

DRIVERS PLACE TOO MUCH RELIANCE ON USE OF THEIR BRAKES

Accidents May Be Avoided Nearly Always but Fatal Time Comes Finally.

It often has been said that the brakes constitute the most important part of the equipment of a car, and most observant persons will readily admit that there is much truth in the assertion. That they withstand the terrific abuse to which they are daily subjected is not short of remarkable. The remarkably low percentage of accidents sustained by automobiles in the ordinary course of street driving is a tribute to the perfection of this part of the machine's mechanism, as well as to the skill of drivers and their faith in the brakes.

Of the accidents that do occur, however, a considerable percentage might be avoided if drivers would school themselves to refrain from the too common practice of taking snapshots for granted. The habit of making snapshot calculations where many factors are involved has undone many a driver and wrecked many a car.

Two sets of conditions are involved in such calculations, viz., those within the car and those which are external to the car. The average driver approaching a street crossing will approach at a considerable speed with his clutch in and the motor driving the car, placing all his faith in the brakes and his own quickness in applying them should anything appear to block the way.

One Fatal Error.
Ninety-nine times out of a hundred, perhaps, he will be quick enough in kicking out the clutch and applying the brakes should this become necessary, but probably not one driver out of 50 ever gives a serious thought to the actual possibility that either the clutch or brake mechanism might fail at the critical instant, or that he himself might fail to accurately carry out his own intentions.

Did he make proper use of his reasoning powers he would not begrudge the ridiculously small expenditure of time and energy required to bring the car under complete control before running into possible danger. In other words, he does not begin slowing up soon enough. Seeing, he too often thinks he has been or will be seen in time.

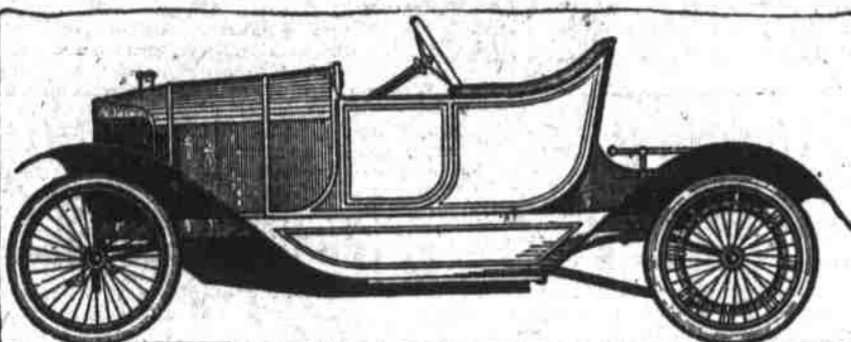
The way in which a driver may be misled by conditions external to his car is illustrated by an accident which recently occurred, and which is only one of a number of the same sort. The driver of a light truck, approaching from a cross street an avenue traversed by trolley cars saw that there was a car standing on the near side of the crossing, and that half a dozen persons were waiting to board it.

The driver's subconscious calculation that before the people could get aboard he could be across the track with a wide margin of safety would have been correct in an overwhelming majority of cases, as would his assumption that, anyway, the motorman, even if he did start up sooner than anticipated, would see the truck and act accordingly.

Unexpected Happened.
But it happened that just as the truck driver withdrew his head behind the side panel, the people, for some reason, decided not to board the car, and the motorman threw his controller around while looking backward. When he turned his head he was within 10 feet of the truck, and the driver never suspected that two of the premises on which his calculation was based were erroneous until he was almost thrown from his seat by the impact.

There can be no doubt that the brakes of a motor car are the most important parts of it in case of emergency, though despite this fact comparatively little attention is paid to them by the average person. In a great many cases they are not touched from one season's end to

CYCLECAR WHICH WILL BE PUT ON THE MARKET SOON



New belt driven cycle car "Signet."

In Fenton, Mich., within 50 miles of Detroit, another concern has been carefully and cautiously working out the details of a cyclecar which it is now about to introduce to the public at a figure under \$400. This is the Fenton Engineering Co., and its little machine, which is to be known as the Signet, is a true cyclecar.

As illustrated, the car is equipped with a V-radiator, back of which is a De Luxe standard 9-horse-power, air-cooled motor having a bore of 3 1/2 inches. This motor is a standard type made for cyclecar purposes by an Indianapolis concern.

The car has a friction transmission and drives by V-belts of imported rubber which have a width of 1 1/8 inches. There is no differential of any kind, the slippage of the belts taking care of any difference in the rotative speed of the wheels in rounding corners and the like. The forward belt pulley has a diameter of 8 inches and the rear 1 1/2 inches.

