

THE AUTOMOBILE

TROUBLE IN THE STARTER.

To every motorist sooner or later there comes the unpleasant experience of stepping on the starter button and instead of the merry whirr of turning gears being greeted by stony silence. It is scarcely remarkable that this occurs, indeed the wonder is that the starter holds up as well as it does under the abuse that it receives at the hands of the average car owner. The starter is not a delicate unit, but it does perform a most strenuous service and the various components must receive a limited but regular amount of attention if they are to continue performing regularly.

The starter system embodies the following units: A storage battery, the cables that connect the battery with the rest of the system, a switch for bringing the starter into action and as a general thing the frame of the car, which is used to return the current to the battery after it has turned over the engine.

In cases of starter failure the first thing to suspect is the battery which supplies the current that operates the starter. Once a week during the winter running season the battery must be filled to level with distilled water. The acid solution should be tested at these times with a hydrometer, showing the specific gravity of the solution. If this has fallen below 1200 the battery is below normal charge and must be recharged without delay. If the battery is permitted to become dry or to fall so low in charge that it cannot turn over the starter the cause of the failure is at once revealed.

The next place to suspect is the cables that connect the battery with the starter by way of the switch. While trouble here is not so frequent, nevertheless insulation may wear through, setting up shorts that drain the battery and prevent the starter from doing its work. Occasionally also the switch goes out of business, but if the battery is proved to have adequate current and the cables are all right examine the switch.

Sometimes the starting motor itself goes out of business through mechanical failure or lack of lubrication. The starting motor is generally lubricated from the engine on one end and by a small oil hole on the other. The engine lubrication is automatic, but the oil hole requires a drop of oil every 500 miles of running. In some cases both ends of the starting motor depend on the hands of the lubricant.

The brushes and commutator of the starting motor do not need oil, in fact if oil gets on these parts it is likely to stop the motor from operating. In this case the oil may be cleaned off by holding a small piece of fine sand paper against the commutator while the motor is running.

From all this the car owner will get the obvious lesson are best cured by reasonable care beforehand. Keep the battery up to its work, watch the cables for broken insulation. Give the starting motor the drop of oil it needs and the starter will continue to whirr obediently to your foot pressure while the crank turns in idleness under the back seat.

CARE IN PARKING.

There is one point above all others that should be eliminated. It is not a "road hog," although he will might be, as he may not be a reckless driver, but he is a pest just the same and costs many motorists many dollars a year.

He is the man who backs into your car and leaves a nice dent in an otherwise fine fender.

How many times you have seen men backing into a parking space quickly, jam the car into the one behind them and then when the same man drives out he is just as liable to bang into the fender of the car in front of him—all due to carelessness. There should be no need of this fender bending business.

It is easy to back into the proper parking space without nicking the car behind or in front, either. Draw up ahead of the space in which you are about to park, parallel to the car ahead. Then turn the wheels as far as they will go and back in carefully.

Science Allows Us Only Four Tastes.

A good deal of our "tasting" is done by smell! The organs of smell convey to the brain their opinion of our food before the "tastes" operate at all. We actually taste, however, with the tongue. This has on it a number of tiny "papillae," and one of their purposes is to taste for us. They contain cells which are connected with nerves through which a message can be passed to the brain.

Scientifically, there are only four real tastes—sweet, bitter, acid, and salt; and the call of these jobs it is to report the presence or absence of these tastes. The "sweet" cells are mostly towards the tip, the "bitter" cells to the back, and so on.

Each group of cells, on touching food that stimulates it, sends its report to headquarters, really as Nature's warning, and so we say we "taste."

Queen Victoria's Birthplace Again Open to Public

When Canadian tourists visit London this summer they will have an opportunity to go through Kensington Palace, which has been closed since 1913. Queen Victoria was born there and was still residing there when, while she was a mere girl, she was informed one morning that she was Queen of England.

All the rooms which Victoria used will be thrown open to the public. In the nursery the King's gallery and staircase include some of the finest specimens of "Victorian" decorative art.

