

PARKS, CAVES, MOUNTAINS, LAKES AND STREAMS COVER 1500-MILE ROUTE THROUGH NORTHWEST

By NEA Service.
MITCHELL, S. D., Aug. 31.—Drive along the 1500 miles of the Custer Battlefield Highway from Des Moines to Glacier National Park, and you pass six national parks, three national monuments, two Indian reservations, the largest state park in America, two national parks, and three unique and nationally known caves.

Such is the run of attractions offered you over a road that is well paved and well kept. All this and much more, for there are hundreds of lakes and streams where fishing is good, and there are hunting preserves and camping sites along the way.

On the way you strike the beautiful Black Hills in the western part of South Dakota where President Coolidge has been staying. Here are peaks that pierce the clouds, tumbling streams where gamey trout snap the angler's fly, runways to cold springs where deer slake their thirst and sentinel crags that guard the canyon depths.

Custer State Park is in this region. It is the largest state park in America, consisting of over 100,000 acres. One can spend two months in this region, each day bringing new thrills.

Here are the "Needles" or "Cathedral Spires," beautiful as Westminster. Below is Sylvan Lake, more than a mile above sea level, while Harney Peak stands

7254 feet high as a great guard to them all.

The game preserve comprises several thousand acres and contains buffalo, elk, deer, antelope, mountain sheep and goats.

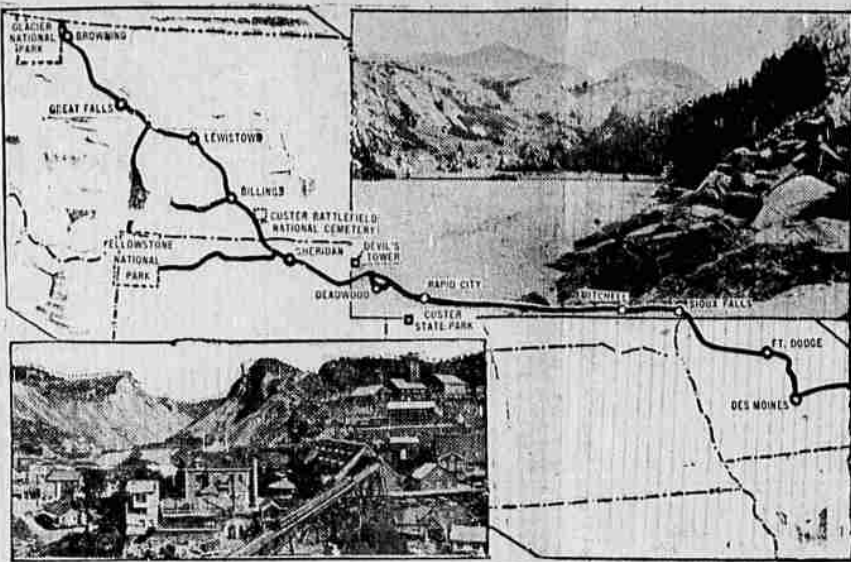
Good Roads, Low Grades

The completed highways in the park are marvels in engineering skill and are models for mountain roads, with no grades over six per cent. Camping privileges are granted free to tourists near the state lodge and at Sylvan Lake, as well as throughout the park. In convenient, inviting places, with unique and spectacular surroundings.

Just outside the park is Wind National Cave. It comprises over 200 miles of explored passages and about 3000 rooms. This cave has deposits made by the water which created it, and the formations are wonderful and varied.

On the route are the Sapphire Mines, the greatest in the world, and on beyond are the Custer Battlefield and National Cemetery. The battlefield is in Montana, about three miles from Crow Agency, is an attraction of national importance and is visited by thousands of tourists each year.

What is said to be the greatest dude ranch country in the northwest is on this highway. Some of the most sublime mountain scenery to be found in America, 2700 miles of trout streams, and over



Nature contrasts remarkably with industry along the Custer Battlefield Highway. There, for instance, lies beautiful Lake Geneva, shown in upper view, in the Big Horn National Forest near Sheridan, Wyo., while not far away, at Lead, S. D., is the valuable Homestake gold mine, shown below. Map shows the route of this highway.

