

In The Automobile World

The Newest Notes of Science

Denmark has about 85 head of cattle to every 100 inhabitants. A holder to suspend a flat can of tobacco from a man's belt has been patented.

Experiments in France have shown that ordinary sod is an efficient filter for sewage.

An electrically driven machine has been perfected that will seal 20,000 envelopes an hour.

The world's greatest iodine works are in Chili, having an annual output of 400,000 pounds.

A recently patented padded elbow rest is claimed by its inventor to prevent writer's cramp.

Pulverized street rubbish and coal tar have been found to make good fuel briquettes in Amsterdam.

Springs control a new soap receptacle so that it can be opened or closed with a touch of a finger.

The government of Brazil maintains a snake farm for the production of serum antidote for snake bite.

An aeroplane engine with twelve cylinders has been invented that makes more than 2,999 revolutions a minute.

Three asbestos mines have been opened in China, where extensive deposits of the mineral have been found.

A Minneapolis inventor's adjustable road sweeper has been designed to serve equally well as a snowplow.

By means of a secret process a French scientist converts flowers, fruit and even animal tissues into metal.

An ice-shaver operated by a crank has been invented that can be used to block a block of ice within a refrigerator.

With only about three horses to each 100 residents Switzerland has the smallest equine population of any country.

If brass or copper be cleaned with salt and vinegar and then rubbed with olive oil it will not tarnish for a long time.

One end of a tool invented by a Frenchman for smoothing rough edges of collars and cuffs serves as a buttonhole opener.

Overshoes have been patented that are stamped from sheet metal and so formed that they will not slip on wet or icy surfaces.

Electric power has permitted the exploitation in Chili of what experts believe may prove to be the world's richest copper deposits.

The bottom compartment of a new kitchen cabinet is provided with a sliding tray so that articles stored in it can be easily removed.

Spinach stems contain 46 per cent. of cellulose, according to a French horticulturist, who claims to have made writing paper from them.

A double snowplow has been invented, to be mounted on the front of an automobile to clear tracks for the wheels on each side of a car.

A French wood preservation method consists of forcing a solution of 10 per cent. borax and 5 per cent. rosin into timber by electricity.

Shutters to regulate the air en-

tering an automobile radiator have been invented that can be operated by a push button on a car's steering wheel.

Brushes that a Frenchman has invented to be carried on automobile running boards remove mud from the soles and sides of shoes at the same time.

An inventor has patented an elevator to be carried on the side of an ash cart to raise cans of ashes and empty them into the body of the vehicle.

Mining experts in the Philippines agree that a steady increase in the gold production of the islands may be expected for an indefinite period.

A patent has been granted for a glass refrigerator, built upon a steel frame and with an insulating air space between the inner and outer walls.

Plants are forced by a Danish scientist by administering chloroform, his theory being that brief periods of rest are followed by quicker growth.

A Wisconsin man's invention enables a gardener immediately to water plants that he sets out with the same tool with which he digs holes for them.

Engineers of the Italian army will sink many artesian wells in Tripoli, in an endeavor to convert a large desert area into an oasis by irrigation.

To prevent articles falling out of a vest pocket is the intention of a new device that holds cigars, pencils, cards or slips of paper equally well.

Spain, by royal order, has made the annual celebration of arbor day obligatory, a portion of the expense of tree planting to be borne by municipalities.

Semaphores that are automatically lighted as they are dropped by drivers pressing knobs have been invented for automobilists to signal following cars.

After almost three years of searching, two Spanish mining engineers have discovered deposits of platinum in that country that apparently cover a wide area.

The handle of a wrist bag for women that a New Yorker has invented is so constructed that it tightens its grip on its user's wrist if it starts to slip off.

Because Sweden's coal mines do not yield enough fuel for the country's needs, scientists are trying many experiments with peat, of which there is a vast supply.

To prevent damage to oil burning furnaces a Californian has patented a device that automatically shuts off the supply of oil should the air supply be impeded.

Furniture makers in Germany impart colors to several native woods by burying them when freshly cut in earth mixed with lime and other materials for several months.

More than 2,500,000 pounds of cotton fiber were used in the manufacture of absorbent and medicated cotton in the United States in the first three months this year.

That he has a fraud proof slot

machine is the claim of an Englishman who has invented one that rejects metal slugs and even coins of the same size and weight as those intended to be used in it if of less value.

By keeping dogs awake for several days two French physicians demonstrated that both nerve cells and muscles lack oxygen when they are tired and secrete a poisonous acid.

In a recently designed rifle gallery target, which resembles a baseball diamond, marksmen fire at a moving figure of a ball and their hits are registered in baseball phraseology.

To avoid headlight glare, a French automobilist has equipped his car with a number of incandescent lamps mounted on a horizontal bar over the radiator, each backed by its own reflector.

