

THE AUTOMOBILE

TIME FOR SPRING OVERHAULING.

Now is the time for all good automobile owners to come to the aid of their cars. Most automobile owners fall into one of two classes—those who have used their machines right through the winter and those whose cars have been hibernating in a garage during the cold winter months. In either case, and especially where the cars have not been used, this is the time for a general going over of the various parts. While the housewife is cleaning house and the robin is announcing the advent of spring, the auto owner should be getting his car in shape for the coming season's use.

There are two ways to do this. One is to undertake the job personally. Another is to take it to a service station. Some may be able to combine these two methods by doing part of the work personally and leaving some of the more technical phases of it to the expert skill of the auto mechanic. Each owner will have to decide for himself how it shall be done. The important thing is to be sure the needed work is done.

Probably many cars needed attention before they were put away, but the owners kept running them with the idea that they would soon be forgotten. The garage is usually cold and consequently is not a very inviting environment compared with a good book and a cozy fireplace.

CAR NEEDS ATTENTION.

A car which has been run only one season needs certain attention. It is well to have the carbon removed from the cylinders and the valves inspected and ground if necessary. The spark plugs should be cleaned and the points evenly adjusted to get an even running engine. The vacuum tank should be drained. The strainer located at the top where the gasoline feeds into it should be taken out and cleaned. The float should be tested. Fill with gasoline to see if the float rises and closes the valve.

The strainer located at the carburetor should be taken out and cleaned. At the same time the carburetor float chamber should be drained to remove any water or sediment that may have collected. The same should be done to the main fuel tank.

While the gasoline fuel line is disconnected from the vacuum tank it should be blown out with compressed air. This may be done with a tire pump. In this case the fuel line is left connected to the main fuel tank. It is

dirty is thus blown into the tank and therefore should be done before the fuel tank is drained.

Drain the oil reservoir of the engine and put in a new supply of oil. Where there is a screen at the pump this should be taken out and cleaned. Take the battery to a service station, have it tested and recharged if necessary. The interruptor points should be cleaned and adjusted. Inspect the commutators of the starting motor and generator. Clean if necessary. If it is not smooth remove and smooth in the lathe. Check up the tension on the springs or brushes to be sure the brushes contact with the commutators. Lubricate the bearings of the starting motor. Take off the ignition distributor head and wipe it out.

CHECK UP THE BRAKES.

Check up the brakes to determine if they need relining. If not, make sure they are properly adjusted. Drain the transmission gear case and the differential gear case. Wash thoroughly with kerosene and put in a fresh lubricant. Fill the steering gear housing with lubricant.

The universal joints in particular should receive attention, as they are apt to be neglected during a season's running. Lubricants should be supplied to all parts taken care of by grease cups; the grease cups should be refilled; also those parts that are intended to be lubricated by oil from a squirt can.

All wheels should be removed, bearings inspected for excessive wear or breakage, cleaned thoroughly, repacked with fresh grease and carefully adjusted. At this time make sure the rear wheels are perfectly tight on their axles. Where wheels are keyed on there should be no play between the wheel and the axle. Where wheels are fastened by flanges be sure the bolts are tight.

The body springs should be lubricated with graphite either by removing and disassembling them or by jacking up the car and using tools designed to spread the leaves. Go over every nut and bolt and be sure all are tight and supplied with locking devices, such as cotter pins and lock washers.

Check up on painting requirements. If paint is in good condition give the surface a coat of varnish. Look over the upholstery, the top and side curbs forward to the best season yet experienced with your car.



A POLISH VIEW OF THE GOLD KING

Uncle Sam—“Why don't you quit worrying me about taking any more of Europe on my hands? Don't you see I am loaded down as it is?”

—From Murcha, Warsaw

How Do You Read?

Few people see the whole of each letter as they read. Most of us glance only at the tops of them. You can test this for yourself by placing a straight-edged piece of paper along a line of print. Cover the bottom halves of the letters and you have no difficulty in reading it; but if the upper parts are hidden, reading becomes a difficult business.

Reading speeds vary enormously. The average man can get through about 20,000 words in an hour. Fast readers will easily double this speed and still take in what they are perusing.

The greatest speed ever achieved was that of a famous man of learning who could read and remember more than fifty words a second. He is said to have read six novels a day.

If each line of print was 3 1/2 inches in length, and there were forty of them to the page, his eyes must have travelled rather more than a mile and a quarter from side to side in half an hour.



Short and Snappy.
“Why is he always so snappy?”
“Because he is always so short.”

Horseshoes of Paper.

