THE WEEKLY NEWS

Mr. Shaner says in the foreword of the program that the Spokane Rod and Gun Club, of which A .F. Wieseman is secretary, is one of the best organizations of the kind in the country. Its members have gained a reputation of being one of the most congenial lot of sportsmen that ever formed a shooting organization, and, as the interest in trap shooting throughout the north-west was never greater than this season t is confidently expected this will be one of the best tournaments ever given

The fact that the C.P.R. is dumping some yorn out box cars, first carefully divesting them of all easily available iron work, off the track on the C.P.R. flat near the wharf gave rise yesterday to the statement that there had been a wreck. On romised a glorious bonfire within the next

NOTICE is hereby given that 30 days afer date I intend to apply to the Chief Commissioner of Lands and Works at Victoria, B.C., for a special license to cut and carry away timber from the following described lands:

No. 1-Commencing at a post planted on ed "C.S. northwest corner post, limit No. on the west side of Deer creek, run 80 chains east: thence 80 chains north: hence 80 chains west to point of com

No. 2-Commencing at a post planted at the northwest corner of C.S. No. 1 lim-0 chains north; thence 80 chains east; thence 80 chains south; thence 80 chains west to point of comment.

No. 3—Commencing at a post planted on

the northern boundary of C.S. limit No. 2. 0 chains; thence east 80 chains; thence south 80 chains; thence west 80 chains

o point of commencement. No. 4—Commencing at a post planted on the northern boundary of C.S. Mmit No. 3. marked "C.S. S.W. corner," thence 80 chains north; thence 80 chains east; thence 80 chains south; thence 80 chains west, to-

point of commencement.

No. 5—Commencing at a post planted on the northern boundary of C.S. limit No. 4, marked "C.S. S.W. corner." thence 80 chains north; thence 80 chains east; thence 80 chains south; thence 80 chains west to-

No. 6—Commencing at a post planted at the southeast corner of C.S. fimit No. 5, marked "C.S. S.W. corner," thence 80 chains east; thence 30 chains north; thence 30 chains west; thence 30 chains south, to Dated March 27, 1907.

CHARLES SCHWARTZENHAUER. NELSON LAND DISTRICT, DISTRICT

OF WEST KOOTENAY.
TAKE NOTICE that I, Thomas S. Scott, f Winnipeg, Man., occupation, gentleman,

intend to apply for permission to pur-chase the following described lands: Commencing at a post planted at the oot of Upper Arrow lake on the west shore, adjoining Reid's on the north, thence north 80 chains; thence west 20 chains; hence south 40 chains; thence west 20 hains; thence south 40 chains; thence east 40 chains to the point of commence

THOMAS S. SCOTT. Dated June 18, 1907.

OTICE is hereby given that 60 days after date I intend to apply to the Hon, the for permission to purchase the following described lands, in West Kootenay District: Situate about 8 miles west from a river, starting at the initial post marked "J.H.R.." thence 10 chains east; thenc chains north; thence 10 chains west; hence 5 chains south to place of comnencement, said to contain 15 acres more less, adjoining Annable's purchase. J. H. RINGROSE. Locator W. L. PAYNE.

April 2rd 1907.

after date I intend to apply to the Hon. the Chief Commissioner of Lands and Works for permission to purchase the following described lands, situate in Fire Valley, West Kootenay district: Comme ing at a post planted at the southeast corner of D. A. McCultoch's application o purchase, and marked "J. H. Morrison's outhwest corner post," running 40 chains north; thence 40 chains east; thence # chains south; thence 40 chains west to

Dated 11th day of March, 1907 J. H. MORRISON, Locator L. C. MORRISON, Agent 6-19"

NELSON LAND DISTRICT, DISTRICT OF WEST KOOTENAY.
TAKE NOTICE that I, Patrick Muliins Winnipeg, Man., occupation, gent nan, intend to apply for permission to purhase the following described land: Commencing at a post planted on the west shore of Upper Arrow lake, adjoining Thomas McKim's on the north, thence orth 40 chains; thence west 40 chains ence south 40 chains; thence east 40 chains to point of com PATRICK MULLINS.

