

In The Automobile World

NEWEST NOTES OF SCIENCE

An imitation bone for cutlery handles is made of seaweed.

Uruguay has about 1,600 miles of railroads, but only one tunnel.

Leather waste enters into the composition of much of the best wallpaper.

In Sweden bricks made from heat are successfully used in small buildings.

Vermont is estimated to have 2,000,000 horsepower of undeveloped water power.

Some vineyards in Italy are cultivated on the faces of almost perpendicular cliffs.

An electrically operated machine has been invented for plucking feathers from chickens.

Argentina maintains a meteorological station at an elevation of 4,000 feet above the sea.

A patent has been granted for an egg substitute made chiefly from thoroughly cooked yams.

A substitute for jute is being made in Russia from kenaf, a native plant of abundant growth.

Direct wireless communication has been established between the station at Arlington, Va., and Rome.

A Cuban has invented a material made of palm fibre to be used as a substitute for cedar in cigar boxes.

A coal shovel which will sift ashes as they are taken from a heater without re-handling has been patented.

According to a London chemist the surest way to determine the age of a painting is to analyze the pigments.

A sliding weight on the handle of a new ice pick does the work of the hand that holds it remaining stationary.

Careful investigation has led Japan to claim to be the richest country in

the world in radium-bearing waters.

Shields have been invented to prevent the propellers and rudders of power boats being tangled in fishermen's nets.

After fifty years of service an organ with bamboo pipes in a Christian church in Shanghai still is in fairly good condition.

The root rest of a new elevated bootblack's stand is hinged so it can be used as a step to aid a person to reach the chair.

The rectrope has been recently in maps of Greenland have shown it to be about 150,000 square miles larger than formerly believed.

A rotary stump cutting machine has been invented that clears land and prepares the wood for paper pulp in the same operation.

There is authentic record that a sewing machine was patented in England in 1755, 81 years before the first American machine was invented.

Alabama was the largest producer of crystalline graphite among the states last year, with New York in second place and Pennsylvania third.

Extensive experiments in Sweden have shown that wood cellulose is an excellent cattle feed, and the government is fostering its manufacture.

Apparatus which photographically records every motion made by a man's hand with a machine or tool has been invented by an efficiency expert.

A London railroad station has been equipped with penny-in-the-slot machines to sell tickets to persons who wish to accompany friends to trains.

A California inventor's wave power motor utilizes the horizontal motion of the water instead of the vertical, usually the case in such devices.

Garbage wagons in a German city are arranged to be drawn either by horses or electric tractors, the latter being 30 per cent. cheaper to operate.

The flagpole on top of a tower on a New York hotel has been so mounted that it can be lowered into a tubular casing for painting or repairing.

A large flour mill in Argentina burns much of its bran for fuel, and finds that 100 tons of it has about the same heating value as 60 tons of coal.

An electrically operated tremolo attachment for stringed instruments has been invented which produces the desired effects when buttons are pressed.

For the importation and improvement of native horses and live stock the Brazilian government will establish twelve zootechnic stations in many states.

An attachment has been invented for bathroom spigots which can be connected to an electric light socket to heat water in small quantities as it is drawn.

The bark of a cactus growing wild in Western Mexico has been found to contain enough resin after the death of the plant to make its utilization practicable.

A specially designed reflector enables a new projecting lantern to produce about 300,000 candlepower by using a 1,000 watt nitrogen filled incandescent lamp.

Many English manufacturing plants are experimenting with their own refuse for use as fuel, one textile mill producing all the steam it needs from shoddy waste.

The sidewalk awning of a store in a Southern California city is so mounted that it can be lowered to form the front of the store when the latter is to be closed.

French engineers have built a machine that is operated by electricity and uses galvanism as its principle in which broken steel is made to heal itself much as wounded flesh heals.

A portable track welding outfit weighing less than 200 pounds which takes its power from trolley wires has been invented for small street railways that do not require elaborate equipment.

