

ROAD DRAGGING COST

Why King System Is Cheapest as Well as Best.

IT BECOMES MERELY A CHORE

By Quitting a Little Earlier a Farmer Can Easily Renew His Boulevard. Proof of Winter Dragging's Value. Comparison of Cost.

[Copyright, 1907, by D. Ward King.] The cost of putting the King system in operation is a matter which must have consideration. Cost always is important.

When one first hears about road dragging he feels certain a mistake or an exaggeration is somewhere snugly concealed, and an active brain spends a certain period searching for its hiding place. Convinced at last of the drag's achievements as a wonder worker, the same brain asks, "What is the expense?" and again is skeptical when the answer comes, "The cost of the new system is many times less than the cost of the old system."

For the farmer who drags the half mile or mile, as may be, from his own front gate to his neighbor's front gate toward town, there is no expense account. With the drag in the road at the front gate, he quits a little early at noon or in the evening, as the condition of the road soil decides, hitches to the drag and renews his boulevard. It becomes merely a chore. A neighbor of mine says, "After a fellow once gets into the fashion of dragging it sticks to him like a bad habit." For myself, I have been riding a drag since the spring of 1896.

In the fall I can take a team from a corn wagon at the crib and drag my half mile stretch before the corn is unloaded, and in the winter months most farmers can find an abundance of leisure in which to drag, and the operation possibly is of as much benefit in the winter as it is in the summer. In this latitude (near the Missouri-Iowa line) we find two conditions of the road in winter when dragging is remarkably effective. One of these special conditions is when a rough and frozen road is thawed an inch or more in depth at about 4 o'clock in the afternoon. Another favorable opportunity is at the close of a warm spell when the wind changes to the north and the mud begins to stiffen with the chill.

If the mud is dragged just before a freeze the road of course remains smooth until another thaw, and the difference between such a road and one which was permitted to "freeze up rough" is as marked as the difference between deep mud and a dry road. On the one you can skim along at any speed; on the other you must move at a snail's pace, with the horses gingerly picking their steps and the vehicle bouncing around as if you were riding over a fresh blast in a rock quarry.

Let me offer two paragraphs from the Record, Hampton, Ia., the first

showing the skepticism often met, the other confessing a radical change of opinion and furnishing proof of the value of dragging in the winter months. The writer addressed a good roads meeting at Hampton Nov. 28, 1905. Under date Nov. 28 in the course of an extended report of the meeting the Record said:

"It is to be regretted that there was no split log drag at hand that he could make a satisfactory demonstration with, the one available not being in accordance with the requirements, and the attempt to show its workings were of little or no benefit."

But in the issue for Dec. 9 the Record admits the inaccuracy of its first impression in the following paragraph, the kernel of which is found in the last sentence of the quotation:

"The King drag that we have here in town is being used today on our streets, and if we had teams enough and drags enough Hampton would have good roads within the city limits tomorrow, whereas for a week they have been practically impassable for the reason that the ground froze up a week ago last night, leaving the roads all cut up. And suppose that every man in the country had had a King drag, costing about \$2, and had dragged the road in front of his premises once over and back a week ago Tuesday, the afternoon that Mr. King spoke at the courthouse, we would have had good roads ever since. This is demonstrated by the fact that wherever on our streets the drag was used that afternoon has been a smooth track ever since."

So much for the value in the winter of the winter dragging.

But winter dragging prepares the way for lessening the cost of spring and summer dragging, because if the roadway has this winter preparation it will generally dry off and be ready to drag before the adjoining fields dry out and are fit to be plowed or cultivated. And so another series of leisure hours is provided for making good roads without money.

I would rather drag half a mile of road for a year than water three horses for a year.

If I should try to strike a balance for the twelve months, it would be something like this:

DEBIT.	
Labor	\$4.00
CREDIT.	
Comfort and pleasure of my own family	\$5.00
Time saved	10.00
Saving in wear and tear	4.00
Satisfaction	10.00
Benefit to neighbors and general public	50.00
Balance in favor of the drag	\$75.00

The last item will perhaps need explanation. The figure is based on an estimate that our family will average one trip per day to town and that there is an average of ten other teams per day passing. For good measure I cut in half the benefit to neighbors.

