

CHALMERS ANNUAL OUTING TOMORROW

Some Employe to Get Car as Prize in Contest of Best Ideas.

THOUSANDS WILL ATTEND

Detroit, Mich., July 22.—Over 5,000 Chalmers employes and their families will be guests of the Chalmers Motor company, at the annual Chalmers outing to be held at Bois Blanc island in the lower Detroit river tomorrow.

The big Chalmers plant will be closed for the day. Two of the largest passenger steamers running out of Detroit have been chartered to carry the big throng.

Chief among the events of the day will be the award by Hugh Chalmers of a \$1,000 Chalmers Six-30 touring car, to the employe who has turned in the most valuable suggestion to the company during the past six months. An additional \$500 in gold will be divided among other employes according to the merit of their suggestions. Interest in the suggestion contest since last autumn has reached a white heat, and the men and women who have turned in ideas for improving Chalmers cars and manufacturing methods, are eagerly awaiting the decision of the judges.

Big Day Promised

Cash prizes have also been hung up for the winners of the various athletic events scheduled for the day. Among the many events on the program are: Prize dancing contest; ladies' comedy race; pie-eating contest; egg race for girls; tug-of-war between departments; departmental relay race; shoe and potato races; three-legged races; fat men's race; 100 yard dashes for men and boys and obstacle races. A baseball game between crack players of the manufacturing departments and offices promises to be hotly contested.

To provide for any in need of medical attention, a staff of doctors and nurses from the Chalmers company will have a special tent where all cases of illness will be treated.

Saxon Cars Relay Across Country

Racing at top speed for stretches of about seventy-five miles each, fifty-two Saxon Six motor cars will relay from New York to San Francisco by way of demonstrating what can be done with a motor car as the bearer of messages over long distances.

Starting Saturday morning from New York City, a Saxon car will enter the Lincoln highway and will travel the first lap of the journey. Just before the start a message from Mayor Mitchell of New York to Mayor Rolf of San Francisco will be handed the driver and this will be passed along the line and finally delivered at the city on the Golden Gate.

This relay race, the first of its kind to be run, is to be another demonstration of Saxon ability and endurance. Two weeks ago, 206 Saxons entered a 300-mile non-stop run and proved the economy of a Saxon in the matter of fuel consumption. Now fifty-two of these cars will demonstrate that they can go at an express train speed and show no signs of strain, over both smooth and rough roads.

Tire Company Stands By Its Statement

President J. N. Gunn of the United States Tire company, when asked if the new ruling of the War department would influence the attitude of the company toward its militia employes, it is asserted, made the following statement:

"I want you to understand that the action of this company was taken advisedly. When we decided to grant full pay to all employes called on active service, we did so without a single reservation. The United States Tire company and its parent organization, the United States Rubber company, both feel that as American corporations they owe a duty to the country to support and aid its military organization. The officers of both companies feel that, even if there is no real trouble along the Mexican border, our National Guard will obtain an invaluable experience, and we are willing and glad to contribute to their obtaining a thorough military education, and believe it to be our duty to relieve them from financial worry while so doing."

Maxwell Makes Good On 5,600-Mile Tour

With the speedometer of his Maxwell touring car registering more than 5,600 miles, W. S. Gilbreath, field secretary of the Dixie Highway association, motored into Detroit last week, after an extended trip through the south, where he has been preaching the gospel of good roads.

Naturally, Mr. Gilbreath sought those sections of the south where the travel was roughest to make his message more effective. He drove his Maxwell over roads that seemed impassable and the car responded to the severe test in great style. The Dixie highway secretary, passing through Detroit, called at the general offices of the Maxwell company to pay a personal tribute to the prowess of the car.

"I have never seen a car get a harder pounding," he said, "and the way it stood up under the strain proved it to be a marvel in construction. It not only stood the wear and tear of the rough roads in fine style, but it made some speed records and some economy records of which to be proud."

Goes on Long Outing In Her Automobile

Mrs. Beacie C. Daisey, an enthusiastic motorist, is leaving on an extended overland trip with her daughter in her new Paige Meadowbrook roadster. After a few days' visit to Lake Okauchji, Mrs. Daisey will run into Chicago and Minneapolis, and return by way of St. Louis and Kansas City.

WATER SUPPLY IS BORDER PROBLEM

Goodrich Truck Man Tells of Conditions Along the Mexican Boundary.

DRILLING MANY WELLS

Columbus, N. M., July 22.—Difficulty in establishing adequate sources of water supply along the arid border and the line of communications into the Mexican interior, is a handicap that is certain to result in much suffering among northern militiamen, declares Charles R. Serfass, stationed here by the B. F. Goodrich company. Mr. Serfass, whose job is to give Goodrich truck tire service to Uncle Sam's truck transports and keep them "on the move," has been on the ground since the week of the memorable Villa raid in March.

He has had an unusual opportunity to familiarize himself with the many conditions and incidents that have resulted in the present wholesale mobilization of national guardsmen along the border.

"Men of the state troops, the majority of them fresh from pursuits in civil life, are not, by any manner of means, going to enjoy a summer picnic in this land of hot suns," says Mr. Serfass.

Water Supply Short.

"The greatest drawback here is the lack of water and adequate facilities for moving food and troops, both by truck and train. Moreover, if it were not for the successful work of the limited number of motor trucks now in service—succeeding the army mule of older days—the problem would be intensified. Much credit is due the northern truck makers for their speed in filling orders and in furnishing the government with experienced drivers and mechanics to keep the equipment in 'battleship order.'"