Dated June 19th, 1907.

NELSON LAND DISTRICT, DISTRICT OF WEST KOOTENAY.

of Creston, B.C., occupation, me: chant, ntend to apply for permission to pur-hase the following described land: Commencing at a post planted at the northeast corner of block 1006, thence 40s hains south; thence 80 chains west; hence 40 chains north; thence 80 chains ast to place of commencement, containing

W. H. CRAWFORD, Locator GEO. HUSCROFT, Agent.

## SHOW GAINS

Effect of Two-Gent Rate Law in Minnesota

IT IS NOT CONFISCATORY

RETURNS OF RAILWAY COMPANIES SHOW ONE-SIXTH INCREASE IN EARNINGS FOR MAY AND JUNE UNDER NEW LAW.

St. Paul. Aug. 23-The two cent passenger rate has actually resulted in in-creased earnings for Minnesota railroads, according to the companies' own figures for May and June, issued by the railway commission. The passenger revenue for those months in Minnesota showed one-sixth increase in returns. The figures of May and June of last year are not available, but the average for the two months since the two cent fares have been in effect is actually higher than the average of the old rate, with no increase in service neces-On this showing the state will rest its case as to the two cent fare law, as proof that the law is notconfiscatory. Affidavits embodying these figures were served today on the attorneys for the stockholders, who are asking an injunction against the rate law.

Affidavits were also filed as to the commodity railway law, snowing that it is not unreasonable or conficcatory These are more complicated, but in their summary show that the average rate per ton under the law will be higher han the actual revenue per ton per mile 1.st year, not only in Minnesota but over the entire lines. These facts are

WINNIPEG GRAIN MARKET

Bulls Have an Innings-Force October

Winnipeg, Aug, 23—Liverpool cables came unexpectedly higher this morning, caused no doubt by the very light ship-ments for the week from the Argentine which were only a trifle over half a million bushels as compared with over twice that amount the previous week and the same week a year ago.

These strong caples started a stronger

These strong cables started a stronger and higher opening in the Winnipeg market which was fairly maintained during the early part of the session. Offerngs became quiet free around noon and a little of the early strength was lost. This was soon recovered however on a bullish report sent out by the Modern Miller, which claimed the demand for American wheat is the best since the year 1902. This report coupled with small Argentine shipments and the insistent rumor that frost in the Dakotas has done great damage, but will not be noticeable until the harvesting, caused American markets, in which Winnipeg sympathizes, to rise to the extent of over two cents over the previous close. Around 95 cents for October sellers seemed to be plentiful but the efforts of the bulls to get the price over this mark were unsuccessful, and prices closed at about the best figures the day. The weather map showed higher temperatures during the night with a few scattered showers. The fore-cast is for showery weather throughout Manitoha and Saskatchewan and fair in Alberta.

PLAGUE SPOT OF EUROPE

Growing Demand That Monte Carlo be

London, Aug. 23—The revelations in he Goold case of the seamy side of Monte Carlo life, has provoked a demand for the stamping out of this European "plague spot." The Monte Carlo correspondent of the London Times contends that the question is an international one, because men and women from all countries are

ruined there annually in scores . corruption," he says "a centre of un-healthy influences the deplorable effects of which are more and more felt. tables have attracted to and retained in neighboring towns a large

studied Monte Carlo closely, joins in the | dates will be the chief matters considdemand that it be exterminated and ered. says there is no doubt that at Nice is populations to be found in any city. The view however is taken that gambling instinct under the least harmful conditions and if open gambling there is abolished a crop of secret gambling hells far worse will spring up.