There is nothing serious the matter with Tommy, Mrs. Garraty, said the doctor, after examining his patient. "I think a little acid and water would do him as much good as anything."

"Aye, doctor, that's cheap medicine," replied the fond mother. "Will I give it to him before or after his meals?"

The Forests of the Empire

At a time when authorities all over the American continent are giving careful consideration to the necessity of developing a more rational forest policy, it is most appropriate and fortunate that Canada should have been selected as the place of meeting for the 1923 Empire Forestry Conference. The first conference of this character was held in London in the summer of 1922, and was attended by foresters from nearly every part of the Empire. Representatives from the United Kingdom, Canada, Australia, New Zealand, India, South Africa, Newfoundland, and the Crown Colonies took part and frankly discussed the forestry problems presented to the individual constituents of the Empire and the Empire as a whole.

From the statistics presented at the conference it is quite clear that, if the forests are adequately protected and properly managed, there is every assurance that the Empire will be able to supply itself with timber for all time. It was evident, however, that to place the Empire on the desirable basis suggested, very much more care must be given, in all parts of the Empire, to the protection and management of the forest resources. Particularly in those quarters where the pioneering stage has not been passed, there is still a dangerous tendency to regard the forest as a "timber mine," rather than as a crop capable of being perpetuated. The reproductive power of the tree is its most important and

most valuable characteristic, and the whole object of forestry is to take full advantage of this reproductive power, and through it to provide timber supplies for this and succeeding generations without diminution in woods capital.

Canada, so far as the Empire is concerned, is recognized as the one large source of coniferous timber, that is the soft woods, therefore, in viewing this subject, Canada has to take into consideration the home demand, the demand from the different parts of the Empire, and the general export trade, and in doing this the information furnished by the deliberations of this gathering will be of great value.

The Empire Forestry Conference, which is to be held next summer will go carefully into the question of Empire timber supplies, the forest policies of all constituents will be carefully reviewed and definite conclusions reached as to where improvements may be effected. The business meetings of the Conference will be held in Ottawa, but a tour is being arranged to give the delegates an opportunity of studying forest conditions and observing forest industries in the various provinces of the Dominion. A unique opportunity will thus be afforded to Canadian lumber and pulp manufacturers to demonstrate their commodities and processes of manufacture, and assist in removing some of the prejudices which have so far operated to restrict, in a measure, our Empire trade.

To feel yourself expanding under the stimulus of your effort to make good; to feel your life unfolding; to be conscious of the growing development of your inner powers; this is infinite satisfaction.

CUT THE DEAD TIMBER

On a large number of farms "dead timber" is a source of heavy loss and at a time when all margins are small margins, it often means the elimination of the profits. We use the term "dead timber" not only in a literal sense, but with reference to any article or animal on the farm whatsoever, that has ceased to be productive. These things are either giving a return greater than their cost in the way of growth, increase or service, or they have passed their period of progress, or efficient service and throw the balance on the wrong side of the ledger.

Speaking literally, when the trees in the woods begin to show dead tops they are ripe and ready to harvest, and like the wheat, the longer they stand after reaching that stage, the greater the loss. Likewise the plow that refuses longer to function in a creditable manner, should be either put in shape or replaced with a new one. It is poor economy to expend one's time and horsepower and time to do only half a job. The extra horse that stands in the barn most of the time can quickly "eat his head off," and the cow or the sow that does not give a satisfactory increase, is "dead timber," and should be eliminated. Four or five thousand pounds of milk a year, or four or five pigs per litter, is not enough. It means you are working for the animal instead of the animal working for you.

We believe in more live stock, but we believe more strongly in better live stock, for the average Ontario farmer. Altogether too large a proportion of our farm animals are not efficient producers. They are loafers or boarders, or just plain robbers. They are "dead timber" and should be disposed of, to the best possible advantage, of course, but disposed of somehow. Times are too close these days to permit the small profits possible to be consumed by "dead timber."

The Sort of Determination That Wins Out.

While talking to an ambitious young man about his future, he said to me: "I do not propose to be a digger in the world. I am determined to stand for something, to make my life count. I am going to try with all my might to make good in the largest possible way. I am resolved not to be an idler. I am going to push things. I am going to work for results. I am not looking for an easy job. I am not afraid of hard work."

