busy," make every acre produce its utmost, let every worker do his best, so that we all may feel that we are entitled by right of merit to share in "the good time coming."

Yours faithfully,
VICTORIA CHEMICAL CO., LTD.

Three

2-17-

CHEMICAL FERTILIZERS

As is the case with nearly all firms, current events in Europe have seriously affected our business, and one of the results is that there is now only the possibility of securing supplies of Potash Salts at prohibitive prices. Fortunately it has always been our policy to protect our clients, and long before war was declared our supplies for 1915 were on the high seas. We beg to point out that at the time of this writing Muriate of Potash is quoted at \$120 per ton in New York, and at \$100 per ton in San Francisco. We feel that if we accept these tempting offers we will be leaving our friends in the lurch, and, as we regard the use of fertilizers as absolutely essential in British Columbia, we are going to sell our supplies at a very small advance on our previous prices, barely enough to cover extra costs. This is our idea of practical patriotism. We feel sure that our attitude in this matter will be appreciated, and that when a grower buys fertilizers or tree sprays he will insist upon having goods supplied by the Victoria Chemical Co., Ltd.

When once a farmer has thoroughly tested our fertilizers no argument is needed to convince him of the profits to be made from their use. To those growers who have not yet tried them we present the following facts, and ask that they be given the careful perusal which the importance of the subject merits.

1. In 1913 at the Dominion Government Experimental Farm, Agassiz, B. C., our "B" brand fertilizer was tested on a crop of mangels. The land without fertilizer yielded 40,440 lbs. per acre, while the fertilized land yielded 65,000 lbs. per acre, an increase of about 61%. The cost of fertilizer used was about \$14.00 per acre. On potatoes similar results were obtained. We could quote many similar tests made in B. C., but have chosen this one because the test was made under Government supervision, and therefore was entirely impartial.

2. Our fertilizer sales increased by over 30% in 1914 as against 1913, in the face of bad financial conditions. Is not this a very convincing fact when you consider that almost all other lines of business showed a very sharp decline?

3. In every orchard in B. C. where our fertilizers have been tested for a period of two or more years, the yield of marketable fruit has been increased on an average by more than 25%. To anyone interested we will supply names and addresses from Vancouver Island, Armstrong, Kelowna, etc.

4. In 1913 Mr. James J. Hill, of the Great Northern Railway tried an experiment on five acre plots on 151 different farms in North Dakota and Minnesota. The results were as follows:

	U. S. Census Average in North Dakota and Minnesota Without Fertilizers	Average of Mr. Hill's Plots With Fertilizer	Increase
Wheat ..	15.8 bu. per acre	30 bu. per acre	14.2 bu.
Barley ..	21.9 bu. per acre	47 bu. per acre	25.1 bu.
Oats	31 bu. per acre	71 bu. per acre	40 bu.

Five

The grain from the fertilized plots was much superior in quality and brought a higher price.

5. Dr. Cyril G. Hopkins, of the University of Illinois, gives the following statistics in "Science," October 3rd, 1913.

England—As an average of 60 years at Rothamstead, where wheat has been grown on the same land year after year:

Unfertilized land produced.....	12.6	bu.	per	acre
Farm Manure produced.....	35.4	"	"	"
Commercial Plant Food produced...37	"	"	"	"

Pennsylvania—As an average of 24 years, wheat yields at the State College, when grown in a four-year rotation were:

Unfertilized land produced.....	10.1	bu.	per	acre
Farm Manure produced.....	24.1	"	"	"
Commercial Plant Food produced...24.8	"	"	"	"

The Ohio Experimental Station, and the experimental fields of the University of Illinois gave similar results.

6. Aroostook County, in the State of Maine, produces 25,000,000 bushels of potatoes annually, grown almost exclusively on commercial fertilizers. It is found that both yield and quality are much improved by the fertilizers. That one county uses 60,000 tons of fertilizer annually.

The bankers in Aroostook County will tell you that fertilizers have "put that county on the map" commercially, as well as agriculturally.

7. Professor John P. Stewart, of the Pennsylvania State Experiment Station, has for the past six years

Sir

conducted experiments with chemical fertilizers applied to apple orchards. Some of his results are as follows:

"Brown" Orchard, average of part unfertilized for 6 years,
208 bushel per acre.

"Brown" Orchard, average of part fertilized for 6 years,
498 bushel per acre.

In plot No. 8 best tree in 1912 fertilized bore 26.6 bushel.
In plot No. 8 best tree in 1912, unfertilized bore 7.9 bushel.

