

The Automobile

"BE PREPARED" FOR AUTO TOUR.

The thing to do is to plan before you start not only where you are going, but how you are going to get there; that is, what you need to enjoy going at all. It would naturally suggest itself to you to go over the entire car, clean it, inspect for wear or broken parts and to know that everything is really shipshape. When you have cleaned up the car look over not only the parts which show and the larger things which possibly you think are the only important ones, such as transmission and differential gear cases, but the grease cups and every working part, wherever there is motion.

If the engine knocks a little on the hills, have the carbon removed. Make sure that the compression is all right and if necessary grind the valves. Look over the wiring to see that there is no worn insulation that will leak current, that the terminals are all tightened properly; then see that the magneto or breaker points, or coil points, are clean and properly adjusted, that the distributor is clean and that your battery is fully charged. If you have no magneto take along a set of dry cells for emergency. The generator and starting motor commutators should be inspected and cleaned and put in first class condition.

Because the springs are to make for your comfort, look them over pretty well and lubricate them if necessary. See that none are cracked or broken. Carry a repair attachment for use in case of accident.

Be especially solicitous about the tires. You want on all four wheels tires which will stand the trip. Then you want two extra casings with tubes inflated, ready to change, and you need extra tubes, with cement patches and rapid vulcanizing outfit, because when your trouble comes there may not be a garage next door. Your fire extinguisher should be a real one and all filled and in working order. It may be worth the price of your car while you are touring.

Things You May Need.

Here are some of the things needed for emergency:

- Set of ignition brushes, labeled; wrench for interrupter points; file for cleaning the points; hydrometer or voltmeter for testing storage battery; set of fuses if used. These should be wrapped together and marked plainly "Ignition Repairs."
- Box of plungers for tube valves, three-in-one valve tool; tire pressure gauge; patches, cement and vulcanizer. Wrap these together and label "The Repairs."
- Box each of assorted nuts, brass cups, lock washers and cotter pins; spool of copper wire and one of soft iron wire, in small box.
- Tow rope.
- Jack and handle and two blocks of wood to place jack on.
- Oil squirt can, filled.
- Extra set of electric light bulbs.
- You can buy these already boxed.
- Bag of clean waste or rags.
- Folding canvas pad.
- Full set of tire chains, repair tool and extra cross links.

In wrapping these things they should be packed so that they will go easily in the tool box or under the seats, and be handy for instant use if needed. Don't throw them all in a jumble so that you have to hunt, perhaps in the dark, to locate the small thing that you may want. You ought to know where they are well enough to find them in the dark, though if you carry an extension trouble light it will simplify your troubles if they come at night.

Of other tools in addition to the regular type supplied with the car, you want one or two sizes of pliers, including a good pair of cutting pliers, a small hammer, wrenches which will fit all nuts on the car, a couple of small cold chisels, tire removing tools, engine valve removing tools, and possibly other things. Your wife might be able to fix most anything with a piece of string and a hairpin, but you will not be able to do this on a car, so you should pay attention to the suggestions given.

Prudence would suggest carrying an extra gallon of oil and a gallon of gasoline. If you are going away from civilization better have enough in reserve to get you to a gas station.

It hasn't anything to do with the car, but it should be remembered that mornings and evenings, even in summer, particularly in high altitudes and on stormy days, are cold. Carry sweaters, raincoats and rubbers, the latter in case you have to get out in the mud to change a tire.

Needn't Follow the Travel.

It might be well to suggest that your tour be planned off the main highways in large part. There is really very little pleasure in forming part of a procession along the main highway, where you have to watch so carefully to avoid accidents that you miss the beauties all around you. Then, too, most of the natural beauties are not to be found on the main line. I know several sections of the country where just off the through road there are falls and glens and mountain heights and scores of beauty spots well worth the visit. All over the country there are places as beautiful as any that Scotland and the Rhine-

and the worst is yet to come



Fly to Right, Walk to Left, in Merrie England.

"Keep to the right" is the rule of the air, as laid down by the British Government in conjunction with the French and Belgian authorities, after consultations on the control of flying, says a London despatch. This action was taken to prevent disasters occurring along the established aerial routes. Definite highways have been mapped out from here to Paris and Brussels, and the altitudes at which the planes will fly are to be fixed before starting from the various airdromes. They must pass at least 100 yards apart, and must keep clear of clouds.

