

# ROADS MADE OF OIL AND GRAVEL

They Are Very Durable For Heavy Traffic.

## MEANS OF CONSTRUCTING ONE

Much Care Required in the Selection of Stones Used—Keen Judgment in Mixing, Heating and Spreading the Substances is Necessary For Best Results—Roll Road Thoroughly.

The highway commission in the state of Massachusetts desired to construct a high class road of oil and gravel during some experiments in road building.

A section of the state highway that was in a dilapidated condition was selected for the experiment. The old surface was loosened up with steam roller plucks, then shaped up with shovels and rolled down with a steam roller, but not tightly bound on top, the old stones being loose rather than otherwise to prevent crawling or waving of the bituminous gravel surface.

The surfacing, which is really an oil mixture, followed and consisted of seven grades of compositions designed to determine as far as possible the comparative proportions of materials that would give the best results.

They found a gravel pit near by and started to work at once. The kettles for heating were set up on the road near the pit and the mixing done there. The gravel was screened, separated into three sizes, and the stones over one inch were thrown out as being too large.

About eighteen gallons of oil per cubic yard of gravel were used. The oil and asphalt were heated separately in kettles from 300 to 400 degrees F., asphalt being generally hotter than the oil, care being taken not to burn by overheating in the kettles. The kettles used for this purpose were of two patterns, both practically designed by the highway commission. The one used for heating the oil had a capacity of 300 gallons and the two for heating asphalt a capacity of 125 gallons.

The gravel and sand were also heated separately by means of thin iron smokestacks laid on the ground with wood fires. The stacks were about ten feet long and laid in groups of four about eighteen inches apart and parallel with each other. The screened sand or gravel was thrown over them to a depth of about one foot, and after being heated to a temperature approximately of 225 degrees F. the stacks, with the fire in them, were lifted out of the heated gravel or sand, laid down in another place and again covered with the mineral to be heated.

The mixing of the oil, gravel and sand was done by hand shoveling on wooden or steel mixing platforms, the wooden at first, but on the steel, which was much better, requiring less labor.

The heated sand and gravel in the above proportion were measured out on the platform by means of a measuring box. Hot oil in small quantities, per-



AN IDEAL HIGHWAY OF OIL AND GRAVEL [From Good Roads Magazine, New York.]

haps one-third of the required amount, was thrown over the hot mineral, turned over once; then the full amount of oil added and turned, then the full quantity of asphalt added and thoroughly mixed until practically no sand could be seen that was not thoroughly coated and there were no lumps, and the completed mixture was ready to be shoveled into the carts and hauled to the road.

The temperature of the mixture after reaching the road in the carts was from 150 to 250 degrees F. It was shoveled from the carts into place or dumped upon a dumping board and shoveled back into place. The best results were obtained when shoveled directly from the cart. Perhaps it was because there was less cooling. One man could do all the spreading. All the corner stones were carefully raked ahead into the bottom so as to reduce as far as possible the roids on the surface. The most careful spreading was given, and a ten-ton roller followed directly after the material was spread.

To obtain the most perfect results teaming should be kept off for a period which need not be longer than twenty-four hours after spreading, when the rolling would be completed.

**Good to Remember.**  
In planning road improvements it should not be forgotten that when a road is once improved with macadam or gravel the travel instantly doubles or triples, and the road surface must be sufficiently strong and durable to provide not only for the present traffic on the road, but for the traffic which the improved highway will bring to that community.

**A Snap for 60 Days.**  
160 acres 12 miles north from Prineville; 35 acres under plow, 40 acres now can be plowed. Hens, barn, 40 chickens, woodshed, chicken house for 1000 chickens, good chicken park; stream water runs through the land, million feet standing timber, span of mares, weigh about 1100, 1000 head of cabbage, 13 acres potatoes, 8 tons good wheat hay, good harness, household furniture and everything goes for \$2500 if taken within 60 days. Address: A. R. EASTWOOD, Prineville, Oregon. 8-25-2m

# HINTS FOR FARMERS

## Scours of Calves.

There are many things which may cause calves to scour. One of the most common causes of calf scouring is overfeeding or feeding milk at too low a temperature. We do not believe it is a safe practice to depend upon the finger to determine the temperature of the skim milk, but a thermometer should be used where it is necessary to heat the milk for calves. The calf will do the best on milk heated from 95 to 100 degrees F. and not given more than it can reasonably take care of. To begin with the calf should not have over a quart and a half of milk at a feed; then gradually increase the allowance as the calf develops. When calves are permitted to have all the skim milk they can drink they will gorge themselves and indigestion and scours will usually follow.

