

EFFICIENT DIRT ROAD IMPLEMENT

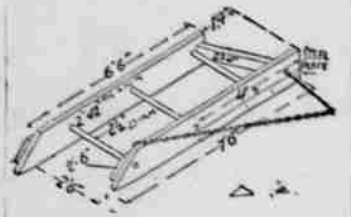
Construction and Methods of Using a Plank Drag.

WORKS BEST ON MOIST SOIL

Better Results Achieved by First Crowning Roadway With a Blade Grader—How to Operate the Machine Successfully.

How to construct and use one of the most useful and handy devices for improving earth roads is described in the Breeder's Gazette by Professor L. W. Chase of the Nebraska experiment station, who says:

The split log drag, or, as it is commonly called, the King drag, is with-



KING ROAD DRAG MADE OF PLANKS.

out doubt the best implement for keeping roads in shape and in many instances is as efficient as any other implement in the construction of earth roads.

The King drag can be constructed of either a split log or a plank, but in Nebraska the plank is much easier to obtain than the log; hence this brief description pertains to the construction from planks.

Select a good yellow pine, ash or oak plank two inches thick, twelve inches wide and fourteen feet long. Cut this in two at an angle so that one edge of each piece is seven feet six inches long and the other edge is six feet six inches long. Spike to the back and along the center of each of these planks a two inch by six inch piece, which re-enforces the plank. Bore the holes for the cross stakes about twenty-six inches apart and four inches from each end with a two and one-half inch auger, using care to keep the auger perpendicular to the plank. The two inch by four inch brace at the front end should start from the middle of the rear plank and drop to the bottom part of the front plank. The blade, which is generally made of stock cutter steel, should be given the proper cutting slope by placing a wedge shaped strip between it and the plank. One end of the chain is fastened to a cross stake, and the other passes through a hole in the plank and is held in position by means of a pin.

The use of the drag is more satisfactory if the road has first been crowned with a blade grader, but whenever this is not convenient and the traffic is not too heavy the road may be gradually brought to a crown by means of the drag.

The surface of the average country road should be covered in one round with the drag. One horse should be driven on the inside of the wheel track and the other on the outside, the drag being set by means of the chain so that it is running at an angle of forty-five degrees with the wheel track and working the earth toward the center of the road. In the spring, when the roads are more likely to be



DIRT ROAD BEFORE DRAGGING.

rutty and soft, it is generally better to go over the road twice and in some places oftener.

The drag should be floored with boards which are separated by open spaces of sufficient width so that the dirt which falls over will rattle through, and yet they should be close enough so that the driver can move about upon the drag quite freely.

To insure the successful operation of the drag it is necessary for the driver to use careful judgment. Sometimes it is essential that the blade be held down so that the drag will cut roots and weeds, while at other times the front edge should not bear too heavily upon the surface, as it will dig out a soft place which would be better if left undisturbed. This regulation of the cutting edge can be accomplished by the driver moving back and forth or to the right and left on the drag.

If the road is to be crowned with the drag it is often well to plow a light furrow along the sides and work this loosened dirt to the center. On roads with heavy traffic the drag should be used much oftener and with more care than on roads with light traffic.

The distance from the drag at which the team is hitched affects the cutting. A long hitch permits the blade to cut deeper than a short hitch; likewise a heavy doubletree will cause the cut-

ting edge to settle deeper than a light one.

There are very few periods of the year when the use of the drag does not benefit the road, but it does the best work when the soil is moist and yet not too sticky. This is frequently within a half day's time after a rain. When the earth is in this state it works the best, and the effects of working it are fully as beneficial as at any other time. The Nebraska soils when mixed with water and thoroughly worked become remarkably tough and impervious to rain, and if compacted in this condition they become extremely hard. This action of the soil in becoming so hard and smooth not only helps to shed the water during a rain, but also greatly retards the formation of dust.

So much has been written and said pertaining to the great benefits from the use of the road drag that many people beginning the use of it become discouraged before they are well started. They should not feel thus, as it often takes a whole season for the road to become properly puddled and baked to withstand the rains and traffic. After a road has been worked with a drag only a short time it is not well to expect it to stand up to heavy traffic during a continued damp spell without being affected. However, it will take far heavier traffic than most earth roads receive to more than scuff up the surface. During the four years that the writer has observed the road shown in the illustrations only once has it ever become so soft that teams were not hauling a ton and a half of coal in each load over it. Even in the fall of 1909 teams were delivering 3,500 pounds of coal at a load to the university farm boiler house before the roads became frozen.