Since July first "Walk on the left" is the rule for London's sidewalk traffic. The Safety First Council has studied the problem of sidewalk congestion from all angles and decided to organize a concerted effort to remedy it. Practically all the twenty-eight metropolitan boroughs have lined up to put into effect the leftward rule, posting notices along the streets. Heretofore the sidewalk rule, if any, has been to the right, while street traffic goes to the left, thus causing many accidents.

Wet Wood Does Not Decay.

It is a common idea that moist wood is more subject to decay than dry wood. That this is only true within certain limits is pointed out by the Forest Products Laboratories of Canada (Dominion Forestry Branch) who state that recent investigations indicate that wood which contains less than 60 per cent. of water is not subject to decay by wood-destroying fungi. Examples of the protective effect of moisture extend further back in time than the foundations of medieval buildings to the pre-historic piles of the Swiss Lake Dwellers. The latter timbers have been submerged in water for thousands of years without becoming moulded. The most modern application of the principle may be seen in certain large Canadian pulp mills where the immense stacks of pulpwood are sprinkled with water. This sprinkling not only prevents rotting but is the most efficient means for the prevention of fire.

A great career, though balked of its end, is still a landmark of human energy.

In the light of eternity we shall see that what we desired would have been fatal to us, and that what we would have avoided was essential to our well being.—Fenelon.

The Great Were Once As You.

The great were once as you, They whom men magnify to-day Once groped and blundered on life's way.

Were fearful of themselves, and thought By magic was men's greatness wrought;

They feared to try what they could do; Yet Fame hath crowned with her success With all the courage of their youth.

The selfsame gifts that you possess. The great were once as you, Dreaming the very dreams you hold, Longing yet fearing to be bold, Doubting that they themselves possessed.

The strength and skill for every test; Uncertain of the truths they knew, Not sure that they could stand to fate With all the courage of their youth.

Then came a day when they Their first bold venture made; Scorning to cry for aid, They dared to stand to fight alone, Took up the gauntlet life had thrown, Charged full-front to the fray.

Mastered their fear of self, and then Learned that our great men are but men.

Oh, man, go forth and do! You, too, to fame may rise; You can be strong and wise. You can if you'll but think you can; The great were once as you. You envy them their proud success, 'Twas won with gifts that you possess.

—Edgar A. Guest.

Giant Motor Truck.

A six wheel motor truck has been built that can carry loads of ten tons and draw two five-ton trailers, all three vehicles being controlled with air brakes by the driver.

To Be Kept Apart.

Sparks and gasoline. Cans and dynamite. Electric wires and metal objects. Children and matches. Electric bulbs and combs or hair-pins.

Careless people and camp-fires. Gas jets and lace curtains. Coal-oil lamps and shaly tables. Forest slash and cigarette stubs. Brush piles and careless smokers. Celluloid comb and hot hair curlers. Lighted matches and forest underbrush.

The Last Bottle.

"Here is a letter it would hardly do for us to publish," said the patent medicine quack. "A man writes: 'I have just taken a bottle of your medicine.'"

"Well?" said his partner.

"There it breaks off short, and is signed in another handwriting. 'Per Executor.'"

A Use for It.

"Do you think, Professor," said the ambitious youth, "that I shall ever be able to do anything with my voice?"

"Well," was the cautious reply, "it may come in handy to raise the neighborhood in case of invasion."

The cleanliness of the Japanese is well known. The poorest Japanese coolie regards his evening bath as a sacred duty and as the greatest luxury of the day. By the time the head of the family is home from his labors his wife has the tub and the water ready. In goes the man first, then his wife, then the children in order of age. Afterwards the family, clad in clean garments, are ready for supper.

Macadam, a Scotch engineer, invented the system of road-making known as "macadamizing."

DRAINAGE IN PRAIRIE PROVINCES

Will Greatly Facilitate Progress of Transportation and Settlement.