Hon. Matt Hall, now warden of the Missouri penitentiary, was a wood dragger before he left the farm. In a published statement he tells of beginning his work in deep mud. In two months he had a half mile of road of which he said: "I can hardly believe my own eyes when I look at it. A loaded wagon won't make any more impression on it than it would on a floor. I don't believe I have spent a half a day on it altogether, and, honestly, I wouldn't near take \$50 for the comfort it has been to me and my friends and neighbors." You will note that Mr. Hall's estimate of benefit is about double mine.

A comparison was recently made which showed by figures taken from many counties and from Maine to Minnesota that a dollar spent under the new system would produce as much benefit as several hundred dollars spent the old way. It is hard to accept such conclusions, yet the figures bear investigation and analysis.

International Road Convention.

It is announced that the minister of public works of France has been authorized to call an international convention in his country in 1908 for the purpose of considering methods to prevent roads from being damaged by excessive automobile traffic. The use of the automobile, it is claimed, has produced many new problems in connection with the splendid roads for which France has become famous, and a plan for their construction and maintenance is deemed necessary. The delegates will therefore in particular discuss methods of adapting present roads to the new conditions of traffic.

Canada's interest in Good Road Plan.

D. Ward King of Maitland, Mo., who is the head of the rural improvement department of the American Civic association, has a drag log method for obtaining good roads at the least expense which is being adopted in the Canadian provinces. The Farmers Advocate of London, Ont., is offering \$100 in prizes for the best roads made with a King drag. In a personal letter the editor wrote: "A widespread interest has been aroused and many drags constructed in addition to those used by our contestants. So far we are more than delighted with what we have seen and heard of the results."

To Lacquer Brass.

To prevent brass from tarnishing put an ounce of shellac into a pint of methylated spirit, cork the bottle and leave it till next day, then pour off the clear liquor for use. Slightly heat the brass to be treated and then apply the solution all over with a camel's hair brush.

THE GARDEN SCHOOL.

How Children of Newton Were Taught to Beautify Home Grounds.

Writing in Maxwell's Tinsman of the work of the garden school in Newton, Mrs. H. A. Elliott says:

An object lesson to the citizens of Newton was the garden school conducted by the ladies of the Social Science club of that town during the summer of 1906. Assured by George H. Maxwell of the Home Crofters' guild of the Tinsman of the free services of an experienced garden director, provided the club could defray the further expense of a garden, a committee of five ladies was appointed from the club to see what could be done.

First they obtained the use of a piece of vacant land on Jackson road, which was then an open grass plot. Then an appeal was made by the committee to the department of agriculture at Washington for free seeds, which were promptly sent. The committee sent a circular letter to about fifteen of the enterprising business men of Newton telling them of the plans for the garden school and asking them if they were sufficiently interested in the experiment to give it some financial support.

The response was quick, and at the end of a week we had the required \$100, and the director went to work. One hundred and six gardens 9 by 35 feet were planted by as many different children from the Nonantum district, and the names of as many more interested children were placed on the waiting list.

A few of these children, having learned how under the direction at the garden school, went back to the home dooryards which had for all time previously been used for dumps, cleared away the debris, spaded up the earth and planted seeds which they procured gratis from the director. The reward was a scarlet runner at the doorstep, a row each of lettuce, radishes and beans and for garden flowers nasturtiums, sunflowers and sweet alyssum. One of the boys carried some vegetables from his home garden into the exhibition at Horticultural hall and was awarded a prize. Could these children, think you, ever again be contented to live in a dump instead of a flower garden? These girls and boys learned the law of cause and effect; that the soil through healthful, pleasant labor will produce food supplies sufficient to nourish the body; that debris, squalor and untidiness may be supplanted by cleanliness, order and beauty and many other lessons, not the least of which were pride in ownership and respect for other people's rights.

