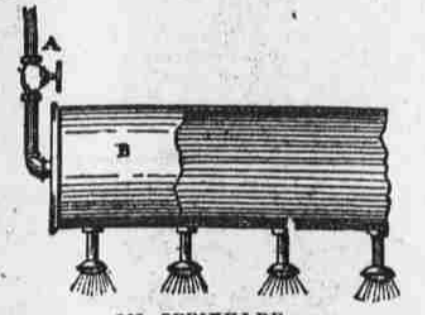


OIL SPRINKLER FOR ROADS.

Attachment for a Common Wagon Holding a Barrel.

Recently civil engineers have given considerable attention to the application of oils to the roadbeds of electric and wagon roads. The idea of using oil on roadbeds originated with the steam railroad corporations. The purpose was to prevent dust and foreign matter rising from the roadbed and getting into the bearings and gearing of the rolling stock. But several other beneficial results were obtained. After a roadbed is sprinkled with a surfacing of oil the loose matter is not only so weighted and caked that it cannot rise and envelop wagons or carriages behind in a cloud of dust, but the bed itself is strengthened. The oils form with the earthy matter to a depth of three to five inches, according to the treatment, and such parts of the bal-



OIL SPRINKLER.

last as are penetrated by the oils assume a crusty condition, which is impregnable to rain and in a great measure impregnable to frost. This state of the roadbed is highly serviceable.

Under ordinary conditions the earth as it naturally exists in a carriage road is porous enough to receive and retain oil to a depth of several inches. As oil and water do not combine, the moisture is driven off and the earth becomes compact to such an extent that any future deluge of water simply flows off over it. In order to build up an oil-saturated surfacing of this type certain operations are followed. Some have gone to considerable expense in the direction of sprinkling devices for this work, while others use a simple oil sprinkling pipe leading from a cask or oil barrel, which is conveyed over the road on a wagon. This barrel is provided with the necessary controlling devices, which are connected with a lever regulated by the driver. A form of sprinkling apparatus is joined to the bottom of the tank, as in the illustration, and this sprays the oil over the roadbed. Several trips are made, until the ballast is saturated near the top, after which the crust forms, which will last for years before another treatment is needed. Cheap grades of crude petroleum are used.

The drawing shows the plan usually adopted for distributing oil over dirt roads. It consists in placing a barrel of crude oil, on blocks, upon a common wagon, which is drawn over the sections of the road which are to receive the oil. The barrel is placed bung down, and the pipe A is screwed in. This pipe can project downward through the wagon bottom or drop to the ground over the rear. The connecting pipe is joined with the distributor, B. The latter is simply a perforated pipe. If a road surface eighteen feet wide is to be covered, one barrel of crude oil will do for about eighty feet in length.

She Let Him Wear a Nightcap.

To the Earl of Essex was granted the privilege of wearing a nightcap in the royal presence of Queen Mary, says the New York Telegram. The fact is mentioned in Miss Strickland's "Lives of the Queens of England" as being one of the odd rewards bestowed by Mary upon her friends after her accession.

The Earl was a valetudinarian and had a great fear of uncovering his head. Considering, therefore, that the colds he dreaded respected no person, he petitioned Queen Mary for leave to wear his nightcap in her royal presence. The Queen not only gave him leave to wear one, but two nightcaps if he pleased. His patent for this privilege is unique in royal annals: "Know ye that we do grant to our well-beloved and trusty cousin and councillor, Henry, Earl of Sussex, license and pardon to wear his cap, coil or nightcap, or any two of them at his pleasure, as well in our presence as in the presence of any other person within this realm, or in any other place in our dominions whatsoever during his life; and these our letters shall be sufficient warrant in his behalf."

The Queen's seal, with the garter above it, was affixed to this singular grant. Three persons in Great Britain alone enjoy the privilege of remaining covered in the royal presence, namely: Lord Forester, Lord Kinnaule, and the master of Trinity College, Cambridge.

Prussian Millionaires.

At the head of the list of the big millionaires of Prussia stands M. Rothschild with \$10,740,000, and an income of about \$350,000. In one year his fortune increased by more than \$500,000. After him comes M. Krupp with \$6,400,000 and an income of \$450,000. After them come two landed proprietors with \$4,200,000 and \$3,200,000 respectively, and a third with \$3,000,000.—Durham Observer.

In nine cases out of ten, when people are indignant, they have no recourse.

When Company Comes in Country.

Begin to enjoy yourself when your guests begin to arrive—in fact, before they arrive. Do not try to serve such an elaborate dinner that the work of getting it ready will draw so upon your physical powers that they will be strained to their utmost endurance. When your visitors arrive, greet them with a hearty handshake, make them feel that you are ready for their coming; speak of the pleasure that you hope the day may bring; compliment them on their good appearance; notice the neckwear, the dainty handkerchief; be thoroughly interested in each and every one. When the time comes for you to prepare the dinner and place it upon the table, leave your guests as gracefully as possible. If the dinner be not too elaborate, and the mental atmosphere be clear and bright, your friends will come again. "Eat to live," and not "Live to eat," should be the motto of every household.—Mrs. John B. Sims, in Ladies' Home Journal.