In the recently published report of the Manitoba Drainage Commission the following significant statement appears: "The future development of the province depends largely on two factors: irrigation in the southwest and drainage in the east and north. The opportunities and cost of irrigation are such as to offer little hope in that direction. The possibilities in the other direction are almost unlimited. When we find that one-seventh of the 7,000,000 acres of improved lands in that province is included in the 2,000,000 acres of land within drainage districts and further, that the lands in the drainage districts are only fifty per cent developed, and understand that in general drained lands are superior to lands not requiring drainage, one must be seized with the importance of this subject and further, one must realize that the future agricultural development of the province depends largely on how this matter is handled at the present time."

There is no exaggeration in this statement and, moreover, what has been said regarding the necessity for drainage development in the province of Manitoba applies with equal emphasis to the provinces of Alberta and Saskatchewan.

Wet Areas Block Settlement.

In general, investigations conducted by the Dominion Reclamation Service have shown that there are comparatively few areas requiring drainage south of township 35, where the sloughs and lakes are usually too alkaline to be of value for agriculture when drained, or are required for stock watering, and other purposes. North of this, however, precipitation is greater, alkali conditions are usually negligible, and the wet areas so much more extensive that settlement in them is rendered practically impossible. These areas often form a serious barrier to transportation and hold back settlement of large tracts of good farming land.

The benefits which would be derived from the drainage of many of these areas would not be confined merely to the lands reclaimed but would extend to the surrounding areas that are apparently dry, since the ground water, which is often near the surface of these flat lands, would be lowered, thereby insuring warmer soil conditions and earlier and more abundant growth—practically a longer growing season.

During the past three years the Reclamation Service has investigated many of the districts most needing drainage. It may be concluded, as a result, that there are vast areas of good agricultural land lying near to the railroads which are reclaimable at a comparatively small cost. By way of experiment the Reclamation Service has undertaken the construction of works to drain Waterhen Lake, comprising an area of about 12,000 acres, situated near Kinistino, Saskatchewan. These works are now nearly completed.

Classes of Land Requiring Drainage.

Lands requiring drainage may be divided into four principal classes. In order of value and economy of total reclamation, the beds of lakes and sloughs come first. The feasibility of draining these depends principally on the cost of the necessary works, for as soon as drained the land is usually ready for seeding to timothy or other tame grass. After two or three years

as hay meadows, such lands are often ready for cultivation for ordinary farm crops. Reclamation of this class of land is practically always a splendid investment.

Next are the native hay lands which are periodically flooded or are permanently wet. These meadows commonly result from the building of beaver dams and are usually admirably adapted and capable of irrigation or spring flooding after drainage by the construction of hold-up gates at the outlet. Lands of this class, which can usually be reclaimed at a comparatively small cost, comprise a large portion of some of the best projects so far investigated.

A third class of lands, the reclamation of which present more difficult problems, is where the water is too deep to permit the growth of the more or less useful wild grasses and yet not deep enough to prevent a dense growth of semi-aquatic plants. Such areas are commonly known as "floating bogs."

After drainage the mass of roots and semi-decomposed vegetable matter that remains on the surface of the land retains water like a sponge and perpetuates the growth of worthless vegetation sometimes for years. Projects consisting largely of this class of land should be undertaken with great caution, as the method of their final reclamation is still in the experimental stage.

Large Areas of Muskeg.

The class of land requiring drainage, which presents the greatest difficulty of all, are the areas commonly known as "muskegs." Muskegs hundreds of miles in extent occupy a large portion of the north country and systematic soundings along the railroad to Hudson Bay show that these muskegs consist of a depth of moss of from one to twelve feet. The usual depth is from two to four feet. The mineral soil underlying this moss is usually clay and silt of high agricultural value. For the present the reclamation of muskeg land will of necessity be confined to such areas as can be reclaimed by drainage and the inexpensive practice of burning or tramping by cattle. Where the subsoil is clay and the plough can reach it after burning off the moss, an ideal condition for agriculture is obtained.

In view of the existence of vast areas of muskeg land throughout the northern parts of the provinces, and the fact that settlement is pushing far beyond these because they are not immediately tillable, it is of the greatest importance that investigations to determine the feasibility of draining these areas be continued and that practical experiments be conducted on a systematic basis to determine the best means of getting the soil into shape for cultivation after drainage.

Strange Electric Storm.