\*\*\*\*\*\*\* RECORD FOR JAP MAILS

Montreal, Aug. 23-Sir Thomas Shaughnessy has received a telegram from the Japanese consul at Ottawa, the Hon. Mr. Nosse, congratulating the Canadian Paon the record foreal ing speed of the Empress of India and the fact that the Japanese ed in Ottawa at 3 o'clock yesterday afternoon, making 15 days

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Hawthorns, Wis., Aug. 23 — A man bassed through here today on the Omana tracks, who stated that he had walked from New York on a wager and in-tended to complete the tramp to the head of the lakes in 43 days. He said that he had been travelling 42 days, and was determined to win the wager. He hopes to reach Superior about 2 O'clock tomorrow afternoon

HAIL DESTROYS WHEAT Valley City, N.D., Aug. 23—One of the most disastrous hall storms that ever visited this country has devasted a strip about 25 miles long and from one to six miles wide, destroying one of the finest wheat sections last night. The storm started southwest of Eckleson and travelled in an easterly direction pounding everything into the ground.

NEW BRUNSWICK LUMBER CUT Fredericton, Aug. 23-It is estimated that the lumber cut in New Brunswick during the coming season will not exceed 85 per cent of that of last year. Scarcity of money and the unsatisfactory state of the lumber market are given as reasons for the curtailment of

COAL MINERS ENTOMBED

Wilkesbarre, Pa., Aug. 23-Four minrs were yesterday caught in a cave in in No. 13 tunnel of the Pennsylvania Coal company near here, and are still entombed and it is believed they are dead. The voice of James Boyles, one of the entombed men was heard at 2 o'clock this morning, but silence has reigned ever since that time. Boyles' companions are Peter Flynn, John Koening and Joseph Koening. The cave-in was caused by a heavy fall of rock. Six men were caught but two of them crawled from under some of the debris after several hours' efffort. One of these Michael Naughton, was badly injured but the other man escaped unhurt.

**BUDGET OF OTTAWA NEWS** 

OFFICIAL RESIDENCE FOR THE PREMIER OF CANADA

CANADIANS MUST EXPORT ONLY HIGH GRADE WARES

Ottawa, Aug. 23-The government aid to have secured the Currier manison on Sussex street, latterly owned by senator Edwards, as an offficial resi-dence for the present and future pre-mers of Canada. The building is locat-ed in well wooded grounds, is quite close to Rideau hall and is a bendsome structure.

In his annual report to the department of trade and commerce lord Strathcona emphasizes the necessity of Canadians striving to steadily improve the quality of products sent to the British markets, as a higher standard is demanded exery

The keynote to the conclusions drawn from the observations of Canadian export trade conditions in the concluding paragraph of lord Strathcona's remarks was: "The prosperity of the kingdom is shown by the trade returns to be increasing month by month. As a result the great consumers of Canadian pro-ducts, the working classes, have enducts, the working classses, have enjoyed a full measure of employment and at present there is no indication of any change in these conditions. It may be stated that the working classes of England are becoming more and more fastidious in regard to food products and that the authorities are imposing greater precautions to insure admission of high class products in first class condition. It therefore behooves those countries like Canada, seeking the great British market to adopt the utmost care and caution in regard to the quality of pro-

ducts intended for the British isles."
The report notes the gratifying increase in the exports of Canadian agricultural products to Great Britain, emphasizes the necessity of greater care being taken in keeping the exports of butter and cheese, fruit and bacon up to standard. In respect to cheese espe ally, it is noted that the shippers are shipping it too green and in boxes of improperly seasoned wood. As a result many complaints have been received. Speaking of the market for wood pulp his lordship notes that the present sh supply of pulp paper is causing appre "Monte Carlo has become a nest of hension among large British publishing concerns and higher prices are looked

sir Wilfrid Laurier returned to the capital at noon today feeling reinvig-orated by the holidays in the woods at population of corrupt men and women | Quebec, On Saturday he will preside a living on vice and endeavoring by all means in their power to propagate it."

