

POULTRY AND GAME
Can get you fancy prices for Wild Ducks and other game in season. Write us for cash offer on all kinds of poultry, pork, etc.
Pearson-Page Co., Portland

HOWARD E. BURTON—Assayer and Chemist, Leadville, Colorado. Specimens from Gold, Silver, Lead, Zinc, Copper, Iron, Tin, Manganese, etc. Full price list on application. Control. Empire work on list. References: Oronote National Bank.

Machinery—Second-Hand Machinery Bought, Sold and Reconditioned. Engines, boilers, sawmills, etc. The J. E. Martin Co., 88 1st St., Portland. Send for Stock List and prices.

Ship us your VEAL, PORK, POULTRY, HIDES
We guarantee top prices and CHECK BY RETURN MAIL. We will send you a year on request to all who make shipments during January and February. We are located in the Northwest. Write for our prices and conditions. Poultry, Live, North-West Pacific Farmer. Please call your neighbors about our liberal offer. Ship to
F. H. SCHMALZ & CO.
Paid-up Capital \$10,000. 141-143 First St., PORTLAND, ORE.

RAW FURS WANTED
Highest Market Price Paid
Ship to **H. LIEBES & CO.**
J. P. Plagemann, Mgr.
MANUFACTURING FURRIER
508 Madison St. Portland, Ore.
Box First North East.

SAVE MIDDLEMAN'S PROFIT
of \$100 or more by buying your Piano or Player Piano direct from factory store.
BUSH & LANE PIANO COMPANY
355 Washington St., Portland, Or.

LIME FERTILIZER
Also Land Plaster, Lime, Cement, Wall Plaster and Shingles. Write for prices.
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102 Front Street. PORTLAND, ORE.

BANDMEN: We are Sole Agents for
HOLTON and BUESCHER
band instruments. The most complete stock of Musical Merchandise in the Northwest. Write for Catalogues.
SEIBERLING-LUCAS MUSIC CO.
134 Second Street. Portland, Oregon

HUNTERS! TRAPPERS!
Deal direct with manufacturer. We pay the highest prices for Raw Furs. Write for free price list and shipping tags.
N. M. UNCAR CO., FURRIERS
191 Seventh Street. PORTLAND, ORE.

Courage.
As courage is pre-eminently the virtue of men, so it is the virtue which most powerfully challenges the respect and emulation of men. And it deserves this pre-eminence, for it is also the virtue which gives security to all the other virtues.—Lowell.

Pretty Sure.
Whenever a man is threatened by the deep sea he is pretty sure to find the devil on the other side of him.

WILLOW RIVER
British Columbia.
The first registered townsite on the Grand Trunk Pacific Railway.
The heart of the country larger than Oregon-rich in natural resources.
On the Fraser River—with over 1000 miles of navigable waterway.
The terminus of the Pacific & Hudson Bay Railway to the Peace River country.
Several other railroads having plans to build into the townsite.
Standing timber in large quantities in all directions.
Agricultural lands in abundance, that can be purchased or purchased direct from the government.
Gold in the sands of Willow River for placer mining and the mining camp, Barkerville, only 110 miles away.
Coal is estimated to be sufficient to last all Canada for a century; located in the Bear River district, only 18 miles distant.
With these natural resources and the railroad spending millions building into that great undeveloped empire, isn't that enough to insure a "City of Importance"? What more would you ask?
Lots are priced low. Terms are easy. Advance of \$100 per lot on January 15, 1918.
When the Grand Trunk Pacific trains are running into town next summer from Winnipeg and the East your lots will be worth several times what they are today.
Willow River will certainly be another Edmonton, Calgary or Prince Rupert.
Send for plan today—that you may get a good selection before the advance of prices.
V. PAGE HARRIS, Act. for Oregon.
500 Henry Bldg., Portland, Or.

This Weather Causes Sickness
Grippe, Colds and Pneumonia
Come From Run Down Condition.