PROUD OF HIS TOWN.

What One Man is Doing to Improve Jackson, Tenn.

One of the most progressive town officials in the south is Samuel Lancaster, city engineer of Jackson, Tenn. Mr. Lancaster thinks there is no place like Jackson, and he wants others to think so, too, and he is doing everything in his power to make it one of the prettiest towns in the country. It is due in a great measure to his efforts that good roads are being built in Madison county. But road building is not all that has engrossed the big brain of Sam Lancaster, says a writer in Breeder's Gazette. As manager of the waterworks he saw a chance to do things. Jackson had no park, and near the waterworks there was needed a raised roadway. Sam Lancaster made the fill, and before any one knew what he was up to he had built a fine lake on the site whence came the earth for the fill. Smaller lakes near by came, then drives, bridges, boats, lilies (marvelous lilies), banks of flowers, trees.

An unsightly railway yard adjoined the waterworks. The railway was asked for a few cars of earth. Presto! Sam made the yard and the park jolt. Grass, flowers, shrubs, beauty, order, seats, comfort, inspiration, hope, all came out of that old sink hole. And the manager only grinned when he saw that Sam Lancaster had actually parked and fenced a part of his right of way. Now travelers on that railway will pass by and say, "Jackson, Tenn., is a beautiful place and must have people of culture within it."

School Gardens in Washington.

The school garden movement in Washington, which started humbly a few years ago, has so strongly appealed to the children and their parents that with a comparatively little assistance from the public funds it has thrived amazingly. Already a marked change is observable not only in the immediate surroundings of the school buildings themselves, but in all parts of the town at the homes of the little ones. They have been taught plant love in terms which have in many cases never been presented to them before. By their personal participation in the work of making gardens, in preparing the ground, selecting and planting the seeds, caring for the sprouts and the plants and finally plucking the blooms of their own cultivation they have gained a sense of responsibility which makes for the improvement of the whole town.

Query. Since editors are busy. Assuredly I fail. To see how they so often Reply by return mail! —Lippincott's.

Behind Her Back. "How worn Mrs. Perkinham's face looks?" "Why shouldn't it look so? She has used it a long time."—Chicago Record-Herald.

LIKE A ROMAN ROAD.

How a Chicago Millionaire Uses Rocks on His New Hampshire Farm.

J. Glessner, the Chicago millionaire, who has made his summer home in Bethlehem, N. H., for the last twenty-four years, is rapidly attaining fame as a road builder, says a Bethlehem correspondent of the Chicago Record-Herald. He is now able to show three miles of probably the finest road in the White mountains, all within or adjoining his own estate and all public road, although it was all built or built over by Mr. Glessner at his own expense.

During the late autumn he had constructed a half mile of road on the main highway from Bethlehem to Littleton and during most of that time had a crew of seventy men, thirty horses and twenty oxen engaged on the work. Part of this road looks like pictures of the modern French or the old Roman roads, and it is built fully as solidly as the Roman roads used to be—in fact, after the same plan.

The most important work done on the Littleton-Bethlehem road by Mr. Glessner this year has been an extensive fill of quite a stretch of road over some lowland where bad traveling had generally been the rule. At the lowest place the road was filled in six feet with stone, and the stone wall on each side was carried three feet higher, the wall in places being ten feet higher on the back side, or side toward the fields. The wall is three feet wide on top and is strongly built.

The road is twenty-five feet wide between the walls, and four teams by



CURVED WALL AND ROADWAY WHERE A SIX FOOT FILL WAS MADE.

actual test can pass abreast. This wall extends for 400 feet and at one part describes a beautiful curve. Unless it is desired to make a fill an excavation of several feet is first made, and Mr. Glessner's men and oxen then begin to dump in immense stones taken out of the nearest fields. A fairly level course is made of these, and then another layer of somewhat smaller stone is dumped on.