Max Pemberton, the novelist, who has

The entry list for the D. and A. match is the largest in the history of the as-sociation it will reach 540. Included in it will be British marksmen and members of the Australian team. The figition promises to be exceedingly

William Wainwright of the Grand Trunk was here today and states that work on the new central station would he started just as soon as the plans were approved, certainly within one

The Central Canada exhibition board declines to be dictated to by the Ottawa bands. The latter sometime ago no tified the board that if it persis engaging the services of an American band in bad standing with the musi cians' union, they would refuse to play at the exhibition. The board has decided to take the bands at their word and will engage bands from nearby points, which are not enrolled in the union and thus save the situation. It is also expected that it will do something to po-pularize them with the people of these

Minneapolis Judge Imposes \$20,000,000 Fine

FOR REBATES ON GRAIN

CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA CONVICTED ON SEVENTEEN COUNTS - FINE MIGHT HAVE BEEN HEAVIER.

Minneapolis, Aug. 23 — Judge Page Morris today imposed a fine of \$20,00,000 upon the Chicago, St. Paul, Minneapolis and Omaha railway company and or-dered its general freight agent, Pearce, to pay a \$2000 fine in the United States district court here today. The road, with its former freight agent was convicted on Aug. 11 of granting rebates to

the Spencer grain company. The in-dictment contained 50 counts, the Spencer Grain company. The in-explained that while it wasclear to him that it would be within his right to impose a separate fine for each offense proved, he could not bring himself to believe that the payment of a rebate on each car of grain constituted a separate offense. Each shipment, the court explained, whether made up of one or more carloads, with the subsequent pay-ment of the rebate, could be treated as a separate offense. At the trial it was shown that 50 counts in the indicts covered 50 carloads of grain shipped to the Spencer Grain company at Duluth and Superior, on 17 different shipments. Whether the court should take notice of this fact in passing sentence and state the fine was to cover 17 offer in a cumulative sentence, judge Morris in his review deemed not essential.

TORONTO MAN APPOINTED Toronto, Aug. 23-Dr. Harvey Clare who has been one of the physicians of Toronto asylum for about a year, has been appointed assistant medical su-erintendent of the asylum at New

McGUIGAN VERY ILL Montreal, Aug. 23-F. H. McGuigan, ormerly fourth vice-president of the formerly fourth vice-president of the Grand Trunk system and more recently first vice-president of the Great North-ern lines, lies dangerously ill at Port-land, Me.

GENERAL OTTER'S MOTHERDEAD Toronto, Aug. 23—Mrs. Anna Otter, mother of brigadier general Otter, died today at the residence of her daughter, Mrs. A. D. Stewart in this city. Mrs. Otter was an octogtnarian.

TO HARVEST CROPS Winnipeg, Aug. 23—The first of the harvesters who are to gather in the crop of the west arrived from the maritim provinces this morning and during the next 12 hours three thousand more also arrived. The first of the six special ex-cursions which are scheduled for this all is from the provinces of Nova Scotia New Brunswick and Prince Edward is morrow morning. The vast majority, to the number of 290, will arrive on spe-cials in the morning. The harvesters will be received at the building specithey wish to go, or if they have n choice, wherever there is particular nee of men. The excursion from Ontari will arrrive early next week. It is esti mated that between will come west on the six special har vester excursions.

MONTANA'S FUEL SITUATION

No Stocks in Hand and Serious Shortage is Inevitable Billings, Aug. 23-State coal mine in-

ector Mott has just completed a tour inspection of the mines of the state and his report on the fuel situation in Montana is anything but cheerful. He that part of the state coal is being ship ped as fast as it can be taken out. No storing is being done at the mines, it being almost impossible to supply the demands. Heretofore, large quantities an emergency during the winter. In the orthern part of the state, operators experiencing a labor shortage are able to remove the coal only in lim ited quantities. With the great increase an unusually large amount of black dia monds and the shortage which has been the inspector declares, is sure to come

PROSECUTION OF LUMBERMEN.