It has been proposed to make a paper horseshoe that shall for general purposes be the equal of the steel article in the following way. Parchment paper is cut in horseshoe form and built up to a suitable thickness by the use of a mixture of turpentine, Spanish white shellac and linseed oil treated with litharge and the whole is placed under an hydraulic press. This produces very light and uniform pieces and it is an easy matter to stamp out the nail holes and grooves. Instead of nailing to the horse's hoof they can be applied with an adhesive composition whose principal part is a solution of rubber in bisulphide of carbon. Paper waste could also be moulded into the shape of a horseshoe by use of the press, but the result is not so good as with the above.

Why Are Americans Often Called “Yankees?”

When the first English people went to America, the Indians, unable to pronounce the word English, called the settlers Yankies or Yankes, as the nearest they could get.

In course of time this Yankee or Yankie became a slang term for “excellent” or the “very best.” The British troops in the war of independence picked up this word, and used it in derision of their opponents, calling them Yankies, and so we first have the word in its modern sense.

Forcing boys and girls to work does not necessarily make them industrious.

Mummies in the Making.

The world has awakened suddenly to an interest in all matters pertaining to the ancient Egyptians, and particularly to mummies.

The elaborate precautions taken to preserve the dead in those far-off days arose from humble beginnings dating back thousands of years, when the dead were dried in the sun and placed in a vault containing a few flint instruments and a pot or two of food for sustenance of the departed's soul on its journey.

It was found that this method did not prevent the body from decaying, and so the fashion for embalming started, the object being to preserve the features of the dead.

A king's tomb was prepared while he was still in his prime, and when he died he was embalmed with great religious ceremony.

When a person of importance died the embalming process was soon started. An incision was made with a stone knife—for some reason metal knives were never used—and the viscera was drawn out. The brains, too, were removed. The organs were preserved in jars, which were enclosed in a box and put into the tomb with the mummy.

Strong embalming fluids were poured into the body, which was then steeped in natron and left for seventy days. After this it was washed and bound with strips of the finest flax, strong gum being used to secure the wrappings.

The mummy was first placed in a wooden coffin. The latter was deposited in another coffin, which in turn was enclosed in a third shaped in the form of a human being.

The idea was that the soul was free to wander through the bodies of the dead for a period of about ten thousand years, after which it was supposed to return and look for its earthly body. Transmigration was imagined to have taken place if the body decayed or was disturbed.

No Time.

Little Mary came into the house dragging and weeping.

“My goodness,” cried her mother, “what a sight you are! How did it happen?”

“I'm sorry, mamma, but I fell into a puddle.”

“What! with your new dress on?”

“Yes, I didn't have time to change it.”



More Profit in It.
The Hostess: “You play, don't you, Mr. West? Would you care to make a tour at bridge?”

Woody West: “No, I thank you. Your husband has just invited me to his den where I think I can make a fifty at poker.”

Vimy Ridge, April 9, 1917

This is the living and the dead who fought for us.
Who fought and lived, and died for us on Vimy Ridge;
This is our living sons, our dead, who fought for us
Our greatest; held for us, with sword, the nations' bridge!

This is the men who sealed their faith in blood for us,
Who mocked for us at death; took up the challenge grim;
Who fought like warrior kings of old and slung for us
The gates of freedom wide, valiant of heart and limb.

The nations, rising, bring a homage rare to them
Who faced the thundering guns, the rush, the dire advance;
Who stormed the fearsome height, and breached the line for them,
And, dying, brought to death a sweet, a new romance.

Our living heroes! Rapturous praise we bring to them!
Theirs was the hour, at last, to conquer and to live;
What shall we render, humbly, in our love to them,
What wreathed incense shall the nation proudly give?

Nought we can bring, in pride, shall pay our debt to them
Who fought, and lived, or bravely fell on Vimy Height;
Yield we our all, our lives, in tribute free to them,
Who drove the darkness back for us—who brought the light.

Anna Durie.

GROWING CORN IN WESTERN CANADA

IMPORTANT PLACE IN OUR AGRICULTURE.

Essex County Corn Show Biggest Event of Its Kind on American Continent.

Not such a very long time has elapsed since it was generally pronounced that Canada would never become a successful wheat producer, and the Dominion which every year outdistanced any other produced elsewhere and, on account of its peculiar desirability, came into universal demand for milling purposes. She has grown this in ever-increasing volume until in 1922 a zenith was reached, with a production of 399,000,000 bushels. The same was said, and generally accepted, in respect to corn, and the corn belt was generally conceded to terminate long before the international boundary was reached. Yet corn is grown in Canada every year now in great quantities, 13,798,000 bushels for husking being produced in 1922, 14,904,000 bushels in 1921, the average for the past five years being 13,629,440 bushels per annum.

