

# The AUTOMOBILE

## HEAT SOLVES ENGINE PROBLEM ON FROSTY DAYS.

The colder the weather gets the more difficult it is to make the engine start. Noises indicating that cars have acute attacks of bronchitis can be heard issuing from garages these snappy cold mornings. Men can be seen running back and forth from house to garage armed with steaming teakettles and dishrags.

Now, to the novice, the new owner, the first inclination would be to blame the manufacturer of the engine. It isn't the fault of the engine at all, it is because "the gasoline doesn't gas." However, there is a solution of the problem, at least enough of a remedy to make life a little happier for the owner.

This condition of gas was absent for several years. In the early days of automobile construction, before the manufacturers were able to devise a carburetor for vaporizing gasoline under all conditions, we had this same trouble as soon as the weather turned cold. Persistent experiments produced a carburetor which overcame the trouble. Then, almost as soon as a carburetor was developed which would vaporize the gasoline under adverse conditions, somehow the volatility of the gasoline was found to have decreased.

It is true that the gasoline now sold has a greater heat-producing quality, if only we can get it properly mixed and volatilized. It may be that the gasoline producers, by putting heavier gasoline on the market have been of a real service to auto men, once we have learned to utilize it economically and efficiently. They may have had in mind higher power, but they have given us a gas which is hard to vaporize on a frosty morning.

### Must Heat the Air.

In changing gasoline from liquid to vapor considerable heat must be supplied. When the atmospheric temperature is too low there is not sufficient heat in it to vaporize the gasoline sprayed in to the carburetor. When the engine is warm the process of vaporization goes on from the needle valve to the moment of ignition, but if the engine is cold the process is retarded more or less, and under some conditions it is possible for thoroughly vaporized gasoline to be again condensed. The man who does not understand is inclined to say uncomplimentary things about the engine and talk about "fireproof gasoline." The only trouble is that the temperature is so low that we must heat the air before we send it into the carburetor.

Practically all the carburetor manufacturers put out a "stove" to heat the air supply, which is attached around

the exhaust pipe, so that the hot air surrounding the pipe is conveyed to the carburetor, which warms the air entering the intake, thus supplying the heat necessary to effect vaporization. This "stove" or gas warmer might be called a "hot air furnace."

### How to Raise Temperature.

The process of vaporization absorbs a large amount of heat. To raise the temperature of the liquid one degree takes a certain amount of heat. The amount required per degree remains the same until the point of vaporization is reached, when several hundred times that amount of heat is required to effect vaporization. The "hot air" furnace supplies the extra amount of heat.

A great many carburetors have the mixing chamber water-jacketed, and the water from the cooling system is circulated through it, supplying some heat in that way. Sometimes that in itself is sufficient, but at present it seems advisable to use both. Neither one of these is in operation when the engine is started; the "hot-air furnace" depends upon the exhaust pipe being heated and the water-jacket upon the engine itself being heated long enough to warm up the circulation, so that it becomes necessary to find some means to supply heat until these warm up.

When the car is started in a warm garage the gasoline will vaporize properly and the engine will run in good shape, but as soon as the car goes out into the cold air it will cool the engine so that some of the gasoline will be condensed. Therefore we close the radiator cover partly or wholly until the engine is thoroughly warmed. If the car is started in a cold garage the teakettle and dishrag method must be resorted to. Wrap the cloth around the intake pipe and the carburetor so that it does not cover the air intake, and pour the boiling water on the rag, taking care that none gets in the air intake. The hot water will heat the carburetor and intake pipe and raise the temperature of the mixture so that the engine will run. In some cases it may be necessary even to drain out the cooling system and fill it with hot water, so that the combustion chamber becomes heated up.

Of course, sometimes the skipping can be overcome by enriching the mixture by the dash control, but with the present heavy gasoline the enriched mixture does not seem to do much good and is simply adding to the supply of gasoline, which is already refusing to vaporize. Therefore, it seems to be the stove and dishrag for the cold engine.

## Forest Fires and Land Clearing.

Most citizens are aware that practically all the forest provinces have adopted brush-burning laws which prohibit the use of fire to clear land, except during certain months of the year, unless the fire ranger in the district gives written permission to burn on a stated date. A paragraph has been going the rounds of Canadian newspapers this autumn to the effect that as a result of a forest fire a settler in the north country was able to clear the debris off two acres and get the land ready for crop for twenty dollars, whereas had he attempted to clear it by logging and without the aid of fire it would have cost him \$200. The inference from the statement is that had this forest fire not broken out the settler would have had to use the more expensive method. And the paragraph went on to state that forest fires were therefore not wholly evil. The statement leaves out two important facts. In the first place, settlers are not, in any province, prohibited from using fire to clear their land. Settlers are permitted, and thousands in every province every year avail themselves of this permission to burn off their "slash," when the season and the conditions are such that there is a reasonable expectation that the fire will not escape from their farms to the property of other settlers. The second point omitted is that every forest fire, running wild, even though it does not happen to result in loss of life, or to burn houses and barns and other like property, burns timber which would have been harvested by some person for his own good and the good of the country. Besides, some of the worst forest fires in history have been caused by escaped clearing fires. There never was and never will be a good forest fire.