roceedings Started in Alterta Promi Long, Bitter Struggle. Edmonton, Aug. 23.—The prosecution just started by the attorney genedal's department against lumbermen alleged to be operating in Western Canadian markets startifies the hegitmusters. operating in Western Canadian markets signifies the beginning of a long and bitter struggle in the courts. The lumber association has adopted a plan for fighting the prosecution. It is expected that there will be a general meeting of the members of the association called shortly for the purpose of deciding definitely upon a course of defence. The association, it is expected, will deny that there is any understanding between the members such as would tend to act in restraint of trade or unduly control the price of stock. They will probably produce evidence to show that the hig hprice of lumber is brought about by the changed conditions of things at the mills and in the lumber camps. They will clai mthat owing to the great-increase in wages, the cost of living, and operating, dealing in lumber cannot be carried out at less figues. In fact, it is expected that the association will produce figures showing that instead of making

expected that the association will produce figures showing that instead of making profits they will have been activally suffering heavy losses. transportation. They will claim that it is utterly imposible to sell lumber at reasonable prices in face of the exorbitant charges made by railway companies for freight. The evidence upon which the prosecution will depend will be largely gathered from retail dealers and contractors, and it is expected this will be ample to prove the existence of a combine working to the detriment of the best interests of the people of the West. The case will pobably come up at the fall session of the supreme court.

MRS. THOMAS' TRIAL

Wiarton, Aug. 23—The preliminary trial of Agnes Thomas charged with the killing of Phillip Gilbert on her premises was held before a magistrate yesterday. Crown attorney Dixon asked for the woman's committal for man-slaughter. G. A. McKay counsel for the defense asked that the whole matter be referred to the attorney general's departmnt which was agreed to and the case was adjourned for a week. According to the evidence versions vary as to the number of shots fired.

GREENWOOD COUPLE DIVORCED Spokane, Aug. 23—Peter C. Johnson married a widow with married children in Greenwood, B. C. in 1900 and until our years ago she lived with him 11 months at three different times. So he testified in his suit for divorce from

Melissa Johnson yesterday.

"At no time," said Mr. Johnson, "did she act as a wife to me. The last time she left me I went 400 miles to bring her back. She left again because I would not deed my property to her. Her son sued me for board and nursing. She has een gone four years now."

Mrs. Adderly testified for Mr. Johnson that Mrs. Johnson had written that she had a good home. She knew them in Greenwood. Judge Sulllivan granted a

fecree on the ground of abando COMMITTED FOR TRIAL

Sam Prior, Charged with Murder of
Little Rosit Moore
Wilsofey, Aug. 23—Preliminary inquiry into the death of Rosie Moore,
who was found dead here some weeks
ago, was opened here this afternoon before magistrates McPhail and Hill, when
Sam Prior was committed for this Sam Prior was committed for trial. Sergt. Debuque prosecuted and was assisted by D. P. Kennedy. Sam prior was arrested by sergeant Debuque and brought here yesterday. Accused was called on and had very little to say. He claimed the blood found on his clothes was from his ness bleeding also clothes was from his nose bleeding also that it was from ducks he shot. He had onfessed previously to sergeant De-uque at Regina that he killed the child and that he used a knife when so doing and that his reason was that the little girl had provoked him about a dog. Prior was committed for murder and will stand trial at the assizes in

Large Force Sent to Free McLean Defeated

ALCAZAR IS IN DANGER

NOTORIOUS BANDIT CHIEF RAIS-ULI SECURES ANOTHER DECIS-IVE VICTORY OVER THE SUL-TAN OF MOROCCO.

Washington, Aug. 23-Information has een received by the state department by cable to the effect that the bandi Raisuli has completely defeated the large force sent against him by the sultan of orocMco, in the effort to secure the release of Caid McLean. According to the same report the important city days by caravan from the city of Tangier, is in danger. \*

PROSPERITY OF I. C. R.

Ottawa, Aug. 23—The earnings today of the Intercolonial railway according to M .J. Butler, deputy minister, are the largest in the history of the road. The system was never in better shape than now and never before hand-

TO VISIT ORCHARD'S OLD HOME Toronto, Aug. 23—Clarence S. Darrow, who assisted in the defense of W. D. Haywood of the Western Federation of Miners, at Boise, Idoha, was in the city yesterday on a holiday trip. It is possible that he will visit Northumberland county, the home of Alfred Horsley, alias Orchard.