Isolate affected calves. Give newborn calves a clean, sunny, well ventilated, disinfected and whitewashed box stall and see that the bedding is kept clean and dry. Treat scours by giving a dose of castor oil in milk and follow two or three times a day with a teaspoonful of a mixture of two parts subnitrate of bismuth and one of salol. If factory or other skim milk is fed give small quantities often from clean, scalded utensils, and in each pint of it at time of trouble mix one teaspoonful of a mixture of half an ounce of formaldehyde in fifteen and one-half ounces of freshly boiled water.—Hoard's Dairyman.

## Strawberries For Next Year.

Strawberry vines may be set almost any time in the spring or summer or even early autumn, provided weather conditions are favorable. It is best to set them out on cool, cloudy days, following a rain, when the ground is well soaked and the weather promises to be cool for a day or two, so that the newly transplanted plants will not be subjected to the hot sun immediately after planting. It is usually better, however, to do the transplanting in the spring. In the first place, they are not so likely to be injured by hot weather immediately following transplanting, and they are not so likely to wither or die before the roots get well established. They have a longer growing period, get more firmly rooted and make a more vigorous growth than if planted in autumn. Having become more firmly rooted and established in their new soil, the plants will probably bear a heavier crop the first year than if planted later in the season.—Orange Judd Farmer.

## Alderney Cattle.

When cattle were first imported from the Channel Islands they were commonly called Alderneys. The Channel group consists of the following islands: Jersey, Guernsey, Alderney and Sark. As we understand it very few, if any, cattle were imported from the island of Alderney, which is in no sense an agricultural island. Only a few cattle are kept on this island as compared with the island of Jersey or Guernsey. The term Alderney is usually applied to the Jersey breed, but in some instances it was used to designate the cattle coming from the island of Guernsey, but that they originated from the Guernsey.—Hoard's Dairyman.

## Horse Notes.

Colts should not be allowed to follow their dams while in the harness. It is best to turn them in the pasture while their mothers are in the field. Good brood mares when properly cared for may do good work on the farm and still nourish their colts properly. They should not be overworked or forced to draw heavy loads.

## Relief For Heaves.

Relief for heaves in horses may be obtained by giving daily doses of one-half dram of digitalis and one dram of sulphate of copper in the food and by feeding with small quantities of concentrated food at frequent intervals. Reduce the quantity of hay and water and always dampen the hay before feeding.—Denver Field and Farm.

## Milo Maize For Hogs.

When milo maize is fed to hogs it may be given them in the head, thrashed and soaked or ground and wet to a thin slop. For fattening hogs a succulent feed should be given with milo, such as early cut sorghum, stock, melons, beets or green cured alfalfa hay.—H. M. Cottrell, Colorado Agricultural College.

## Secrets of Dairy Profit.

The secret of dairy success in Holland is easily understood and may be stated in a few words—efficient cows, excellent care, co-operation and superior quality of butter and cheese.—Illinois Experiment Station.

## Candidate for Sheriff.

To the Democratic voters of Crook county: I hereby announce myself as a candidate for the office of Sheriff of Crook county, subject to the approval of the voters of the county at the primary election to be held in September. Respectfully,  
T. N. BALFOUR,  
File, Oregon.  
7-14

## Baled Hay For Sale.

Alfalfa and Ryegrass, half mile out on Shaniko road. J. E. ADAMSON, 8-25-21

## For Sale.

Four head of Jersey cows. Call on or phone J. E. ADAMSON, at Prineville, Oregon. 8-25-21

## Summons.

In the Circuit Court of the State of Oregon for Crook County.  
Mary McMeekin, plaintiff,  
vs.  
James H. Hawkins, Mary Hawkins, J. Strodel, Frank J. Strodel, Naomi Salomonson, C. J. Johnson, O. C. Gray, O. B. Gray and J. H. Treasurer, defendants.  
To J. H. Treasurer, defendant above named:  
In the name of the State of Oregon, you are hereby required to appear and answer the complaint filed against you in the above entitled court and cause, on or before the 20th day of October, 1910, and if you fail to appear and answer said complaint on or before said day, the plaintiff will apply to the court for the relief prayed for in her complaint, to-wit: for the foreclosure of that certain mortgage executed by James H. Hawkins and Mary Hawkins, his wife, on the 15th day of June, 1907, in favor of Mary McMeekin and mortgaging the S½ of the NW¼ and the NW¼ of the SW¼ of Section Seventeen and the NE¼ of the SE¼ of Section 18 in Tp. 14 S., R. 19 E., W. M., in Crook County, State of Oregon, and for a decree for the sale of said premises to pay said mortgage and the costs and accruing costs, and that you and all persons claiming under you be ever barred and foreclosed of all equity of redemption in said premises and every part thereof.  
This summons is published by the order of the Honorable H. C. Ellis, County Judge of Crook County, Oregon, made on the 5th day of Sept., 1910, and prescribed that this summons be published for six consecutive weeks in the Crook County Journal, a weekly newspaper published in Prineville, Crook County, State of Oregon. The date of the first publication of this summons is the 5th day of Sept., 1910.  
M. R. ELLIOTT,  
Attorney for the plaintiff.