To give concrete columns for building wide foundations a German engineer has invented a method for blasting away the earth with dynamite, making a hole which soft concrete quickly fills.

An inventor believes he has made a safe hammerless shotgun by requiring it to be held against the shoulder with the right hand in position for firing before the trigger can be released.

A safe invented in England is fastened to a musical tone production by some instrument, its vibration affecting electrical mechanism that operates locks.

So that a window can be left open without danger of damage to a room when it rains a canvas trough has been invented that is intended to be fastened to a window sill to catch the water.

A light draft boat that a Frenchman has invented consists of two cigar shaped floats supporting a frame on which a man sits and drives it with pedals geared to an aerial propeller.

The dial of a new French clock is perforated and behind it are numbered disks for both 12-hour and 24-hour time, either of which can be turned to show the numerals through the openings.

Operated by one man, a gasoline driven machine has been invented that delivers more than 1,000 hammer blows a minute to newly laid concrete foundations for roads to give them an even density.

Locomotives and cars specially designed for passage through sand storms and to offer a minimum of resistance to the metal-cutting sand have been built for the French railroad in the Sahara.

Weighing less than 200 pounds, a portable track welding outfit, that gets its electricity from trolley wires has been invented for small railways that do not require elaborate plants of the kind.

Placing the exhaust ports near the centre of the cylinder so they are uncovered at the end of the stroke, a German has invented an economical engine as the cylinder heads are kept at a more even temperature.

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

Helpful Hints.

A little wrinkle in removing a wood screw which resists all attempts, especially where it is slightly rusted, is simply to apply a heated rod to the end of the screw until the screw is quite hot. The heat expands the screw in the wood and when cooled is loose enough to remove very easily.

There are two ways to test oil. One is gradually to heat a bottle of oil until a yellow vapor arises on the surface; maintain this heat about fifteen minutes, then let the oil stand about twenty-four hours. The oil is of good quality if it will only turn a little darker than originally, but if it is not of good quality it will turn black, and a certain amount of black sediment will be seen. This is exactly what happens if such oil is used in the engine.

WIRE AUTO WHEEL BECOMING POPULAR

Those who are in close touch with the automobile manufacturing business find in the growing popularity of the wire wheel one of the most interesting tendencies of the times.

To be sure, the total output of automobiles at present is so astounding that the number of cars equipped with wire wheels is rather dwarfed in comparison, however, when one examines the statistics of wire wheel production it is apparent that a distinct wire wheel boom is under way and rapidly gaining momentum.

It is estimated that at the end of 1916 there were in the United States not more than 10,000 cars equipped with wire wheels. The 1916 season has probably added 50,000 or even 60,000 cars to this class, a sheer gain of 500 per cent. With that spectacular increase in mind it is not difficult to credit well-informed automobile men who predict that 1917 will see 200,000 new cars put on wire wheels.

Aside from the popularity of these cars on account of their handsome appearance, they have received an impetus from the scarcity of hickory of the best quality and from the patent litigation which has vexed the demountable rim makers.

Women Motorwise.

The influence of women in the sale of automobiles has long been recognized by manufacturers as a leading factor and consequently much study has been devoted to pleasing them.

But women change, just like men and the weather, and what was sufficient to satisfy mildly a few years ago now falls short. Looks and comfort are still necessary to get her O.K. but a large percentage have become thoroughly motorwise. To be sure, fine lines, deep cushions, wide doors and easy spring action are essential but you've got to convince her of power, stability and all-around mechanical excellence just as you have got to convince the man.

There is no use in worrying, but what difference does that make?

POWER!

More than enough--

You will never have to use all the power your Gray-Dort can give you. We have not found a hill steep enough or sand deep enough to hold her. Are you in a hurry—she has sped far beyond the limits of the law or ordinary daring. Do you wish to travel rough, poor roads—they will never trouble the even song of her motor. For city driving she throttles down to a surprisingly low speed on high. She takes hills at any speed you want on any gear.

And for all this power and speed her motor is light, compact, economical—thrifty of gasoline and wonderfully lacking in repair-bills.

Gray Dort \$945

Comfort and Beauty

Note the lines of the Gray-Dort—a true yacht-line body, embodying the ideas of the finest motor-car builders. Her appearance will be a source of pride to you. The Grays have been building Canada's finest buggies for 60 years. All this experience has been expended on Gray-Dort bodies.

And for riding comfort—and convenience of driving! She has 50 inch full cantilever rear springs—deep upholstery—lots of leg room—wide seats—quiet motor—every comfort for passengers.

And when you sit at the wheel you have the reliable Westinghouse starting and lighting, easy gear shift, speedometer, accelerator, one-man top—everything to make driving a pleasure.

