The Automobile

ENGINE TEMPERATURE AND LUBRICATION

Many things will cause an automobile motor or stationary gasoline engine to overheat, but lubrication is often not considered in its true importance.

In breaking in a new touring car recently I took unusual care to break in the motor without harming it. I watched everything carefully—cooling system, oil level in the crank-case, and the set of the spark. Since the car was new, the carburetor was perfectly adjusted.

I kept a constant watch on the motometer for the first 300 miles of driving the engine, and saw no signs whatever of overheating. To give the power plant every chance, I had the crank-case drained of the old oil, washed it out with two quarts of new oil, and refilled it with six quarts of new oil. Ordinarily, I do this only every 500 miles.

As soon as this change of oil was made the engine began to overheat. I was at a loss to understand it. The carburetor adjustment had not been changed; I was driving with the spark set as before; I was not giving the car any harder service. Unquestionably, the new oil was the cause of the trouble.

But I had been careful to have the crankcase refilled with as good oil as was furnished with the car originally, and had specified "medium" grade as was recommended by the manufacturers. Where then was the trouble?

I drove my car to the filling station. We put a few drops of oil from my car on a sheet of white paper and on the same sheet also placed a few drops of other grades of the same oil. The comparison showed, by color and texture, that an inexperienced attendant had filled the crankcase of my car with "heavy" oil instead of the "medium" for which I called.

This experience shows that merely a good grade or kind of oil for engine lubrication is not sufficient. You must have both a good oil and the correct grade of oil, that is, "medium," "heavy," or "light" as the manufacturer may recommend. It shows, too, that you can not always depend on the filling station attendant to furnish you the right oil, even when specified, much less when one simply calls for "oil."

RUNNING ON RESERVE.

Some cars are equipped with a reserve gas tank, but all engines carry a reserve power supply. It is for this reason that a large percentage of motorists keep going day in and day out without realizing that they are running on the engine's reserve power and that suddenly the engine is going to give out altogether.

Reserve power is such an important point in the design of some engines that it is possible to climb steep hills in high gear with the cylinders hitting on only five or seven, depending upon whether the engine is a six or an eight. This may be due to faulty spark plugs or, which is more likely, to a valve not seating properly. Compression in the particular cylinder approximates nil, and contributes hardly anything to the work of the engine. The other five or seven cylinders carry the burden, and do it exceptionally well.

But suppose a second cylinder grows weary? When you run on the reserve you skate on thin ice.

MORE HARM THAN GOOD.

Just because the garageman uses a pair of pliers to tighten the screw that holds the ignition wire terminal to the spark plug when he inserts a new one is no reason why you should try to go him one better by giving each one of the screws a few extra turns. If a screw is turned down too far it will spread the terminal and actually loosen it.

NEXT BEST THING.

Fresh rust on the bumpers can be removed without the aid of nickel polish if the latter isn't handy when the car has been brought in at night. Dampen the end of a rag and rub the parts affected. Then dry. Sometimes a little moisture on the bumper, if the car is brought from the cold into a heated garage, will answer the purpose of a temporary cleanser if rubbed with a dry rag.

These two wistful youngsters are the children of Earl Haig, one of the greatest field marshals that England ever had and leader of the nation's troops during the World War. They are Lady Irene Haig and Lord Dawyck.

Building.

When a house is reared, each brick laid, each nail driven, each rafter set in place finds its position on the basis of all that was done up to that moment. There must be a solid underpinning that the superstructure may be substantial. It is impossible to derive a rock-bottom stability from a quicksand foundation.

The structure of society depends on the performance of each man in his place through the generations. Age builds on age; and as we come on the scene we inherit the fruit of the toil and travail of civilized mankind before us. In our turn we are bound to leave "on going hence some immemorial thing." All we can do is to live our lives as well as we know how to live them and leave the issue with the Master-Builder whom the stars obey.

