Automobiles and Good Roads

A Department Designed to Help Farmers With Progressive Road Ideas.

O construct highways correctly prop-er excavation should first be made and the subbase thoroughly well rolled with a roller of at least ten tons in weight. This should be done no mat-ter what kind of base material is used. However, in the construction of a slag road, in order to obtain the very best results, it is necessary that the loose slag be spread on the subbase to a preper depth and then thoroughly rolled from time to time as the work pro

During such procedure it is recom mended that the road be kept well wet with water, if water is available, and in finishing it is only necessary to put on top of the slag base about two inches of slag screenings, which contain dust and slag particles as large as one-fourth of an inch, which, like all cement, is inert in the dry state.

Road Steadily Improves

This likewise should be theroughly wet and well rolled. In fact, the top should never be put on except with plenty of water and thoroughly rolled. Thus he never leaves home without a This is necessary because of the natural plentiful supply of fuel. It is very, very cementing qualities of slag, and in order voids as possible.

A slag road built under these specifications, instead of deteriorating, as is too often the case with most other road metals, will gradually improve until the entire roadbed becomes a solid mass, thereby giving practically a concrete road.

It is sad indeed to watch road forces at work, not only along country highways, but more especially in the cities. where there are macadamized roads, for the waste of time and material is something appalling.

Slag Natural Cement.

Streets are repaired merely by throwing loose alag or some other material into the ruts and, instead of finishing the job by rolling and compacting the material, making it more or less permanent, the loose material is allowed to remain, and vehicles passing over it, instead of compacting the filling will cause the parties to grind into dust, which will be carried off either by the wind or by rapidly moving automobiles, leaving the street in as bad condition as before it was repaired.

Slag is the one material that not only is cheaper as a rule than all other road bases, but it is available in large quantities and at all times, regardless of the weather. The rainy season has no effect on the shipment of slag, as is the case in the rock quarries and grave pits, and by reason of the fact that it is usually loaded at points where a number of railroads center cars are available when such is not the case at quarries and gravel pits located exclusively on one line.

Advantages Are Told.

The advantages to be derived from

It is a natural cement rock.

It will cement together if properly compressed by wetting and rolling. It is, as a rule, vastly cheaper than

any other road material.

It is available in large quantities and

It is an impervious material.

It is considerably lighter in weight A road roller heated to a rather high than stone or gravel, consequently a great saving in freight is effected where distances are equal.

Inland Empire Crop Prospects.

On the basis of a canvass just completed by the International Harvester Company on the prospective wheat and submitted to the Spokane Chamber of Commerce, the increased yield this year mission house in Centralia, Wash., this in the Inland Empire will total between season. A good man will be placed in income of the Inland Empire farmers all of their produce at the commission I would like to have him tell, why ain't this year will be close to \$15,000,000, house, and what is not sold to local and germs good on oats as well? This whole and this amount will not be additional outside dealers will be put through the germ business sounds so queer, that I crop altogether, but also returns from cannery, thus insuring no over-production't want 'e mover here; if he don't the report.

Farmer Must Be Own Garage Man

From Location of His Home, Country Owner of Machine Must Attend to Duties Himself Which Promotes Economy and Better Knowledge.

be his own garage man. Such provision, it must be said, proves to be an item of economy rather than undue expense. Also, it necessarily leads to a closer contact with the motor and all working parts of the car. This, in turn, brings a greater degree of pleasure in its opera-

The farmer is obliged to get his gasoline by the barrel, so he has a storage tank near his garage, and in such a place as to be conveniently reached. seldom that a farmer's car is stalled by working parts remain in perfect tune. Gasoline Bought in Quantity.

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

MIRED!

By George F. Paul.

The shades of night were falling fast
When through a country village passed
A youth, who bore through slush and

The shades of night fell like a log,

They roused the cricket and the dog He floundered through the rust

deep,
And as he stopped he swore a heap.
Excelsion!

He lived but seven miles from town, Just where the Hollow road slopes down, Yet when at last he reached the place Long whiskers covered all his face. Excelsion!

.............................

A New Road Material.

A new road material designed to

stand hard usage from automobiles is

ing material whose composition is not

divulged by the inventor. In the pres-

ent process the stone is heated at first

point is passed over the surface, the

roller weighing about six tons. Re-

ports state that a very good road suf-

To Sell Own Produce.

was decided to institute a farmers' com-

to buy home-grown produce entirely.

face can be obtained in this way.

No more he ventures in to town To act the mud bespattered clown.
He's sitting there; he waits and waits
Till mud dries on the pearly gates.
Excelsion!

A youth, slop

alop
A carpet sweeper and a mop.

Excelsion!

By DENNIS H. STOVALL.

S THE farmer must shelter and oil, it gives a long season of service care for his own machine, and has with no repairs.

not the opportunity to run into a garage for gasoline, lubricating oil or other supplies every time he gets ready for a drive, it is necessary for him to ment. There is also found a small machine shop or at least a bench with all needed tools for doing lighter repairs on the machine. To accommodate all these features, the farm garage is usually built large enough both to shelter the car and allow ample space for the oil reservoir and tool kit. The gasoline tank is buried underground nearby, with a pipe and pump connection inside the building, convenient to the supply tank of the car.