C. Gee Wo
C. Gee Wo

THE CHINESE DOCTOR
This wonderful man has made a list of the properties and actions of roots, herbs, buds and bark on the human system. Many of the remedies which this man uses are scarcely known to the scientists of this country, and in Chinese families are handed down from father to son and kept a profound secret. Most of these remedies are imported from Fook-Asia to his large laboratory at 1214 First Street.
It seems almost a miracle to many patients who have called on this famous man and in such short time become well by his treatment.
If you live elsewhere than in Portland and wish to procure his medicines, send 4 cents in stamps and a return blank and circular will be forwarded to you. This will fill out and proper remedies will then be sent to you.
Open evenings and Sundays.
The C. Gee Wo Chinese Medicine Co.
1623 First St., Cor. Morrison
PORTLAND, ORE.
P. N. U. No. 1—13.
When writing to advertisers, please mention this paper.

GOOD ROADS
An ingenious trick was recently played on some women of Maukjan, Madras, India. They handed sums of money to a woman who said that she possessed the power of doubling the contents. The victims had their packets returned to them after seven days, when the silver coins they had contained were found to have been changed into copper ones.

BAD ROADS WASTEFUL
Antiquated Methods in Illinois Cause Big Loss.

Conference Held at Peoria Approves Program for "Pulling Illinois Out of Mud"—Recommend State Prisoners to Be Used.

Bankers, farmers, automobilists, educators, labor and business men from all over Illinois met at Peoria the other day and approved unanimously a general program for "pulling Illinois out of the mud."
After three rousing meetings they prepared a resolution to the next state legislature setting out the lines on which they think state legislation should be based.
The Illinois highway improvement commission, which called the meeting, declared \$55,000,000 will be wasted in Illinois during the next twenty years unless the present antiquated methods are changed.

To prevent this waste the conference urges the creation of a small state railway commission to replace the present army of local commissioners, more active assistance by the state for the trunk lines, and more active insistence by the public on good roads.
It is proposed that prisoners in the state penitentiaries be used not only for the preparation of road building materials, as at present, but, if possible, for actual construction work through the state.
It is proposed to follow the Colorado method, using the honor system, and sending the gangs out with guards.

The legislation recommended by the conference would provide:
—State and county co-operation in the construction and maintenance of main highways and bridges.
—A non-political state highway commission of at least three competent members, who shall devote their entire time to their duties.
—Improvement in such counties as elect to come under the provisions of the law, of main, continuous inter-county highways connecting county seats and other important cities, principally at the expense of the state and county; such roads to be selected and improved by county authorities, subject to the approval of the state highway commission and after improvement to be turned over to the state for perpetual maintenance.
—Improvement, maintenance, and control of remaining roads (about 80 per cent. of the whole) under supervision of county and township authorities.
—Effective measures to guarantee maintenance after roads are once constructed.
—Use of the state automobiles tax, together with such other funds as the legislature may appropriate in the improvement of highways.
—Use of state prisoners—under state direction—on an honor system, in actual road work when practicable.
—Payment of all road taxes in cash.
—Compulsory dragging of all earth roads.
—Proper construction and guarding of crossings at railroads and intersection of street and highways.
—The "platform" of the conference includes resolutions in favor of federal aid for postroads and national highways, and calls attention of Illinois congressmen to this position.
Jesse Taylor of Jamestown, O., told the convention the difference between hauling coal in Belgium and America, 13 cents a mile, meant a waste of \$127,500,000 in this year's farm crops alone.

Egg Material.
The laying mash has become generally recognized as the most convenient as well as economical method of providing a hen with egg material. The following is a good formula: Coarse wheat bran, coarse middlings, ground corn and oats, alfalfa meal, meat scraps, each 100 pounds, linseed meal forty pounds, fine table salt ten pounds. This 550 pounds of feed, costing around \$10, should be enough to last a flock of 100 hens one month and should produce during that time, at December and January prices, from \$50 to \$60 worth of eggs. There is not another animal on the ranch that will show this profit from the same amount of feed given in addition to the regular rations.