On a February night, in south latitude 33 degrees west longitude 98 degrees, the sailing ship *Ville du Havre* encountered a most remarkable storm. The rain fell in torrents and the ship appeared to be electrified, the mast heads flaming like giant candles. Strange lights traveled over the rigging and after every flash of lightning a part of the vessel, which had been newly painted, remained for several seconds glowing with phosphorescence.

The lightning, which was very frequent, instead of displaying itself in zigzag lines took the form of flying bombs, which exploded with outbursts of light that illuminated the whole sky. Before and after the more violent explosions of thunder fierce gusts of wind swept the ship. This terrifying experience lasted for five hours with no respite.

How Fires Start.

One of the most frequent forms of involuntary incendiarism known is the way thoughtless individuals—generally smokers—throw away matches without taking the simple precaution of blowing them out, and assuring themselves that they are extinguished—matter of a second or two, although they were perfectly willing to spend fifteen seconds' time in lighting the match and lighting the tobacco. This careless practice is universally prevalent throughout the country.—Deputy Fire Marshal Lewis, Ontario.

In for the Beating.

Horace sat on the doorstep crying bitterly. Passers-by tried to console him, but without avail. Presently a sympathetic old lady came along.

"What's the matter, little boy?" she asked.

"Got my new pants covered with dust!" sobbed the boy.

"But they're clean now, dear," continued the lady.

"I know they are!" wailed the lad.

"Then why do you still cry, child?"

"Cos mother wouldn't let me take 'em off when she beat the dust out!"

Cured Her.

"Does Alice bring her troubles to you now as she used to?"

"No; not since I began pointing out that she was to blame for having them."

Catches All Air.

A windmill of French invention for generating electricity has a large number of vertical vanes, which catch all the air that is moving.

Spreading Gospel of Music Through the Press.

Speaking on one occasion on the question of music publicity in the press a famous educationist said this: "If I attained my ambition, there would not be a publication which ever would not press unless it carried its story of music. The more discussion there is about music, the more there will be, the more matter printed about music, the more concerts there will be. Everybody is a potential patron of music, and is worthy of being developed into a music lover. Education is the torchlight which can be used to bring 98 per cent. of the people who think they don't like music into the fold of those who know they do. Education will convert the indifference of 'I am always aware of the man who says, 'But music I don't care for, it's too hard for me to attempt to sit through a recital after a hard day's work. I want some relaxation.' I am always eager to take that man aside and argue the matter out with him. I am always conscious of the presence of women who are deaf to the possibilities of music in their domestic happiness and I want to tell them about it. Of the children growing up with the wrong kind of music in their ears, of working men, of professional men, of business men, of medical authorities and of civic and other government authorities."

Education in affairs of music must go through every channel, through the schools, the clubs, the open forums, the newspapers and the periodicals.

Forest Fire Law Strengthened.

Many important amendments were made to the Forest and Prairie Fire Act of the province of Alberta at the last session of the legislature. The principal of these amendments, which will greatly lessen the difficulty of combating fires, and which are welcomed by all who have to do with the forests, are the following:

All Dominion forest and fire rangers, Royal Canadian Mounted Police, Provincial Police and municipal councillors are ex-officio fire guardians, with authority to enforce the Act.

Municipal councils must appoint fire guardians.

Fire guardians have the power to order out any male person over sixteen years of age to help in fighting a prairie or forest fire. There are of course the usual exemptions in the case of postmasters, physicians, telegraph operators, etc.

Spark arresters must be used on marine engines, with a view to preventing fires originating from Sparkies thrown from the smokestacks of steamboats operating on northern lakes and rivers.

Provision is made for the establishment of fire districts. In these timbered areas it is illegal to start clearing fires between 15th April and 15th November, without a special permit.

The scale of penalties for violation of the Forest Fire Act have been revised and the penalties made heavier, so that there will be greater respect for the Act.

Tree Growing Competition.

The importance of having shelter-belts of trees on prairie farms has so impressed the Directors of the agricultural society of Biggar, Alberta, that they have inaugurated a tree-planting competition, extending over five years and open to all farmers in the district. Each year there will be cash prizes offered for the best prepared plot and the best plantation set out, and in 1926 there will be cups, medals, and cash prizes offered for the best plantations of the five years. The society has secured the endorsement and assistance of Mr. N. M. Ross, Superintendent of the Dominion Forest Nursery Station at Indian Head, Saskatchewan, in planning the competition and it would appear that this is the beginning of a forward movement in tree planting on a large scale in those parts of the prairies that have not yet taken it up.