### The Sticker and the Striker.

A hammer once said to a nail, "Your value don't begin 'till I knock you on the head." "And start to drive you in." "You have a head, I must admit, 'but nothing seem to know 'till you are to usefulness." "Awakened by my blow." "Tis true," replied the nail, "but I 'As soon as you are through, 'Stick on the job, my first and last, 'As I was meant to do." "I am no rover, once in place 'I never start to hike— 'While you swing this way and swing that 'Stick on the strike!"

### Making One's Place.

If you've made the place you tell in, 'Then you have not told in vain. If you fashioned out of duty, Out of service and of pain, Something nobler than the average, something finer than the rest, You have crowned your life with honor—for you know you've done your best. Make your place, and then you'll know it, Then you'll master all it brings. All that fills with peace and power, Gives you comradeship with kings. For it's better than a kingdom to have made a place in life That shall lift you out of shadows and shall save you out of strife.

### The Seaweed Harvest.

That every year there is a harvest of seaweed is a fact which is not generally known. This industry is carried on in Holland. The seaweed is mown with scythes, when the tops almost reach the surface of the water. The harvesters, clothed in watertight garments reaching to the shoulders, work when the tide is low.

When this industry began, only one scythe was used at a time, but now several are fixed to a line which the workers draw to and fro in a saw-like manner above the base of the weed. After the weed has been cut it is spread out in order that it may be withered in the sun. When it becomes black it is soaked in water. The fresher the water the blacker the seaweed turns, and the blacker the weed, the higher becomes its value.

After being soaked for a few days, the product is spread out in the fields to dry, and when thoroughly crisp it is made up into bales weighing about one hundred pounds each. It is then ready for the market.

Seaweed has lately been found to produce gelatine of a very high quality.

### Shade.

The kindest thing God ever made, His hand of very healing laid Upon a fevered world, is shade.

Green temples, closed against the heat Of noontime's burning glare and heat Open to any pilgrim's feet.

This is God's hospitality, And who so rests beneath a tree Has cause to thank Him gratefully. —Theodosia Garrison.

—and the worst is yet to come



## SOME FUNNY TALES OF FOREIGN LANDS

### BADEN-POWELL MIS-TAKEN FOR A NEGRO.

#### Lord Frederic Hamilton Relates Many Interesting Anecdotes of Life Abroad.

Once Lieutenant-General Sir Robert Baden-Powell arrived at Trinidad and all the Barbadian or Badian boatmen and cab-drivers struck work and hurried to the landing-stage.

A Negro, questioned on the matter, replied with hauteur:

"You ask me dat, sir? You not know dat our great countryman, General Badian-Powell, arrive to-day, so we all go welcome him."

Even more interesting are the natives of Montserrat, the little island in the West Indies.

Lord Frederic Hamilton once went ashore there. He was greeted by a jet-black coxswain with the remark: "Tis the lee side I will be going, sort, the way your Honour will not be getting wet, for them back-seas are mighty troublesome."

The brogue was due to the fact that the Negroes naturally learned English in the fashion in which their masters spoke it. Cromwell had deported many Irish to the island.

While sailing down the Volga, in Russia, writes Lord Frederic Hamilton in his book "Here, There, and Everywhere," the chief engineer of the boat—a burly, red-headed, red-bearded man—came up and began explaining things. Lord Frederic could talk Russian quite freely, but the technicalities of marine engineering were rather beyond him. He stumbled lamely along somehow until a small red-haired boy came in and in the strongest of Glasgow accents cried to the engineer: "Your tea is waiting on ye, feyther."

### Too Much Red Tape.

A train was having a long halt at a small Indian station and an Anglo-Indian, who had some official connection with the East Bengal State Railway, spoke about it to the immensely pompous native stationmaster. The latter asked the white man to enter a complaint in the official book. The Anglo-Indian was conducted through long passages to the station-master's office, where a strongly-worded complaint was lodged.

"And may I ask," questioned the irate business man, "when you mean to start this infernal train?" "Oh, the train, sir, has already departed these five minutes," answered the bland native.

The last frontier telegraph post in India is a terrible place of captivity for white people, but the British sergeant and four privates who were in charge of it were high-spirited. The men had notices stuck up in the deserted place: "This way to the swings and boats." "The public are requested not to walk on the newly-sown grass." "Try our famous shilling teas," and "All season tickets must be shown at the barrier."