Plant Food.
When plants run to vines and tops it is a sure indication that the soil is full of nitrogen and lacking in potash and phosphoric acid. This frequently comes from the use of large quantities of stable manure. A fertilizer low in nitrogen and rich in potash and phosphoric acid will balance up the plant food ration.

Difficulty With Guinea.
One difficulty about raising guinea is that the young birds are very easily killed by mites and lice.

Grit.
Grit and shells are comparatively cheap, but the cheapest of all ways is to haul a load of sand and gravel and dump it in the poultry yard. Sand and gravel from some streams contains a large percentage of broken shells, which the hens will soon devour with a relish. It will be surprising to see how soon an average-sized fock will make away with a box of grit.

Call Out Poor Layers.
Call out all the poor layers and give the good hens a chance.

Had Kept Her Bargain.
An ingenious trick was recently played on some women of Maukjan, Madras, India. They handed sums of money to a woman who said that she possessed the power of doubling the contents. The victims had their packets returned to them after seven days, when the silver coins they had contained were found to have been changed into copper ones.

It Cures While You Walk.
Allen's Foot-Ease is a certain cure for hot, swollen, callus, and swollen, aching feet. Sold by all druggists. Price 50c. Don't accept any substitute. Trial package FREE. Address: Allen & Olmsted, Le Roy, N. Y.

Accomplishing.
It is very important that the young man select his life work early and bend every energy toward accomplishing something. One of the most common causes of failure in this life lies in the fact that men do not see the importance of being thorough until it is too late.—Florence Videtta.

English Stump Speech.
A correspondent "Old Briny," sends us the following specimen of frenzied stump oratory: "Feller blocks! Thanks ter th' gov'ment, yer get yer d'minishin' wage, and yer little loaf, an' all that. Watcher get ter do now is ter go fer devil-ootion and local anatomy, an' go 'til blind!" (Loud cheers.)—London Globe.

Be thrifty on little things like bluing. Don't accept water for bluing. Ask for Red Cross Ball Blue, the extra good value blue.

By installments.
The "epoch-making advice" of a bookmaker to a colleague in distress is related in Vanity Fair. The colleague had been paid £25 on a bet by a certain captain, who, in a fit of absent-mindedness, paid him the same amount again next day. "What shall I do about it?" asked the bookmaker of his friend; and prompt came the answer: "Ask him for it again."

Steel Stays Stopped Bullet.
Steel stays have saved many a woman's life. Not long ago Mary Henessey was taken to Bellevue hospital with a flesh wound in the side, and Dr. Drury discovered that had it not been for a steel stay which deflected the bullet, the wound would have been fatal, for the slug had been traveling toward a vital organ.

Clogged Sewing Machine.
When a sewing machine will not work, stand it near the fire so that the oil may melt, and then clean with pure paraffin, putting it into every oil hole. Work the machine well, and then wipe every part with a clean cloth. When perfectly clean, lubricate with machine oil.

As a Man Thinks.
Jennie—"He must have a soft spot in his heart for me." Wennie—"Why so?" Jennie—"He says he is always thinking of me." Wennie—"But you know, a man doesn't think with his heart. The soft place must be in his head."—London Telegraph.

Happiest Home.
But the happiest home is built when the twin together meet the trials and catastrophes that come from the outside world with the good health, the common sense, the humor, the patience and courage that will rout them. It should not be necessary for these qualities to be used by the one to combat the faults of the other.—Barbara Boyd.

Learning by Love Letter.
"Love letters between young men and women are an excellent method of teaching literature," says Dr. Arthur Holmes. But it must be done tactfully. We have known a young lady who broke off an engagement because her fiance returned her love letters with the spelling errors neatly corrected in red ink.

TO CURE A COLD IN ONE DAY
Take LAXATIVE BROMO Quinine Tablets. Druggists refund money if it fails to cure. E. W. GROVE'S signature on each box. 5c.

Scientific Fact Established.
A number of rabbits upon whom coffee was tried to determine the effect of the caffeine it contained, died, proving beyond a doubt that coffee never was intended as food for rabbits.—Louisville Courier Journal.