Care of Auto Real Pleasure.

On our own country place we have learned that the closer we can keep to our machine in the matter of its operato get it properly bound this material the wayside for lack of gasoline. He tion and care, the more positive is the must be rolled to eliminate as many likewise keeps a plentiful supply of lub- enjoyment we derive from its use. Even ricating oil and grease on hand. So his though we are obliged to move to town, motor never lacks for lubricant, and all we should continue to do our own work, simply because we have grown into the Gasoline Bought in Quantity.

Buying gasoline in quantity works a considerable saving within a year. Oil, latter, after all, in time of need, is truly even of the best, can be purchased at as much the farmer's friend as of any a much lower price when secured in owner of an automobile. But we have barrel or half barrel lots. So the method learned by experience that to care for that is adapted as a necessity becomes our own machine adds at least 100 per the very best that could be devised. cent to the pleasure of operating it.

Some Good Advice To Auto Owners

ON'T coast downhill.

Don't go down a long steep grade faster than 15 miles an hour. Shut off your spark on descending a grade, with your clutch engaged in high, intermediate or low, according to steepness, and use your foot brake only when necessary. This not only cools the motor but saves your brakes.

Don't be in a hurry on mountain grades and don't be afraid to make a noise so that others may know you are coming.

When rounding curves sound your

You cannot make a sharp curve safe-

ly if going over 15 miles an hour. Make it a rule to take no curves at at a speed of over 20 miles an hour.

On mountain grades don't put too much trust on the outside bank, especially if your car is a heavy one.

If you have to cool your radiator on a long hill and you have the water to do it with, make a good job of it. Let being tried by a Swiss engineer, W. the radiator drain while you pour in Erlich, and is said to consist of a mix. cold water until the motor is cool. If the use of slag in building highways ture of broken stone about the size of a may be analyzed as follows:

| ture of broken stone about the size of a fresh oil in the crank case will help hazelnut, but not limestone, with a bind-

Song of the Lazy Farmer.

My neighbor's got some formalin, to from 100 to 150 degrees C. and mixed soak his oats and barley in; he says the at all times, regardless of weather concomposition. When in use the mass is since the crop was cut. Then when h remelted in order to put it on the road. plants it in the field, the smut germs grow and burt the yield; instead of getting lots of grain, he'd harvest heads of smut again. He says to kill these germs of his, he'll soak 'em up and let 'em fizz; so all his grain is in a pile, and wetted down to soak awhile.

I'll let my neighbor toil and soak. I At a meeting held by committees of think this thing is all a joke. I b'lieve cereal crops, figures of which have been local fruit growers and grocerymen it in tater bugs and worms, but don't go much on these here germs. When neighbor sows alfalfa seed, he doesn't soak it. eight and ten million bushels more than charge of the house, and another put no indeed; before he plants the crop he the bumper crop of 1913. The added on the road. The farmers will deliver puts a lot of germs upon the roots. Now higher prices, which are inevitable, says tion. At the meeting the grocers pledged keep his germs to hum, I'll set the dog on them, by gum!

We Make Large Loans Upon **Improved City** and Farm **Properties**

IN WASHINGTON AND OREGON

Making the Mortgage to secure a number of Notes or Bonds of \$100, \$500 and \$1,000 each.

The form of the bond and mortgage is, so far as possible, identical with the small loan where the note and mortgage are assigned to the purchaser.

We have at present several very attractive issues of such bonds, maturing from 1 to 10 years, netting 7 per cent. Let us tell you about them.

Jacob Furth F. K. Struve V. D. Miller

DAVIS & STRUVE BOND CO.

INVESTMENT BROKERS 807 Second Avenue

Want A Position

Being ready when the oppor-tunity comes is what counts for success. There is a big demand success. There is a big demand for BEHNKE-WALKER trained bookkeepers, stenographers and telegraphers.

Eight hundred and forty-one different firms called on us for help since August 1st. There is no quicker, surer way to secure remunerative employment and future success than to secure our

BehnkeWalker

BUSINESS COLLEGE I. M. Walker, Pres. Portland, Ore.

RAT SWAT

The New Rodent Exterminator

RATS AND SQUIRRELS GO IN A SINGLE NIGHT

If Your Dealer Does Not Have It, Write Us.

AMERICAN DISTRIBUTING CO., 1004 Broadway Bldg., Portland, Oregon

U.S. and Foreign Patents Obtained.

Send Sketch and Description for Opinion as to Patentability.

PETER HABERLIN, 200 Victor Bldg., Washington, D. C.

A SNAP

A first class steam laundry. Fully equipped. Laundry buildings and residence; wagon; teams. Earning \$700 per week. Splendid \$4,000; easy terms.

PEOPLES REALTY CO. 14 N. 6th St., Portland, Oregon.

WOULD YOU LIKE AN INCOME OF \$2,500 A YEAR?

If so, and you have \$1,000 to invest in good, legitimate business that will stand the strictest investigation, write to me

JOHN SPRINGS, 312 Henry Bldg. 312 Henry Bldg., Portland, Oregon.