Dont's For Your Storage Battery.

The motorist who will examine the battery of his car regularly every week and heed the following instructions, will continue to receive satisfactory service from his battery day after day, says T. G. Breen, dealer in Chevrolet passenger cars and trucks.

Don't allow your storage battery to stand in a discharged condition for any length of time. Should the battery, for many reasons, become discharged, have it fully charged at once at the nearest garage or charging station. A battery, when in a discharged condition sulphate rapidly, making charging extremely hard and in time entirely destroying the elements.

Don't allow dirt, water or any pieces of metal to come in contact with or remain on the top of your battery. Inspect regularly and keep clean.

Don't continue to crank your engine with the starting motor if it does not start after a few sevolutions. Something is wrong with your ignition system or carburetor. Locate and remedy the trouble before again cranking the engine. Just turning the engine over will not help you start, but it will exhaust your battery if continued for any length of time.

Don't forget to turn "on" the ignition switch before attempting to start the motor.

Don't forget that you must restore in the battery whatever current has been withdrawn for starting. It requires about twenty times as long to restore current to the battery as it takes to remove the amount in starting the engine.

Don't turn on all the lights of your car and leave it standing for several hours. Conserve the battery supply by using only such lamps as are absolutely needed to prevent accident.

Don't allow the battery to become loose on the brackets.

THE MOTOR CAR OF THE FUTURE

Looking Ahead to the Ideal Vehicle—May Not Be Gasoline Driven.

The automobile of the future will be weather-tight. Of course, there will always be as many, if not more, body models, but they will all tend towards one standard. And this standard model will be a weather-proof affair. Probably all glass sides, front, rear and roof.

The glass sides will come down, of course, for warm weather. Curtains inside will help keep off sun when shade is wanted. But frames, instead of being of heavy wood or metal, will approximate the framing now used on most modern glass showcases. If malleable glass is ever made, the frame may be dispensed with, but this story cannot go.

The power plant of a car will be under the body, or on or near the rear axle.

Now wait a minute. A thousand gasoline engineers are about to rise and call me wicked names and tell me it can't be done. I dare say it can't, with a gasoline engine.

But who said the car of the future was to have a gasoline engine

There is at least one comparatively new development in the steam car field which does this very thing—puts the power plant where it belongs, close to the rear axle, thus dispensing with the long shaft, the universals, and their likelihood of breaking and wearing out, and their power loss.

Electric automobiles of the present all have their power plants on or near the point of power application. One truck which drives from all four wheels, and at least one front drive passenger car, show that some engineers appreciate the real source of power and the place where the power is applied as close together, not as far apart, as possible.

The car of the future won't leave anything to be done by man power. In a few years, foot brakes will be things of the past, except on cheap cars. Why should man exert muscle to stop a car any more than to start it? What's that great brute of an engine idling under the hood for?

And in the near future the car with the steering wheel will be as obsolete as the car with hand pump for gas or oil to-day.

The car of the future will have no such thing as "driver's seat." All the seats in the car, except one, will be moveable. Driving will be done by a small control board which can be held in the lap. It will be connected to the mechanism by a flexible electric cable.

A small finger lever, not a wheel, will guide the car. Another will attend to speed changes, buttons will light and warm the car, blow the horn, apply the brakes, everything. The driver will sit right or left, as he pleases, or even on country roads in the rear seat. Driving then will be what it ought to be, not a physical, but a mental exercise.

This is no wild guess, but the inevitable end of practice foreshadowed in the present developments. We have with us now, for instance, the push button, electric gear shift. It displaces the manual work of moving around a set of gears, and does labor electrically, with energy stored in the storage battery by the engine. Of course, the car of the future will be without gears—but that is not the question.

Steam or electric steering has displaced hand steering on all the large ships, so why should the motorist sit humped over a much-in-the-way-of-your-comfort-wheel, when your engine can suply the muscle, and all you need to supply is the brain?

Government Sells Tractors.

The Department of Agriculture of Ontario has some seventy tractors on hand which are to be sold at a reduction of 10 per cent. to all returned men who are bona-fide farmers. These tractors were purchased by the Government for plowing, and used in the greater production campaign last year, but now that the emergency for production has passed, there is no further need of the tractors by the Department of Agriculture. Hence it is that the reduction of 10 per cent. is being offered to returned men who are farmers.

Cylinders Cast En Bloc.

Practically four-fifths of all the designs produced have the cylinder cast in block. The exceptions to this usually have some other reason rather than foundry practice for so doing. There are two air-cooled cars on the market now, and they, of necessity, have to use individual cylinders. All of the V motors have the cylinders cast in the same manner, although in a few of the designs the block consists of only three cylinders, instead of six or four.

