THE MUD NUISANCE ON OILED MACADAM ROADS.

A Question That is Perplexing Road Engineers.

With the coming of summer municipal engineers have brought again before them the perplexing question which has been giving many of them gray bairs for several seasons past:

What shall we do this senson to cope with the dust nuisance on macadamized streets?

Probably the most generally adopted plan has been the sprinkling of the macadam with some asphaltle oil. It has been demonstrated that where horse drawn traffic does not predominate such sprinkling is a success in preventing disintegration and undue wear by building up a rubbery traffic mat on top of the stone.

But in escaping from the chorus of complaints of the dust nulsance the engineer runs foul of a new set of protests from indignant citizens who find carriage varnish, clothing and floor coverings ruined by the black, greasy mud which covers these roads after every bard rain.

The cause of this nuisance has been variously explained, but the condition has seldom been remedied. It has now been shown that asphaltic oils and water will form an emulsion whenever the various parts of the country nearer colloidal matter like clay is added. together, they have made country life This is what happens to the asphalt less lonesome, and they have reduced bound traffic mat under the soaking of the cost of transportation of country min and the kneeding of traffic. Con- produce to a minimum. France is the siderable loam and litter are carried only country in Europe where the agrion to the road to the course of ordi- cultural classes are not dissatisfied nary traffic, and the rain and wheels and where they do not feel that they complete the process. After the rain have a harder time than those who lahas ceased the emulsion gradually dries | bor in other fields. out, and the truffic mat eventually becomes as effective as before, but it is again converted to mud by the next heavy storm. When the mat contains a large proportion of bitumen and is dense and rubbery this emulsifying is delayed, but only delayed. When the mat grows older and so much dirt and litter have been ground into it that the proportion of bltumen is lowered, then its earlier water shedding qualities are lost and its surface is slimy, slippery and nasty after every shower.

Several remedies are conceivable. the binder great care must be paid to removing the last traces of fine dust and litter and in throwing on gravel, small stone or screenings as a filler. The finest dust is to be discarded. Moreover, this filler must be of a material not easily reduced to an impalpable powder under traffic. Every means must be taken to prevent the carriage of dirt and litter on to the stead a year for only \$1.50.

traffic mat, as by providing frequently cleaned approaches. The avoidable accumulations of dirt and litter must be removed before each added from time to time during the of the mat unimpaired. The expense involved in these measures is obvious. So impractical, therefore, seem all the present expedients for preventing this greasy mud that the trouble seems like a necessary wet weather evil of

BEST ROADS IN THE WORLD.

olled macadam.

The Splendid System In France That Has Brought This About.

In France, where they have the best roads of any country in the world, the highways are divided into severa classes, but all of them are supervised by the national government, which maintains a bureau of roads and bridges and supports a school for the education of the engineers and inspectors who are employed in the bureau.

This method of building and maintaining roads in France was started by the first Napoleon, who appears to have been the earliest European statesman who clearly saw the economic advantage of proper highways and who at the same time had the power to car-ry out what he wished. The effect of these good roads in France has been wonderful. They have brought all of

Work in Alabama.

Mobile county, Ala., is preparing to surface 100,000 yards of road with chert, clay, gravel and oyster shells.

Beautify the School Grounds. While all our cities and towns are making a mad scramble to build or improve parks it may be as well to pause and consider if school grounds are not sadly in need of planting and general care. Cities often have beautiful parks and bare, inhospitable and unsatisfybut practical objections arise to all of ing premises about the schoolhouses them. For instance, before applying Children schooled amid pleasant and ornate surroundings will make a generation of adults who will demand the fnest parks and other improvements.

> Innes & Davidson's shop is the best place in town to get your hair cut or a shave.

DIRECTORY OF OFFICIALS.

United States.

