

# The Automobile

**OVERHEATED ENGINES.**  
The automobile engine in summer is like a human being in one respect at least; namely, that it readily becomes overheated. There is a variety of reasons for this undesirable condition which the motorist should be familiar with.

Overheating may be one reason. If the engine is allowed to gorge itself too unrestrictedly on motor fodder, it will tend to overheat. Those who have found it necessary to cover the radiator in winter and take off the fan belt to keep the engine hot enough to run smoothly and with proper vaporization and firing, may find that they have as much trouble during the heated term keeping the engine cool enough to run properly.

Generally speaking, the nearer to the boiling point the water in the radiator gets without having it actually boil, and steam away, the more effective will be the results. Some engines develop much less than the maximum horsepower because they are too well cooled. Others seem to become overheated on slight provocation, causing the water to boil.

This would not occur if everything were working as the designer intended it should. During the cold weather the motorist who habitually drives with a retarded spark gets away with it because the temperature is in his favor. But when the mercury goes up, he finds that his engine overheats and gives trouble. He has not changed his method of driving and cannot understand the cause of his difficulty.

## Keep Spark Advanced.

In hot weather one good way to overheat the engine is to drive with a retarded spark. A considerable manipulation of the spark control lever is required for getting the best results. The tendency is, because the engine knocks at low speed, to leave the lever partly retarded instead of advancing it when a higher speed is reached.

With the magneto, it is the general practice to advance the lever to three-fourths or seven-eighths of the full range right after the engine is started and leave it there for practically all work except very high speed. The nature of the spark given by the magneto changes somewhat with the speed of the engine, and the equivalent of an automatic advance and retard of the spark occurs with the variation of speed of the motor. With the battery system, however, there is very little change in the nature of the spark affected by the engine speed.

Overheating may often be traced to sediment in the radiator, which cuts off free radiation of heat. This may be removed usually by the use of a saturated solution of washing soda and water. With the advent of hot weather each year it is well to fill the cooling system with a solution of this sort and run the engine for several hours. Then drain the solution off and refill the system with clean water.

If in the system used a pump is employed the upper hose should be disconnected from the radiator and the engine should be run to pump the solution out of the system. At the same time water from a hose or other source should be fed into the top of the radiator as fast as it is pumped

out, and thus flush the entire system before connecting up the hose again. Where the thermo-siphon system is used, which does not employ a pump, it is, of course, impossible to do this. But one should remove both upper and lower hose connections after running the engine with the solution and wash it out with fresh water as well as possible. A hose inserted in the upper connection of the cylinder probably would force all the solution out, with any collection of sediment, and the same process with the radiator ought to clean it out.

## Watch the Fan Belt.

Fan belts are more likely to get out of order in the summer than in winter. This may be because the engine throws grease and oil more readily in hot weather. Belts should have grease enough to keep them soft and pliable, but too much causes slipping. They should be wiped free of all oil occasionally. There is always a belt adjustment, and this should be tightened so that there is sufficient tension to drive the fan at all engine speeds.

Wherever the flywheel has spokes to form a fan the oil pan and hood should be kept tight, so that air will be drawn through the radiator rather than through other openings. If the radiator is not kept free from oil the outside passages will very quickly collect dust, which will prevent a free flow of air and cut off the radiating surface. The same effect is secured when the front of the radiator is too thickly smeared with paint.

Pumps will wear out in time. But this is one of the last places to look for trouble. The action of the pump may be determined usually by removing the radiator filler cap when the engine is running and noting whether or not the water is circulating. But if a baffle plate is placed in the filler opening it cannot be seen, and a test can be made in the same manner by which the cleaning solution is washed out.

## Look Out for Sediment.

With the thermo-siphon system there is very little pressure generated and a slight obstruction will stop the flow of water. Therefore, it is more necessary to keep the system free from sediment and to see that the gaskets at the joints are made with circular openings of full size, so as not to obstruct the flow of water. Likewise, water must be kept above the top hose of the radiator in order to have any circulation in this type of cooling system.