Not All Owing to Wife.
"Biggins says he owes everything to his wife." "That isn't true," replied Biggins' father-in-law. "His wife quit lending him anything years ago—and then he started in owing me."—Washington Star.

Not Inconvenient.
"Did the dissolution of your gigantic corporation cause you inconvenience?" "Not the slightest," replied Mr. Dustin Stax. "I needed an enlarged and improved system of branch offices, anyhow."

Wanted to Live in History.
Some men's idea of fame is certainly a distorted one. A murderer in South Carolina pleaded for the privilege of being the first man to be electrocuted when that new mode of execution was introduced into the state.

No Use for Boys Any More.
Somebody has invented an electric device that will split kindling wood. Gradually we are getting it so arranged that the world will have absolutely no use for small boys.

RESIDENT BAKING POWDER
MILKING BETTER
PISO'S REMEDY
FOR COUGHS AND COLDS

WASTING OF ROAD MATERIAL
Estimated That \$9 Out of Every \$10 Uselessly Squandered Annually in States of Corn Belt.

It would be difficult to give in actual figures the amount of money that is annually wasted in road work in the states of the corn belt. To say \$9 out of every \$10 is uselessly squandered would be putting it too strongly for some communities, but it would not be wide of the mark in others, says the Iowa Homestead. Strange as it may seem, those very localities where the worst roads are stanchest in their support of the old-fashioned system whereby the highways are in charge of those who know absolutely nothing about the scientific construction of roads.

We are not assuming to give advice on how to build roads, because road making is not our profession, but it is sometimes in order to point out how not to build them. While traveling recently on a highway that has almost a nation-wide reputation for its excellent condition due to dragging, we found at one place twenty or thirty teams applying gravel. Already several miles had been graded, application being made to a surface that was in many places at least thirty feet wide without the slightest attempt having been made to make a grade. For a distance of many rods in places the center of the highway was considerably lower than at either side and yet these faithful "gravelers" were dumping their loads in the very middle of what might be called the "saucer" grade. No attempt whatever was made to pack down the loose gravel, so that all traffic was being diverted to the sides. Heavy traffic following wet spells had resulted in cutting the entire surface into well-high impassable ruts, the situation therefore presenting the pleasing prospect of having the ground freeze up this fall with the surface in frightful condition.

It requires no expert knowledge of road making to conclude at once that labor expended in this way is practically wasted. Instead of first getting rid of the water, which has always been the fundamental principle of road making, and then applying the gravel, those in charge of this road simply because the cash was available for putting so much labor on the surface began at the wrong end and it may safely be predicted that not two years will elapse before this gravel has disappeared into a bottomless bog. Here was an expenditure of \$500 a mile that was in our opinion worse than wasted because this loose unpacked gravel by its diversion of traffic to the sides simply means that where formerly some good could be accomplished with a drag, now this benefit cannot be expected because dragging the soil to the center will only the more quickly bury the surface material—the gravel.

While we have given but one instance we believe that similar cases could be found in a great many counties of the corn belt where gravel is available and if this is true it is high time that some system is developed whereby every dollar that is spent on a highway must be for labor that is superintended by someone who is schooled in a practical way on the scientific principles of road making.

BETTER ROADS ARE COMING
Recent Convention Held at Peoria Gave Powerful Impetus to the Movement in Illinois.

The recent good roads convention at Peoria gave a powerful impetus to the good roads movement in Illinois. Prospects are that some sort of road legislation will be passed by the legislature this coming winter.

Opposition to the hard road movement will come mainly from two sources. The first is that class of people who do not trust the state to spend money wisely and economically. They believe that the township or county can use the road money more effectively. The second and largest source of opposition is from the northern part of the state, where the main roads are now pretty thoroughly graveled or macadamized. The people there say with some justice that after having taxed themselves to build their own roads, they should not be compelled to help build roads for the rest of the state.

This should not block the progress of the good roads movement, however. It should be easily possible to devise a law to provide for an equitable distribution of the state road money. In the sections which already have macadamized roads, the money could be spent for concrete pavement on the roads where traffic is heaviest. As for the first objection, the state, with a force of trained road makers, ought to be able to put in permanent roads much better and at less cost than the township or county. Experience does not show that misuse of funds is any more likely to occur under state than under county administration.