"I do not propose to be thin-skinned, to quarrel at rebuffs. I will neither be cajoled or ridiculed out of my resolve to get to the front in my vocation. I am determined to be king in my line. I don't propose to accept my second-best without a terrific protest. I am not going to complain, to pity, or coddle myself. If things go hard, experiences are painful, I propose to show my grit, to stick and hang and never acknowledge defeat, nor am I going to accept misfortune. I am going to regard myself as lucky, fortunate. I know that I was made, planned, intended for the best, for prosperity, for comfort, even for luxury. My whole constitution is fitted for the best. I am going to look for the things that are my birthright for plenty, happiness. I know the way to get these things is to expect them."

It is surprising that a man with such a determination should have advanced by means of his struggles to the front of his business and be recommended today as a leader in his community—O. S. Marten.

Cheaply Earned Fame.

A person who speaks English is reasonably sure of being understood in any good hotel on the Continent. Sometimes, however, the rule fails, and then one's native ingenuity and resourcefulness are put to the test. George Bernard Shaw is a man of varied acquaintances, but it is said, a knowledge of Italian is not among them.

Nevertheless, a report got currency that he could speak Italian fluently, and a representative of the Giornale d'Italia came to interview him in consequence. This is the explanation which the great man is said to have given for the genesis of the report.

"Once I was in Milan with a party of English folk. We were dining at a restaurant and our waiter knew no language other than his own. When the moment came to pay we were unable to make him understand that we wanted not one bill, but twenty-four separate ones."

King Tutankhamen Suffered from Insomnia

A piece of papyrus just translated by the British Museum shows that King Tutankhamen suffered from insomnia. Responsibility seems to have rested with certain hippopotami which made so much noise as they wallowed in the sacred lakes of Thebes that he found sleep impossible.

The papyrus tells of a quarrel the monarch had with the owner of the beasts over whether the King's slumber should be sacrificed to their physical comfort. How the dispute was settled was not disclosed.

The most helpless thing in the world is capital without brains.

If you have money to invest, consult your banker; it is to his interest to keep you prosperous.

Believe everything that is told you by the press. That is a good way to get fooled.



Pools of Solomon Tapped by Modern Engineering

With a speech of congratulation by Sir Herbert Samuel, the High Commissioner, and the presence of an electric motor, the machinery has been put in motion, bringing the waters of the Pools of Solomon to the Holy City. It is the consummation of years of work, involving large outlay and much engineering skill.

Engineers of the public works department made use of three immense reservoirs a few miles south of Bethlehem, known as Solomon's Pools. Although they bear the name of Israel's great king, they date from the Herodian period. These pools have been out of repair for several hundred years and two of them have now been cleaned and reconstructed. When the third pool is completed their capacity will be 40,000,000 gallons, equal to three months' supply of water for the entire city.

Mining With a Feather.

Placer mining in Mongolia is a primitive process compared even with the American pioneer method of washing out gold in a pan. The Mongol—so Dr. Ferdinand Ossendowski tells us in his book, *Beasts, Men and Gods*—lies flat on the ground, brushes the sand aside with a feather and keeps blowing into the little excavation so formed. From time to time he wets his finger and picks up on it a small bit of grain of gold or a diminutive nugget, drops it into a little bag hanging under his chin. In that way he collects about a quarter of an ounce, of five dollars' worth, of gold a day.

Rubberseed Oil.

A report has been made by the Agricultural Department of the Federated Malay States on the oil from the seeds of rubber trees as a substitute for linseed oil. The oil is said to be of high quality, to require but little refining, and to come from a waste product that is available in great quantity and that is easy to collect.

Experiments with a consignment of thirty tons of seeds sent to England resulted in a yield of 2500 tons for the oil and 400 tons for the residual cake. Linseed oil at that time was selling for \$300 a ton.

War Robbed Europe of 35,000,000 in Population.