## Notice For Publication.

Department of the Interior,  
U. S. Land Office at The Dalles, Oregon,  
September 1st, 1910.  
Notice is hereby given that Frederick H. Mingers, of Lamonia, Oregon, who on October 2nd, 1900, made homestead No. 14720 (Serial No. 60213) for S½ SW¼, NE¼, SW¼ and SE¼ NW¼, section 5, township 14 north, range 14 east, Willamette Meridian, has filed notice of intention to make final five-year proof, to establish claim to the land above described, before Warren Brown, county clerk, at his office at Prineville, Oregon on the 15th day of October, 1910.  
Claimant names as witnesses: Hattie Quinn of O'Neil, Oregon; John Ferguson Robert Cowan, John Hackett of Lamonia, Oregon.  
C. W. MOORE,  
Register.

## Administrator's Notice.

In the County Court of the State of Oregon for Crook County.  
In the matter of the estate of  
Wilson E. Burton, deceased.  
Notice is hereby given that the undersigned, has been duly appointed administrator of the above entitled estate, and all persons are hereby notified to present their claims with proper vouchers to the undersigned at the office of T. E. J. Duffy, Prineville, Oregon, or the law office of Frank Menefee at The Dalles, Oregon, within six months from the date of the first publication of this notice. First publication August 25, 1910.  
PAUL W. CHILDERS,  
Administrator of the estate of Wilson E. Burton, Deceased.  
Frank Menefee, attorney for the State, The Dalles, Oregon.

## Professional Cards.

Crook County Abstract Co.  
Abstracts of title to all land and town lots in Crook county.

B. F. Wyde, Secretary, Prineville, Oregon

Chas. S. Edwards, R. P. Belknap  
OCCUPYISTS

Belknap & Edwards  
Physicians and Surgeons.

Prineville, Oregon

J. K. Rosenberg  
Physician and Surgeon  
(County Physician.)

Calls answered promptly day or night  
Office hours: 10:00 a.m. to 10:00 p.m.  
1st and Main Streets.

Prineville, Oregon.

E. O. Hyde  
Physician and Surgeon

Calls answered promptly day or night  
OFFICE ONE DOOR SOUTH OF ADAMSON'S  
DRUG STORE. Both office and residence telephones.

Prineville, Oregon

M. C. Brink  
Lawyer

X street, Prineville, Oregon.

M. R. Elliott,  
Attorney-at-Law

Prineville, Oregon.

C. C. Brix  
Attorney-at-Law  
Real Estate

Office with Geo. W. Barnes

Prineville, Oregon

N. W. Sanborn  
Attorney-at-Law

Adamson block - Prineville

W. A. BELL  
FRANK MENEFFEE  
Lawyers

The Dalles, Oregon

G. L. BERNIER  
Attorney-at-Law

Will practice in all the Courts.  
Office next door to Dr. Rosenberg's,  
Prineville, Oregon.

WADE HUSTON  
Surveyor

Homestead locations a specialty

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# Lumber for Sale

We are manufacturers of high-grade Lumber, both Pine and Fir  
We have on hand first-class Flooring, Shiplap and Rustic, Etc.

# Wood and Slabs

OUR PRICES ARE RIGHT  
Wallenburg & Farrer,  
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Mill on Coon Creek, three miles east of Grizzly, Oregon

# Wood Choppers Wanted

We can use several wood choppers at once to cut wood on our land. Accommodations good, and cash paid.  
Apply at  
The Wallenburg & Farrer Mill,  
on Coon Creek, three miles east of Grizzly, Or 9-8

# Week-end Excursions to Lake Odell

Finest trout fishing and sailing in Central Oregon  
Distance from Bend—72 miles  
Round-trip rate by Auto \$20

Schedule  
Leave Bend, Saturday, at..... 7:00 a. m.  
" Rosland, " at..... 9:30 " "  
" Crescent " at..... 10:30 " "  
Arrive Lake Odell, " at..... 12:30 p. m.  
Leave Lake Odell, Monday..... 7:00 a. m.  
" Crescent, " at..... 9:00 " "  
" Rosland, " at..... 10:00 " "  
Arrive Bend, " at..... 12:30 p. m.

Arrangements may be made for cars from Prineville to connect with the above at \$30 for round trip.