A good name, like the inferior fortune that is money, is a matter of accretion. The good neighbor and useful citizen is known to-day by what he has been consistently for many years. In rare instances, which headlines seldom fail to emphasize, the pillar of church and state topples suddenly to ruin; and there is grief, with general amazement. When we see such a collapse, we must remember the infinitely small proportion measured with the number of those who continue to justify the affectionate general confidence.

That public esteem is worth a man's ceaseless effort to acquire; and it is better to upbuild such a reputation than to rear the most palatial of the houses made with hands.

Poor Fellow.

A teacher, trying to impress on her pupils the rightness of kindness to all animals, took them for a walk to bring the lesson home to them.

Hearing a scream from little Johnny she asked: "What's the matter, Johnny"

"I've been sitting on a hornet," was the tearful response. "and I'm afraid I've hurt the poor thing."

Gates Have History.

A pair of wooden gates which stood in front of the Palace of Beauty at the British Empire Exhibition are copies of the sacred gates of the Teheran mosque and have a most romantic and tragic history. They were made by a poor Persian wood carver who defied the decrees that they were not to be copied. Each day he made a pilgrimage to the mosque, committed some detail to memory, and then went home and wrought it in the wood. But his visits caused suspicion to fall upon him, he was watched, his secret discovered, and, on the completion of his task, he was found murdered, and his work disappeared. Presently the gates came into the hands of Persian dealers, who sold them at a sacrifice rather than keep them, and at length they were recognized in a small London curio shop, and became one of Wembley's multitude of attractions.

Coincident with the presence of the Prince of Wales in the U.S., is the fact that King Edward VII., when the Prince of Wales, arrived in New York as Lord Renfrew on September 20, 1860. He is shown as photographed at that time.

The Enchanted Shirt.

The King was sick. His cheek was red,
And his eye was clear and bright;
He ate and drank with a kingly zest
And peacefully snored at night.

But he said he was sick, and a king should know;
And doctors came by the score,
They did not cure him. He cut off their heads,
And sent to the schools for more.

At last two famous doctors came,
And one was as poor as a rat;
He had passed his life in studious toil,
And never found time to grow fat.

The other had never looked in a book,
His patients gave him no trouble;
If they recovered, they paid him well;
If they died, his heirs paid double.

Together they looked at the royal tongue,
As the King on his couch reclined;
In succession they thumped his chest august,
But no trace of disease could find.

The old sage said, "You're as sound as a nut."
"Hang him up!" roared the king, in a gale—
In a ten-knot gale of royal rage:
The other leech grew a shade pale.

But he pensively rubbed his sagacious nose,
And thus his prescription ran:
"The King will be well if he sleeps one night
"In the shirt of a happy man."

Wide o'er the realm the couriers rode,
And fast their horses ran;
And many they saw, and to many they spake,
But they found no happy man.

At last they came to a village gap;
A beggar lay whistling there;
He whistled and sang, and laughed, and rolled
On the grass in the soft June air.

The weary couriers paused and looked
At the scamp so blithe and gay,
And one of them said, "Heaven save you, friend!
"You seem to be happy to-day."

"Eh, yes, fair sirs," the rascal laughed
(And his voice rang free and glad),
"An idle man has so much to do
"That he never has time to be sad."

"This is our man," the courier said;
"Our luck has led us aright.
"I will give you a hundred ducats, friend
"For the loan of your shirt to-night."

The merry wight lay back on the grass,
And laughed till his face was black;
"I would do it, fair sir" (and he roared with fun),
But I haven't a shirt to my back."

In Time of Stress.

Rescuer—"Hold on tight, miss! Hold on tight!"

Schoolteacher—"Don't say that; say "Hold on tightly!"

Natural Resources Bulletin.

The Natural Resources Intelligence Service of the Dept. of the Interior at Ottawa says:

The cooler weather will soon be here, when heat will be required in the homes. The kitchen stove and the heater will be moved into place for the winter, and at times of severe weather these stoves will be forced to their utmost to keep the home comfortable.