Cucumber Boats.

Peel the cucumbers, cut them in two lengthwise, and scrape out the seeds. Put the pieces on ice till wanted, then fill with the following mixture: Chop tomatoes and celery, and add a few drops of onion juice, also mayonnaise dressing. Arrange the boats on lettuce leaves, and garnish with thin slices of radishes with the red skin left on. Any good salad mixture will make a nice filling.—American Salad Book.

Germany publishes about 20,000 books a year, France 11,000, Italy 9,000, England 6,000 and the United States 5,000.

Every woman believes that her husband is a child in some respects, and that she must be on the alert to keep things out of his grasp that he wants, but which are not good for him.—Acheson Globe.

After the Honeymoon.

She—You must think I'm a goose. He—Oh, no! You are wrong; entirely wrong. What I had in mind was a buzzard.—Chicago Times-Herald.

Overestimation.

Father—What is the meaning of that black eye, my son? Johnny—Oh, that's merely a mark of esteem, father. Father—How so? Johnny—I esteemed myself a better boxer than Tommy Jones.—Chicago Daily News.

Brain Work and Exercise.

Three hours of brain work will destroy more tissue than a day of physical exercise. Many men and women earn their living by their brains. Hostetter's Stomach Bitters makes the mind active and vigorous. This medicine is an appetizer and a cure for dyspepsia. A private Stamp covers the neck of the bottle.

In Germany a clock has been made that is warranted to go for 6,000 years.

HOW'S THIS.

We offer One Hundred Dollars Reward for any case of Catarrh that can not be cured by Hall's Catarrh Cure.

F. J. CHENEY & CO., Props., Toledo, O. We the undersigned, have known F. J. Cheney for the past 15 years, and believe him perfectly honorable in all business transactions and financially able to carry out any obligations made by him.

WEST & TRUAX, Wholesale Druggists, Toledo, O. WARDING, KINNAN & MARVIN, Wholesale Druggists, Toledo, O. Hall's Catarrh Cure is taken internally, acting directly on the blood and mucous surfaces of the system. Price 75c per bottle. Sold by all druggists. Testimonials free. Hall's Family Pills are the best.

Croesus, of ancient times, possessed about \$20,000,000.

Ladies Can Wear Shoes

One size smaller after using Allen's Foot-Ease, a powder to be shaken into the shoes. It makes tight or new shoes feel easy; gives instant relief to corns and bunions. It's the greatest comfort discovery of the age. Cures swollen feet, blisters and callosities. Allen's Foot-Ease is a certain cure for ingrowing nails, sweating, smarting, hot, aching feet. We have 30,000 testimonials. All druggists and shoe stores sell it. 25c. Trial package FREE by mail. Address, Allen S. Olmsted, Le Roy, N. Y.

A Sickly Lot.

Jennie—Herbie, it says here another octogenarian's dead. What's an octogenarian? Herbie—Well, I don't just know what they are, but they must be awfully sickly creatures. You never hear of 'em but they are dying.—Tit-Bits.

HOITT'S SCHOOL.

Menlo Park, San Mateo Co., Cal., accredited at the Universities. Location, climate, and careful attention to Mental, Moral and Physical training, places Hoitt's among the foremost Schools for Boys on the Coast.—S. F. Chronicle. Will re-open in the new building August 15th, (9th year.) Ira G. Hoitt, Ph. D., Principal.

The dragon fly can fly backward and sidelong, and can alter its course on the instant without turning.

Mothers will find Mrs. Winslow's Soothing Syrup the best remedy to use for their children during the teething period.

More than 4,000,000 women work for their living in Great Britain.

Remember that you can buy Jesse Moore A. A. Whiskey for the same price that is paid for ordinary whiskey. For sale by all first-class dealers and druggists.

A new home for working girls has been opened in New York city.

FITS Permanently Cured. No fits or nervousness after first day's use of Dr. Kline's Great Nerve Restorer. Send for FREE \$2.00 trial bottle and treatise. DR. R. H. KLINE, Ltd., 529 Arch Street, Philadelphia, Pa.

That sleeping or waking snakes never close their eyes is a curious fact.

I never used so quick a cure as Piso's Cure for Consumption.—J. B. Palmer, Box 1171, Seattle, Wash., Nov. 25, 1895.

The elephant has 4,000 muscles in his trunk alone, while a man has only 577 in his entire body.

Heed the Red Flag of Danger! Red pimples, blotches, boils, sores are danger signals of torpid liver, poisoned blood. Cascarets Candy Cathartic will save you. All druggists. 10c, 25c, 50c.

Mistaking the Operation.

A very short-sighted old gentleman going into one of our large towns for the first time, and coming from the heart of the country, seeing a man digging, went to him and said:

"My man, for whom diggest thou this long and narrow grave?" But the man took no notice. Going closer, he remarked again:

"My man, for whom diggest thou this long and narrow grave?" The man looked up and said: "Go on, you silly old fossil! I'm laying gas pipes!"—London Answers.