For general orchard work Prof. Stewart recommends 30 lbs. actual Nitrogen, 50 lbs. actual Phosphoric Acid, (P_2O_5) and 50 lbs. actual Potash (K_2O). This would mean an application of 100 lbs. Nitrate of Soda, 300 lbs. Superphosphate, and 100 lbs. Muriate or Sulphate of Potash per acre, which is very nearly how our "B" brand is manufactured. If the soil is already strong in Nitrogen and the trees are making as much leaf and wood growth as is desirable, the Nitrogen should be omitted. In that case our "C" brand would be effective.

A full report of Prof. Stewart's experiments with fertilizers for apple orchards appeared in the June, 1914, number of "Better Fruit."



There are now comparatively few farmers in British Columbia who remain unconvinced that the use of fertilizers increases the yield of all crops, that quality is improved as well as quantity, that poor soils may be built up and good soils improved by the use of these concentrated plant foods, and that the money value of all crops is increased sufficiently to pay a handsome profit over and above the cost of the fertilizers. In fact every man who has studied

the subject knows that the intelligent use of fertilizers pays, and instead of saying, "I cannot afford to use fertilizers," he will say, "I cannot afford to do without them." He also knows that his stock thrives better and his dairy cows give more milk when fed on hay, grain and roots grown with chemical fertilizers, because of the improvement in feeding value. The only question is what kind of fertilizers to use, and this is very important because a fertilizer at \$100 per ton might be really better value than another at \$40 per ton.

Even if the analysis is the same, the form in which the plant food is supplied makes much difference in the results obtained in the field. We would like to particularly emphasize the fact that we deal only in standard materials and every authority, as well as every experimental station in the world will bear witness that chemical fertilizers are superior to all other commercial fertilizers.

As to prices, if analysis is considered, we do not think there is a firm in America selling at lower prices and, as everyone knows, manufacturing costs are higher here than at almost all other points in America.

FERTILIZER "A"

Nitrogen	4%
Potash (K_2O)	7%
Phosphoric Acid (P_2O_5) ...	10%

All of our mixed fertilizers are made from standard materials and no "filler" or "make-weight" is used. "A" Brand is particularly adapted

Eight

for hay and grain on loam soils, and for lettuce, cabbage, beets and general truck farming, also for lawns.

The feeding value of all crops is greatly increased by the use of our Fertilizers. Fruits of all kinds are greatly improved in color, flavor, firmness and shipping quality.

FERTILIZER "B"

Nitrogen	31½%
Potash (K ₂ O)	11 %
Phosphoric Acid (P ₂ O ₅) ..	9 %

It is particularly adapted for Potatoes, Root crops, Fruits, Berries, Hops, Tobacco, or where a complete fertilizer strong in Potash is required.

For Potatoes and Tobacco it will be well to order "B" Special, which contains Sulphate of Potash instead of Muriate. Wherever Sulphate of Potash is required order "A," "B," "C" or "D" Special.

Impoverished soils can be built up by the use of our Fertilizers when aided by intelligent farming.

FERTILIZER "C"

Potash (K ₂ O)	11 %
Phosphoric Acid (P ₂ O ₅) ..	12½%

Particularly adapted for Clover, Alfalfa, Peas, Beans and other legumes, also for soils where Nitrogen is known to be in plentiful supply.

"Baldwin Spot" is a physiological trouble and can be corrected by soil treatment. The use of our Fertilizers aids greatly in fighting diseases of trees. A well nourished tree is usually able to resist disease.

FERTILIZER "D"

Nitrogen 21½%
Potash (K₂O) 11 %
Phosphoric Acid (P₂O₅) . . 10 %

To be used instead of "B" where a fertilizer very high in Potash and Phosphoric Acid is required, backed by a moderate quantity of Nitrogen.

Where our Fertilizers are used the soil increases in fertility from year to year. The use of our Fertilizers will increase the humus in your soil if rotation is practiced.

THOMAS' PHOSPHATE POWDER

Basic Slag

Phosphoric Acid . . . 16% and over

To be used instead of Superphosphate where the soil is sour. Basic Slag contains about 56% of free lime which helps to correct acidity.

Ten

FINELY GROUND BONE MEAL

We guarantee this Bone Meal to contain 3% Nitrogen and 27% of Phosphoric Acid or its equivalent.

DIP FOR CATTLE, SHEEP AND SWINE

Use our Lime-Sulphur solution at the rate of one gallon to twenty gallons of water. It will be found an excellent dip as it not only destroys ticks and lice, but cures all skin diseases.

FERTILIZING MATERIALS

IN addition to our brands of Mixed Fertilizers which have established a splendid reputation, we offer the ingredients separately to those who may require them to meet special conditions of soil and crop.