Then comes a still smaller layer, and then, last, the stonewall is leveled up and all openings are filled in with very small stones, so carefully and thoroughly placed that animals can be driven over without hurting their feet. Then the rock is entirely covered and the road finally shaped up with a good layer of "hardpan," which packs solid and is practically impervious to water. Drainage at each side is always provided for, the roads are well rounded, and these features, combined with the solid foundation of rock underneath and the impervious layer on top, give an ideal road.

WHO USES HYOMEI?

The Best People in Grants Pass Says Demaray Guaranteed in Catarrhal Troubles.

No other remedy or treatment for catarrh has ever been as popular or asked so many remarkable cures in Grants Pass as Hyomei.

The best people attest its curative virtues, says C. H. Demaray, who is the local agent. The fair way in which Hyomei was sold, to refund the money unless it gave satisfaction, was the best proof when it was introduced that it possessed unusual curative powers.

Demaray took all the risk of the treatment giving satisfaction, and left it to the purchasers to be the judge.

Later, when Hyomei was used and recommended by our well-known physicians and business men and their wives as a treatment that absolutely cured catarrh, no matter how serious or long standing, the sales rapidly grew and today there is no other remedy in Demaray's stock that has such a large and staple sale.

The first bottle of Hyomei's healing air kills all catarrhal poison.

Try Hyomei today on Demaray's offer to refund the money if the treatment does not give you satisfaction.

Austria's Provinces.

So many languages are spoken in the provinces of Austria-Hungary that interpreters are employed in the various parliaments to interpret the speeches of the delegates and make them intelligible to all the members.

The Mail Order Catalogue.

Lucey had a little cat, Willy had a little dog, Mother had another cat—But it was a cat-a-logue.

Mother's cat was full of tricks, For the bargains that it brought. Nothing were but gilded bric-a-brac—Mother's sorry now she bought!

Mother's cat (the catalogue) Used to be her precious pet, But she fed it to the dog, And the dog is eating yet. T. SAPP, JR.

The Farmer's Wife

Is very careful about her churn. She scalds it thoroughly after using, and gives it a sun bath to sweeten it. She knows that if her churn is sour it will taint the butter that is made in it. The stomach is a churn. In the stomach and digestive and nutritive tracts are performed processes which are almost exactly like the churning of butter. Is it not apparent then that if this stomach-churn is foul it makes foul all which is put into it?

The evil of a foul stomach is not alone the bad taste in the mouth and the foul breath caused by it, but the corruption of the pure current of blood and the dissemination of disease throughout the body. Dr. Pierce's Golden Medical Discovery makes the sour and foul stomach sweet. It does for the stomach what the washing and sun bath do for the churn—absolutely removes every tainting or corrupting element. In this way it cures blotches, pimples, eruptions, scrofulous swellings, sores, or open eating ulcers and all humors or diseases arising from bad blood. If you have bitter, nasty, foul taste in your mouth, coated tongue, foul breath, are weak and easily tired, feel depressed and despondent, have frequent headaches, dizzy attacks, gnawing or distress in stomach, constipated or irregular bowels, sour or bitter risings after eating and poor appetite, these symptoms, or any considerable number of them, indicate that you are suffering from biliousness, torpid or lazy liver with the usual accompanying indigestion, or dyspepsia and their attendant derangements.

The best agents known to medical science for the cure of the above symptoms are Dr. Pierce's Golden Medical Discovery. That this is absolutely true will be readily proven to your satisfaction if you will mail a postal card request to Dr. R. V. Pierce, Buffalo, N. Y., for a free copy of his booklet of extracts from the standard medical authorities, giving the names of all the ingredients entering into his world-famed medicine and showing what the most eminent medical men of the age say of them.

ODD HAPPENINGS.

The foot and ankle of Albert Sutter of Elizabethport, N. J., were burned off by a hot copper wire which, passing through a roller, became coiled around Sutter's leg.

The ear of William S. Brobst of Pottsville, Pa., a bridegroom, was so severely injured at the wedding on account of two grains of rice having lodged on the drum that an operation has been necessary.