NO USE FOR KNIFE WIELDERS Ottawa, Aug. 23—Antonia Bardesci for stabbing Arthur Charbonneau 12 times with a stiletto has been sentenced to said that foreigners must be taught that

to take special means of preventing them ORCHARD INSECT PESTS

DR. FLETCHER'S SUGGESTIVE TALK TO FRUIT GROWERS.

PESTS RARE AS YET BUT MUST BE GUARDED AGAINST.

Through the courtesy of Mr. George helpful to those engaged in the fruit

growing industry in the the report of his address hereunder.

Dr. Fletcher said in part:

I have no doubt many people who might have been here have kept away because they say "we do not know much about insect pests." You are in such a delightful part of the country

that you are troubled with very few.

The recent development of farming and fruit growing in this valley has been such a surprise to everyone, and the fact that you have a district so em-inently suited to the production of fruit of the finest appearance and quality, has made this subject, one of great interest to everyone. The reputation of Kootenay fruit and that from other parts of B. C. is such that we down east are always on the qui vive at ex-hibition times to see what is coming. It is not only its quality that is so excellent, but also the appearance, which is a very valuable asset, it is so remarkable that it always attracts attention. You will always have the naming of some of your B. C. fruit challenged because of the peculiar effect of the B. C. soil and climate upon the shape and development of some of the well known varieties. One of the great surprises to the great surprises to the great surprises. to fruit growers in the east a few years ago when you sent an exhibit of B. C. fruit was the excellent quality of the C. fruit was the excellent quality of the Ben Davis apple. That is one of the excellent apples that bring great satisfaction to the grower because it brings large returns into his pocket, but it is not always so much esteemed by those who buy them. The fact that it is such an excellent apple to grow however gives rise to this danger, that too many of them will be planted. There are a great many being planted today, and as your conditions here are such as to enable you to produce the best varieties it would be wiser for you to devote your attention to them. Flavor, appearance, and popularity on the market, these are the three factors of success in fruit growing.

growing.

Notwithstanding the fact that your orchards are so very clear of insect and fungous enemies which do so much harm in other less ravored parts, that is no reason why you should not find out all you can about them. The provincial government is doing a great deal in fortifying the farmers so that they may save themselves a great deal of may save themselves a great deal of loss by knowing beforehand the difficul-ties they will havt to meet. In this valley growing fruit is a new thing, but still there are certain orchards which have existed long enough to show you what can be done, or at any rate give indications of the lines along which

Then secondly, there are in many or chards too many varieties. The experience of others is that a few well known popular varieties, bring more money to the grower than a greater number of varieties. Most people know this, yet I see in many of the orchards a great number of trees many of which will not succeed. Mr. Ricardo, the very successful manager of lord Aberdeen's Coldstream ranch at Vernon, says that one of the first things he did when he took charge was to cut out about 75 per cent of the varieties, that is from about fifty or sixty he cut out all but five or six. Many of these were nice and pretty, luxuries, but you are not most of you growing fruit as a luxury but to make it pay, and what is nice and pretty does not always pay. I take a great interest in this district because it is a part of Canada that has shown a wonderful capacity for producing fruit of the very best quality and appearance. You see I have mentioned appearance several times, it is a factor of the great-est importance, a thing may be very good but unless it advertises itself it is of less value than something that is not so good but more popular.