Newest Notes Of Science

South Dakota led the states for wild hay last year, harvesting 3,282,000 tons.

One city in England waters its streets entirely with electric sprinkling wagons.

Hinged rear feet on a new straight chair permit it to be used much like a rocking chair.

Discoveries of deposits of talc, or soapstone, have given a new industry to South Africa.

For the convenience of travellers liquid soap is being packed in easily punctured capsules.

The oil fields of Algeria will be exploited by a company that is being formed in France.

An inventor has mounted a cutter for railroad rails on a turntable for use in crowded shops.

After failing many times Italian engineers have successfully bored an artesian well in Tripoli.

The deadly phosgene gas has been found valuable for bleaching sand for use in making fine glass.

Japan is utilizing the crater of an extinct volcano in which are many hot springs as a sanitarium.

To permit soft coal to be used in hard coal base burner stoves is the purpose of a new attachment.

India is reviving its ancient industry of building wooden ships, using timber from its vast forests.

A recently invented kerosene torch for thawing coal frozen in cars is powerful enough to weld metals.

The smallest known bird is a Central American humming bird that is about as large as a blue bottle fly.

A new current regulating attachment for any incandescent lamp gives it a range of twelve different intensities.

Fibers used in textiles and cordage have been extracted by a Frenchman from the water hyacinth of Indo-China.

Detecting the presence of gasoline fumes in sewers is the purpose of a new lamp which normally burns hydrogen.

Experiments in Japan with the cultivation of flax have obtained the best results when Belgian seed has been used.

An inventor has patented a broom with a resilient handle with the idea that it will last longer and be easier to use.

Spain is studying its extensive deposits of peat with a view of utilizing them for the production of gas and electricity.

A recently designed bed for automobile tourists consists of a rope bound canvas sling on which the cushions of a car are laid.

Motorboats equipped with mowing machines are used for gathering papyrus for manufacture into paper pulp by a plant in Zululand.

By the use of a new motor driven machine old concrete sidewalks and roadways can be crushed so the material can be used in new ones.

Using only bamboo, Dutch engineers have built a bridge in Java more than 100 feet long and with a central span of more than 60 feet.

Easily adjusted reducing valves have been invented to permit high pressure fire hydrants to be used for streams of ordinary pressure.

A patent has been granted the Spanish inventor of a process for utilizing banana fiber instead of hemp and jute in textiles and coruage.

A crib for babies has been invented that folds so compactly that it can be carried about and used by tourists in an automobile or hotel room.

English scientists have decided that passing electricity through freshly cut timber makes it more resistant against decay and fungous growths.

On the principle of the old-fashioned bullet mold is a mold for recasting on an iron handle the head of a lead hammer that has been battered.

Practically all the equipment for wireless stations that are to be erected in remote parts of China will be ccarried to the sites by aeroplanes.

A recently designed motor scraper to build roads or clear them of snow has two small scrapers in front of the fore wheels to give them good traction.

A dive to a depth of 262 feet in the sea by a Greek sponge fisherman is believed to be the world's record for a man unprotected by diving apparatus.

Using a single rear wheel for steering, a self-propelled threshing machine has been designed, supplied with power by a 40 horsepower kerosene engine.

A Spanish engineer has invented a straw compound fuel which is claimed to have advantages over coal when used in locomotives and agricultural tractors.

Adjustable frames to fit heating radiators have been invented which can be covered with any desired material to exclude dust from the radiator crevices.

Though French scientists have constructed the world's most powerful electro-magnet it is so expensive to operate that its use is limited to laboratories.

Geological survey estimates of 345,500,000 barrels for petroleum marketed in the United States last year indicate the establishment of a new high record.

Experts are investigating Sweden's alum shale deposits for the government in the hope of obtaining illuminating oil, sulphur and other products therefrom.

Carbonator, storage tank, cooler, dispensing faucets and rack for glasses are combined in a new space saving device for places in which beverages are sold.

Seaweed is being used in England as a binding material in concrete building blocks made of crushed slag and other heretofore neglected mineral products.

A Chicago man is the inventor of portable apparatus for lifting patients from hospital cots without disturbing them and moving them from room to room when necessary.

Official investigation and experiments in Spain have shown the soil of Andalusia to be adapted to cotton rhising and that extensive swamps can be reclaimed and utilized.

The stand for a new electric flat-iron automatically disconnects the current when the iron is placed upon it, the current flow being resumed as the iron is lifted.

According to a British scientist who investigated 78 families, including more than 3,000 individuals, left handedness is inherited, often through several generations.

The government of Formosa is planning the establishment of one of the greatest hydro-electric plants in the Far East, capable of supplying 130,000 horsepower and serving the entire island.

The first brewery in the Society Islands has been built, mainly with materials and equipment from the United States.