

MAINTENANCE OF PUBLIC ROADS

One of the Most Important Problems of Today.

THEY ARE TRULY ESSENTIAL.

Of Advantage to the Farmer. Bring Towns Closer Together and Boom Home Trade—Some Reasons Why Your Road May Be a Poor One.

One of the most important problems confronting the public today is the construction and maintenance of its roads. It is truly essential that we have good roads.

Good roads not only prove an advantage to the farmer commercially, but they are a pleasure to the motorist and bring towns and cities closer together, thereby inviting trade and transportation.

There are many reasons why road building in instances proves a failure, and it might be well to enumerate some of them: First, a road may be made too narrow to accommodate the traffic or so narrow that teams will track, cutting the surface into ruts,



A WELL MADE ROAD.

In a very short time. Second, the use of poor unreliable materials, then laying the material dumped in piles along the sides of the road for traffic to spread. Third, poor drainage; either the surface is too flat or too high in the center, the side gutters or ditches too deep or not deep enough. Fourth, laid on an unstable foundation, laying the foundation on surfaces filled with holes and ruts, thereby leaving no end of trouble and expense after the road has been used a very short time.

If a thing is worth doing at all it is worth doing well, and, since constructing roads is a thing worth doing, why not do it well?

The first thing to take into consideration in the proper construction of a road is location and directness. In speaking on this very subject one authority on good roads said recently, "Whenever possible roads should be located on straight lines." Continuing, he said, "The best location is one which is straight to general direction, is free from steep grades, is over solid ground and serves the largest possible number of people."

The most desirable foundation for road construction is a natural pebbly surface. Telford uses the pitched foundation for a road which is subject to heavy traffic. For an ordinary road a thickness of five or six inches of gravel or flat well rolled and watered should



A CURVED ROAD IS TRULY A POOR ONE. It is used as a foundation with a three or four inch covering of granite also rolled and watered.

Another important factor in road construction is drainage. If the road be constructed in such a way that the surface has just enough convexity, say a slope of from one and a half inches to two feet, and the gutter grades so arranged as to have a fall of at least six inches in each hundred feet, a good surface drainage will be obtained.

To maintain our good public roads, after we get them, new and suitable materials should be added when needed and all defects repaired at once. One of the best systems for the maintenance of good roads was inaugurated a few years since by the French and is known as the patrol system, which necessitates daily inspection and care. It would be well if we spent more time in caring for our roads and established some system whereby they would receive constant attention.

REFUSED TO LAUGH.

A Joke on Himself That Mark Twain Failed to Enjoy.

When Mark Twain was a resident of Hartford, Conn., he once called at the office of Dr. Swan, a local specialist of considerable repute, to consult him regarding a trivial ailment.

The physician was inclined to be rather arbitrary in his charges, was very independent and disliked exceedingly to be consulted in regard to minor ailments. In this instance he named a fee for his services that the economically minded Clemens thought excessive.

After a little argument Mr. Clemens declared that he would not pay any such price as the physician asked, and rose to leave. Just as he turned his back on Dr. Swan a voice said distinctly:

"Go along home, you old fool, you!" Instantly Mark Twain wheeled around, angry through and through. "What's that, sir?" he roared at the doctor. "What's that you say?"

With a smile that was dying in its sweetness Dr. Swan pointed to a cage in the corner where his parrot was swinging and chuckling with birdish glee, and explained:

"That is the gentleman who spoke to you, sir." Somehow the explanation did not seem to reduce Mr. Clemens' anger very much, and he never entirely believed in Dr. Swan's innocence. —New York American.

THE FLY'S BALANCERS.

Without These Organs the Insect Would Tumble to the Ground.

The insects of the Diptera order, to which the common housefly belongs, have, as a rule, one pair of wings and rudimentary remnants of another pair in the form of a club shaped organ on either side of the thorax behind the wings. These organs are called "balancers" and, as experiments have shown, are indispensable in the maintenance of equilibrium.

A fly from which they have been removed cannot direct its flight, and if it tries to fly from the edge of a table will immediately take a downward course, dropping to the floor on its head about three feet away and falling over on its back. Similarly, if it tries to fly from the floor after succeeding in getting on its feet again it will rise by the air two or three inches and then again tumble, striking its head and turning over on its back as before, but only about four inches from its starting point. Horizontal and ascending flight becomes absolutely impossible.

The similarity between these artificially produced insect mishaps and many an aeroplane accident is striking, and a study of why the removal of the fly's balancers causes it to upset may go a long way toward solving the problem in aeroplane construction. —Westminster Gazette.

Beware of Cousins!

Cousins are not as simple as they seem. The very fact of being a cousin, or having a cousin, is complicated. The lines of kinship are both eluding and deluding. Cousins will be cousins, even if you did not choose them. They can borrow money from you, visit you without being asked, tell people they belong to your family, contest your will, even fall in love with you—and a cousin once removed is twice as apt to. Never completely trust a cousin. Never depend on his not doing any of these things. Never take him for granted. The "cousinly kiss" may or may not mean what it means. And cousins always do kiss. It's part of being cousins.