Muriate of Potash contains 50% Potash (K_2O).

Sulphate of Potash contains 50% Potash (K_2O).

Nitrate of Soda contains 16% available Nitrogen.

High Grade Bone Meal contains 3% Nitrogen, 27% Phosphoric Acid, or its equivalent.

Superphosphate of Lime contains 16% Phosphoric Acid (P_2O_5).

Thomas Phosphate (Basic Slag)—16 % Phosphoric Acid (P_2O_5).

Eleven

(N. B.— P_2O_5 is really Phosphoric Anhydride, but it has become customary to erroneously describe it as Phosphoric Acid. Many dealers take advantage of this fact to mislead the consumer. For example, we could guarantee that our Superphosphate contains 22% Phosphoric Acid, whereas we guarantee only 16% as P_2O_5 . See that every dealer guarantees the phosphoric acid contents expressed as P_2O_5 .)

Percentage of Plant Food

We are frequently asked regarding these percentages as some of our friends seem to think that we should supply 100% Potash, 100% Nitrogen, etc. The explanation is that Potash, Phosphoric Acid and Nitrogen have no existence commercially and the materials we supply are of the highest grade possible consistent with reasonable prices. The same condition exists with regard to all foods whether for people, animals or plants. As an illustration, we do not expect the farmer to supply milk testing 100% Butter Fat! If it tests 4% it is high grade milk, and there will be no suggestion that a "make-weight" or "filler" has been used. We publish the analysis of each of our brands of fertilizer, and we also state in plain figures the number of pounds of each ingredient which goes into a ton of fertilizer. We positively guarantee the analysis of our fertilizers, and that no "make-weight" or "filler" of any kind has been used.

THE APPLICATION OF CHEMICAL FERTILIZERS

Potatoes

Use our "B" or "D" Special at the rate of 500 to 700 pounds per acre; apply in the drill, scattering the

Twelve

Fertilizer in a broad stream, extending it up on each side of the furrow, then drop the potatoes and cover in. Every up-to-date potato planter has a fertilizer attachment, which of course saves considerable time.

Root Crops

When the soil is prepared for sowing, mark out the ground and scatter from 400 to 600 pounds of our "B" or "D" brand per acre along the rows in a stream from 5 to 10 inches wide, then drill in the seed. Every modern seed-drill has a fertilizer attachment.

Grain

Use from 300 to 500 pounds per acre of our "A" brand, sow broadcast, and harrow in with the seed.

Hay and Pasture

Use our "A" fertilizer at the rate of 300 to 500 pounds per acre. Broadcast in early spring before or at the time growth begins. In many instances it will pay to harrow thoroughly, particularly if the meadow is old or mossy.

N. B.—Where the crop is one of the legumes, such as clover, peas, etc., use our "C" Fertilizer at the rate of 300 to 500 pounds per acre.

Lawns

Use our "A" brand at the rate of one-quarter ounce to each square foot of surface. Sow when the grass is dry so that the fertilizer will not adhere to the blades. After the application has been made the lawn may be watered if required. If the seed used has been partly clover our "B" brand will be best. Do not accept any substitute for our brands, as there is nothing on the market "just as good."

Hops

Broadcast as early as possible and thoroughly cultivate or lightly plow in. Many successful growers, however, prefer to apply the Fertilizer in trenches a foot or two from the crowns, using from 400 to 700 pounds of our "B" brand per acre. If there is an excessive growth of leaf and vine and the hops are not setting in proportion, Nitrogen should be reduced or left out entirely. In such cases we recommend our "D" or "C" brands. On soils containing alkali our Superphosphate of Lime will be found valuable as a neutralizing agent.

Strawberries

Scatter alongside or around the plants, not on them, about 400 to 700 pounds of our "B" or "D" brand. Apply early in spring and cultivate in. Strawberries are not heavy feeders, yet, owing to the early maturity of the crop, it is most important that they should be liberally provided with readily available food.

Other Berries and Bush Fruits

Use about the same amounts as for strawberries, and the same methods of application will answer. In old plantations, or where planted close together, broadcast the fertilizer and cultivate in.

Orchards

Very early applications are strongly recommended, many fruit growers preferring to use in the Autumn. Use per acre about 400 to 800 pounds of our "B" Fertilizer for bearing orchards. Broadcast the fertilizer and thoroughly cultivate in. If the trees are

already making too much wood and foliage growth our "C" brand should be used instead of "B."