Whilst corn has been raised in the Eastern Canadian provinces for years it is only recently that this has come to be an important crop to the Western farmer, and each year the corn acreage of the Prairie Provinces shows a substantial increase. The high quality of the product of the Western provinces was attested when a grower from Kelowna, Manitoba, exhibited at the Texas State Fair and carried off the championship honors, winning out against the premier exhibits of the first corn-growing states of the Union.

The Corn Belt Moving North.

The important place corn has come to occupy in Canadian agriculture was evidenced at the beginning of the present year when a corn show held in Essex County, Ontario, turned out to be what is believed to be the biggest event of its kind on the American continent in point of attendance and exhibits. The attendance for the four days the exhibition was open was twelve thousand and there were more than three hundred exhibitors and there were more than six hundred prizes, amounting to nearly \$2,000 in cash. The quality of the corn exhibited was excellent and the more than one thousand bushels displayed exceeded in quantity the International Show at Chicago.

The honor of staging the continent's biggest corn show is a novel distinction for Canada, and a noteworthy achievement which the farmers of the province would hardly have been conceivably able to attain. American visitors were particularly impressed to discover that the limits of the corn belt had been extended so far north. The event marks a new step in Canadian agricultural history and indicates still another possibility of Canadian agriculture.

A Western Show.

Recently, at Prince Albert, in Saskatchewan, was held the first corn show in the history of the province, which again disproved the old-time idea that the northern limits of the corn belt ceased at the international boundary. The judge, Professor Chappin, of Saskatchewan Agricultural College, who comes from the heart of the corn belt in the United States and has done much to popularize corn-growing among the farmers of Western Canada, said, “I once thought that North Dakota was the northern limit of the corn belt. This show has proved that excellent corn can be grown several hundred miles further north than was believed possible. Two years ago, The Yellow Dent that captured the sweepstakes is the equal of any corn of its kind I have seen.”

“The Good Ship John.”

Which name figures most often in the shipping lists? The name John wins hands down, there being no fewer than 115 ships afloat either called John or the names of which begin with John.

But you may have to search a long, long while before you come across a Johnny. In fact, there is only one. Shipping companies frequently favor a particular style of name, or else a particular ending. The White Star, for instance, always chose names ending with “ic”—the Celtic, the Majestic, etc. The Cunard Company is equally faithful to the termination “ia,” and gave us the Manzanilla, the Lusitania, Germania, and so on.

Among the quaintest names to be found are the following: “Try Again, Jolly Dog, Happy-go-Lucky, and—odd of all—the Go and Ask Her.”

Why Not, is another. Why? Well, why not?

Source of Edible Oil.

A plant that belongs to the legume family and that is now cultivated in upper Egypt and can be grown with profit in certain parts of the Sudan is a new source of edible oil. The seed yield is under pressure from 37 to 38 per cent. of oil and certain specimens of fresh seed from the Sudan, which contained less than 4 per cent. of water, yielded more than 44 per cent. The oil is colorless, of a light yellow color and without disagreeable taste. The seed is so small that it cannot be handled with ordinary equipment, but the oil product is so valuable that new machinery will no doubt be built to do the work.

Faith in the country boy and girl is the first essential in their successful leadership.

Ignorance is an enemy which the farmer should hunt with increasing persistence.

A strong social spirit can be maintained in a community only when each member of that community contributes his part to its social activities.

Races Around the World

A race round the world has always been a popular theme with novelists. Jules Verne, for instance, wrote, “Round the World in Eighty Days,” in which he described the record-breaking journey of one Phileas Fogg.

Wonderful performances have been accomplished by real people. The actual round-the-world record is held by an American, J. H. Mears, who, in 1913, circled the earth in thirty-five days, twenty-one hours, thirty-five minutes, and four-fifths of a second. Before this the record was held by Andre Jaeger-Schmidt, who performed the trip in thirty-nine days and rather less than twenty minutes.

Mears undertook the feat with the support of an important American newspaper, and the time allowed was thirty-five days, twenty-three hours, thirty minutes. Mr. Mears left New York for Paris on July 2nd. From there he travelled by the Trans-Siberian Railway.

At one point he was held up for eighteen hours by a flood. He managed to pick up the record of the last hour by bribing the engine-driver, but the Russian officials threatened to throw him into prison if he continued this policy.

In all he covered 21,066 miles, averaged 587 miles a day. He arrived back in New York on August 6th, well inside his time limit. The total cost of the trip was only \$840.

Schoolboy's Wonderful Trip.