(Not that cousins need necessarily prove perfidious. Once in a blue moon they invite you to Europe or leave you money, but that almost always takes an aunt or an uncle.)—Atlantic.

Cod Liver Oil From Sharks.

Shark spearing is a profitable industry in Malaysia, though attended by an element of danger and no little excitement. The chief value of the fish is its liver, which yields an oil that is refined in Europe and sold as cod liver oil. In October the ocean sharks come into the lagoon, between the barrier reef and the atolls, to pair. At this time they can be speared in large numbers by people skilled in catching them. There are several species of these sharks, and they ordinarily run from seven to fifteen feet in length. The liver of a shark of this size gives about five gallons of oil. The sharks are found in pairs, and the harpooners try to kill the male first, for they are then able to spear the female also, as it does not desert its mate.

Not a Total Wreck.

"What have you done with your play?" "It didn't go as a farce, so I had some music composed and tried it as an opera, but it fell flat. Then I boiled it down into a vaudeville sketch, but nobody would touch it."

"Too bad. A total loss, eh?" "Not total. There's one good joke in it: I can sell that for 50 cents." —Louisville Courier-Journal.

Man's Big Mistake.

According to a German biologist, man made a mistake when centuries ago he changed himself from a quadruped to a biped, the contention being that many present day ills are due to carrying the spine in an upright position when it was intended to be carried horizontally.

Accounted For.

"The baby's awful said," said Mabel. "Yes; they come bald on purpose. If they had hair they'd pull it all out, and then all that hair would be wasted," said Tommy. —Philadelphia Record.

DEALING WITH A THIEF.

It Was an Unusual Method, but It Proved Effective.

Governor Thomas Chittenden of Vermont is remembered for his great kindness of heart as well as for his ability and force of character. He was the first governor of the state and lived in the liberal manner that befit his office. His cellar, as was the custom of those days, was well stocked every fall with provisions.

One winter night the governor's rest was broken by sounds coming from his cellar. He left his bed quietly and, with a candle ready to light, went his way in the direction of the noise. As he reached the cellar he struck a light and saw a man taking great pieces of pork out of his meat barrel and stowing them away in a bag.

The governor approached the intruder and in a commanding voice said: "Go on, sir! Fill up that bag and be off. You ought to be ashamed of yourself to disturb honest people at this time of night!"

The thief shrank back, evidently much frightened. "Be quick!" continued the governor. "It is no fit time to keep me shivering here!"

So stern was the governor's manner

that the man was compelled to obey.

"Now, begone!" went on Governor Chittenden. "When you are again in need of food come to me and say so, and I will give you more. Do not pilferage my house at night. If I ever have the smallest reason to suspect you of another such act you shall be punished for this offense as the law provides."

It is pleasant to know that the man came to the governor the next day to ask for employment, in order that he might pay for what he had taken, and that work was found for him, which he performed steadily and well. —Youth's Companion.

A collector for the London zoo has succeeded in capturing several crab hunting and crab eating dogs in Brazil. The dogs are half fox, but they do not seem to care very much for poultry. They have been known to turn up their noses at nice, fat pullets and go fighting for crabs instead. The dogs hunt up packs along the banks of the rivers in the Amazon valley, and the crawfish and land crabs of that region are their especial prey. The crabs often put up a vigorous fight, but the dogs have a way of turning them over and biting them in a vital spot just as the thoroughbred terrier polishes off a rat. —New York Herald.

Unfair Advantage.

A school inspector, examining a class in Bible history, asked, "Can any boy tell me what bird Noah let out of the ark?" There was a long silence, and then the smallest boy in the class put up his hand and answered, "Please, sir, a dove!" The inspector expressed his surprise that only the smallest boy in the class knew the answer to the question. "But, please, sir," replied one of the boys, evidently touched by this approach, "his father keeps a bird shop!" —London Telegraph.

A Lesson in Pronunciation.

"How do you pronounce that word 'divorce,' professor?" asked Mr. Knab sides. "Is it 'divoray' or 'divorcee'?" "That all depends, my young friend," smiled the professor. "When Mrs. Jones-Smythe-Wiggles got her first divorce I should have called it 'Divorce A,' but now that she has come through with a third I should say that 'Divorce C' is a justifiable form." —Harper's.

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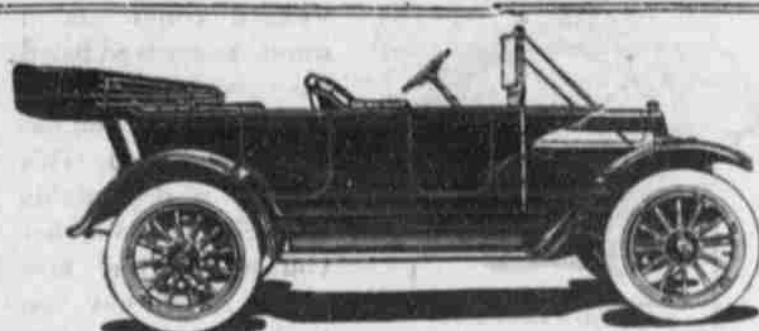
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