In planting young trees, put one pound of "B" brand per tree in the hole, first covering the roots to a depth of three or four inches and then scattering in the fertilizer. Where young trees are already planted, scatter one pound around each tree, beginning about a foot from the stem and extending out three or four feet.

Greenhouses

Our "B" Special is particularly adapted to this work. For bench work, use two or three ounces per square yard (9 square feet), scatter over the surface of the soil as may be required. On such plants as tomatoes, roses, carnations, etc., it will be well to make an application when fruit begins to ripen or flowers begin to bloom; this is in order that the most perfect development may be obtained. For potted plants use, according to the size of the pot, about one-quarter to one level teaspoonful, working into the surface of the soil and then watering; or apply with water, using about one tablespoonful to one gallon of water, keeping well stirred. In no case allow the fertilizer to come into direct contact with roots, leaf or stem.

Onions

Use from 500 to 700 pounds per acre of "D" fertilizer, sowing it broadcast after the ground has been made ready for planting, but before the seed has been put in, or the plants set out if transplanting is practised.

SPECIAL SOILS AND CROPS

The foregoing suggestions for application must not be considered hard-and-fast rules, since special soils and crops may require special treatment, and the farmer will frequently be called upon to use his own best judgment. For example, peat and swamp soils contain much decayed vegetable matter, have an abundance of Nitrogen, are always very deficient in Potash, and are very often short of Phosphoric Acid as well. The fertilizer for such soil is obviously Potash in some form, and Superphosphate of Lime. We recommend for grain crops on this class of soil from 300 to 400 pounds per acre of our "C" fertilizer, and for potatoes, roots, etc., from 500 to 700 pounds per acre of the same fertilizer. The benefit derived from our fertilizers on lands of this class in the Grantham, Duncans, Sooke, Delta and Chilliwack districts furnish the best testimony as to the great profits which may be had from judicious fertilizing.

TABLE FOR ESTIMATING AMOUNTS TO USE

For purposes of calculation it is worthy of note that the following amounts of fertilizer put on an acre, which is 43,560 sq. ft., would furnish one square yard or one square foot with quantity as shown by the following table:—

Per sq. yrd.	9 oz.	$6\frac{3}{4}$ oz.	$4\frac{1}{2}$ oz.	$2\frac{1}{4}$ oz.	$1\frac{1}{8}$ oz.
Per sq. ft.,	1 oz.	$\frac{3}{4}$ oz.	$\frac{1}{2}$ oz.	$\frac{1}{4}$ oz.	$\frac{1}{8}$ oz.
Per acre.	2722 lbs.	2042 lbs.	1361 lbs.	680 lbs.	340 lbs.

PRICE LIST OF CHEMICAL FERTILIZERS

Fertilizer, Brand "A".....	\$2.40 per 100 lbs.	\$44.00 per ton
Fertilizer, Brand "B".....	2.50 "	46.00 "
Fertilizer, Brand "C".....	2.00 "	36.50 "
Fertilizer, Brand "D".....	2.35 "	43.50 "
Sulphate of Potash—		
(90 per cent. basis).....	3.75 "	70.00 "
Muriate of Potash—		
(80 per cent. basis).....	3.40 "	65.00 "
Superphosphate of Lime....	1.50 "	26.00 "
Nitrate of Soda.....	3.25 "	62.00 "
Thomas Phosphate (Basic Slag)	1.60 "	28.00 "
High Grade Bone Meal....	2.00 "	37.00 "

Five per cent. discount will be allowed from above
prices for very prompt payment.

Prices f.o.b. Victoria.

All prices subject to change without notice.

The following is a partial list of dealers from whom
our products may be procured:

Brackman-Ker Milling Co., Ltd., Victoria, Vancouver,
 Rossland, Nelson, New Westminster, Nanaimo,
 B. C., and Calgary, Alta.

Brown Bros., Vancouver, B. C.
The Alberni Trading Store, Alberni, B. C.
Pioneer Feed & Coal Co., Alberni, B. C.
A. R. Macdougall, Vancouver, B. C.
The Bazett-Bell Co., Duncan, B. C.
McNeill & Henniger, Grand Forks, B. C.
Wm. Rennie Co., Ltd., Vancouver, B. C.
The Vernon Hardware Co., Vernon, B. C.
Okanagan United Growers, Ltd., Vernon, B. C.
Rockwell, Theal & Davison, Ltd., Chilliwack, B. C.
Coulter & Berry, Langley, B. C.
Daykin & Jackson, Armstrong, B. C.
McPhee & Morrison, Courteney, B. C.
James Oxenham, Surrey Centre, B. C.
Creston Fruit Grower's Union, Creston, B. C.