While cutting down a pear tree at Wissahickon, Pa., John Bentley struck with his ax a diamond studded watch charm lost by his maternal grandfather in 1862. The charm had lodged in a crack, and the tree had grown completely around it.

When John Dreeland, aged eighty, of St. Louis, awoke the other morning he was on a narrow ledge outside his window, forty feet from the pavement, his feet dangling in space, and, being thinly clad, he was half frozen. He was rescued by firemen.

GLEANINGS.

The malnourishing of a watch is two feet long.

Blacking was originally made of soot and stale eggs.

Corn and beans are the staple articles of diet of the working classes of Mexico.

There is every possibility that the waiters of the Paris cafes will shortly go on strike again in support of their cherished right to wear mustaches.

The police of Denver are trying to cure drunken men by having their photographs taken while the men are drunk and showing the unfortunates the next morning how they looked.

The German government has asked for supplementary credit to the extent of \$100,000 for the construction of a new airship which Count von Zeppelin will build at once in order to be ready for experiments in the first favorable weather next summer.

POINTED PARAGRAPHS.

Excuses are like weeds—lots of them, but no good.

Some fellows have a great deal of ability in ungrammatical packages.

Having common sense and having command of it are two different things.

It takes a lot of time to properly air grievances. Not one in a hundred is worth it.

So many people are like a poorly governed community—they fail to maintain a sinking fund.

When a man has an opinion or a theory that happens to turn out right, how he loves to hear about it!

Men are possessed of two great fears—that they will become old and that they will never live to be old.—Atchison Globe.

INDUSTRIAL ITEMS.

Germany's annual product of milk is almost the same in value as the annual coal output—the first being about \$405,000,000, the second \$404,000,000.

The manufacture of rubber from the native guayule shrub has begun in Marathon, Tex. It is estimated that the factory owners control 75 per cent of the guayule land in Texas.

Consul J. L. Brittain sends the information that there will be a complete industrial exposition held at the city of Prague, Bohemia, in 1908, extending from May until October.

The retail clerks of Chicago have started a movement for the organization of the saleswomen of that city in order that they may occupy the same positions in the labor world as the male salesmen.

NOTICE FOR PUBLICATION.

Timber Land, Act June 3, 1878, Roseburg, Ore., December 19th, 1907. Notice is hereby given that in compliance with the provisions of the act of Congress of June 3, 1878, entitled "An Act for the sale of timber lands in the States of California, Oregon, Nevada and Washington Territory," as extended to all the Public Land States by act of August 4, 1892

NELLIE M. IRWIN of Vancouver county of Clarke State or Territory of Washington has this day filed in this office her sworn statement No. 8777 for the purchase of the Fract' 1 W 1/4 SW 1/4 and SW 1/4 NW 1/4 of Section No. 18 in Township No. 31 S, Range No. 4 W W M and will offer proof to show that the land sought is more valuable for its timber or stone than for agricultural purposes, and to establish her claim to said land before Joseph Moss, U. S. Commissioner at Grants Pass, Oregon, on Saturday, the 7th day of March, 1908.

He names as witnesses: Wesley B. Sherman, of Grants Pass, Ore., George H. Slover, of Grants Pass, Ore., Roy Garoutte of Merlin, Ore., William Bailey of Davidson, Oregon. Any and all persons claiming adversely the above-described lands are requested to file their claims in this office on or before said 7th day of March, 1908.

BENJAMIN L. EDDY, Register.

NOTICE FOR PUBLICATION.

Timber Land, Act June 3, 1878, Roseburg, Ore., Nov. 6, 1907. Notice is hereby given that in compliance with the provisions of the act of Congress of June 3, 1878, entitled "An Act for the sale of timber lands in the States of California, Oregon, Nevada, and Washington Territory," as extended to all the Public Land States by act of August 4, 1892

PATRICK O'DONNELL, of Canas Valley, county of Douglas State of Oregon, has this day filed in this office his sworn statement No. 8573 for the purchase of the E 1/4 of the NW 1/4 and the NE 1/4 of the SW 1/4 of section No. 30, Township 84 South, Range 4 W. W. M., and will offer proof to show that the land sought is more valuable for its timber and stone than for agricultural purposes and to establish his claim to said land before the Register and Receiver of this office at Roseburg, Oregon, on Tuesday, the 28th day of January, 1908.