"The government is now slowly drilling wells about every two miles along the border. Each well has to be equipped with a gas engine and a reservoir tank. Since the National Guard troops commenced to arrive and establish camps, more wells than at first were deemed necessary have had to be drilled."

"No more unfavorable time of the year could have been chosen for a concentration of northern men unacclimated to this heat, which gets more intense as the summer advances. Then, too, the altitude makes a big difference. A great many of the northern boys are going to suffer much from the scarcity of water in the camps for drinking and bathing."

Farmers Interested In Auto Trucks, Says Barker

W. S. Barker, state agent for the Dixie Flyer, spent several days last week in traveling about the rural districts, along the road to Crete, Lincoln and Ashland.

Barker reports excellent crop conditions and a growing enthusiasm over motor-driven pleasure and work vehicles.

GUARDS AGAINST FIRE

Expert Tells How Electric Charges Accumulate in Filling Auto Tanks.

HOW TO PREVENT EXPLOSIONS

"In the last few months, many articles have appeared in the automobile papers giving accounts of fires said to have been caused by sparks resulting from charges of electricity generated by the straining of gasoline through chamois or in other similar manners," writes Herbert Chase, chief engineer of the Automobile Club of America, in the June number of Motor Travel, the club's official publication. "A considerable amount of material has been collected by the writer on this subject with the hope that some authoritative data might be presented for the benefit of club members. The bureau of standards at Washington has been conducting an investigation along this line, but as yet has made only a preliminary report. From this and other sources the fact has been established that frictional electricity is generated by the passage of gasoline through a chamois or through other nonconducting material. This so-called static charge may under certain circumstances be sufficient to cause a spark which, accompanied by certain conditions, may in turn result in igniting gasoline vapor, thereby causing fire."

"It is a fact long recognized by physicians that the rubbing together of two nonconducting materials will cause the production of a static charge. The electric charge thus generated will distribute itself over the surface of the nonconductors or other object in contact therewith. If then either body containing the charge is brought close to another body which is not charged or which has a charge of lower potential than the first body a spark will jump from one to the other."

"Gasoline itself is a nonconductor, as is chamois and such material as rubber, canvas and the like, from which hose such as is used, for example, to deliver gasoline from the ordinary type of measuring pump into the tank of a car is made. The passage of gasoline through such a hose or through chamois in a funnel is apt, especially in a cold, dry atmosphere, to produce a static charge on the surface of the funnel in which the chamois lies or at the nozzle at the end of the hose."

Poor Mixture Prevents Explosions.

"Suppose now in filling a tank the funnel containing the chamois be held in the end or is otherwise out of contact with or insulated from the tank to be filled. As the gasoline passes through the chamois the funnel takes on the electric charge. If then the funnel be brought close to the tank of the car or with any other conducting medium a spark will jump from the funnel to the tank or other conductor. The same phenomenon would occur if the nozzle of a non-conductor hose used for filling purpose were held out of contact with the tank during the filling and afterward allowed to touch it. If this spark occurs at a point where the gasoline vapor is mixed with air in certain proportions an explosion follows and a fire is almost

certain to result providing the heat of the spark be sufficient to ignite this mixture.

"The fact that accidents have not occurred more frequently is presumably due first to the fact that the heat of the spark is not always sufficient to ignite an explosive mixture even though this mixture exists in the region where the spark occurs, and second, more often because the proportion of air to gasoline vapor is not such that ignition can occur, i. e., the mixture is either too rich or too lean."

"Atmospheric conditions have much to do with the production of so-called 'static' charges or at least with their distribution. Thus if the air be warm and damp the air itself is a sufficiently good conductor to preclude the possibility of a charge of high potential collecting on any body exposed to the air. On the other hand, if the air be cold and dry, a condition which frequently exists during the winter months, especially at points away from the sea coast, a charge of high potential may be collected on the

body and dissipated in the form of a spark jumping to another object or to the earth. This same phenomenon may frequently be observed when a comb of hard rubber passed through the hair in the presence of a cold dry atmosphere.

Keep Metal Parts in Contact.

"To prevent the possibility of fire when filling a gasoline tank it is simply necessary to 'ground,' that is, connect with the earth, the funnel or nozzle on the surface of which the charge is apt to accumulate. As a rule the most, if not all, danger can be averted by simply keeping the funnel or filling nozzle in metal contact with the tank being filled."

"When the funnel or nozzle is grounded, as, for example, by connecting either to some metal object such as a pipe running into the earth, this allows the charge to pass through the conductor and with the earth without the production of any spark."

Thus, for example, if a wire-wound hose be used and this wire be connected at one end to the discharge


nozzle and at the other end to the metal fitting attaching the hose to the pump or its delivery pipe, no charge will result, for the pump itself is grounded. If a funnel and chamois are used while filling a tank, the gasoline being delivered through the hose nozzle, the tank of the car and the funnel should be kept in metallic contact, and so should the hose nozzle and the funnel.

No Danger if Care is Exercised.

"Many fires have occurred as results of sparks caused as above. This seems to have been established be-

yond doubt. One instance which has come to the writer's attention is that of a large automobile factory in which it was at one time a practice to draw gasoline into a portable tank which was allowed to rest during the filling process on a wooden box. The funnel used between the nozzle and the portable tank was not in contact with the discharge nozzle of the pump during the filling operation, but was close enough to it for a spark to jump after the charge accumulated on the funnel and portable tank had become of sufficiently high potential."

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