Carelessness in stretching the hose over the pipe is another cause of overheating. And it is difficult to locate. Some times the hosing of the hose is loosened and folds back inside, covering the opening of the pipe so that water does not flow freely. Also the lining of the hose will some times loosen up and pieces will lodge where they cut off the circulation.

In addition, keep the engine free from carbon and keep the valve push rods adjusted close, have the mixture as lean as possible and be sure the exhaust from the muffler is free. And the discomforts and trouble from overheating during the warm weather months will be lessened, if not entirely eliminated, on the part of both automobile and automobilist.

## THE SHARK

By PIERRE MILLE

Translated by Wm. L. McPherson  
My friend Samuel Boze was washing his hands—for the tenth time, at least, that afternoon. It is a mania with him. You might believe that he was not a Jew, but a Mussulman, and constrained by his religion to a ritual of frequent ablutions. I said that to him laughingly in the restaurant lavatory, when he rolled up his sleeves once more, took off the many jeweled rings which he wears on his fingers and plausibly soaped himself half way up his hairy forearms.

He shrugged his shoulders, went out and selected a table and said to me, after ordering oyster cocktails:

"You can't ever be clean enough! You can't ever do enough to avoid carrying some sort of odor about you. All the things you touch—the leather of the seats in cabs, the cedar wood of pencils, even this scoured spoon—have an odor. That is bad. It is very bad. I have learned that much in my travels."

Six or eight mouths out of every twelve Samuel knocks around the world, from the Persian Gulf to the islands of Oceania and to Venezuela, buying pearls from the pearl fishers. Then he comes back to Europe to sell them. It is a good business, in which there is much adventure.

"I learned this," he resumed, "on the reefs of the Great Barrier, near the Frankland Islands, in Australia. You know that there are banks of pearl oysters there, thirty to forty meters below the surface, all along the coral chain. It is too deep for ordinary divers such as are used in the Persian Gulf. You have to anchor a sailing vessel near the reefs and send men down in diving suits. It is the roughest sort of work. They have to spend four or five hours on the sea

bottom, almost crushed by the pressure of the water and poisoned by the carbonic acid gas caused by their own breathing.

"On a ship I took to the reefs there were two Jap divers, who relieved each other, one working in the morning, the other in the afternoon. The first, an old man, dry, courteous and taciturn—as, in fact, most of them are—rose to the surface one day a little earlier than he was expected. The second, his younger brother, was engaged at the moment in cleaning some fish which he had caught with a line from the deck. They took off the old man's helmet and relieved him of his apparel—the cuirass of bronze and leather, and the rest of the suit all impermeable, ending in the shoes with soles of lead.

"Come, hurry up!" said the captain to the younger man, pointing to the armor.

"The little Jap knew that Europeans are always nervous and in a hurry. Time is money, especially when a minute may represent two or three thousand francs. The substitute wiped his hands on his linen drawers and started to find a basin in which to wash them.

"Come! Hurry up!" the captain repeated.

"So he let himself be incased in the machine and went down.

"He hadn't been scratching the coral with his flat knife for more than ten minutes before he saw a gray shadow playing about his head. It grew bigger and became more precise. It was a shark, an enormous shark. The diver was very much astonished. He had never had such an experience before. The sharks of each country have their own habits and customs. Those of the Australian coast rarely attack a man. The sea is very full of fish, and there is much easier prey than the big, dangerous monkey, who swims back, makes a noise and strikes with a pointed thing which he holds in his mouth.

—and the worst is yet to come



"The little Jap believed that the shark's presence was due to chance. He didn't suspect at first that the visitor was after him. There must be some easier live victim or some carrion in the neighborhood, he thought. He looked about carefully, but saw nothing. And the shark, halting over him, began to turn on his belly, bringing the three rows of teeth level with the man's head. The Jap stirred the bottom with his knife so as to muddy the water, and also gesticulated. The shark rose several yards and waited.

"He's going to stay," thought the diver. "He is obstinate. He has chosen me for his meal to-day. He isn't like the other sharks. I'd better go up."