It is important that the good roads question be thoroughly threshed out this fall and winter. We should like to hear from our readers on this subject, and will be glad to give space in the paper to as many letters as possible.—Prairie Farmer.

Kicking Habit of Mule.
If a mule is properly trained he will not develop the kicking habit any more than a horse will. Mules have a bad name on this score simply because they are not as well broken as horses are.

Disposition of Cripples.
The cripple and the malformed chicken should be put to death immediately after hatching. Such little unfortunates will bring nothing but disappointment. They will give you more care than ten well and whole ones. They will make you sick of the chicken business and give your entire flock a black eye from the first kill 'em the instant they are born.

Green Feed Necessary.
A hen should have all the green feed she will eat every day of her life.

Horticulture

GRAPES FOR USE IN WINTER
Placed in Department of House Cellar Without an Artificial Heat Some Keep Well.

What a pity it is that grapes will not keep longer. Every autumn I place in a department of my house cellar, where there is no artificial heat, baskets of various varieties of grapes, says a writer in Green's Fruit Grower. I do not expect the Worden, Concord, Delaware and Niagara to keep long, therefore I consume them first. After these I consume the Brighton, which is a fairly good keeper, but which shrivels up considerably. Barry has kept well with me this season. Gaertner, a red grape, has kept pretty up to Thanksgiving.

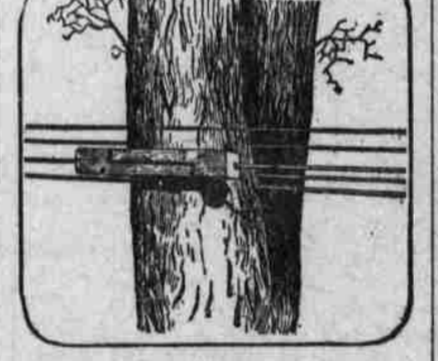


A Good Keeping Variety.

grapes through the winter, but I have never succeeded in doing so in my ordinary fruit room. The grapes must not be placed in piles in baskets or boxes. With me they do the best in single layers. If one layer is piled on top of another they are inclined to rot. Some people cut off portions of the vine with clusters on it and place the ends of the vine in a bottle of water and report good results in keeping the grapes plump and fresh. Others insert one end of each stem of grapes in a bottle of water, but when the water evaporates it must have attention, therefore this is rather an expensive method. The Catawba has the reputation of being the best keeper of the hardy northern grapes. The Catawba and even the Delaware are kept, as I assume in cold storage, and put on the market in western New York all through the winter, but I observe there is difficulty in keeping even the Catawba in prime condition for the holidays.

INSULATOR FOR THE TREES
Wood Used Should Be Thoroughly Waterproofed to Prevent Branches From Forming.

Part of the telephone lineman's work consists in keeping the wires clear of trees and their branches, which often afford a good ground. The Morse tree insulator here shown is simple and quickly placed on the wire,



Tree Insulator.

says the Popular Electricity. It is a rectangular piece of wood that may be placed on a wire by means of two crosswise grooves deep enough to meet a shallow groove on the face. The wire passes from one crosswise groove along the face groove and out by way of the second groove, the middle of the insulator thus held by the wire bearing against the limb or tree without the use of nails or other fasteners. The wood for the insulator is thoroughly waterproofed.

Quantities of Water.
Consider the kind of plant you are watering. Soft-stemmed kinds, especially those with large leaves, will require much more water than hard-wooded, slow-growing kinds. While the former, easily recover from drought, the hard-wooded suffer permanently from extremes.
The seasons and time of day should also be watched. Plants not in active growth should be watered sparingly until they have regained their foliage. Watering in the evening just before dark greatly aids fungous diseases, as the foliage remains wet through the night.

Figure the Cost.
The orchardist must figure the value of the land per year on which the apples are grown, the cost of pruning, spraying, cultivating, picking and packing, the cost of the barrel and the cost of delivering the barrel in full wagon loads at the nearest railroad station.