300 mountain lakes keep visitors entranced.

Largest Gold Mine

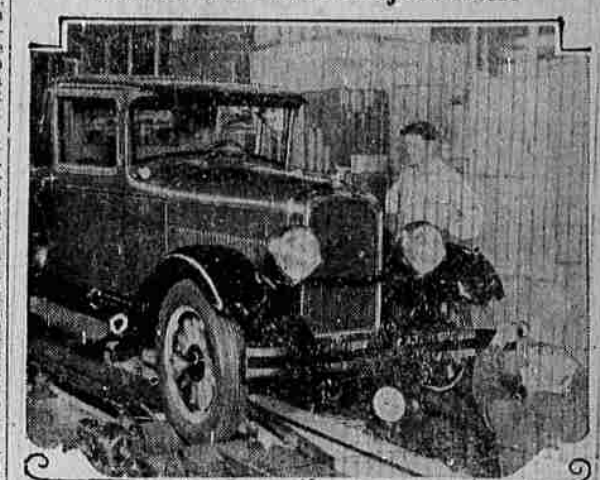
The Homestake mine at Lead, S. D., is the largest gold mine in the United States. Its total output to date is \$206,000,000. There is enough ore "blocked out" to furnish the mills with 4350 tons a day for nine years. The deepest shaft is 2420 feet. During tourist season guides are on duty.

The Big Horn National Forest covers an area of 1,136,200 acres, and the district contains three active glaciers and more than 300 lakes, all of which are filled with mountain trout. Fortunately, it is not "fished to death." It's a new country and has been open to automobile traffic only a few years.

The Big Horn Forest once was a favorite hunting ground of the Indians. Many of their old camp sites can still be found. On Medicine Mountain is the famous Medicine Wheel. This is thought to have some religious significance and was built by early Indians no long ago that even legendary history is lacking.

Through Montana the route traverses many national forests. In the Bear Tooth National Forest is the only grasshopper glacier in the world. In the Jefferson, Lewis and Clark, beautiful scenery, trout streams and shimmering lakes are to be found. And at the end, Glacier National Park greets us with all her majestic beauty.

Latest Device Eliminates the Human Factor in Brake Adjustment



Individual "dynamometers," as shown here, assure properly adjusted brakes.

BY ISRAEL KLEIN,
Science Editor, NEA Service.

Heretofore, the matter of brake adjustment has been a question of try and test. The brakes, being only on the two rear wheels, required more tightening and a run on the road to test their efficiency.

But four brakes on a car now need perfect adjustment and equalization that has taxed the ingenuity of engineers. The equipment has to remain equalized to a reliable degree. Testing four brakes on the road, by the mere judgment of the driver, can no longer be relied on.

So engineers have designed various meters and put the cars on the dynamometer block, so that they may adjust each brake to its calculated efficiency, and so that all four may be equalized to work as a unit. But the human factor, which is more or less fallible, could hardly be excluded from this work, and occasionally a car has come through improperly adjusted.

Now a new type of machinery is being used in various automobile plants, by which the human factor is almost entirely eliminated.

There is no more guesswork on the part of the men doing this work, for the adjustment of brakes is left to the machine itself.

This apparatus consists of a set of corrugated metal rollers driven by an electric motor, for each wheel of the car. Thus the automobile is made to run, by the power of the motors, on four sets of these rollers. They are in fact, individual dynamometers, the rollers revolving the wheels of the car.

As the brakes are gradually applied, the friction created between the brake drum and the brake lining on each wheel is weighed by a set of scale beams. This pressure is measured in pounds and is shown on a dial connected with each set of rollers.

The exact brake pressure for front and rear wheels is known, so that the brakes need a little adjustment either way, while the operator is guided accurately by the dial on the scale.

While the brakes are adjusted through these machines in the matter of resistance, they are equalized under the same pressure of the brake pedal.

CARS FOR TOURISTS

Tourists arriving in France may now hire automobiles for touring as they do in this country. These become available to offset the high cost of shipping automobiles even across the channel from England.