"He gave the hoisting signal. But in the code there was nothing to explain why he wanted to ascend. He could only say 'Haul me up!' Above they were greatly surprised, yet they obeyed. They began to raise him, but very slowly. It has to be done very slowly, stopping the movement for several minutes at each fathom or fathom and a half. For the decompression mustn't occur too rapidly. Without these precautions they would pull up a dead man.

"The ferocious fish seemed to understand. His prey was afraid and wanted to flee. That encouraged him. With a single stroke of his tail he approached, plunging a little too deep, and then coming up with his stomach against the diver's stomach and his head level with the diver's head. The Jap kicked with his leaden shoes and stuck his knife into the animal's face. But the rounded knife edge glanced off the wrinkled skin. Nevertheless, the shark drew away. It was always the same thing. These men have strange and disconcerting ways!

"A whole hour! It took the diver a whole hour to get to the top. The attack was renewed several times. The Jap, in spite of his sang-froid, began to shake inside his armor. The shark became more and more enraged. Now he changed his tactics. He tried to stun the man by striking him with his tail. But the armor resisted. Finally they reached the surface.

"The ladder wasn't there. The ship had turned with the wind. The men on board began to pull the diver upward toward the ladder. But since his headpiece was out of the water he could no longer see what was happening beneath. He asked: "Where's the shark? What's he doing?"

"The shark wasn't far away. The Jap felt the grating of pot-hook teeth along his leg. With the other leg he gave a kick. The teeth glided along and fastened in the foot, some penetrating the leather, others bent back by the leather sole. The pullers felt the weight they were dragging increase enormously. They saw the shark clinging to the diver.

"Some one got a rifle and fired. The beast, probably hit, dived. These men are insupportable! Something incomprehensible always happens where they are concerned. The Jap reached the ladder and climbed up. They took off his helmet. His face and lips were ashy white and his teeth chattered.

"I was attacked by a shark," he said. "That isn't natural! No, that isn't natural! What could have been the matter with him?"

The older brother shrugged his shoulders. He pointed to the fish in the bucket and said: "You didn't wash your hands."

"Perhaps you don't altogether understand," Samuel explained. "The little Jap hadn't washed his hands before putting on the diver's suit. He carried with him the odor of blood and fish. That is what attracted the beast."

We had reached the cigars. Samuel Boze paid the clerk and returned to the washroom.

Properly drained lands will absorb and hold for the crops a larger amount of the rainfall on the land than land lacking in drainage facilities.

## Routine and Ruts.

Many people lament to themselves if not to their friends and families the fact that they are in a rut. They feel that as the years go by they wear their rut a little deeper and see less and less of what lies beyond its walls. Life seems to them to present a steadily narrowing vista. They contrast their condition unfavorably with that of the fortunately placed, who have leisure and wealth, who are not the slaves of routine, who can follow each day whatever pursuit they wish, and whose lives are enriched by variety of experience.

But people should not confuse ruts with routine, says a writer in Youth's Companion. It is not in the least inevitable that one who must pursue a daily routine should eventually fall into a rut. The people who most successfully preserve and develop their individuality are generally those who are most conscientious in performing routine tasks. The people who deteriorate are those usually who neglect routine tasks, or who do them poorly and carelessly, with distaste or abhorrence.

Routine tasks, to be sure, are of all kinds; but that is only another way of saying that they are suited to all temperaments. There is routine that brings a person constantly into association with others, and there is routine that keeps him for the most part solitary. Whatever the routine may be, it has its special facilities for developing and enriching the lives of those who faithfully pursue it. The routine of the research worker is as different as possible from that of the traveling salesman; that which the research worker finds reasonably congenial would be to the traveling salesman intolerable. The converse is equally true. So long as routine is reasonably congenial, it should be a blessing and not a curse. If it is reasonably congenial, — and the young man should not jump to a hasty conclusion that it is not, or he may find on being drafted into a routine of another sort that he had been better off than he had supposed,—it offers scope for enlargement of the mind and heart that is denied to those who are morosely grubbing along, making their ruts deeper and deeper. For in most cases when routine becomes a rut it is because the victim proverbially insisted on transforming it into one.