The Chinese Government will reopen a pottery that was built in 1396, and which is said to be the only place that has preserved the ancient ways of making porcelain of rare colors and designs.

Operated by electricity, a rotary brush and suction fan have been combined by an Ohio inventor into a device for cleaning billiard tables more satisfactorily than vacuum cleaners do the work.

Italian canners utilize the skins and seeds of tomatoes, the former for stock feed and the latter for oil, useful in its crude state for soap and illumination, and when refined for table purposes.

According to a Geological Survey estimate, the United States uses about 165,000 ounces of fine platinum annually, of which only about 65,000 ounces are refined in this country, the rest being imported.

Although a steel tube is stronger and more rigid than a bar of the same metal of equal weight, a French scientist has demonstrated that a tube is more flexible than a bar of the same exterior dimensions.

A speed of nearly 75 miles an hour has been attained by a unicycle built by a St. Louis inventor, the machine consisting chiefly of a single wheel almost seven feet in diameter, drawn by an aerial propeller.

The government of Brazil is planning to experiment with the production of jute, as no native fibre has proved an acceptable substitute, and the coffee trade of the country alone uses 10,000,000 jute bags a year.

Patents have been granted to a Connecticut woman for a baking board consisting of a pad of waxed paper, from which single sheets can be removed when soiled, and for a waxed paper rolling pin with a cardboard core.

TAKE PRIDE IN NEATNESS OF CAR Auto Reflects Owner's Sense of Care—Proper Cleaning Methods.

A well-polished and clean car invariably reflects something of the owner's personality in respect to care and neatness. The best medium for washing a car is good automobile soap, dissolved in a pail of water. A service manager advises the use of a soft carriage sponge and flowing clear water in a gentle stream a few inches from the end of the hose, over the wheels, chassis, and fenders. This will remove most of the mud and dust. Then cut the oily and greasy dirt with the soap solution, sopping it on freely. Go over the parts again with clear water, and let them dry.

The dust should be blown off the body with the hose, but no water should be put on the hood. Go over the body again with the hose and a wet sponge. Squeeze the sponge dry and take up the surplus water in crevices. Then wet a chamois, wring it, and wipe the body dry. Clean the hood by hand, using a little soap solution locally if there is any machine or road oil on it.

Mud should never be permitted to dry on the car. Cold water should not be flowed on the hood while it is hot. The excessive use of soap and using water with too much force are injuries. Hot water will take the lustre from the finish.

OFFICIAL PREACHES THRIFT Why the Use of a Car is Real Thrift.

"Few people even begin to realize the actual amount in dollars and cents they can save by a little care in the use of an automobile," says R. C. Rueschaw. "Each individual saving represents such a small amount that we are prone to regard it as negligible, while as a matter of fact the aggregate of many of these small savings runs into quite a respectable sum."

"That is the very root and essence of the thrift movement now on foot throughout the country. Doing without a car is not thrift because in most cases it costs a man less to do a given amount of work with an automobile than without one. Then, too, any serious reduction in the purchase of passenger cars due to such a mistaken conception of thrift would tend to cripple an industry which ranks near the top in the amount of money it puts back into circulation through wages, dividends, purchases, and so forth. Killing the goose that lays the golden egg is not thrift."

"True thrift in using an automobile lies not in cutting down the use but in eliminating the waste. Running your engine idle, even for one minute, is sheer waste. Acquire the habit of stopping the engine whenever you stop the car. Look over the gasoline system frequently from tank to carburettor to discover and stop wasteful leaks.

"Running with under-inflated tires," adds Mr. Rueschaw, "is another waste. It not only takes considerably more power—gasoline—to run with soft tires, but you increase your tire cost by half. Driving in car tracks is one of the worst forms of thriftlessness. If the paving is rough, go slow or drive over a block to a smooth street; don't willfully waste your tires by deliberately cutting them to pieces in car tracks.