It is not well to consider the benefits from a good road as solely confined to heavy traffic, for there is no doubt that the time saved to light vehicles



THE SAME ROAD AFTER THREE YEARS' DRAGGING.

and the greater pleasure derived from their use over good roads far surpasses the economy in heavy hauling. While driving over a well crowned, smooth road the team does not have to follow the usual rut, no slacking has to be made for irregularities in the surface, and it matters not whether one or two horses are being driven.

Calcium Chloride For Preventing Dust.

The Houston (Tex.) Post has the following discussion of dust prevention: Second in importance only to the construction of good roads themselves is the solution of the dust problem. Automobile traffic has had a revolutionary effect upon road building and has taxed the utmost energies of road engineers throughout the world to cope with the new conditions which have arisen. The dust that is raised by a rapidly moving machine is disagreeable and annoying not only to other users of the highway as well as the occupants of automobiles following in the wake of the car ahead, but also the residents along the road. The only real and permanent solution of the problem is the construction of a binder that will not yield to the effects of automobile traffic. Oil and tar together with various other preparations have been tried out, and especially abroad, with only fair success. In most cases their application is expensive and their effects disagreeable. The greatest satisfaction from all standpoints has been obtained both in the United States and abroad from the use of calcium chloride. It is the cheapest of all binders, with the exception of water, and in some cases is much more economical than the latter when the cost of dust prevention for the whole season is taken into consideration. One of its greatest advantages is that it is clean and absolutely odorless. In fact, it seems to have been demonstrated that calcium chloride can be used with profit on frequently traveled highways.

Good Road Helpers.

Don't be jealous of the automobile owner, for if he doesn't happen to own land in your township he is paying taxes in some other place and thus contributes his share toward the making of better roads, and in many instances he is advancing money to aid in road construction. If a road is made better for an automobile it is also made better for a buggy with a load of eggs in the back end.

A Good Move.

It is a good idea to have a clean ditch at each side of the road before winter. The other day a farmer plowed a good furrow out of each ditch of the road alongside his farm, and he pulled the dirt over the grade with a road drag. It was a neat thing to do. The dirt put on the grade was not enough to make mud, but enough to open a clear track for the water into each ditch.

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City orders given prompt attention. We set up all stoves and guarantee satisfaction.

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PRINEVILLE, OREGON.

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Olive and Goldie Telfer
Ladies, we cut, fit and make stylish garments
We use the only practical method of cutting garments, everything being done by the actual inch measurement, on the same principle as the tailor cuts for gentlemen---and perfect fitting garments may be cut for all kinds and sizes of forms.
Dressmaking by the Day Opposite Presbyterian Church

City Meat Market

Horgan & Reinke, Props
Beef, Pork, Mutton, Wholesale and Retail
All Kinds of Sausage Nice and Fresh
Home Cured Bacon and Lard. Fish and Poultry in Season.

Butter and Eggs. Home Cured Lard
Finest Made, 5 lb. 90c.; 10 lb. \$1.75.

The First National Bank

Of Prineville, Oregon

At the close of business June 7, 1911

| RESOURCES | | LIABILITIES | |
|----------------------------|--------------|--------------------------------|--------------|
| Loans and Discounts..... | \$24,835 03 | Capital Stock, paid in..... | \$60,000 00 |
| United States Bonds..... | 12,500 00 | Surplus fund, earned..... | 60,000 00 |
| Bank remittances, etc..... | 32,540 12 | Undivided profits, earned..... | 37,724 56 |
| Cash & Due from banks..... | 210,924 04 | Circulation..... | 8,000 00 |
| | | Deposits..... | 285,099 63 |
| | \$531,124 19 | | \$531,124 19 |

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Prineville, Oregon.

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Licentiate Oregon State Medical Board.
Specialist in Surgery; Hygiene; Al-
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Huntington & Wilson
Attorneys
Of The Dalles, have opened offices in
Portland, Oregon, Rooms 805-807
Lewis Building.
Business sent to them from Crook County
through their office in The Dalles or direct
to their Portland address will receive prompt
attention. Portland Phone, Main 7395.

Crook County Abstract Co.
Abstracts of title to all land and
town lots in Crook county.
R. F. Wyds, Secretary, Prineville, Oregon

F. E. Fremont
Architect and Designer.
Late methods in building construction, interior
arrangements and decoration.
Headquarters at Oregon Hotel.
Prineville, Oregon.

HAVE YOU
Filed your Deed? Of Course.
HAVE YOU
An Abstract?
Certainly everyone has an abstract now.
Do you know where your corners are.
Well, No, Not exactly.
Brewster Engineering Company,
Prineville, Oregon, will locate them for
you and guarantee the work. Surveying,
Platting, Irrigation Engineering.
Phone Pioneer 204.