I have said you are troubled with few

insect pests. Many that do a lot of harm in other parts of Canada, and even in districts close to here. I have not seen here. They have many difficulties on Vancouver Island that you have not. That is because this is a new district. In nature we do not find large blocks of one kind of plant or tree together, as is the case under cultivation, consequently the insects which feed on one kind of plant do not increase so rapidly. But as this condition is changed by cultivaas this common is changed in a district, the insects that feed on them increase, and it becomes important for the fruit grower

increasing so that his profits are not reduced. Some hundred years ago a naturalist found in Colorado a few specimens of a very rare beetle. He brought them home, and for many years they were very rare treasures in collections. But as man gradually spread civilization over North america he carried with him that standard food the potato from east to west, and directly the cul-Through the courtesy of Mr. George
H. Playle we are enabled today to publish a fairly full report of Dr. Fletcher's admirable address to the truitgrowers of this district on Monday evening. Dr. Fletcher has good advice to offer and there is much-that is suggestive and helpful to those engaged in the fruit report of the potato extended to Colorado beetle swept across the continent over this bridge of insects and plants in order that they across the continent over this bridge of a special food and now it is a regular pest in all the potato fields of the country, and today it is absolutely necessity and the potato fields the cultivation of the potato extended to Colorado beetle swept across the continent over this bridge of insects and plants in order that they are supplied to the colorado beetle swept across the continent over this bridge of insects and plants in order that they are supplied to the second the provincial and dominion governments to transfer the cultivation of the potato extended to Colorado beetle swept across the continent over this bridge of insects and plants in order that they are supplied to the colorado beetle swept across the continent over this bridge of insects and plants in order that they are supplied to the colorado beetle swept across the continent over this bridge of insects and plants in order that they are supplied to the colorado beetle swept across the continent over this bridge of insects and plants in order that they are supplied to the supplied to the colorado beetle swept across the continent over this bridge of insects and plants in order that they are supplied to the colorado beetle swept across the continent over this bridge of insects and plants in order that they are supplied to the colorado beetle swept across the continent over this bridge of insects and plants in order that they are supplied to the colorado beetle swept across the continent over this bridge of insects and plants in order that they are supplied to the colorado beetle swept across the colorado beetle sw try, and today it is absolutely necessary to protect our crops against this insect or we would have no potatoes at all. The insects eat the leaves so that no food is produced and stored in the root, which of course is not a root at all but an underground branch. It is a popular and pretty fable that children are taught, that leaves are the lungs of the plant but it is not true they are mouths or stomachs. they take their try is a very low estimate: ten per cent

mouths or stomachs, they take their food in gaseous form from the air and work it up with the water taken from and Canada destroyed by insects. To that the soil through the roots, and put it in store for next year's growth, lay it injury by fungous diseases. That is oneup in reservoirs for next year's plant. | fifth of the whole crop of the country tak-People who allow the leaves to be easten then have very small potatoes. Fruit growers who allow the leaves of the trees to be eaten have very small crops of fruit next year, because there is no trees to be eaten have very small crops of fruit next year, because there is no stock of food laid up in the trunks. If the leaves of the currant bush are eaten off one year the fruit next year will be

off one year the fruit next year will be very small and poor and bitter.

And this matter of fighting insects, like everything else, is a very simple matter when we know how. Some people are surprised when a botanist is able to tell them the names of every plant, but it would be a foolish man who could not tell the names of all the people in this room when he knows them. It is this room when he knows them. It is is not caused by and has nothing to do the same with insects when we know with drainage or swamps except in so the the same with insects when we know with drainage or swamps ex them. In case of insects and plants it as the swamps provide bree