The Merrill-Wilkinson Co.,  
Bend, Oregon

Best Material  
Finest Workmanship  
Modern Methods and  
Correct Mechanical  
Principles unite in



The Royal Standard Typewriter  
to produce the world's best writing machine, one that has established a new and higher standard of efficiency and economy The Real Standard of today.

The Best Typewriter At the Lowest Price  
\$65.00  
Local agent for Central Oregon,  
J. S. FOX,  
Public Stenographer and Bookkeeper, Prineville, Oregon

Statement of Resources and Liabilities of  
The First National Bank  
Of Prineville, Oregon  
At the close of business Sept. 1, 1910

RESOURCES	LIABILITIES
Loans and Discounts.....\$37,812 45	Capital Stock.....\$ 50,000 00
United States Bonds..... 12,990 00	Surplus and Undivided profits 70,513 40
Bank remittance..... 12,853 02	Circulation..... 6,880 00
Redemption fund..... 625 50	Individual Deposits..... 591,941 56
Cash & Due from banks 380,496 38	
602,777 45	602,777 45

B. F. Allen, President  
Will Wurzweiler, Vice-President  
T. M. Baldwin, Cashier  
H. Baldwin, Asst. Cashier

# St. Thomas Aquinas Academy

Condon, Oregon  
Boarding and Day School, conducted by the Sisters of St. Dominic. This institution is pleasantly situated on an eminence overlooking the city of Condon, Oregon. The building is new and attractive, and has the advantage of being equipped with every modern convenience, including a fine new steam heating plant.

The course of studies is thorough and practical, embracing the studies of the Primary, Intermediate, Academic and Commercial Departments. Music is thoroughly taught in an artistic and scientific manner. Classes in sewing will be formed, in which plain sewing and embroidery will be taught.  
One of the principal aims of this school is to impart cultural manners and a thorough moral and religious training.  
For further information, address Sister Superior, 7-28-11

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You will not be disappointed. J. A. MOORE, agent for Redmond, Madras and Prineville. Will demonstrate the car any time. 5-19

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Successor to Pollard & Henderson  
Soft Drinks and Cigars

Always glad to see old friends. New ones welcome. Make my place your headquarters.  
D. Quackenbush, Prop'r

# Motor Gasoline AT LONG BROS.

Opposite Poindexter Hotel

# POLK'S GAZETTEER

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B. L. POLK & CO., Inc.  
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IN THE DESCHUTES VALLEY  
WRITE  
JONES LAND CO  
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# Drop in and See Champ Smith

DEALER IN Soft Drinks of all kinds

Imported and Domestic Cigars

At the old Smith & Cleek stand, Main street, two doors south First National Bank

# HARNESS and SADDLERY SHOP

H. D. STILL  
Prineville, Oregon

# Wanted.

Three men to saw logs and split pine wood. I furnish the timber, but want work contracted. Address P. O. Box 205, Prineville, Oregon. 6-16

# General Blacksmithing

HORSESHOEING, WOOD WORK, ETC.,  
NEATLY AND PROMPTLY DONE  
WHEN IT IS DONE BY : : :  
Robert Moore

Satisfaction Will Be Guaranteed  
PRINEVILLE, OREGON.

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With all the equipment on it for \$1050 f. o. b. Portland and invest the balance in real estate and give to charity the difference in maintenance. What you get for \$1050 is a car equal in every way except in weight to \$4000 proposition and a car that will take you 25 miles on one gallon of gasoline.

Equipment—Top, Gas Lamps, Generator, Magneto, Two Side Oil Lamps Tail Lamp, Tube Horn, Wind Shield and Speedometer.  
Demonstration at your convenience.

C. L. SHATTUCK, PRINEVILLE, OR.  
Agent for Crook County.

# THE HAMILTON STABLES

J. H. WIGLE, Proprietor  
PRINEVILLE, OREGON

Stock boarded by the day, week or month at Reasonable rates. Remember us when in Prineville. RATES REASONABLE. We have  
Fine Livery Rigs For Rent

# CROOK COUNTY BANK

W. A. BOOTH, Pres. D. F. STEWART, Vice-Pres. C. M. ELKINS, Cashier  
STATE BANK NO. 188 L. A. BOOTH, Asst. Cashier  
Capital Stock fully paid.....\$300,000 00  
Surplus..... 5,000 00  
Stockholders' Liability..... 35,000 00  
Statement Rendered to State Bank Examiner March 29, 1910:  
Assets  
Loans and Discounts.....\$190,442 10  
County and other warrants..... 2,000 00  
Real estate and fixtures..... 7,750 34  
Expenses..... 1,948 24  
Cash on hand and due from banks \$130,990 78  
Liabilities  
Capital stock.....\$20,000 00  
Surplus..... 5,000 00  
Undivided profits..... 6,000 00  
Deposits..... 301,550 92  
\$202,220 02