The Signet has cantilever spring suspension, the front springs being half a length and fastening to the frame at their ends, while the rear are full half

elliptics to give a double cantilever action.

The control is standard with spark and throttle lever on the steering column and brake and clutch pedals. Electric lamps are included, being run by storage battery.

The body is a two-passenger affair for side by side seating. Back of the seat there is a platform for luggage. The steamline effect is carried out, terminating at the pointed radiator. The wheelbarrow is 96 inches, while the tread is 36 inches.

The little car weighs 475 pounds complete, its overall width outside of the fenders is 45 inches, while the seat length is 38 inches. Wire wheels are used.

The Fenton Engineering Co. is not to market the car directly, though the same capital, all of which is local to Fenton, is back of the project. It is probable that the name of the Signet's maker will be the Signet Cyclecar Co., though this has not been definitely decided upon. It is planned to make about 100 cars the balance of this year, more than this number being already contracted for, it is said. Next year's manufacturing plans have not yet been decided upon.

the next, when exactly the reverse ought to be the case.

They should be examined and adjusted whenever the car shows the slightest inclination to continue on its course against the will of the driver, as evidenced by a firm pressure on the brake pedal. Most cars are so constructed that it is quite simple to take up for brake wear, and in the majority of cases the work does not necessitate the soiling of the operator's hands.

While the automobile is a wonderful piece of mechanism, and is amazingly dependable, there never was and never will be anything made by human hands that is infallible, and any one who throws caution to the winds and depends wholly on his brakes is bound to lose in the long run.

HASLET TO SUPERVISE STUDEBAKER PLANTS

By virtue of a recent increase in responsibility, Chief Engineer James G. Haslet of The Studebaker corporation has been placed in general supervision of all Studebaker automobile manufacturing, receiving direct reports from Production Manager Max Wollering, to whom report the superintendents of all the plants of the system.

Mr. Haslet retains general charge of the designing and other departments of engineering at the Studebaker Plant 10 which is, however, in immediate charge of Assistant Chief Engineer Austin. The enlargement of Mr. Haslet's responsibilities is of interest largely from an industrial point of view, presenting as it does the unusual situation of an engineer in charge both of designing and manufacturing.

Driver Killed in Practice.

Harry Endicott, one of the most prominent of American race drivers, was killed at Jackson, Mich., Sept. 5, when his car went through the fence at the local track, where he was training for a meet. The car struck and killed a little girl and injured two other persons.

YOSEMITE PARK NOW OPEN TO MOTORISTS

Order Came Too Late in Season to Be of Much Value This Year.

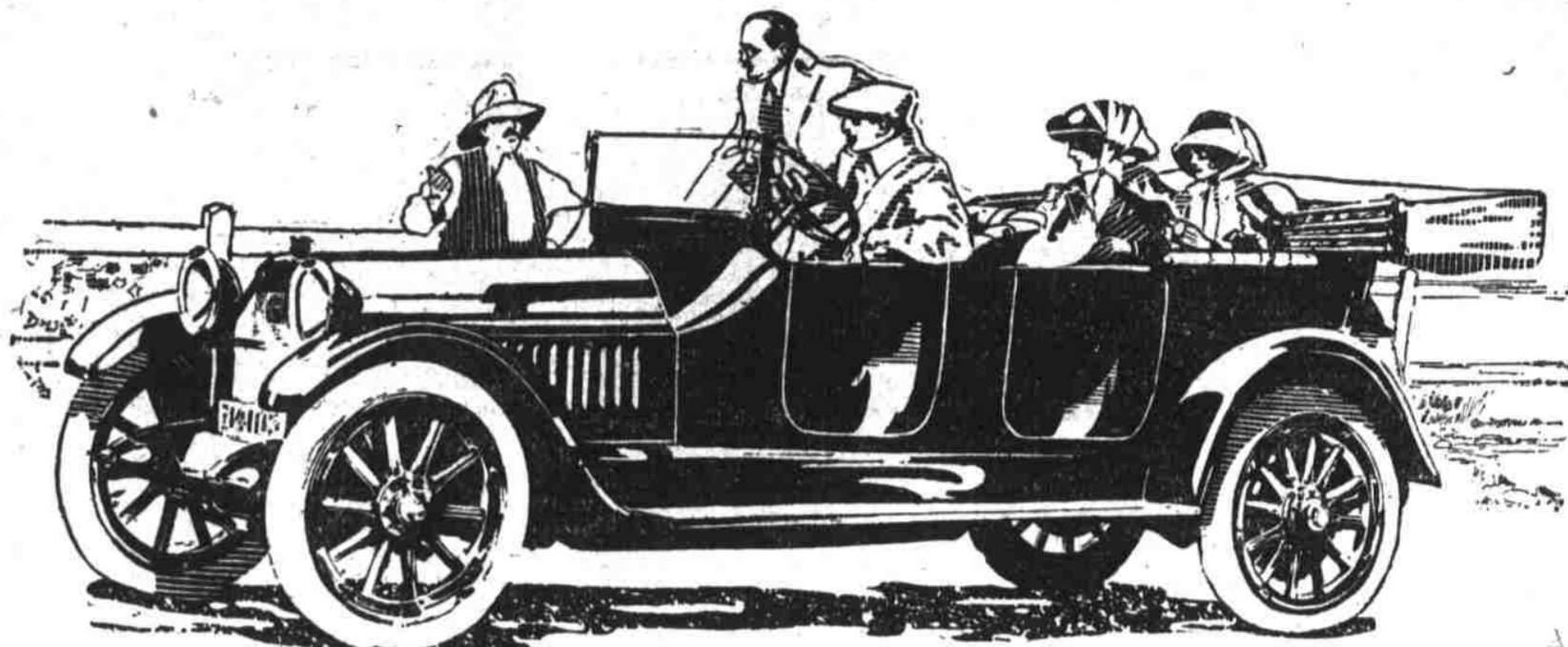
While a number of autoists are taking advantage of the reopening of the valley to automobiles, the order came so late in the season that traffic into the Yosemite will not be very great this season. The Yosemite valley is at its best in the early summer when the weather is cooler and the streams are high, thereby enhancing the beauties of the falls many fold. Next season a great rush of auto traffic into the valley is predicted.