More oil should perhaps be Vice President . . James S. Sherman Secretary of State P. C. Knox season to keep the bitumen percentage | Secretary of Treasury . F. MacVeagh high and the water shedding qualities | Secretary of Interior . W. L. Fisher Secretary of War. . . . H. L. Stimson Secretary of Commerce and Labor . . Charles Nagel Secretary of Navy Geo. Von L. Meyer Secretary of Agriculture Jas. Wilson Postmaster General . F. H. Hitchcock Attorney General G. W. Wickersham

	State,
- The Park of the	Governor Oswald West Secretary of State B. W. Olcott Troasurer Thos. B. Kay Atty General A. M. Crawford Superintendent Public Instruction
	State Printer W. S. Duniway Commissioner Labor Statistics
	NIGHTO AND COLUMN AND ASSESSMENT AND ASSESSMENT OF PARTIES.

Seventh Judicial District.

Judge W. L. Bradshaw Attorney Fred W. Wilson

County County

Congressmen A. W. Lafferty

..... Jonathan Bourne, Jr.

1	Crook County.
	Judge H. C. Ellis
1	Clerk
j	Sheriff
	Treasurer Ralph Jordan
l	AssessorJ. D. LaFollette
1	School Supt R. A. Ford
ì	Coroner Fr. E. O. Hyde
1	Surveyor Fred A. Rice
	Commissioners R. H. Bayley
ı	James Rice

The Courts.

Circuit-Meets first Monday in May and third Monday in October. Probate-Meets first Monday in each month.

Commissioners'-Meets first Wednesday in January, March, May, July, September and November.

Bend School District No. 12.

	Directors H. J. Overturf, Chmp
	Clerk Miss Marton Wiest
1	City of Bond

City of Bend.

ì	Mayor Office Vacan
	Recorder
	Treasurer
4	Chief of Police S. E. Roberts
	City Engineer George S. Young
ı	Councilmen
	S. J. Spencer
а	John Graid

HAMPTON BUTTE

The New, Town laid out in Section 16, township 21 south, range 22 east, about half way between Burns and Bend

Is Now Placed on the Market.

It is located on the survey of the Oregon Trunk east and west line, and is the same distance from Metolius, the first division point, as that station is from Fallbridge; and Hampton Butte will undoubtedly be the second division point on the Oregon Trunk when the road is extended.

Hampton Butte is in the fertile Hampton Valley, which has been settled up and is being turned from a sagebrush plain into a dry farming grain country. The town is near the Horace Brookings' stopping place, and from one corner of the townsite can be counted the homes of 34 settlers.

A store and Hotel are expected to be built in Hampton Butte this summer by the Oregon Central Improvement Co., owners of the property, and within thirty days the company expects to have a drill on the ground to go down to secure artesian water.

A block of the townsite has been dedicated for school house purposes and another block for park purposes.

The Agents for Hampton Butte townsite at Bend are

THE WENANDY LIVERY COMPANY

from whom any information may be obtained

Oregon Central Improvement Co.

Main Office: 411 Mutual Life Bldg.,

SEATTLE, WASH. F. A. HILL, Pres.

N. W. PARKER, Sec. L. F. WAKEFIELD, Mgr.

•·····•• The Bulletin and the Pacific Home- John Steidl SEND THE BULLETIN TO YOUR FRIENDS IN THE EAST. \$1.50 PER YEAR and a year for only \$1.50.

ELMER NISWONGER

W. P. VANDEVERT

If You Are Looking for a Good Residence Lot, Investigate

Wiestoria, Bend View, Aubrey Heights RIVERSIDE AND LYTLE---

Homesteads Specialty.

Our field man was in the employ of the U. S. Geological Survey for six years. Every location guaranteed We can locate you in

Harney, Lake or Crook County.

BEST RESIDENCE SECTION OF THE TOWN.

A GOOD WATER SYSTEM IS BEING INSTALLED FOR THESE ADDITIONS.

PRICES REASONABLE. \$25 DOWN, \$10 PER MONTH. Look Over These Additions Before Buying Elsewhere. We have some of the best Business Property in Bend, on Greenwood, Bond and Wall streets, at MOST ATTRACTIVE PRICES.

CALL ON OR WRITE THE

Irrigated Land.

If you are looking for Irrigated Land with a guaranteed water right, we can furnish it to to you in tracts of five acres up. We can sell you a small tract on

Very Easy Terms.

OREGON INVESTMENT COMPANY

WALL STREET, BEND, OREGON.