The Tooth of Buddha is held sacred in Ceylon. Lord Frederic Hamilton was present at the uncovering of the tooth, a most intricate ceremony. There were seven cases, and in the seventh, composed entirely of rubies and diamonds, reposed the tooth.

The original tooth was stolen and destroyed by the Portuguese in 1315, but a new tooth was made out of a piece of ivory, which was readily accepted by the Buddhists. The seventh case was made in Bond Street, London.

Another story concerns a little white Bermudian boy who had never seen the motherland and was brought on a trip by his father. As the ship was passing Cowes the boy said: "Do

you mean to tell me, Daddy, that the people living in these queer houses in this odd country are really human beings like us, and that they actually have human feelings like you and me?"

### A Flaw in His English.

The Chinese secretary to the Governor of Hong Kong prided himself on his accurate English. Asked about a certain paper, he said: "I placed it in the second business-hole on your Excellency's desk."

"Pidgin" means "business," and "Pidgin English" is really "business English." The secretary considered it vulgar to use the term "pigeon-hole."

A young Guardsman accompanied Lord Frederic Hamilton on a voyage to Jamaica. "The first night the Guardsman, who had never been in the tropics before, rushed into his companion's room. 'I have drunk nothing whatever,' he faltered, 'but I must be either very drunk or else mad, for I keep fancying my room is full of electric lights.' These turned out to be Jamaican fireflies, which are peculiarly brilliant.

The earthquake at Kingston in 1907 destroyed the whole town. As soon as it was over a rough-looking shanty was erected and a sign proclaimed it was a steam-bakery. The names over the door were two Scottish ones.

A woman shopper in Jamaica asked the black forewoman at the counter if she had any silk stockings, either pink or flesh-color.

"Very sorry, madam," was the reply, "we hab no pink silk stockings, but we hab plenty of flesh-colored ones," taking down as she spoke a great bundle of black silk stockings.

Another story told by Lord Frederic Hamilton concerns a Sussex shepherd who, when ill, begged the vicar to read to him the hymn, "The roseate hues of early dawn." One day he said, "I fancied myself on the downs again, and can just see 'them rows of ewes at early dawn!'"

### Humbug.

When you say that something is "all humbug," do you know what you mean?

This expression had its origin during a European war, when many false reports were circulated in Hamburg. It became customary for anyone wishing to signify his disbelief of a statement to say, "That is Hamburg," and so the word "humbug" found its way into our language.

When we say that something is "not worth a rap," most of us imagine that reference is made to a rap of the knuckles. The real origin of the phrase dates from the time of George I, when the "rap" was a counterfeit coin which was frequently passed off for a halfpenny but which was really worth nothing.

When we speak of a "baker's dozen" we are recalling the time when bakers were fined so heavily for giving short weight that they threw in an extra loaf in order to be on the safe side.

### Canada's Pension List.

Canada's annual pension list, in respect to the late war, amounts to \$30,802,608 payable to 50,287 disabled soldiers and 19,411 dependents, according to a report published by the Department of Soldiers' Civil Re-establishment. They include allowances to 25,413 wives, 34,721 children and 178 parents of disability pensioners and 16,142 children of dependent pensioners. Up to June 30th, 20,126 additional pensioners had accepted a final payment of their claims which cost the government in all \$8,127,052. The total amount paid out in pensions up to August 31st last was \$101,414,216.

### Johnny Was Dead Right.

The teacher had been telling her class about the rhinoceros family. "Now name some things," she said, "that are very dangerous to get near, to, and that have horns." "Automobiles!" promptly answered Johnny.

## Animals That Use Bluff

Almost every bird and beast which is unable to defend itself against its foes seeks safety in bluff, an art highly developed in many animals.

Take a porcupine, which is one of the better bluffers, and observe it when its enemy approaches. Not only does it turn itself into a living chest-nut burr, but it also rattles its quills against one another to proclaim how impregnable it is, and at the same time to hearten itself up a bit. When it shivers with fright the same rattling takes place, and deludes its enemies.

A lizard, which is common in Australia, and has a frill like an Elizabethan collar, is another clever braggart. When attacked, it starts a comical performance, opening its frills and raising itself on its haunches. Its front raised as high as possible, it sinks its head between its shoulders until it looks like a miniature umbrella.

When in danger, the opossum pretends it is dead, falling down and curling itself up. You may roll the creature about with your foot, explore the pouch, pick it up and carry it by its tail, offer it almost any indignity, and it will, in most cases, neither resist nor complain. But if you take your eyes off it as it lies upon the ground it will jump up and scuttle away.

And owl and various other birds throw their wings forward and use them well in a struggle, but one—the magnificent Argus pheasant—spreads them in front of him. This not only magnifies his appearance, but serves as a shield in the combat that may not be avoided always.