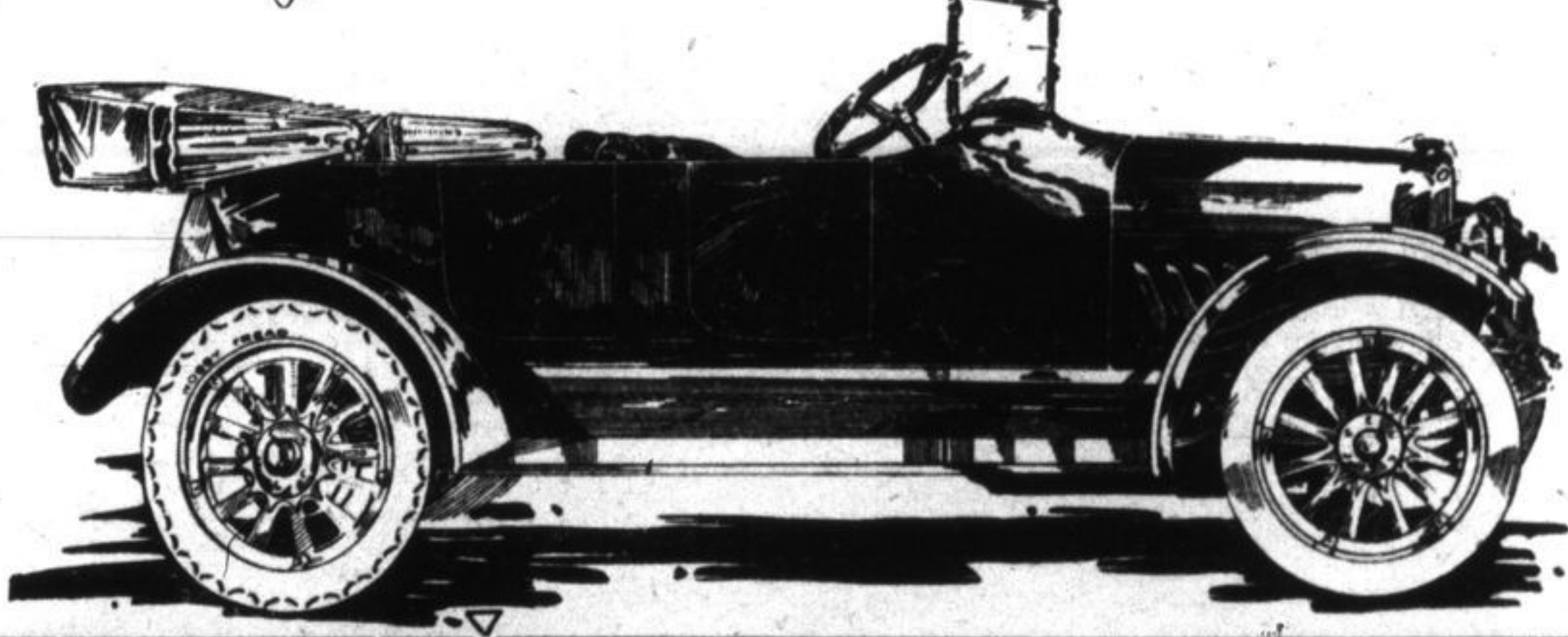
MOTOR—Gray-Dort, 4 cylinder, cast en bloc, I-head type, bore 3 3/4 in., stroke 5 in., speed 2000 r.p.m., horsepower 28. Cast iron removable heads. Timing gears—cast from helical. Carter carburetor. Thermo-siphon cooling. 3 gallon tube and fan radiator. 1 quart oil pump and splash lubrication. Westinghouse two-unit starting and lighting system. Connecticut battery ignition. 12 inch cone clutch with 6 compensating springs. Three speed and reverse selective transmission with double row New Departure bearings. Universal joint. Gasoline tank under cowl. I beam heavy duty front axle. 3 floating rear axle, with forked tube torsion and Hyatt High Duty bearings. 10 inch internal expanding and external contracting brakes. Pressed steel frame. Springs, front, 37 in. elliptic, rear, 50 in. full cantilever. Left-hand drive. 16 in. irreversible worm and nut type steering wheel. Centre gear shift lever. Emergency brake, right pedal. Service brake, clutch pedal. Accelerator, spark and throttle control on steering wheel. Artillery type wood wheels. Detroit demountable rims, 30 x 2 3/4 Dominion tires. Nobby rear seat. Westinghouse electric lighting. Linoleum covered running board. Lock ignition switch. Dashlight, ammeter, roborall, footrall, clear-vision windshield, one-man top, tools, equipment complete.

- 5-passenger touring model ... 8045
- 3-passenger roadster model ... 8045
- 5-passenger sedan model ... \$1160

Gray-Dort Motors, Ltd.
Chatham, Ont.