The first car to enter the Yosemite under the new orders, which were placed in effect September 1, was driven by J. H. Leach of 1539 Boulevard avenue, Los Angeles. His daughter, Miss Juanita Leach, carried with her as a souvenir, the sign which has hung for seven years at the park line saying that autos were prohibited in the Yosemite national park.

The Yosemite national park was re-ceded to the United States government in 1904 by the state of California after the state had held it 40 years, California having acquired the park from the government in 1864. It became evident that the wonders of this great valley would be better preserved if the park were again placed under federal control. H. R. McNoble of Stockton, as a grand officer of the Native Sons of the Golden West, led the fight to have the park reestablished as a national park, and it was during his term as grand president that legislation was enacted turning the Yosemite back to Uncle Sam.

Chalmers---1914

Our New "Six"



\$2175
Fully Equipped f. o. b. Detroit

The Master Motor of Them All

What other motors are still striving for we give you in the New Chalmers "Six."

To the best features of the costliest cars we have added these crowning triumphs:

- Silence at all speeds; silence that lasts.
- Sustained power; even after years of use.
- No vibration; comfort and long life.
- Extreme flexibility, without intricate gearing.

These features mean far more than the luxury they bring. They mean minimum wear—no waste of power—lowest possible depreciation. A car that lacks them may cost you less to buy—but it will cost you more to keep.

When once you know the years of extra service these features add you'll wonder how we give them at the price, \$2175.

Go ride in this car. Let it tell its own story in deeds. It can neither overrate its virtues nor hide its defects. It must tell the truth—nothing else.

Silent at All Speeds

Many cars that are quiet at ten miles an hour kick up a lot of noise at thirty.

Let us see what the New Chalmers "Six" will do. Watch the speedometer; 50—40—50 miles an hour and not a murmur from cams or valves.

The Chalmers engineers have discarded the noisy little wedge-like cams so widely used. They knock the valve open with a blow and close them with a snap. The big oval cams of this motor push open the valves and slide them shut with the smoothness of velvet.

What Silence Tells You

The silence of the Chalmers "Six" means more than the mere luxury or quiet.

It tells you that your motor is working with the perfection of a watch—without the slightest wear; that your car has not depreciated one iota; that it is as good as the day you bought it.

And this silence continues for years. 30,000 miles of hard road service, equal to three years of average use, left this motor as good as when it started.

\$80,000 Extra Cost to Us—An Enormous Saving for You

This motor, like the trained athlete, grows better by action.

Chalmers valves of Tungsten steel cost \$80,000 extra per year. But Tungsten steel is not affected by the cylinder heat. So there's no warping—no leaking—no power wasted as happens with the ordinary cast-iron and nickel steel valves. Tungsten steel valves almost never need regrinding.

This means an enormous saving of power to you. It means no wear—no depreciation. Think of the years of extra service this master motor will give you.

Power—Supple as a Fencer's Wrist

The power of our New "Six" is so flexible that you can throttle it down on high to a creeping gait in the crowd; then away swift as a swallow, mounting quickly to twenty, thirty, forty miles an hour without stress or effort.