He names as witnesses: B. Krakenberger, of Roseburg, Oregon; Warren Beatty, Roseburg, Ore.; Grant Taylor, of Winchester, Ore.; John Q. Gilbert of Roseburg, Oregon. Any and all persons claiming adversely the above described lands are requested to file their claims in this office on or before said 28th day of January, 1908.

BENJAMIN L. EDDY, Register.

NOTICE FOR PUBLICATION.

Timber Land, Act June 3, 1878, Roseburg, Ore., Nov. 15, 1907. Notice is hereby given that in compliance with the provisions of the Act of Congress of June 3, 1878, entitled "An Act for the sale of timber lands in the States of California, Oregon, Nevada and Washington Territory," as extended to all Public Land States by act of August 4, 1892,

LILLIAN M. KNAGGS, of Harrison, County of Kootnai, State of Idaho, filed in this office her sworn statement No. 8687 for the purchase of the SW 1/4 of the NW 1/4, W 1/4 of the SW 1/4 and lot, 1 of Section No. 13, in Township No. 37 South of Range No. 7 West, W. M., and will offer proof to show that the land sought is more valuable for its timber or stone than for agricultural purposes, and to establish her claim to said land before the Joseph Moss, United States Commissioner, at his office in Grants Pass, Oregon, on Monday, the 17th day of February, 1908.

He names as witnesses: Martin A. Conger, of Grants Pass, Ore.; Emmett R. Conner, of Wilderville, Oregon; William Bull of Grants Pass, Ore.; Clarence A. Packer, of Harrison, Idaho. Any and all persons claiming adversely the above described lands are requested to file their claims in this office on or before said 17th day of February, 1908.

BENJAMIN L. EDDY, Register.

SUMMONS.

In the Circuit Court of the State of Oregon, for Josephine County. Walter Tallmadge, plaintiff,

vs. Maud Tallmadge, defendant.

Suit for Divorce. To Maud Tallmadge, the defendant above named:

In the name of the State of Oregon, you are hereby summoned to appear and answer the complaint filed against you in the above entitled Court and Cause on or before six weeks from the date of the first publication of this summons, which first date of publication is Friday, January 3, 1908, and the last day of publication of said summons, and the last day for your appearance as aforesaid is Friday, the 14th day of February, 1908, and you are hereby notified, that if you fail to appear and answer the complaint within the time aforesaid, the plaintiff will apply to the Court for the relief prayed for in his complaint, to-wit: for a decree dissolving the bonds of matrimony now existing between the plaintiff and defendant, and that the plaintiff be awarded the care and custody of the minor children, Chester, aged 3, Lester aged 6 and Cleo, aged 8, and for such other and further relief as to the court may seem equitable. This summons is published by order of Hon. Stephen Jewell, Judge of the County Court of Josephine County, State of Oregon, made January 3, 1908, ordering the publication of this summons for a period of six successive weeks.

OLIVER S. BROWN, Attorney for the plaintiff.

Poster, Plaintiff's Address, and Fees are returned at the Court's office.

The Youth's Companion



It Comes Every Week

Among the contents of the New Volume for 1908 will be

250 Good Stories

Serial Stories, Stories of Character, Adventure and Heroism.

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All the issues of The Companion for the remaining weeks of 1907. The Thanksgiving, Christmas and New Year's Double Numbers. The Companion's Four-Leaf Hanging Calendar for 1908, then The Companion for the 53 weeks of 1908—a library of the best reading for every member of the family.

THE YOUTH'S COMPANION,

Boston, Mass. New subscribers received at this office.