## A Day.

A little smile, some cheerful words,  
A happy greeting to the sun;  
A thought of growing things and birds  
Whose all-day song is just begun.

A kindly word for fellows who  
You pass a-strugglin' on the road,  
A hint for little things to do  
An' mebbe lighten all their load.

A psalm a-swellin' in your heart,  
When tapers in the west of day—  
Plumb glad that you have played your part—  
Content with your humble way.

Some praise to God for restful sleep,  
For things that's gone, a thought o' sorrow—  
A hope for tender things that peep—  
An' hopin' for the same to-morrow.

## Widow's Wit.

Mrs. Bangs—"So that pretty widow is really married so soon again, eh?"

Old Bangs—"Yes."

Mrs. Bangs—"But her late husband's will expressly stipulated that if she took a second husband her legacy was to revert to his most distant relative."

Old Bangs—"That's where she was smart. She hunted up the relative and married him."

During the month of April, 2,258 United States settlers arrived in Western Canada, bringing with them goods to the value of \$147,368, and ready money to the extent of \$598,154. The victor is he who can go it alone.

## My House

H H

By OLIVE SARGENT

The tame house, the town house, it is not to my mind—  
With rigid rubber plant before and cabbages behind.  
The mason and the carpenter may work for townfolk still,  
But I have built a wee house upon a windy hill.

My own house, my brown house, is very near the sky;  
The dawn is at my window before the day is high,  
And when the darkened valley has lost the westerling light  
My glowing, golden hilltop with sunset still is bright.

The cold wind, the bold wind, my wee house cannot shake,  
Though dry leaves go whirling, though oak boughs bend and break;  
It rushes o'er the ridgepole and whimpers down the flue—  
My tight walls, my stone walls, it cannot whistle through.

The shy birds, the wild birds, nest boldly in my trees;  
They educate their fledglings in fearless nurseries;  
All lightly, all sprightly, they swing among the leaves  
And scold marauding squirrels that rustle in my eaves.

No town-bought seeds are planted in formal garden ways,  
But, rare and sweet, the wild flowers go marching through my days.  
With violet and columbine, or autumn goldenrod,  
The blessed hilltop glows beneath the very smile of God.

My dear house, my own house, I'm climbing up to you,  
Where all the air is free and clean, and all the sky is blue.  
The tame folk, the townfolk, may have whatever they will,  
But I will have my brown house upon a windy hill!

## CANADA'S POST-WAR IMMIGRATION

GOOD CLASS OF PEOPLE COMING NOW.

Majority - Are Farmers and Most of Them Possess Substantial Capital.

In the resumption of immigration on a substantial scale in the post-war period there have been several features of a gratifying nature to the Dominion of Canada. Canada as a bourse for new hopes, an outlet for pent-up energies, a land of great future for the creation of new homes has appealed to the highest and most intelligent types of people who have flocked thither in a resistless avalanche. Many of these people are possessed of substantial capital which they are investing in the farm lands and industries of the Dominion. Striking and pleasing, too, is the evidence of the main stream bound for the land, for these expansive, fertile partially cultivated tracts, the greater productivity of which is the prime factor of Canadian development.

It has been agreed among the best authorities on the question, in the absence of reliable statistics, that immigrants from the British Isles have brought with them in the past approximately \$100 per head to make a start in their new home. This figure was based on estimates of pre-war immigration, and whilst there are no statistics to go upon for the period since the war it would be safe to assume that for the year 1920, for instance, it could be considerably raised and still be conservative. The group hit most directly and severely by the war in England, and in which there is a greater proportion looking for a betterment of conditions in new fields, was the middle class, and this class has been found to largely compose the crowds which leave the liners at Canada's ports of entry.

Per Capita Wealth of Immigrants.