The wings form such a screen in front of the bird that it can withdraw its head altogether behind it, and then strike through at its antagonist in some altogether unexpected place.

Tactics of this kind are said to be the secret of the extraordinary success the ground hornbill of South Africa has in killing snakes, writes Mr.

Ernest Ingersoll in his book, "The Wit of the Wild." The birds advance on the snake, and with their wings outstretched proceed to annoy the reptile. As soon as the snake strikes at the feathers the birds close in and violently peck the foe with their long, sharp bills, quickly withdrawing again when the snake lets go. This they repeat until the snake is dead.

Most harmless of the reptile braggarts is the hog-nosed snake, which can really hurt nothing bigger than a mouse or a fledgling sparrow.

It tries to inspire terror by swelling out its head and neck to twice their size by expanding its ribs. Then it blows and hisses and makes believe it is the ugliest sort of viper—and, as a rule, succeeds. But if it sees its bluff is detected it falls limp and literally goes into convulsions of terror.

Quite as clever in its way is the caterpillar of the sphinx moth—a slow, fat, green worm. It has no armor or spines or poison or ability to defend itself, but the instant anything approaches it, at once it rears up and wags its horned head. In this way it looks so formidable that few of its enemies have the nerve to tackle it.

Some fish are very good "bluffers," particularly the tribe of globe fish or porcupine fish.

These fish when quiet look much like others, except that they have a rough, leathery skin instead of a scaly one. When alarmed, the globe fish changes completely. It sucks in water by rapid gulps until it swells into a ball studded with stiff spikes.

In this condition it rises to the surface of the water and spins and bobs about, giving queer grunts and making a most comical appearance. If another fish takes the little fellow into its mouth it spits it out immediately as something horrible. In reality, the spines of the globe fish would do no harm, but the little fellow succeeds in life as well as if he wore a real orica.

### Love Beside the Fire.

The pride of autumn fades away on wooded vale and hill, The days are growing grayer and the nights are growing chill, Then hey for home, and happy eyes and joys that never tire, We'll face—the worst that winter brings, with love beside the fire.

O, sweet as youth the springtime was, and fair were summer's bowers, And gaily flowed the pagentry of autumn's golden hours! With sadness from the hills we saw their sunlit days retire But winter brings us back again to love beside the fire!

So bolt the door against the blast, and start the cheerful blaze, And let us sit, sweetheart of mine, and talk of olden days. Of days when first you woke in me the dream of young desire, When yet I hardly dared to hope for love beside the fire! —Doris A. McCarthy.

### Montcalm.

He heard a firing in the early morn, And lo! the Plains of Abraham along Was stretched a deep red line. He heard no song, But only saw, where quiet grass and thorn Had been, an army strong, moving in scorn Of all his batteries; a scarlet throng Of fighting, resolute men, who knew nor thong, Nor clogging fear; men that were British born.

O warrior brave, O faithful son of France, Who met, unquelled his hour, without a qualm! Snatching from black defeat and recreant chance, Triumph unstained, rich-touched with victory's balm: Wrenching from Death, in direct circumstance, A deathless name that fills the world: Montcalm. —Anna Durlie.

## Romantic Tale of a Forestry Poster

The Forestry Branch of the Department of the Interior, Canada, issues fire warnings in about sixteen different languages and dialects. These notices are nailed to trees along trails and at camping places, and, according to all who have to do with the forests, they constitute one of the greatest factors in forest protection. They are always "on the job" reminding all who travel in the forest of the need of care with fire. Many Canadians are unaware of the existence of a wonderful system of writing known as Indian syllabic script, an invention of a missionary and used all over northern Canada by the Indians. The Indians learn it very quickly, and it is read and written by many Indians who never saw a white man. While the same script is used for all Indian languages, each Indian can read only those books or communications written in his own language. It is a miracle to see how a law is carefully enforced by Dominion fire rangers, and is generally observed all through our Canadian forests. Sometimes a porcupine will eat one for the glue it contains, and sometimes a moose or a strayed steer will

lick off the ink because of its salty taste, but, generally, men and animals leave them alone. One conscientious ranger, however, recently had a problem to solve about posters. One poster on his beat, printed in Indian syllabic, was neither torn down nor defaced, but it was partly detached and, on turning it over, the back was seen to be covered with syllabic writing done with the juice of some herb. The ranger could not read syllabic, but fearing that this was a message inciting Indians to disregard fire laws, or making light of authority, he took down the poster and showed it to several leading men of the band of Indians, who smiled in a curious way but professed their inability to read it. Sure now that something was afoot, he sent the suspected document to Ottawa. The translator also smiled as he read it, and then translated the characters into a love letter and proposal of marriage from a bushy Indian swain, who, being without writing materials had taken this means of addressing the object of his affections. The translation was duly returned to the conscientious fire ranger who, much relieved, danced at the wedding and all lived happily ever after.