Cool the Ashes.
Ashes for fertilizing the grape vine should be cooled before applying them and then they should be so placed that they will not come in contact with the vine itself but rather enter the ground and fertilize the roots.

Spray Apple Orchards.
Apple orchards ought to be sprayed three times a year, and when it comes to taking care of 500 to 1,000 trees it will readily be seen that it is no small undertaking.



"Father, I'm Glad You Smoke Duke's Mixture"

Before we tell you about the boy and his air rifle, we want you to hear about Liggett & Myers Duke's Mixture—the tobacco that thousands of men find "just right" for a pipe—the tobacco that makes "rolling" popular.

Liggett & Myers
Duke's Mixture

This favorite tobacco is fine old Virginia and North Carolina bright leaf that has been thoroughly aged, stemmed—and then granulated. It has the true tobacco taste, for the very simple reason that it is pure tobacco. Pay what you will—it is impossible to get a purer or more likeable smoke than Duke's Mixture. It is now a Liggett & Myers leader, and is unsurpassed in quality.
In every 5c. sack there is one and a half ounces of splendid tobacco—and with each sack you get a book of cigarette papers FREE.

How the Boy Got His Air Rifle
In every sack of the Liggett & Myers Duke's Mixture you now pack a Free Present Coupon. These Coupons are good for all kinds of useful articles—something to please every member of the family. There are skates, sleds, balls and bats, cameras, umbrellas, watches, fountain pens, pipes, opera glasses, etc., etc.

As a special offer, during January and February only, we will send you our new illustrated catalogue of presents, FREE. Just send us your name and address on a postal.



Hindu Charm.
"The God-given Almighty Power is moving within me to give health, success and happiness. I shall be shown the way to help bring about all these conditions. Love, Light and Kindness wait upon me. I shall be shown the way."

TURN OVER A NEW LEAF
Start the new year right. Take care of the Stomach, Liver and Bowels, and they will serve you well. Make the appetite keen, digestion perfect and Liver active by the daily use of
HOSTETTER'S STOMACH BITTERS
It promotes and maintains health, strength and vigor. Try it today.

Air Flight for Consumption.
If you have incipient consumption—take a flight in an alrship. Doctor Flemming, an eminent authority on tuberculosis, lecturing before the Berlin Aeronautical association, described the benefits of high altitudes upon those afflicted, and asserted that fifteen minutes' exposure to the sun's rays during an alrship flight at high altitude was certain death to the bacilli of tuberculosis.

We Are a Nation of Frog-Eaters.
Frogs' legs, at which people turned up their noses in disgust only a few years ago, have now become so popular an article of diet that no fewer than 6,000,000 frogs a year are killed in Minnesota alone to supply the demand. The northwestern frogs are the most delicate, but the biggest are the southern bullfrogs. The latter are not so sweet or tender as the former.

Pettit's Eye Salve QUICK RELIEF EYE TROUBLES
Desire for Long Life.
There appears to exist a greater desire to live long than to live well. Measure by man's desires, he cannot live long enough; measure by his good deeds, and he has not lived long enough; measure by his evil deeds, and he has lived too long.

Fault Finding.
If we had no faults, we should not take so much pleasure in noticing the faults of other people.—La Rochefoucauld.

Destroys Dandruff.
Ayer's Hair Vigor keeps the scalp clean and healthy, destroys all dandruff, and greatly promotes the growth of the hair. You will certainly be pleased with it as a dressing for your hair. It keeps the hair soft and smooth and promptly checks any falling of the hair. It does not color the hair, and cannot injure the hair or scalp. Consult your doctor about these hair problems. Ask him what he thinks of Ayer's Hair Vigor.

New Idea in Fruit Growing.
An electric motor to vibrate gently a fruit tree so that the sap flows to the buds and blossoms and enables them to resist frost has been patented by a Colorado orchardist.
Greek Fire to Be Used Again.
To stop following hostile vessels or even for purposes of attack when the conditions are right a German naval officer has invented a Greek fire that will burn while floating on water.