American Factory at Flint, Mich.
"The Quality Goes Clear Through."

W. P. Peters, Kingston



Where You Cannot Prophecy — PREPARE!

NOT even the best-informed man in government or business circles dares to attempt a prophecy of conditions after the war. We hope for the best—meantime wise men are preparing now for anything.

How?

By regulating their expenditures according to their actual needs rather than by their prosperity—by husbanding the surplus—and by investing to the limit in Canadian War Loans that help so much to maintain present prosperity.

Money saved and loaned to Canada by Canadians is a two-fold safeguard for the future. The lenders will benefit directly from the excellent interest return and absolute security—and indirectly because the interest thus kept in Canada will help to keep business good after the war.

Canadian War Savings Certificates are issued in denominations of \$25, \$50 and \$100, repayable in three years. At the purchase prices of \$21.50, \$43 and \$86 respectively, they yield over 5% interest. Buy them at any Bank or Money Order Post Office.



The National Service Board of Canada.
OTTAWA.

ALGONQUIN PARK.

The Real Highway to Health and Happiness.

No better place could be devised for a real holiday for red blooded men and women than Algonquin Park, situated about 200 miles north of the City of Toronto. It is an unspoiled territory of nearly two million acres, starred with beautiful lakes and intersected by winding streams. No reserve in Canada can approach it in the wealth of attractions it offers to the lover of out-of-doors.

Away up in the Highlands of Ontario, two thousand feet above the level of the sea, the park is a wonderful spot in which to renew the energies of a tired body or refresh a wearied spirit. Its tonic air filters through hundreds of square miles of pine, balsam and spruce; the days are unusually long, with bright sunshine, while the cool evenings are a time of enchantment.

The park is a paradise for the fisherman and canoeist; the excellence of its sports draws anglers from every part of the Dominion and from every state in the Union, while the canoeist can travel for hundreds of miles in his light craft, and he is a veritable kingdom of his own. The accommodation in the park is such that the most varied tastes can be pleased. There are hotels for those who want to be in the wilderness—yet, enjoy all the comforts that good service and social companionship can bring; there are groups of log camps, comfortably furnished and ideal for family parties, with central lodges containing recreation and dining rooms where you may dine and find everything ready for you on your return from the tramp; or if you have planned to camp under your own canvas, you may step into a canoe at one of the little railway stations and after a short paddle find a site unmarked by the hand of man, yet within easy reach of the park outfitting stores.

Many families now go into the park expressly for the camping, making their headquarters at the hotels long enough to get supplies and camping outfit ready for the trip. Then in canoes, and with guides or without them, they launch out into the deep woods, camping where fancy prompts.

A handsome illustrated publication telling you all about the Grand Trunk Railway, and a copy can be had free on application to J. Quinlan, district passenger agent, Grand Trunk Railway, Montreal, Que.

Women have such a good time talking because they have so little to say that they do not care how they say it.

Lift Corns Off With Fingers

Doesn't hurt a bit! Corns and calluses loosen and fall off! Magic!

Few drops of Freezone take all pain and soreness from corns instantly



No humbug! Any corn, whether hard, soft or between the toes, will loosen right up and lift out, without a particle of pain or soreness.

Wonderful discovery by Cincinnati man

This remarkable drug is called Freezone and is a compound of ether discovered by a Cincinnati man.

Ask at any drug store for a small bottle of Freezone, which will cost but a trifle, but is sufficient to rid one's feet of every corn or callus.

Put a few drops directly upon any tender, aching corn or callus. Instantly the soreness disappears and shortly the corn or callus will loosen and can be lifted right off with the fingers.

Freezone doesn't eat out the corns or calluses but shrivels or rather loosens them without even irritating the surrounding skin.

Just think! No pain at all; no soreness or smarting when applying it or afterwards. Try a little and see for yourself. It is surprising.

Few drops stop corn-pain

Take soreness from any corn or callus instantly

Women should keep Freezone on their dressers and never let a corn ache twice. If a corn starts hurting just apply a drop. The pain stops instantly, corn goes!

They bottles of Freezone cost but a few cents at any drug store.

Auto Taxi
Touring Car Service
Phone 566
Office: Clarence St., near King.
Barrieffield Camp and All City Calls Promptly Attended To.

Garage!
Robinson & Wiltshire
VULCANIZING
All kinds of cars repaired promptly. Cars washed. Gasoline and oils for sale. Cars for hire.
With J. M. Martin, Maxwell Service Station.
110 Clergy Street
Phone 1192.

CITY TAXI STAND
285 King Street.
Opposite Custom House
Phone 749
Boat, Train and All City Calls Promptly Attended to. All modern five and seven passenger cars used.