For the convenience of our customers we publish
hereunder the freight rates from Victoria to the

Seventeen

principal points in B. C. and Alberta as furnished to us by the local office of the C. P. R. Of course we can assume no responsibility for any changes which may be made. The minimum carload is fifteen tons, and the rate is given in cents per 100 lbs., carload and less than carload:

	FERTILIZER			LIME-SULPHUR	
	Carload	Less than Carload	Over 2000 lbs.	Carload	Less than Carload
Abbotsford	16	25	..	19	25
Agassiz	18	29	..	19	29
Ashcroft	26	47	48½	26	47
Arrowhead	35	79	..	42	79
Armstrong	32	72	..	38	72
Alberni	15	31	..	18	31
Calgary	46	97	..	54	97
Chilliwack .....	..	20	..	..	20
Chemainus	6½	16	16	10	16
Cowichan Station	5¾	15	14½	9	15
*Comox	20	25	..	..	25
Cranbrook	45	99	..	53	99
Creston	41	90	..	48	90
Duncans	5¾	15	14½	9	15
Enderby	31	71	..	38	71
Grand Forks	49	106	..	58	106
*Hammond	15½	29½	24½	16	29½
*Haney	15½	29½	26½	16	29½
Kamloops	28	55	53	30	55
Kaslo	43	94	..	51	94
Kelowna	35	78	60	43	78
Ladner .....	..	10	..	..	10
Ladysmith	7	17	15	10	15
Langley .....	..	20	..	..	20
Lytton	22½	39	43	22	39
Mission Junction.	16	30½	..	18	24
McBride Junction.	12	23	23	14	23
Mount Lehman. ....	..	20	..	..	20
Nanaimo	8	21	15	11	15
Nakusp	39	86	..	46	86
Nelson	39	86	..	46	86
*New Westminster	21	24	..	16	19
Notch Hill	30	62	56½	33	62
Peachland	35	78	60	43	78
Penticton	36	80	62	44	80
Revelstoke	33	74	61	39	74

	FERTILIZER			LIME-SULPHUR SPRAY	
	Carload	Less than Carload	Over 2000 lbs.	Carload	Less than Carload
Rossland	39	86	..	46	86
Salmon Arm	30	65	50½	35	65
Steveston .....	..	10	..	..	10
Summerland	35	78	60	43	78
Trail	39	86	..	46	86
*Vancouver	15	15	..	15	15
Vernon	33	74	56	39	74
Wellington	8	21	21	11	21
Westholme	61½	16	16	9	16
*Whomock	15½	30	29½	9	16

*Includes wharfage each end.

TREE SPRAYS

Lime-Sulphur Spray

Our Lime-Sulphur Spray is now so well and favorably known that there seems little need to describe it at length. Last season we gave a guarantee of 32.5 Baume, and the growers found that every barrel tested well above our guarantee. The reason for this is that it has always been our policy to make very certain that our statements are well within the facts. We use the best of material and up-to-date appliances, and the work is done under the care of thorough, practical chemists. Any fruit grower who cares to is welcome to visit our plant and see the process.

Our Guarantee

1. That no materials are used but Lime, Sulphur, and fresh water.
2. That our spray tests 32.5 Baume.
3. That it is absolutely free from sediment.

Pests Destroyed by Our Lime-Sulphur Solution

It is effective against San Jose Scale, Woolly Aphis, Apple Aphis, Apple Scab, Oyster Shell, Bark Louse, Leaf Blister Mite, Leaf Curl, Red Spider, Mildew, Peach Blight, Plum Rot, Shot-Hole Fungus, Moss and Fungus trouble of all kinds.

Our Lime-Sulphur solution will also be found an excellent dip for sheep, cattle and hogs, as it not only destroys ticks and lice but cures all skin diseases. Use one gallon of our solution to twenty gallons of water.

Tonic Effect

In addition to the destruction of pests our spray has another value. It is a tonic to the tree, promotes the growth of clean, healthy bark, and insures that injurious insect life and fungus will not gain a foothold in your orchard.

DIRECTIONS FOR USE

Winter Spraying

Many expert orchardists are now of opinion that winter spraying should be done twice, once immediately after the leaves fall, and again a little before the buds begin to open in spring. For winter spraying use our Lime-Sulphur solution at the rate of one gallon to ten gallons of water. Use a good pump, as the spray to be most effective must be applied with force. It was formerly found necessary to use lime-sulphur solutions hot to prevent crystallization, and it is true that home-made or imperfectly made sprays

must be so used if they are to be effective. It will be found, however, that the Victoria Chemical Company's Lime-Sulphur solution is made on a formula and by a method which is designed to permanently avoid crystal formation. Our Lime-Sulphur solution, made by exact methods and under our special process of filtration, may be used cold, and should always produce perfect results. There are, however, good orchardists who maintain that all lime-sulphur sprays work better when applied hot, and there is no objection to so using our spray if thought desirable.