This wondrous flexibility is due to our big, roomy valves. They open 40 per cent wider and shut tighter than common. This gives freer passage to the gasses.

Salient Features of the New Chalmers "Six"

- Six-cylinder motor, T-head type 4x 5 1/2-inch—40-65 h. p. All moving parts included.
- Bosch magneto.
- Electric starter—Entz System, built in Chalmers shops.
- Non-stallable motor.
- Full electric lights—Our powerful head-lights also contain auxiliary lamps of moderate power for city driving.
- 132-inch wheel base.
- Molded oval fenders.
- Gasoline tank and tire carrier on rear—clean running boards.
- Left drive and center control—enter from either side.
- 36x4 1/2-inch tires and Continental demountable rims.
- Four forward speed transmission.
- Underslung rear springs; main leaf of vanadium steel.
- Tapered bonnet and stream line, bell backed body.
- Chalmers patented doors.
- Full equipment, including Chalmers silk mohair top, quick acting storm curtains, Warner speedometer, one extra demountable rim, electric horn, pump, tools, etc.

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| Roadster . . . \$2175 | Six-Pass . . . \$2275 |
| Four-Pass. \$2175 | Coupe . . . \$2850 |
| Five-Pass. . \$2175 | Limousine. \$3600 |

The wonderful flexibility of this motor is amazing. You'll find you can do nearly everything on "high." It does away with gear-shifting almost entirely. With this "Six" any supplementary gear mechanism would be useless. The motor itself gives a suppleness of power unknown in costlier cars.

A Non-Stallable Motor

This motor will never go dead in the crowded city traffic. The electric starter won't let it.

Even if the driver should cut off the gas accidentally, the electric starter, which is always on duty, keeps the motor running—won't let it stop.

It prevents stalling under sudden overload.

This is the greatest feature of safety and convenience put on a car in the past five years.

An Electric Starter That Never Quits

The simplest and surest starter ever made. A little motor spins the engine to start it. Then it automatically reverses itself, becomes a generator and stores up power in the battery for electric lighting and future starting purposes.

That Vibration Jinx

After a long ride you are often tired and you don't know why. It's the vibration jinx in the crank case. It means the moving parts are too heavy or a fraction out of balance.

Vibration is overcome in the Chalmers by forging connecting rods stronger and yet 40 per cent lighter than the average; by giving the motor an extra long stroke and so reducing the number of strokes; by balancing all moving parts on a delicate scale. Even the clutch and the timing gears are balanced with the rest of the motor.

The smoothness of the "Six" saves wear on the car, as well as on the passengers. The interval between the explosions of any "Four" makes a gap in the power stream. It produces a vibration that hammers constantly at the life of the car. There's no escape from it. The explosions of the "Six" give an unbroken stream of power. It gives smoothness and economy that no "Four" can equal. It adds years to the life of the car.

The Beauty of the Car

As the Chalmers motor is made better, the car is made handsomer. The Chalmers Company spent \$75,000 in new equipment to give you its long oval fenders—not alone for the added beauty, but for their utility as well.

Bodies are big and bell-shaped. Plenty of room to stretch your legs in either seat. Doors are wider than usual, with concealed hinges. They fit so snugly that all mouldings are dispensed with.

Extra tires are carried in the rear, leaving the running boards clean as a quarter-deck. Everything about it tends to give the New Chalmers Six the flowing, stream-line effect of a graceful steam yacht.

Unsurpassed at Any Price

It is impossible to get more real value than we give in the New Chalmers "Six." The wonder is that we can sell it at the price.

But this car is the product of a \$7,600,000 factory, where economy of production has been perfected as never before; where parts makers' profits have been eliminated; where enormous output reduces cost to a minimum.

In the New "Six" you get features that mean your car will run year after year as smoothly and silently as the day you bought it—features that keep operating costs down to a minimum.

To buy a car that lacks these features, even though the first cost be less, is short-sighted. To pay more is an extravagance.

Let the Car Tell Its Own Story in Deeds

We want you to take a ride in the New Chalmers "Six"—a ride that will make you dissatisfied with any other car. This ride isn't just a ride. It is the Chalmers Standard Road Test—a part of our regular sales plan. It is used by all Chalmers dealers to show what the Chalmers will do under all conditions of service; how it meets emergencies, overcomes obstacles. It will prove to you in deeds what we have told you in words. Let us take you on such a ride.

ZEROLENE

THE STANDARD OIL FOR MOTOR CARS

"STANDARD" because it is recognized by automobilists as the best or standard product for motor lubrication.

"STANDARD" because it is standardized or uniform in quality.

"STANDARD" because it is a product of the STANDARD OIL COMPANY—which in itself is a guarantee of absolute quality.



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