The ten European countries which were engaged in the World War have now 11,000,000 less population than they had ten years ago and they have had but for the war. Such are the facts put forward by the Society for the Study of the Consequences of the War, which has its seat in Copenhagen.

Of the European powers—with the exception of Russia, for which no accurate figures are available—France mobilized the largest percentage of her male population, 38 per cent, or 7,000,000. Immediately after her come Germany and Austria-Hungary, with 35 per cent, or 11,000,000, and 29 per cent, or 5,000,000, and last Great Britain, with 26 per cent, or 5,000,000.

The total losses of men of all European warring states—here Russia is included with approximate figures—amounted to 35,400,000. Ten millions of these remained on the battlefield. Five millions are charged off to the high mortality due to famine and epidemics, and the remainder are estimated as lost owing to the decrease of the birth rate.

The total war losses for the different countries range between 4 and 10 per cent of the population; in Germany it is a little above 9 per cent. A veritable catastrophe was sustained by Serbia. There the total losses are 35 per cent.

The war-waging states of Europe had in 1913 a population of 400,000,000. With a normal development this number would have increased to 424,000,000, while the actual population in 1919 was only 389,000,000.

The Orator—"Work, my friends, is the lot of man! Man was sent into this world to earn his living by the sweat of his brow. You didn't find Adam walking about the Garden of Eden with his hands in his pockets!"

TRUE EDUCATION

A teacher who once sent a note to the mother of a small girl, informing her that her offspring was painfully deficient in geography, and requesting that parental admonition should be added to the urging of the instructor, received this reply, repeated by the child:

"Ma says she never knew no geography and she got married, and Kate never knew no geography and she got married, and you know geography and you ain't got married."

The idea that "knowing geography," or, in other words, being educated, sometimes unites people for ordinary living, is not altogether confined to the class whose "geography" has been neglected. When a University graduate fares forth into a busy, jostling world of facts and figures, he is usually upheld by a sense of superiority over the common herd. Surely his degree must be the key that unlocks the treasury of life. But as time creeps on a faint suspicion sometimes assails him, that something of vital importance has been omitted from his—or her—curriculum. The treasury refuses to yield its riches. Uninstructed persons with degrees, but who have the knack of seeing things as they are, carry off the things most desirable from under his very nose.

We once overheard a conversation between two girl students on a street car. Snatches of conversation are illuminating; they constitute one of the most entertaining and inexpensive diversions of life.

First Student: "Did she graduate?"

Second ditto: "Oh, yes, with honors. First Student: 'Why?'"

Second ditto: "Why? She knows everything, and she knows nothing. Her education has all run off to her head, while her heart reminds me of a room that has been cleared for a dance!"

There is only one good reason for living. It is to subtract from the world's misery, and add to the world's joy, and to possess the understanding heart, for which Solomon so fervently prayed, that differentiates between the temporary and permanent in each. Education is the dispelling of illusions, and the driving home of realities. It is learning how to live and how to enjoy through serving. It is the training of the mind in the gentle art of getting what it thinks it wants, by hook or crook. If we were suddenly called upon to divide the world into educated sheep and uneducated goats, we should be hard put to it to effect a classification. Years ago, when extreme youth and extreme simplicity were our outstanding characteristics, we should have taken on the task with assurance. It seemed so simple. The people who were learned in book lore, and the people who were not. The people who spoke and wrote their mother tongue with ease and fluency, and the people who didn't. But as the years crept on we were not so sure.

Webster defines "education," in part, as "furnished with knowledge or principles." Had we written it we would have said "knowledge with principles." For, alas! and alack! so very many people, as they advance in so-called education, seem to retrograde in a sense of right and wrong. They also seem to lose, or fail to acquire, that understanding sympathy with the struggles of mankind to maintain a foothold on the slippery pathway of life that constitutes the right key to the treasury. For without understanding how can they serve? And without service how can they find happiness? The real "jeography" of life is learning to find our way to the place where we are needed most.

Barred the Onion. The ancient Egyptians, it is said, were forbidden to eat the onion, garlic and leeks. According to the priests of Pelusium, the onion was barred because it caused a flow of tears, hunger and thirst; hence was manifestly out of place in fasts and during religious ceremonies.