"A little figuring will show that by the constant exercise of care and the elimination of waste it is easily possible to save as much as a hundred dollars in a year. Keep track of your expenses, save that hundred and then buy thrift stamps with it. That's real thrift!"

Observe Tire's Sense of Direction.

Tires develop little moods that are almost human, is the opinion of a tire company manager, and he has been on a wheel for some time. The rubber adjusts itself to its position, that is, the rubber shapes itself to turn in one direction. It stretches in one direction, it strains in one direction, it recedes before a blow in one direction. Therefore when a motorist removes a tire or repairs or for any other purpose he should observe the tire's "sense of direction."

The suggestion is made that, after removal, the tire be marked with an arrow indicating the direction it has been running, so that the tire may be adjusted to run in the right direction.

English Trucks Use Gas Oil.

Coal gas for fuel, carried in large rubber gas bags, is being used by 4,500 motor trucks in England. So great has been the demand for gas containers that a short time ago over 2,500 trucks had been unable to get their equipment. Only 4 per cent. of the deliveries of gas apparatus has been for private use. The British Government recently appointed a gas traction committee to consider what further rules are necessary with regard to gas as a fuel and to make recommendations for the use of gas and flexible containers at atmospheric pressure and also to indicate the limits of approved use under limited pressure in semi-rigid containers.

Obscure Tire Trouble.

It often happens that a tire will pick up a tack in such a way that the point projects just slightly through while the head has been worn off by contact with the road. This little tack-point will cause small punctures of the inner tube for which there is no apparent reason. Wiping the interior of the casing with a damp cloth will locate the seat of trouble. If one head is cut off of an old casing the result is a very satisfactory protection for another casing of the same size. It may be tried on before inflating, and if care is used to locate the weak places in one casing over the strong places in the other, excellent service will be given.

Bandits at Ural, Sask. gaged and robbed of \$1,500. Manager Charles Hill of the Farmers' Trading Company, and set fire to the company's grain elevator and lumber yard, causing a loss of 3,000 bushels of grain and a million feet of lumber.

Sixteen persons in Belgium, some of them women, have been sentenced to death by the Germans on the charge of spying.

The nominating committee appointed by East York Liberals failed to find a candidate to run against Hon. George S. Henry.



A Country Without Motor Cars

IMAGINE, if you can, a country without motor cars, and you have a country whose commerce is seriously crippled.

The motor car is just as necessary in our daily life as the telephone, the telegraph, or the railroad. It would have disappeared long ago, as many mere facts do, if it had no function higher than mere pleasure. Its permanent usefulness is recognized.

The farmer found that it saved him time and money, broadened his life, and helped him keep his children contented at home. The merchant found it widened his field of business and speeded up his deliveries. The salesman found the car added to his working territory. Business men found they could accomplish more in a working day. The medical profession as a whole adopted the motor car. Imagine, if you can, the Allies without motor transportation attempting to fight Germany motor equipped.

If you are without a motor car you stand exactly the same chance with your competitors? Buy a Ford.

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THE UNIVERSAL CAR	
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Every expenditure that will result in better tires or service has been cheerfully made; but every expense that would not stand this test is scrupulously avoided.

Economical Efficiency has enabled Michelin to supply the motoring world with "better tires for less money."

ECONOMICAL EFFICIENCY
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LIKE RATS IN TRAP.

Blocked German Craft Are Constantly Bombed.

London, June 21.—Twenty-one German destroyers, a large number of submarines and numerous auxiliary craft are penned in the Bruges Canal docks as the result of the recent British naval operations at Zeebrugge, the German submarine bases on the Belgian coast. Thomas J. MacNamara, financial secretary of the Admiralty, made an announcement in the House of Commons to this effect to-day, and said that the operations were more successful than had been at first supposed. He added that German craft were now the subject of constant bombing.

Your final estate, so far as this old world is concerned, consists of enough earth to cover you up.