D. H. PEOPLES
Civil and Irrigation Engineer.
Irrigation, Subdivision, Land
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Office next door to Lyric Therter

Road Warrant Call.
Registered road warrants up to and
including No. 6--November 16, 1911.

Daily Auto Service
From Prineville to Sisters by way of
O'Neil, Redmond and Clute Falls.
Leaves Prineville at 12 o'clock. Tickets
on sale at stage office next door to post-
office. J. E. CHRISTIAN, prop.
8-24-11

Notice for Publication.
Department of the Interior,
U. S. Land Office at The Dalles, Oregon
November 5th, 1911.
Notice is hereby given that
Percy H. Sandvig,
of Prineville, Oregon, who, on April 22nd,
1910, made Homestead, No. 0663, for E1/2 NW1/4,
SW1/4, and NW1/4, Sec. 10, T. 12N., R. 12W.,
Ship 18 south, range 16 east, Willamette Meri-
dian, has filed notice of intention to make
final commutation proof, to establish claim to
the land above described, before Warren
Brown, county clerk at his office, at Prineville,
Oregon, on the 19th day of December, 1911.
Claimant names as witnesses: John N.
Burnett, Curt Wilson, A. Curt Miller, Richard
Pinder, all of Prineville, Oregon.
11-14p C. W. MOORE, Register.

**Notice of Appointment of Administra-
trix and to Creditors.**
Notice is hereby given that the under-
signed has been by the county court of the
State of Oregon, for Crook county, duly ap-
pointed administratrix of the estate of
Claude E. Wright, deceased, and all persons
having claims against said estate are hereby
required to present the same, duly verified,
to said administratrix at the law office of M. E.
Brink, in Prineville, Oregon, within six
months from the date of the first publication
of this notice.
Dated and published first time October 12th
1911. RUTH WRIGHT,
Administratrix of the estate of Claude E.
Wright, deceased. 10-12-11

**Notice of Appointment of Administrator
and to Creditors.**
Notice is hereby given that the under-
signed has been, by the county court of the
State of Oregon, for Crook county, duly ap-
pointed administrator of the estate of Elias
E. Adams, deceased, and all persons having
claims against said estate are hereby re-
quired to present the same, duly verified, to
said administrator, at the law office of M. E.
Brink, in Prineville, Oregon, within six
months from the date of the first publication
of this notice.
Dated and published first time October 12th
1911. W. A. ADAMS,
Administrator of the estate of Elias E.
Adams, deceased. 10-12-11

**Notice of Appointment of Administrator
and to Creditors.**
Notice is hereby given that the under-
signed has been, by the county court of the
State of Oregon, for Crook county, duly ap-
pointed administrator of the estate of Olive
Rising, deceased, and all persons having
claims against said estate are hereby re-
quired to present the same, duly verified, to
said administrator, at the law office of M. E.
Brink, in Prineville, Oregon, within six
months from the date of the first publication
of this notice.
Dated and published first time October
12th, 1911. FRED A. RICE, M. E. NEVILLE,
Administrators of the estate of Olive Rising,
deceased. 10-12-11

**Notice of Appointment of Administrator
and to Creditors.**
Notice is hereby given that the under-
signed has been, by the county court of the
State of Oregon, for Crook county, duly ap-
pointed administrator of the estate of Lewis
McCallister, deceased, and all persons having
claims against said estate are hereby re-
quired to present the same, duly verified, to
said administrator, at the law office of M. E.
Brink, in Prineville, Oregon, within six
months from the date of the first publication
of this notice.
Dated and published first time October 12th,
1911. GEORGE W. McCALLISTER,
Administrator of the estate of Lewis Mc-
Callister, deceased. 10-12-11

Notice of Administratrix's Sale of Land.
Notice is hereby given by the undersigned,
the administratrix of the estate of John H.
Reams, deceased, that pursuant to an order of
the county court of the State of Oregon for
Crook county, made on the 6th day of Novem-
ber, 1911, she will at the front door of the
county courthouse in Prineville, Oregon, on
the 9th day of December, 1911, at 10 o'clock
in the forenoon, sell at public sale to the highest
bidder, subject to confirmation by said county
court, all the right, title and interest the John
H. Reams had at the time of his death in the
following described real estate, to-wit: Lots
one, two and three in block eight in the first
addition to Prineville, Oregon.
Terms of sale, cash upon confirmation.
Dated this 9th day of November, 1911.
MARGARET REAMS,
Administratrix of estate of John H. Reams, de-
ceased.

Give us your order for
CORDWOOD
Juniper or Pine, large or
small quantities.
DILLON'S YARD
Opposite Post Office.