In many of the homes, especially those that have been built for some time, or those of a more or less temporary nature, the chimneys are a great source of fire danger. These in many cases are built upon brackets. With the contraction and expansion of woodwork, due to changing atmospheric conditions or wind pressure, the mortar in the chimneys works loose and falls out, allowing sparks to find their way between the bricks into attics and on to shingle roofs, where they are not discovered until too late to save the home. It is well to go carefully over chimneys to look for and repair any places that may be defective.

Another great source of fire danger is where stovepipes pass through walls and partitions. Those should always be protected with wall thimbles surrounded by an air space, and not approaching wall or ceiling closer than ten inches. Overheated pipes are a very prolific cause of fire. Care should be exercised that stovepipes are in good condition, and well supported.

Other causes of fire due to heating equipment are starting fires with coal oil or gasoline, placing kindling in the oven or too near the stove, overfilling fire pots, drying clothes over stoves or pipes, and the careless handling of ashes.

Last year insurance losses paid on farm fires amounted to over twenty-five per cent. more than the total premiums received, while on unprotected risks these in the smaller municipalities where no fire protection is available, the losses amounted to 81 per cent. of the premiums collected. This also constitutes a loss to the insurance companies.

An increased insurance rate can only result if such fire losses are not reduced. The unfortunate part of fire losses is the country is that many of the buildings are insufficiently insured and the loss falls heavily upon the owners, many of whom are working hard to establish themselves in comfort. A little care will in most cases prevent the start of fires. Regrets never yet replaced a burned home, while care may save a life-long regret.

There has been no rain in Central Australia for three years.

Life is like an investment—it falls flat when there is lack of interest.

"The fruition of the greatest art will never civilize the world. . . . When we learn to be kind to animals we will be kind to our neighbors. The day of wars will pass. It does mean changing human nature, a slow process, but it can be done."—Minnie Maddern Fiske.

Woman's Part in Nation Building

Broadcast by the Alberta Division of the Canadian Red Cross Society. Speaker: Mrs. C. B. Waagen, Vice-President and Honorary Secretary.

The remarks which follow are part of an address which was broadcast from the Calgary Herald's station, Calgary, under the title Woman's Part in Nation-Building. Its clearness and decisiveness of thought give it an authoritative ring and these qualities make it very good reading.

"No development of civilization, no progress in evolution has as yet changed the position of either man or woman in their fundamental relationship to life. Woman is still the mother of the race, the first guardian and teacher of the child. Man is the father, he is still the father and the universal provider who by the sweat of his brow makes provision for the home of which he is also the protector, and of which side by side with woman he has shared the responsibility of creating.

"And as the home is the cradle of the child, so it is the cradle of the nation's life. And to guard, and to give direction and strength and character to that life still remains the highest, noblest, most difficult and most splendid task to which woman is called to direct her powers.

"It is neither as the household drudge nor as the seeker after new experiences amidst a round of social excitement and amusements, nor yet as the competitor with man that woman can find her true and real happiness or that she can make her highest and best contribution to the building of the nation. She must realize with undismayed vision the great responsibilities of her task, the tremendous powers that are hers. The economic conditions of our time and the development of machinery and appliances, have affected a vast change in living conditions. The home arts and crafts are no longer with us. The household of maidens to be directed and controlled has vanished. But if the old has gone, the new is pressing upon us and it is towards that new world and the large part she must play therein that woman is facing. And it is a more difficult, more complex life than the old. And as the woman of old took stock of her household so we as women today, each and every one of us, must take stock of ourselves to see what is demanded of us and what we require physically, mentally, morally and spiritually to equip us to meet this new order, remembering always that we must first recognize in ourselves that natural law, that destiny and purpose for which nature has created us as women: That whether or no we realize that destiny in our own lives, in the making of homes, in the creating of new life, or whether as independent human beings we go out into the struggle and warfare of life—we should carry with us the recognition that as the builder, as the uplifter, as the interpreter of motherhood in the broader sense of the term, in a sometimes too dark and unlovely world, woman will make her best contribution towards human progress and will most profoundly influence the whole life of the race.