Thinking of the absolute good, the absolute peace, the absolute perfection of everything that God has made, and contemplating God's world of perfection, tends to bring the mind into tune with the Infinite Mind.

ARCTIC CIRCLE A REGION OF VAST AND VARIED RESOURCES

Vilhjalmur Stefansson, Renowned Explorer, Urges Canadians to Look Towards Development of District Rich in Coal, Iron, Copper and Other Minerals.

The particular task which Vilhjalmur Stefansson, the well-known Canadian explorer of the Arctic regions, has set for himself the abolition of the north pole, or, as he put it in the course of an address at Toronto, recently, his present aim was to let the people of Canada as a whole know that the old story of the "eternally ice-bound North" was nothing more than a myth. Instead of being ice-bound the year round, the farthest northern slopes of Canada had summers as warm as any other figures to be found in any other portion of the Dominion, for, in quoting figures from one of the meteorological stations in Alaska, he stated that 96 degrees of heat in the shade was quite a common thing, while it had been known to go as high as 100 in the shade. Mr. Stefansson wanted to overcome the "old traditional teaching of our ancestors" that the farther north a person goes the colder it becomes, and to upset at the same time the claims of some that the northern stretches of Canada were worthless. For, in those districts there were great areas of coal, iron and copper mines which were but awaiting development, while there were hundreds of thousands of square miles of grazing lands which should be the feeding ground of the newest form of Canadian food, the reindeer.

Those who hold that the reindeer was not suitable for food would only have to drop in at some of the leading hotels to-day to have that theory uprooted, and as an illustration of the popularity of the new food, he pointed out that in New York City a few of the leading hotels and restaurants were now taking the full supply of reindeer from the North. Apart from these natural resources which Mr. Stefansson had seen with his own eyes, there were, he imagined, a great number of other products which would be developed as civilization spreads northward; and at any rate he wanted to lift the veil of ignorance from the minds of those who were saying that Canada had little to gain by clinging to Wrangell Island. To encourage those who were still fighting for the retention of the island, he recalled the days when as famed a man as Benjamin Franklin reported that the whole of the Dominion of Canada was nothing more than an icefield and that to the British Empire it was not worth as much as the Island of Guadalupe, which was the occasion of dispute between the English and the French. But later experience has demonstrated that one business street in one of Canada's larger cities was worth as much as the whole of the island which was under dispute; and talking of Wrangell Island, who could say that those who see in it no good to-day were any wiser than was Benjamin Franklin in his time?

In passing, Mr. Stefansson painted an Arctic region which had a short, but warm summer, with some varieties of flowers in bloom, with sandflies and mosquitoes and all those forms of insect life which were to be found farther south, and he denounced generally the belief of some that it was a region of excessive cold. The lowest temperature registered in the north was 54 degrees below zero, while just a short distance from Wrangell one degree lower than that had been recorded. It was important in the speaker's mind that Canada should pay a great deal of attention to her northern districts, for, if she was ever to become a rival of the United States in wealth and prosperity, it must be through a development of all her resources, regardless of where they may be placed. The States, he recalled, were taking a great deal of interest in their northern lands, and Canada must do the same.

Lumber Bills Include Fire Bills.

The weather was hot and dry. No rain for a month. The east wind moaned through the trees. Pine needles snapped underfoot. The crash of falling trees. The ring of axes. The saw-whistle. Logs, logs everywhere. Dry tops, branches and slabs. And amidst all these, half dozen men smoking cigarettes.

One glowing spark. A wisp of smoke. The hiss of burning pine. Crackling flames sweeping onward, skyward. A living wall of vivid fire. Black death and destruction.

One little spark in a forest—and in its wake 50,000 acres of free-wood land; 30 million feet of burned timber, four logging camps, 20 houses, three automobiles, and \$90,000 worth of other property.

And the very next summer everybody was wondering why lumber prices had gone up. If the wheat crop fails, the world expects dear bread. When the forest disappears from hundreds of miles by human carelessness, most people never connect the fact with higher bills for spruce or pine. Every forest fire must be paid for by the user of forest products.