The per capita wealth of persons immigrating from the United States has always maintained a much higher level, being largely in excess of the average from the British Isles, due without doubt to the large proportion of farmers who have sold their old holdings to purchase new farms in the Dominion. Varying estimates have been made by immigration authorities up to \$1,150 per person, and it would seem a very fair estimate to take an average of \$500.

A survey of immigration for the year 1920 illustrates the distribution of the various classes which make for the most agreeable assimilation. It is gratifying to find that still the overwhelming majority of immigrants went on the land. Of the adult immigrants entering Canada by ocean ports and border ports, 19,185 were of the farming class or declared their intention of settling on farms; 5,821 were laborers; 9,283 mechanics; 2,720 were of the trading class; 533 miners; 996 female servants, and 9,721 unclassified.

The gratifying feature of United States immigration to Canada has always been its large proportion of farmers and agriculturalists, and in the year 1920 this was substantially maintained, of the 19,185 men who intended following the profession of farming, 16,177 being from the various agricultural states of the Union. The trading class accounted for 3,882, or a little more than half of the total of this transient calling. There were 5,931 mechanics or more than half of the total machinists. The trading class from the United States accounted for almost the total of this category with 2,008 out of 2,720, whilst the 342 miners made up more than

two-thirds of the immigrating total of this class of labor. Of the total 996 female servants listed on the returns, 578 came from across the line. There were 6,842 tabulated as unclassified.

Many British Industrialists.  
British immigration to Canada has always had a tendency towards the industrial centres rather than the land, and with 800 followers in the 1920 figures, the class of mechanics looms up largest, those who avowed their intention of following agriculture accounting for just more than half this number with 472. There were 340 laborers and 186 of the trading class. Whilst only 86 are listed from the British Isles as domestic servants, this would presuppose the omission from statistics of those government conducted special parties of this class of labor which reached fairly high figures. There were 598 persons from the British Isles entered in Canada as of unclassified professions and callings.

The United States human contribution to Canada is always most pleasing on account of its locating where most needed; Great Britain is apt to send more to the industrial centres than to the land, and laborers and female servants are largely made up of those immigrants coming from other European countries. The maintaining of an equitable balance of classes in 1920, as illustrated by the figures, has made for rapid and agreeable assimilation, the most valuable asset in development in times of economic stress.

## Crushed Flowers.

My mother, writes a thoughtful contributor, grew geraniums and other flowers in the big window of the sitting room at home. That window is a treasured memory of childhood. To us children the flowers that bloomed there seemed the most beautiful things in the world. When the ground outdoors was frozen and covered with snow the window was full of life, color and fragrance.

One day I asked my mother for a geranium leaf and, when she gave it to me, crushed it in my hand the better to enjoy its strong fragrance. At another time I took a dozen or more leaves, put them into an old sugar bowl and crushed them with my little fist until the fragrance filled the air. I put the bowl on the bureau in my bedroom, and that night I went to sleep in an atmosphere heavy with the exquisite perfume.

As the years have passed and I have grown in knowledge of life, I have learned that other things than geranium leaves give their utmost fragrance on being crushed. How many of God's other precious flowers there are that have given out their sweet fragrance when crushed with worldly misfortune and grief. Flowers should be more than beautiful; they should be fragrant as well. Too often the flowers of God are satisfied with a frigid purity when God wishes them to be warm with the perfume of love. That perhaps is why He sends some crushing misfortune that through suffering we may learn sympathy. It is the hurt of love that gives to our lives the fragrance of understanding and sympathy.

To be a successful leader of boys a man must live the life that he wants them to live. A boy is a critical, suspicious creature, with high ideals and a sense of loyalty; but he has a high perception of hypocrisy and insincerity that is uncanny. Most boys have a sense of humor; they like play-acting and jokes and have a wonderful capacity for getting into scrapes; yet their sense of justice is accurate, and they really like discipline, for it relieves them of responsibility. But it is useless to preach to a boy unless you are ready to back up your counsel by your example.

Blind horses never make a mistake in their diet when grazing. Like all other horses, they are guided by the nostrils in the selection of proper food.