"Be Strong in the Battle of Life."

Happy is he who is prepared by perfect health, to win life's battle. Health comes only with absolutely pure blood. Over 90 per cent. of humanity have taints, or humors in the blood, which should be removed by Hood's Sarsaparilla, the best specific for both sexes and all ages.



CARTER'S INK
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PORTLAND-CHICAGO SPECIAL
A Gilt-Edged Train Put on by O. R. & N. —All Modern Equipments, and Run Through Without Change.

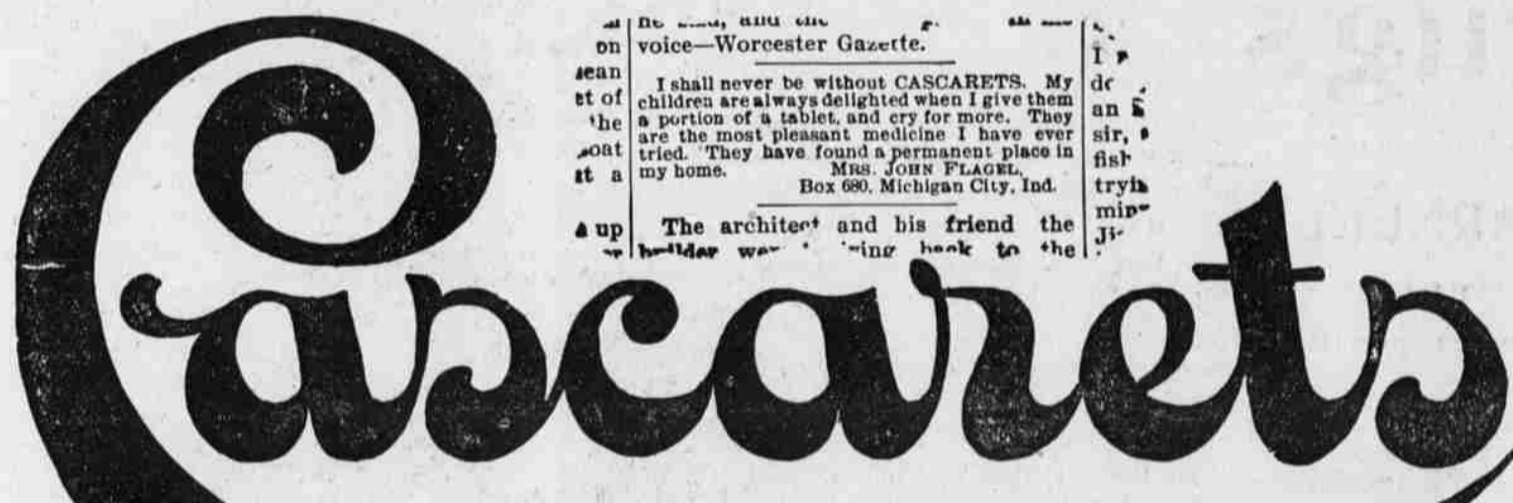
Buffet-library cars of the latest build have been placed in service on the O. R. & N. fast mail trains. The library car embraces a spacious smoking saloon, furnished with easy chairs, writing desks, a well-selected library of standard and popular books, guide-books and current periodicals, a well-stocked buffet, a barber shop and an apartment for baggage.

The Oregon Short Line have also inaugurated a modern dining-car service, giving uninterrupted dining-car service via the O. R. & N. and its connections to and from the East. New chair cars of the latest pattern and new baggage and mail cars are to be added to the present through service of new Pullman palace and Pullman tourist sleepers, which have recently been placed in service and just out of the builders' hands. The entire train will be vestibuled, making East and West-bound trains equal if not superior to many of the widely advertised limited trains in the East.

American exports of manufactured goods now average \$1,000,000 a day.

Good For Little Folks

Children are particularly liable to bowel troubles in the summer time. The best preventive of summer complaint, diarrhoea, dysentery, is to keep the bowels open gently. The delicate tissues of a child's intestines should never be abused by the use of violent purges. The only liver and bowel regulator fit to be used by children is the ideal laxative and intestinal tonic, CASCARETS Candy Cathartic.



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THIS IS THE TABLET THEY WORK WHILE YOU SLEEP 10c. 25c. 50c. DRUGGISTS

CASCARETS are absolutely harmless, a purely vegetable compound. No mercurial or other mineral pill-poison in Cascarets. Cascarets promptly, effectively and permanently cure every disorder of the Stomach, Liver and Intestines. They not only cure constipation, but correct any and every form of irregularity of the bowels, including diarrhoea and dysentery. Pleasant, palatable, potent. Taste good, do good. Never sicken, weaken or gripe. Be sure you get the genuine! Beware of imitations and substitutes! Buy a box of CASCARETS to-day, and if not pleased in every respect, get your money back! Write us for booklet and free sample! Address STERLING REMEDY COMPANY, CHICAGO or NEW YORK.

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The pleasures and successes of life are almost impossible. Upon the health depends the future. Thousands have built up their systems with

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What has been done can be done again. \$1 per bottle at your druggists.

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