the same with insects when we know them. In case of insects and plants it is much simpler than with people because people change and plants and insects in the control of noxious weeds and insects is simple when we have the requisite knowledge. The first element in obtaining that knowledge is to want to. Many people say they want to know but do not take the trouble to find out. It is a common statement among fruit growers that they spray their trees. It is ay, "with what?" They reply, "I don't know." Now spraying trees is not a shibboleth, you should know exactly why you do it and how it is to produce results. Now while there are a great many insects in the world the knowledge of them is very simple, because all that are found can be divided into two classes. They may be classed by the way they eat their food. One class eats with jaws or mandibles such as we have, and the other class obtains its food by penetrating with a beak-like organ and sucking out the sap or blood. So those are the two classes, biting and sucking. And according to the nature of the mouth parts so are our remedies. For the insects that bite we put on the so those are the two classes, biting and sucking. And according to the nature of the mouth parts so are our remedies. For the insects that bite we put on the plant some poisonous substance which will destroy the insect but not hurt the I am thankeful enough to have lived plant. In this chemists have helped us. One of the most deadly poisons is arsenic, and one of the best forms of what can be done, or at any rate give indications of the lines along which you can carry on your work most successfully. One of the difficulties with your orchards now is the wonderful prolificacy of your soil which causes your trees to come into bearing very early and produce large quantities of fruit before they are sufficiently developed to bear it. The trees have a fine healthy appearance, and an exceedingly bright healthy green color. This rapidity of growth is a difficulty because the young trees are liable to break down under the heavy crops, and that suggests the advantage of thinning the fruit more than has been done. The idea of thinning is to produce less fruit but that of better quality. A small crop of large and perfect apples is less trouble and more profitable than a large quantity of small, ones. Some trees, like some horses, will kill the goose that lays the golden egg.

Then secondly there are in many or.

among them black spot of the apple which was so very destructive in the east but which is not very prevalent in B. C., though I found one specimen in Kaslo so you should be on your guard against it. Another disease which

moth in Massachusetts. That work has cost about four million dollars, but in a sense it has been rather cheap if it can be stopped, because it has resulted in a lot of valuable information. They now have about seventeen hundred men fighting the gypsy moth and the brown tailed moth in Massachusetts. These insects were imported by a misguided man who called himself a scientist and thought he would introduce a new kind of silkworm. He put the eggs on his window ledge and one blew out. He knew it was gone but could not see it and did not trouble to look very hard. Now the consequence is that in the may see whole groves and parks of trees entirely denuded of foliage by these moths. I mention this to show what can be done if room is the second of the sec what can be done if people set to work to do it, for this insect is now being fought with every prosepte of final suc-cess. The San Jose scale has done great destruction in the United States and edy, that is a practicable remedy. A

remedy to be practical must have three qualities; it must be simple, so no mistake may be made in the preparation and application; it must not cost more than it is worth; and of course it must to the work, it is a practical remedy for all your different insect pests and fungous diseases that you want and ahould demand from the people you pay to give you this information. The

about what people in their foolishness have been in the habit of calling bugs. They call anything smaller than a kitten,

"bugs," and that is about the nearest they want to get.

One of the greatest dicoveries of the last century to my mind was not the in-vention of the steam engine of the ap-

long enough to see the equeation of the children of this country put on a reasonable basis. Our same time many of the fungous diseases.

There are two kinds of fungous diseases, one of which is on the outside, and the other penetrates the plant. In the standard Bordeaux mixture, four pounds bluestone and four pounds of lime we have a remedy which will destroy most of the fruit grower. the worst enemies of the fruit grower, it got such a hold on the land that in stead of thirty bushels to the acre the fertile lands of the Red river valley were producing ten and five bushels, and the people were being driven out of the land, they said it was too bad to night, guard against it. Another disease which is very destructive on the Wraser river and on the island is the plum rot. The mummified plums should all be beaten down and burned or buried deep so that the spores are not spread abroad in the spring.

The value of arsenate of lead was discovered in fighting against the gypsy covered in fighting against the gypsy his very farm stink in his nostrils because he gets no profit out of it. The Manitoba government printed and published and spread broadcast pictures of this weed and every child who went to school learned to know it, and through the children the perent tree. the children the parent knew it, and the result is that with the assistance of the great railways that weed has been

lmost stamped out.
So the knowledge of the insects and fungous diseases that threat chards is important to you, it is the knowledge concerning your bus which no intelligent busi be without. Everyone of you here has the opportunity to make great fortunes successful and bring the best returns, and when your orchards are contaminated by injurious insects be prepared to deal promptly with them, because they are sure to come. You hear of the loss

in Ontario of the codling moth: do you (Continued on Page Two)