Two of the most notable record-breaking trips were those of Charles Fitzmorris, a schoolboy, who won a race organized by an American newspaper by travelling round the world in sixty days and thirteen and a half hours, and Nellie Bly, a woman journalist, who completed the journey in just over seventy-two days in 1889.

The earliest known trip round the world was that of the Magellan expedition in 1519-1522. Three hardy adventurers took three years over their voyage.

It might be thought that, as ten years have elapsed since the present record was set up, a modern traveller might lower it. A journey round the world to-day would take considerably longer than thirty-five days.

The last three records were set up with the assistance of the Trans-Siberian Railway. This is not working now owing to the state of affairs in Russia, and a world traveller would have to use the route which the early record-breakers followed—that is, by the Mediterranean, Suez Canal, Indian Ocean, and China. Fifty-four days is the least time it would take to get round the world to-day.

Three Months by Aeroplane.

A traveller starting from New York could get to London in six days by means of one of the fastest liners; then from London to Paris and from Paris to Marseilles he could use the regular air services, which take about a day. From Marseilles a P. and O. mail steamer could take him to Hong Kong in twenty-nine days. From Hong Kong to Yokohama would take five days, and the journey from there to Vancouver would occupy another nine. From Vancouver to New York by train would occupy four days.

By aeroplane the world could be circled in less than fifteen days—that is, if there were a machine capable of making the journey without a stop. But this is not possible, and when stops and so on are taken into consideration the time works out at nearly three months. At least this was the time allowed by Sir Ross Smith, who was preparing for a round-the-world flight when he met his death.

Industrial Medicine

By J. A. Mireault, M.D., Montreal

Industrial medicine deals with the relations existing between occupation and health. It forces the physician to assume a more intelligent and important role; he is no longer only the mechanic making repairs to the defective human being, but also, the engineer who superintends the welfare and the adaptation of that most marvelous machine, the human body, to its greatest power of production, who foresees the internal and external causes which might interfere with its working capacity and its duration.

“A locomotive may arrive after a hundred mile run in perfect condition, but it will require a period of rest and supervision in the round house. The engineer has appreciated the value of his engine as well as the difficulties to be overcome in bringing the load to destination. He is trained to exercise the best possible judgment in the selection of fuel and oil, in the appropriate distribution according to the atmospheric conditions, the estimation of grades, the length of the road and the weight to be carried.

The assessment of physical fitness is certainly as important as the valuation of the inorganic qualities of the metallic motor. “The efficiency of the human organism and the factors which influence it is one of the most important problems of the day. Physiological causes are the basis of any accurate gauge of efficiency and must be reckoned with as a factor in industrialism.”

Time Loss Through Sickness, Accidents, etc.

The physiologic inefficiency of the English people is best attested by the report on preventive medicine by Sir George Newman, which shows the minimum average annual loss of time through preventable sickness and accidents amounts to 14,296,724 weeks, or a period of upwards of 27,000 years, and this figure did not include absence from work due to maternity benefit, sanatorium treatment, or absence for less than four days per patient. If undue fatigue causes loss of five cents a day for each worker in the United States it amounts to an annual expenditure of \$500,000,000.

With a view to saving some of this millions sacrificed is less of time, a campaign of education has been launched to bring to the attention of employers the value of medical supervision in industry. It is estimated that in England the loss of work arising from ill-health, sickness, undue fatigue and preventable accidents entails a waste of £2,000,000 a week. Dr. Collis estimates that a proper medical organization would decrease this amount by 50 per cent.

Service to the Community.

The word education means the development of the physical, intellectual and moral faculties of the human being. In our modern institutions for the culture of the young great care is taken to give a good human training for the soul and the brain, but the same sound basis does not exist for the adaptation of the body to the conditions of existence. In the hands of the laboring classes no attempt is made to guide the children towards the career or occupation for which they are best fitted by their physical qualities. No thought is taken to determine the proper correlation between the intellectual and physical aptitudes. Too frequently the need of money to eke out the family budget, the casual advice of a neighbor, or the only reasons which bring a boy into a definite field of action.

Industrial medicine can guide a young man in his choice of a career, but its greatest service to the community is that it helps the industrial worker to protect his capital, i.e., his health and his capacity to do a full day's work.

Desire health, learn how to get it, and then keep on doing the things which will keep you from getting sick. This is the way to begin building a healthy career.