T Thorough Understanding of the Means of Health.

"Health—good health, is the most practical foundation on which to build the structure of an adequate and usefull life. If advancement of science has robbed woman of many of her old occupations, it has offered many new opportunities in their place. No intelligent woman to-day should be without a thorough understanding of what gool health means for herself and those about her. She should be equipped with a knowledge of physical laws, a knowledge of her own body, of the laws of hygiene, of sanitation, of food values, of that background and atmosphere which in any home makes towards the maintenance of health and of harmony.

"She must equip herself with a knowledge of maternal and child welfare, since science has brought this knowledge to her very doors, and she will ultimately be responsible for the use she makes of it in directing her own life and the lives of her children. She must be equipped and prepared in case of sickness. This knowledge of health and of the physical needs of herself and those about her is the foundation on which the higher structure of life must be built.

Mental Health.

"Scientists and doctors to-day tell us that many of the ills, especialily those mental and moral weaknesses which make their appearance late in life, are due to unfavorable circumstances and training in the early environment of the child. With this added knowledge that is placed in our hands to-day there comes to women a new and even greater responsibility. A study of child psychology, that is a knowledge of the mental develolpment and needs of our children, based upon the best instruction and knowledge which can be obtained on this subject from those men and women who have devoted themselves to the study of the minds of children, should be a part of the equipment of every woman who is to guide and develop the minds of the young.

"Let us rid ourselves at once of the idea that there is any easy path to the profession of parenthood if it is to be carried on intelligently and successfully.

The Wider Vision.

"If woman's sphere is in her home, her education and mental outlook must be large enough to travel across the threshold out into the great world beyond, and to learn life's struggles and problems if she is to prove a helpmate to the man with whom she shares the responsibilities of life and parenthood and if he is to be a guide and inspiration in the lives of her children.

"She must have courage to face life's problems squarely, to think in terms of truth even when this hurts; she must equip herself with sympathy and understanding if she is 'to meet with open hands the best and worst.' She must cultivate a sense of humor that she may acquire a knowledge of proportion and balance; and above all she can never afford to lose the gospel of tenderness nd affection which nature has whispered to the hearts of all women if they will only take the time to listen and have the courage and strength to be themselves.

"To-day it is surely the first duty of women themselves, to see that in this task of nation building the utmost opportunity is given to women of all classes, of all creeds, and of all conditions to secure for the development of their bodies and minds those surroundings, that knowledge and that special training which will enable them to make the best possible contribution through their own lives and through the lives of their children to the life of the nation as a whole and to the uplifting of the human race."

The camera doesn't lie. So this Toronto lady had her photograph taken with the sixteen-pound lunge she landed unassisted in the Trent River this season, the biggest catch made by any woman.

False Alarm.

"Adam! Quick! The baby just swallowed a safety pin!"

And Adam laughed and laughed, for he knew safety pins hadn't been invented yet.

The Romantic History of Writing Materials

The introduction of papyrus by the Egyptians gave a great uplift to letter-writers and to literature generally. It is, as the Germans would say, the "name-father" to paper, and a very respectable and worthy elder too.

Bark had been used for tablets, and for writing letters which were capable of being folded up, during the best period of the Roman world, and such were still in use under the later emperors. The tablets were of bark on which the Emperor Commodus inscribed his little list of victims, the discovery of which led to his own victimization.

Origin of "Book."

It was a simple thing, the Egyptian idea of papyrus; the improvement on the use of tree-bark being the use of peelings from a reed instead. This reed was called Byblos or papyrus, then very common and now very rare in Lower Egypt. From its name, Byblos, comes the Greek word meaning book, and thus our own word for the Scriptures.