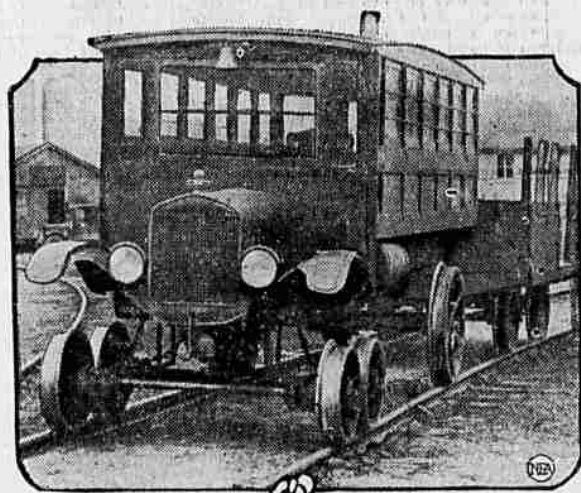
Why not spend your Labor Day at Floras lake, good fishing, boating, fine camp grounds, furnished

cottages, all kinds of sports, good bathing. Hotel accommodations, 18 miles south of Banden. J. R. Smith & Son, Props.

TRUCKS ARE LOANED

The drive-yourself system has been extended to the use of trucks. A large Chicago rental service has added trucks to its line, for renting under the same conditions as passenger cars.

Now the Profits Come In



Since a popular motor was put on flanged wheels, to replace the single locomotive of the eight-mile Manchester and Oneida railroad in Iowa, the stockholders have been reaping dividends. The little road is for the convenience of the farmers in the neighborhood, most of whom own stock in it.

OL' TRUSTY

By Wotton



SAFETY DEVICES

Attach a spot light, or ditch light, to some fellow's car and he seems to get the peculiar notion that he can step on the gas more freely at night.

Put chains on your tires in slippery weather, and if you're not cautious you'll begin to rely too much on those chains for safety. That's true in the case of other safety devices. They seem to encourage recklessness.

Chains, however, can skid on wet pavement. A bump in the road might throw the ditch light off its proper angle and make it almost useless. Any number of accidents might occur despite safety appliances.

On the other hand, the man without chains is more cautious on rainy days, in the knowledge of this fact. The man without a spot light drives more slowly and carefully at night.

That doesn't obviate the usefulness of these devices. For they assure safety where safety already is being practiced. They require, for efficient use, the cooperation of the driver in the way of constant watchfulness and careful driving.

ITALY'S ROADS GET MUSSOLINI STAMP

By NEA Service.

ROME, Aug. 31.—The iron hand of Mussolini now makes itself felt in Italy's motordom.

He has moved the headquarters of the Automobile club of Italy from Turin to Rome and has assigned to it the duty of collecting motor taxes, instead of leaving this job to the usual government officials.

But under Mussolini's regime, the road conditions and traffic reforms have improved noticeably. In two or three short years, out of a complete chaos of traffic law, has come a set standard of traffic rules.

Italy now has a right-hand road rule. One-way foot paths have been constructed for the safety of the pedestrians. Traffic on these paths goes in the opposite direction from the string of cars on the same side of the road, which prevents the walking public from stepping in front of a car and being hit from the rear.

Although road conditions in Italy on the whole are bad, the Fascist government is spending large amounts of money to improve them.

Special motor roads have been constructed from Milan to the various lakes and pleasure parks around that city, and plans are being made to extend them as far south as Naples.

It is expected that within a few years the entire highway system of Italy will be modernized through the efforts of Mussolini.

HOW'S SHE HITTING ACCIDENTS INCREASE

During 1926 there were 4886 fatal accidents and 123,888 non-fatal accidents, in Great Britain. In 1925 there were 3971 fatal and 111,502 non-fatalities.

STATE EYE DIRECTOR

A motor vision director in every state is the aim of the American Optometric Association, according to Chairman W. E. W. Silver. The duty of this director would be to examine the eyes of drivers whenever necessary.