Red and Green Avert Sunstroke.

The fact that a combination of red and green materials was used in the uniforms of the Tommies during the war to nullify the effect of the rays of the sun was brought out in a claim before the Royal Commission of Awards when J. N. Thomson applied for an award on behalf of his deceased father, says a London despatch.

It was stated that a weave of these two colors sewn into the soldier's pine pad, which was four inches wide and fixed into the tunic, proved highly effective in Mesopotamia, where 7,000 men were thus equipped. The same combination was used as a sun curtain hung from the helmet, protecting the back of the neck, and is generally employed now in the army to avert sunstroke. Thomson claimed that not a single case of sunstroke was known where the protective material was worn.

Madagascar Gold.

The island of Madagascar, according to reports, promises to assume some importance as a producer of gold. On the eastern slope of the island are some auriferous districts said to be very rich. Nuggets and dust are found in the streams' beds, but the principal lode has not, it appears, yet been discovered. Mining engineers have anticipated such discoveries, but have been very careful; the gold workmen have proved capable of withstanding the climate.

Music in Canadian Schools

MUSIC

I am born of the joy from an old refrain,
Where the thrushes sang near the wandering stream—
Their rapturous chantry dwells near me again—
While evening sleeps in the moonlight gleam.

I am born of the breath from the soul of things—
Apart from the wind and its rude, restless ways—
I am tenderly borne on uncouth strings—
As an old wonder-song from remembered days.

I am born of the strange and wonderful sea—
'Neath the measureless clouds, so frail and so still,
I heard my own voice in a song, brokenly—
A challenge to night-bird, the river and rill.

I am born of a thought in the beauty of rhyme—
In sweet, sustained notes in a soul's melody,
That wandered afar in some forgotten time,
Nor halting nor fearing to dwell close to me.
—Charlotte Carson-Talcott.

are taking a hand in it. The parents are showing a very keen interest in the matter.

Almost without exception the parents who have had musical training insist that their children shall receive similar instruction. It is essential, then, that the schools through their teachers should play the part of parents, and instruct every child in the fundamental principles of music. Let the children have especially some singing experience and prepare them to have at least one art subject at their command with which to make worthy use of their leisure time.

Music is really the only subject in the curriculum of the schools that is distinctly of cultural value. All other educational activities lead towards the

of them can come to appreciate music in a way that is indispensable to a good general education and to real living. This can be done by teaching them to recognize and name the compositions of the great masters, making it possible for children to be informed concerning the lives of the great composers, and to bear a performance of their works by means of the phonograph, player-piano, or still better, by the first-hand rendition of artists. This does not mean that children should be bored by listening to music which they are too undeveloped to enjoy. Let the younger ones sing the beautiful songs that have stood the test of years and as they develop they will understand and enjoy the more complex and subtle music of a more advanced age.

By no means least of the benefits bestowed by music is that of bodily grace. The kindergarten youngster who sways to and fro, as he sings of the wind among the flowers, the child who enjoys some sturdy folk-song and dance, the older girl who interprets Chopin through rhythmic motion, all of these are acquiring bodily grace and health—a mind and body harmoniously attuned.

In order that these pleasures and advantages may be lifelong possessions, the cornerstone of the love of music must be laid in childhood.

The school that is lacking in school spirit, that studies because study is necessary, lacks the inspiration of musical activities.

If these musical activities are not in evidence in every high school and in the elementary school as well, it is proof that the compelling force in control of these schools is money that quality known as enthusiasm.

Enthusiasm makes people do things.

commercial and pecuniary accomplishments. The educational value of music has not hitherto been as fully appreciated as it should be by those responsible for the school curriculum in small towns. Where class-singing, for instance, has been consistently practiced, its benefits are universally acknowledged. It promotes health; it is a valuable means of recreation; it quickens the sense of hearing, making it more discriminative; it trains the faculty of speech as well as that of song; it awakens the musical instinct and preserves the voice, not only in childhood, but in later years.

There is a growing feeling in Canada that while few school children can, even with a good course in music, become real musicians, fully 95 per cent.