This papyrus grew abundantly in lakes and marshes, to a height of about ten feet; the diameter of its stem was two or three inches, and from its surface peel could be taken off, layer after layer, to the number of some twenty coatings. The use of this peel occurred to the Egyptians as an improvement upon ordinary bark and the new writing material soon became popular.

It could be written upon one side only; but books were copied into long rolls, of sheet glued under sheet, the sheet which felt the first glue being called on that account the protocol, a term still preserved by diplomatists.

The run on papyrus being very great, that plant began to show signs of scarcity in Egypt, and for that reason, among others, its exportation was at one time forbidden.

Paper From Rags.

At the same time, the Kings of Pergamus became a literary sect, and wanted something whereon their scribes could write their books. So the skins of the beasts, occasionally used in some places already, began to attract increased attention, they were prepared into dry substances, and called, after Pergamus, "pergament" or parchment, and vellum, meaning skin.

This parchment was dear, however, and for common purposes papyrus was so much more convenient that the Egyptian paper never really was supplanted, until the birth of a system which got paper out of cotton, about seven or eight sundred years after the discovery of parchment.

The world then worked on for a thousand years, before we hit op the plan of making the modern paper out of linen rags; a very lucky thing, for up to that time the monks, who could not go to the expense of much new parchment, had industriously been scraping out the copied records of antiquity and works of its great masters to make room for their own writings.

Dependent Children.

Home-finding as a method of providing for neglected and dependent children is now fully recognized as being in the best interests of both the child and the community. The child is placed under normal conditions with the opportunity of forming life-long attachments, while for the community there is the gain in social adjustment and economy. No child philanthropy can be considered progressive and efficient which does not aim to secure for the homeless child a safe place in some family circle. Taking this for granted it follows naturally that there must be a complete and comprehensive plan of supervision.

On this point Mr. J. J. Kelso very truly says: "Too much importance cannot be attached to this branch of child-protection work. If it is carelessly done and correspondence relied upon for information instead of a personal visit, the home-finding movement will be brought into disrepute and the happiness of many a child completely wrecked. Visiting should be done, but in such a tactful way as to ensure the protection of the child and at the same time retain the good will of the foster parent."

When it is clearly established that the child has become deeply rooted in the affections of the foster parents, provision is made for legal adoption and once that is accomplished all supervision ceases and the child becomes an integral part of the family. This excellent law should be more generally known to those who have opened their homes to a friendless child, for it gives them a protection not always possible in past years.

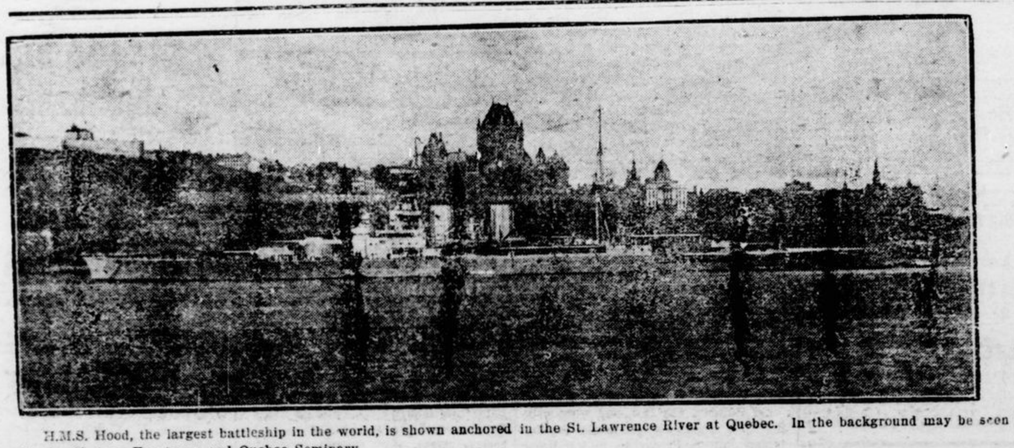
He Sold Wells.

"He's in the oil business, you say? Retail, I suppose?"

"No—hole-sale."