Where Had She Heard It?

The famous musician was bowing to the select audience in his hostess's palatial house when she came rustling up to him. "What was that lovely selection you played just now?" she inquired.

"That was an improvisation, madam," he replied.

"Oh, yes," she murmured, "I remember now. It's an old favorite of mine, but the name of it had slipped my mind for a moment."

Tomb Believed 3,000 Years Old Found in England

A tomb believed to be about 3,000 years old, has been discovered at Catterline, four miles from Stonehaven, according to the *St. Mary's News*, respondent of The London Daily News.

While James Scott was digging in a field his spade struck a large stone slab. He continued digging and exposed to view three layers of stones.

He sent for the Rev Mr. Fraser, of Kinnell, an antiquarian. With assistance the large stones were removed, and a grave was revealed containing the skeleton of a fully-grown man lying on his left side, with an earthenware food urn beside him.

Mr. Fraser expressed the belief that the remains belonged to the bronze age, and might possibly be 3,000 years old. The greater part of the urn is in a good state of preservation.

According to a list of the world's forty-seven air transport services issued by the Air Ministry, France consuls nineteen, Germany eleven, and Great Britain only six. French air routes have a total mileage of 6,420; while the mileage of British air lines in Europe is 1,110. In addition there are the 600 miles of the fortnightly R.A.F. service from Cairo to Bagdad and two lines in Australia.

The consciousness of perpetual expansion, mentally, morally and spiritually, must necessarily constitute the highest kind of happiness, because there is no other satisfaction like that which comes from the consciousness of growth.

The Banff-Windermere Highway

Wonders of This New Scenic Route Through the Rockies Grand Circle Tour.

An attractive pamphlet is just being issued by the Canadian National Parks Branch of the Department of the Interior describing the new Banff-Windermere highway traversing Banff and Kootenay national parks, which will be officially opened for travel on June 30 next. The road, which was built by the engineering division of the Canadian National Parks Branch, is important because it is the first highway across the central Rockies and also because it forms the last link in the great 6,900-mile Circle Tour, a system of motor highways, which extends down the Pacific coast from Seattle to southern California, returning via the Grand Canyon, the Yellowstone and the United States Glacier national parks to the Canadian boundary. The booklet does not profess to be a complete guide but tells in an interesting way the story of the construction of the road and gives a brief description of some of the attractive points along the route.

Every Mile a Surprise. The booklet is illustrated with 32 half-tone engravings which indicate the beauty and grandeur of the scenery through which the road passes. One of the most striking of these is Sinclair Canyon, where the road has been blasted through towering walls of red rock. To one who has not known them," says the writer, "it is impossible to describe the delights of the new motor highway. From the Columbia valley is a little more than 125 miles, and every mile is a surprise and an enchantment. It does not matter whether the motorist enter by the eastern or western gateway, he is swept at once into an enchanted world. The magnificence of the mountain ranges and the immensity of the scale on which they have been laid out, refuse to be put into words. Something is left out in every picture. The sense of height and vastness, the infinite serenity and majesty, when the beholder on his first glimpse of the Canadian Rockies. The endless succession of ranges following off to the distance a far as the eye can see, the display of every form, peak, and more than a mile up from a red and blue shifting plain of light and shadow, the indescribable variation of color, the very appearance of the landscape itself, are a joy and a revelation.

The Vermilion Pass. It is interesting to note that so long ago as 1838, Sir James Hector, geologist to the Palliser Expedition, explored this region in connection with his search for a suitable pass for a railway, pointed out the feasibility of the route for a road. "Of all the passes traversed by our expedition," he wrote, "the most favorable and inexpensive to render available for wheeled conveyance would be Vermilion Pass, at the foot of the high and high of land is the most gradual of them all." After Hector's discovery of the Kicking Horse pass and the discovery of the route of the Canadian Pacific railway, the Vermilion Pass was practically forgotten. But now, the project of a trans-Canada highway, was formulated in 1912, and the Department of the Interior, O. L.