Canada's Meat Packing Industry

Judged by the value of annual production the meat packing and meat processing industries of Canada are the Dominion's second most important manufacturing activity. According to Government statistics covering a survey of the industry in the year 1921, there were then 84 slaughtering and meat packing establishments in operation in Canada which had a total production value of \$153,138,289. Of the 84 plants, 6 were located in Prince Edward Island, 2 in Nova Scotia, 8 in New Brunswick, 17 in Quebec, 29 in Ontario, 7 in Manitoba, 2 in Saskatchewan, 7 in Alberta and 6 in British Columbia.

The total amount invested in all Canadian plants was \$58,459,555, and 9,928 employees were engaged at wages and salaries totalling \$12,547,778. The cost of animals slaughtered and materials used totalled \$113,389,835 and the total expenditure amounted to \$138,129,570. The capital invested in the 18 plants of the Maritime Provinces was \$568,063 and had a production value of \$1,928,144. Quebec plants were capitalized at \$7,595,428 and produced goods to the extent of \$20,255,231. Ontario capitalization in the industry was \$34,421,821 with a production value of \$94,732,180. The Prairie Provinces plants were capitalized at \$13,600,445 and had an annual production of \$28,360,382.

Among the chief products of the industry in 1921 were meats sold fresh to the extent of \$62,674,353; cured meats to the value of \$53,636,527; lard and lard compound, \$11,751,806; cooked meats, \$6,006,393; sausage, fresh and cured, \$4,274,777; canned meats, \$1,461,856; hides, \$2,827,309; oleo and other oils, \$1,075,592. Other products of less value were tallow, oleomargarine, stearine, animal tallow, bones, raw and ground, complete fertilizers, skins, glue wool and hair.

In the Canadian slaughtering and meat packing industry, imports amount annually to about half the value of exports. In the year under survey the former amounted to \$18,821,126 and the latter to \$39,157,370. The principal items of import were fresh, chilled and frozen pork to the value of \$5,342,518; cattle skins \$2,073,443; bacon and hams \$1,547,419; and lard \$1,234,979. The export of bacon and hams was easily the principal item of the outgoing trade, accounting for \$25,613,052. Beef, fresh, chilled and frozen, accounted for an export value of \$4,057,958. Cattle hides exported had a value of \$3,270,079. Mutton and lamb exported had a value at \$1,182,848.



Driven to Drink.
The best of all companions is a glass of gin.

Magnetic Rotation.

Iono-magnetic rotation is the term given to a certain phenomenon. If a spark from a condenser of considerable capacity is sent horizontally through a gas and two small vertical planes of mica in the form of a cross are suspended in the middle of the discharge by a fine fibre attached to the centre of the cross the spark produces no rotation of the cross. If, however, a vertical magnetic field is established in the gas the cross rotates through a considerable angle if the gas is air and over a small angle in other gases. This rotation is ascribed by some authorities to the bending of the paths of the ions or electrons and to the additional protection which the vane affords against other gas impacts from one side rather than from the other in these circumstances. The observed rotations indicate that the effects of the positive ions are in general greater than those of the negative.

Highest Dwelling in U.S. on Mount Rainier.

For the purpose of providing shelter for mountaineers who may be overtaken by storms, the United States government recently constructed a novel stone dwelling at an altitude of 10,000 feet, on the south side of Mt. Rainier, Rainier National Park. The location of the shelter is on a sand and pumice-stone ridge at the base of Gibraltar, a famous landmark in the park. The spot is known as Camp Muir, named after a famous explorer who ascended the mountain in 1888, and chose this place for a camp, because it is practically the only spot on the mountain sheltered from heavy winds. The shelter is built of stones gathered on the site, and the style of architecture resembles that of Indian dwellings of the Southwest. Constructed by the National Park Service at a cost of \$2,500, the building houses comfortably 25 persons.

Simple Perfume Making.

At first thought it might seem an impossible feat to collect the perfume of flowers after it has escaped into the air, yet it seems simple enough by this method.

Fresh, high scented blossoms are placed in an uncovered bowl filled with water and set near the “collector,” which consists of a common glass funnel with the small end closed. The funnel is filled with a mixture of crushed ice and salt and suspended in an upright position. Moisture from the air of the room forms on it and unites with the emanations from the flowers. As the moisture collects it runs off the tip of the funnel into a receptacle. If this liquid is mixed with an equal amount of pure alcohol the perfume of the flowers is preserved indefinitely.

I Shall Forget.

Oh, I shall forget you
In the vivid spring
When again the jonquils bloom
And returning thrushes sing:
I shall not remember
Ecstasy or hate
When I watch the wind stir
In the birch-trees delicate.
Oh, I shall forget you—
Exquisite and dear—
When the rains shall wash the dead,
Clinging old things from the year!
—Zoe Akins.