The Ocean's Bed.

The ocean bottom is thought to be made of abnormally dense rock.



H.M.S. Hood, the largest battleship in the world, is shown anchored in the St. Lawrence River at Quebec. In the background may be seen the Citadel, the Chateau Frontenac and Quebec Seminary.

CANADA'S LIVESTOCK INDUSTRY

After the various vicissitudes experienced of recent years, and the being buffeted between the United States and British markets according to the vagaries or tariffs and embargoes Canadian livestock producers would seem to have reached a realization that it is a poor policy to remain dependent upon a single source for the disposal of their produce, and are seeking a remedy for periodically recurring ills in a wider expansion of markets. In the movement to go farther afield in the vending of their produce which is markedly evident at the present time, may be foreshadowed brighter and more staple times for Canadian livestock producers.

In the first six months of 1924 Canada exported 32,179 cattle to Great Britain and 40,953 to the United States as compared with 30,029 head to Great Britain and 23,659 head to the United States in the same period of 1923. The total shows an increase amounting to 18,991 in favor of the present year, an increase of 35 per cent. The number of livestock marketed in England and Wales during the first 26 weeks of the year amounted to 89,148 fat cattle, 95,934 stores as compared with 84,867 fat cattle and 234,804 offered during the corresponding period of last year.

Beef, Bacon, Pork and Mutton.

In addition to these live exports there were exported 16,588,300 pounds of beef, of which 2,314,000 pounds went to Great Britain and 6,307,800 went to the United States; 51,516,000 pounds of bacon, of which 50,929,000 pounds went to Great Britain and 586,800 to the United States; 4,652,000 pounds of pork, of which 2,923,000 pounds went to Great Britain and 1,729,600 pounds to the United States; 79,200 pounds of mutton, of which 79,200 pounds went to the United States.

Some progress has been made in co-operative marketing of livestock and the year ending in June of operation of the co-operative cattle pool of the United Grain Growers, Ltd., was a successful one from the standpoint of the producer. For the twelve months the profits of the cattle pool amounted to $20,870, which made possible a distribution of one per cent. of the value of their cattle to be paid to shippers in addition to the full market value which they had already received. Since the pool was inaugurated in February, 1923, it has sold more than 100,000 head of cattle with a value of $3,200,000.

Prairie Provinces Developing New Markets.

Western Canada, particularly the Province of Alberta, has become interested in endeavoring to develop new markets for its livestock, and in this connection shipments have been made to Japan, Belgium, and to California. The Grande Prairie and Peace River Country have been furnishing a large number of winter-fed cattle for the Old Country markets, and shipments of carefully selected cattle have moved from Central and Northern Alberta with a successful outcome which would seem to augur a profitable future trade.

The Alberta Government's experimental shipment of beef cattle to Japan is especially significant. Japanese livestock dealers came from all over the country to view the stock and were well pleased with the cattle, particularly satisfied with the beef. They are anxious to have another shipment made as soon as possible, and it is believed there is possibility of a voluminous and profitable trade developing in this connection between Western Canada and Japan.

Co-operation.

It ain't the "catcher" or the "pitcher"
Nor the individual play,
But close co-operation
That makes them win the day.
It ain't the individual,
Nor the "big league" as a whole,
But the everlastin' team work
Of every bloomin' soul!

Must Improve the Hootch.

"Bootlegging is in its infancy."

"Well, considering the kind of hootch it's being brought up on, do you think it will live to grow up?"

Autumn Dusk.

I saw above a sea of hills
A solitary planet shine,
And there was no one near me
To keep the world from being mine.

Apple-Packing School.

Instruction courses in modern methods of grading and packing apples are to be given to fruit growers at a up-to-date applepacking station which will be opened by the ministry of agriculture at Cottenham, Cambridge, England.

Protection of Sea Fronts.

In England wood blocks and segments, with tab end grain, have proved successful in resisting the action of wave-driven

ONTARIO ARCHIVES
TORONTO