The Question of Additional Lime

For winter spraying we can see no particular advantage to be gained by the addition of extra lime, other than that the trees will be whitened more, and the operator may possibly be able to see better when all parts of the tree have been covered. Nevertheless there are thorough practical orchardists who believe that the extra lime is of value, and after all there is really no objection to its use other than that the extra lime being only in suspension, not in solution, there is danger of clogging the nozzles.

Summer Spraying

When applied when the leaves are on the trees our spray should be used much more diluted than is the case with winter spraying. With apples and the hardier fruits one gallon to twenty gallons of water will be found effective, and should cause no injury. For peach trees, plum trees, and fruits with rather delicate foliage use at the rate of one gallon of our solution to thirty gallons of water. It is found advisable to add from six to eight pounds of lime

to every fifty gallons of diluted spray. This is found to prevent all danger of burning the foliage, and also makes a white color which shows distinctly what parts of the tree have been reached by the spray. In adding the lime, it should be made into a milk of lime and then strained into the spray barrel through a very fine sieve.

The advantage of summer spraying lies in the fact that the spray coats the leaves and kills the young mites coming from the eggs. Summer spraying with our lime sulphur solution will also be found effective against peach leaf curl, mildew and all fungus trouble.

CAUTION: Do not spray while the trees are in bloom, as damage may result. Spray after the fruit is set.

Salt

Some growers think that the use of salt is a benefit for certain troubles, as, for example, with peach leaf curl. There is no salt in our spray, but if you wish to use it, add about 12 pounds of salt to every 100 gallons of diluted spray. For fungus troubles it is advisable to omit the salt, since it has a tendency to retain moisture, and moisture encourages fungus. Please bear in mind that the spray should test 32.5 Baume without salt. If you wish salt it is cheaper to put it in afterwards than to buy a spray which contains it.

Vital Importance of Spraying

Let us add, that in fruit growing the proverb, "Eternal vigilance is the price of victory," is true in a very special sense. Spray carefully and conscientiously.

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ly with that kind of sprays, our Lime-Sulphur solution. It needs no argument to convince you of the superiority of such a highly concentrated, scientifically made spray as ours to the home-made article, which is never uniform, is often ineffective, and gives continual worry and trouble. In buying a spray ordinary intelligence will say that the safest to buy is that produced by experts in their line. We have installed large filter presses and other plant at great expense, and the strength, freedom from sediment, and uniformity of our spray have earned the hearty approval of those who have used it.

SOLUBLE SULPHUR COMPOUND

Several of our friends are desirous of trying this material as a winter spray, and to meet their wishes we have decided to supply it. Until it is thoroughly tested in B. C. we do not feel like endorsing it for general use, but we certainly recommend experimental work. This material has been tried in Washington, Oregon, Ontario and New York State, and many reports say that it is very effective. Certainly if it does the work well it has several advantages over Lime-Sulphur solution in that it is furnished in powder form, is readily soluble in cold water, and dispenses with heavy handling, as well as a great proportion of the freight charges.

Directions for Use

For winter spray use 1 lb. Soluble Sulphur Compound to 4 Imperial gallons of water. Stir for a few minutes and the spray is ready for use.

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"Black Leaf 40" or Nicotine Sulphate

Guaranteed 40% Nicotine

For some years we have handled Nicotine Sulphate and are gratified to note the steady demand for this article.

The "Nicotine Sulphate" must not be confounded with "Black Leaf Extract," as the former contains 40% Nicotine, while the latter contains less than 3% or in other words one pound of the former is equivalent to 1½ gallons of the latter, and is therefore much more economical to use. "Nicotine Sulphate" is unexcelled for orchard and garden spraying to kill Aphids and Slugs. It possesses the following advantages when used according to directions:—It is thoroughly effective; does not stain either fruit or foliage; it may be applied without damage when trees are in bloom; it is perfectly soluble in water; and its percentage of nicotine is absolutely guaranteed. A pound of "Nicotine Sulphate" will make about 76 Imperial gallons of spray ready for the trees.

Arsenate of Lead

We are also quite satisfied with the reception accorded our Arsenate of Lead, and with the words of appreciation received from our customers.