How's She Hittin'

BY ISRAEL KLEIN,
Science Editor, NEA Service

Many a difficulty in the running of the automobile can be detected by its odor. Outside of the familiar burning rubber odor, however, few drivers can locate the cause.

A survey of odors that indicate something wrong in the car might be helpful.

First, burning rubber. That

"They Say—"

Maybe Jack Is Asking the Cards Whether He'll Beat Gene.



JACK DEMPSEY

It does look as if Jack Dempsey might be asking the cards whether he'll win from Gene Tunney. But he's not; he's just indulging in his favorite game of solitaire after working hours at his training camp at Lincoln Fields, near Chicago.

means generally too frequent use of the brakes, especially when traveling down a long hill, or forgetfulness in releasing the hand-brake at the start.

But far more serious is the rubber odor from burning insulation in the ignition system. Most likely it means a short circuit is impending. It is caused from overheated wiring, which is a sure warning of something wrong in the ignition system.

The entire system must be checked over until the cause of overheating is found and corrected.

The next most common odor is that of gasoline. A leak in the fuel system or continued overflowing of the vacuum tank might be detected by the odor of raw gasoline. The overflow in the vacuum tank might be caused by a clogged air-valve in the gasoline tank.

Burned gasoline odors may be traced to the exhaust side of the engine—in the connections between cylinders and exhaust manifold, in the carburetor or intake manifold heating apparatus or in the car heater. A leak at any of these points will permit the burned exhaust gas to escape and warn us by its odor.

However, if a strong wind is blowing from behind, the odor might come from the gas that is escaping naturally through the exhaust pipe.

Another odor is that of burning oil. That might signify loose pistons, which permit gasoline to be "blown down" into the crankcase and dilute the lubricating oil.

An overfilled crankcase might declare itself by this odor. Oil escaping into the drums or brake linings develops this odor, revealing that the axles need repacking or tightening.

Somewhat similar is the odor of frying grease which betrays a leaking universal joint housing generally, by grease splattered on the hot muffler or exhaust pipe.

An overheated engine can be detected by the smell of steam or scorching metal, as well as hot lubricating oil. This smell comes from the vaporization of oil on the outside of the hot engine.

Whatever the odor, however, danger is flashed to the driver and the car should not be driven farther before the cause is located and corrected.

PREVIOUS RECORD

Judge: "Were you ever in trouble before?"
Prisoner: "Well—I—er—kept a library book too long, once, and was fined two cents."—Life.

LONGER CAR LIFE FROM CHROMIUM

By NEA Service.
TOLEDO, Aug. 31.—A new metal, which will increase the life of an automobile ten years, is to be in use in automobile plants within the year, according to L. D. Cope of the American Electroplaters Society. It ranks next to the diamond in hardness and will not corrode.

Chromium is the metal. It is already being used in electroplating and as an extra-hardening element in certain steels.

AUTO BUSINESS IS GOOD, SAYS CATCHING MOTOR CO.

During the month of August, according to Roy Catching, Hudson-Exeter distributor for Douglas County, the automobile business has been brisk for his agency, the company selling 19 new Hudsons and Essex cars and 15 used cars. This is considered an excellent showing for August, and is indicative of excellent condition of business generally throughout this section of the state.

MUCH MORE PAINFUL

Very Old Father: "There is nothing worse than to be old and bent."

Very Young Son: "Yes there is, dad."

"What?"

"To be young and broke."—Passing Show.

Champ—Fidel La Barba—Frosh

School Credits of Flyweight Champion Duly Accepted so He Can Enter Stanford in Fall as Meek and Humble Freshman



Presenting Fidel La Barba—as he looks as he will look as a freshman at Stanford this fall. La Barba's application for entrance has been accepted by Stanford authorities and he will thrust aside his gloves for the books of higher education in September. Since everybody knows that La Barba is very handy with his two fists, the question of blood-thirsty sophs seeking to put him through their regular frosh stunts arises. But colleagues are no respecters of freshmen, and La Barba is more than likely to have some hazing come his way—and will more than likely take it in the spirit given!