Kindly note that the cans for this Arsenate are enamel lined, and proof against corrosion. Our Arsenate is a soft, smooth paste, packed in the best quality of packages, mixes easily with water, and, because of its remarkable fineness, covers and adheres to the foliage splendidly. It is the standard remedy for tent caterpillars, cut-worms, and all insects that

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eat or chew. Full directions are given on each package.

Price of Arsenate of Lead

1-lb. Package	.....	25c	per lb.
5-lb. "	.....	18c	"
10-lb. "	.....	17c	"
25-lb. "	.....	16c	"
50-lb. "	.....	15c	"
100-lb. "	.....	14c	"

Price of Nicotine Sulphate ("Black Leaf 40")

1/2-lb. Size	.....	\$ 1.25
2-lb. "	.....	4.50
10-lb. "	.....	17.00

Price of Soluble Sulphur Compound

100 lbs.	.....	\$9.00
50 "	.....	5.00
25 "	.....	2.60
10 "	.....	1.35
5 "	.....	70
1 "	.....	25

IRON DRUMS

Average Size - - - About 32 in. Diam. x 41 in. Long
 Average Weight - - - About 210 Lbs.
 Average Capacity - - - About 90 Imperial Gallons

PRICES

F. O. B. Nanaimo, Victoria, Vancouver, New Westminster

Single Drum	- - - - -	\$7.50 each
Ten Drum Lots	- - - - -	\$7.00 each
Larger Quantities	- - - - -	On Application
Thin Lined Drums	- - - - -	On Application

Terms, 30 Days Nett

These drums are accumulated through purchases of Glycerine and are offered at a price considerably lower than original cost.

VICTORIA CHEMICAL COMPANY, Ltd

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**CANADIAN
EXPLOSIVES
LIMITED**

MANUFACTURERS OF
**LOW-FREEZING
STUMPING
POWDER**

Especially Adapted to Farmers Use

**All Kinds of Dynamite, Black Blasting
Powder, and Blasting
Accessories**



FACTORIES at Nanaimo, B.C., Northfield, B.C.,
Bowen Island, B.C., Beloeil Station, P.Q.,
Windsor Mills, P.Q., Vaudreuil, P.Q.

DISTRICT OFFICES:

Victoria, B. C. Nelson, B. C.
Vancouver, B. C. Prince Rupert, B. C.
Edmonton, Alta.

Head Office: MONTREAL, P.Q.
Main Western Office: VICTORIA, B.C.

EXPLOSIVES ON THE FARM

One of the greatest boons to the farmer in late years has been the use of explosives for work on the farm. Explosives are used for clearing land of stumps, boulders and trees; in road making and grading; in breaking up hard-pan, shale or clay soils; in making ditches; in draining swampy lands; in digging post-holes, wells and reservoirs; in planting and cultivating orchards; in excavating for foundations, etc.

The Canadian Explosives, Limited, who produce the well-known "C. X. L." brands of explosives, and who are strictly a Canadian firm with practically fifty years' experience in the making of explosives, have, of late years, been turning their attention to the production of explosives specially adapted to farm use. Their most recent success in this line has been the production of "C. X. L." Low-Freezing Stumping Powder; a powder which will not freeze until a temperature of approximately 32° Fahrenheit has been reached. This means that this powder will not freeze until water freezes and will thaw when ice melts. This latter fact alone has brought it into immediate favor with all consumers. Ordinary nitro-glycerine dynamites and stumping powders freeze at a temperature of between 45° and 50° Fahrenheit, and, unless thoroughly thawed when used, will not do efficient work, and either incomplete detonation will result with the effect of producing a "burnt hole," or a complete "mis-fire" will ensue. The thawing of explosives also takes up valuable time, and, unless done in the way recommended, is attended with a

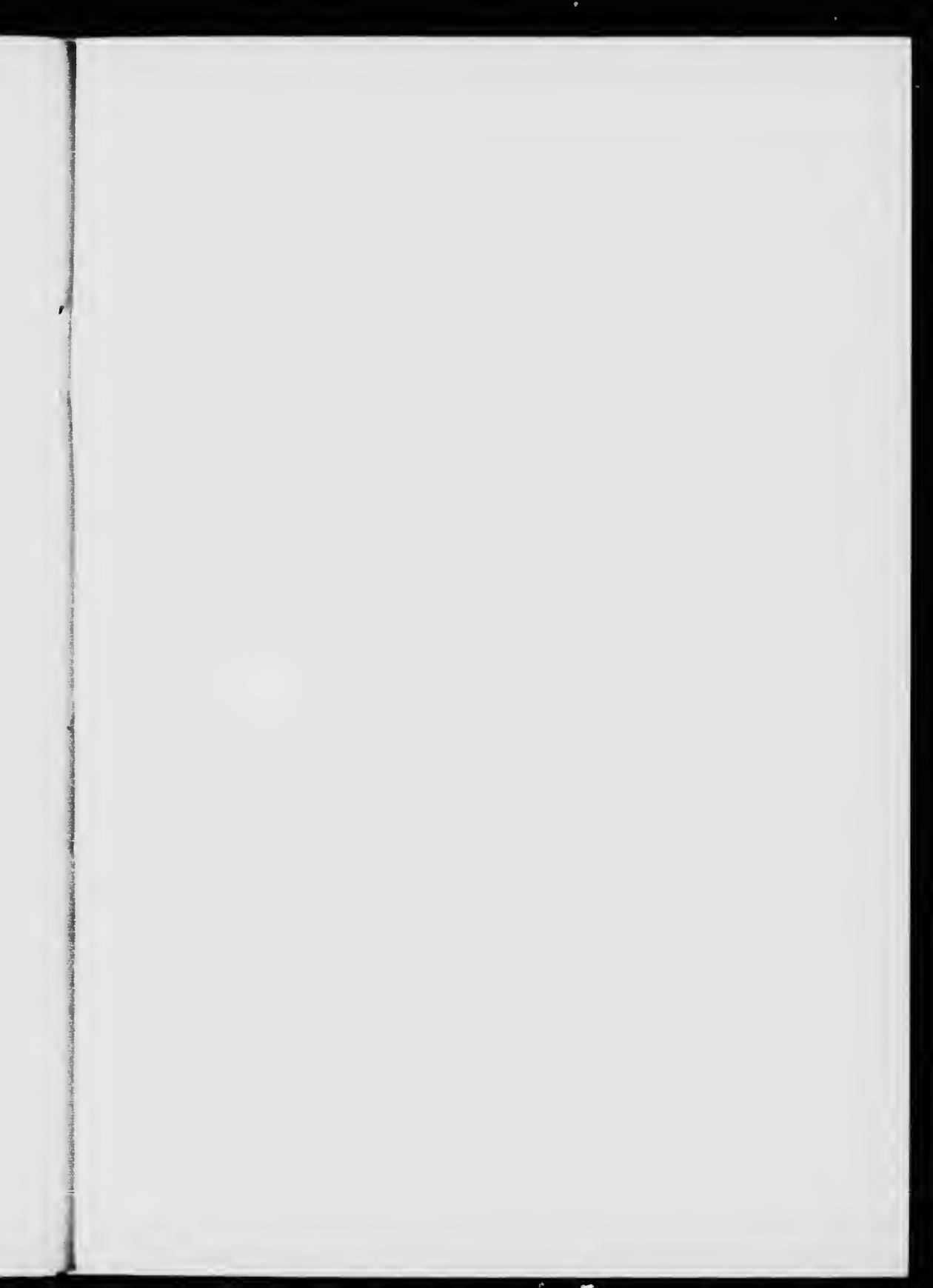
certain amount of danger. Therefore, it is easy to see that Low-Freezing Stumping Powder has proven a great boon to the farmer. Canadian Explosives, Limited, are selling their new "C. X. L." Low-Freezing Stumping Powder at the same prices as obtained for ordinary stumping powder.

When you use "C. X. L." brand of explosives, you have the very best on the market. All "C. X. L." explosives are thoroughly tested at the laboratories established at each and every factory, only the very best of raw materials enter into their composition, and all employees are thoroughly experienced men in the manufacture of explosives. Canadian Explosives, Limited's, shipping facilities are also of the very best; their factory output is always equal to the demand and, therefore, prompt service is given on all orders.

A very complete pamphlet, entitled "A Book for the Farmer on the Use of Explosives," has recently been published by Canadian Explosives, Limited, and they will take pleasure in mailing a copy to anyone interested. Correspondence is also solicited.

Communication sent to any of our District Offices will be promptly answered.







OUR SPECIALTIES



MIXED FERTILIZERS

BRANDS

"A," "B," "C" and "D"



MURIATE OF POTASH
SULPHATE OF POTASH
NITRATE OF SODA
SUPERPHOSPHATE OF LIME
THOMAS' PHOSPHATE (Basic Slag)
BONE MEAL
LIME-SULPHUR SPRAY
SOLUBLE SULPHUR COMPOUND
"BLACK LEAF 40"
ARSENATE OF LEAD
SULPHATE OF IRON



NO ORDER TOO LARGE FOR OUR CAPACITY,
NONE TOO SMALL FOR OUR
CAREFUL ATTENTION

