

## TRUCKS BIG FACTOR IN SUGAR INDUSTRY

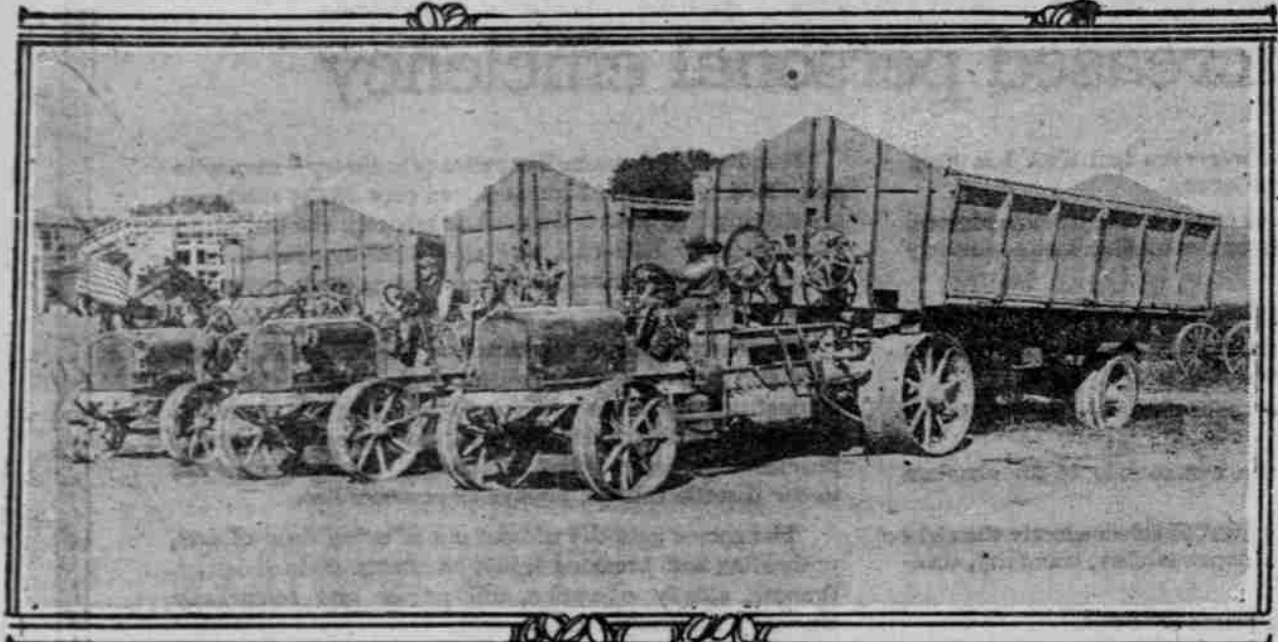
Three Whites Enact Role in Conservation Work.

### FLEET HELPS FEED ALLIES

Freight-Haulers Perform Tasks of 160 Horses, 20 Wagons and 40 Able-Bodied Men.

BY C. A. URQUHART, Pacific Coast Manager of the White Company.

### FLEET OF WHITE TRUCKS DOES YEOMAN SERVICE IN CALIFORNIA BEET FIELDS.



FIVE-TON FREIGHTERS OPERATING WITH 15-TON TRAILERS, HAULING SUGAR BEETS FOR SPRECKELS SUGAR COMPANY, SPRECKELS, CAL. Beets are hauled from the field in wagons of four and a half to five tons capacity, each in trains of three wagons, by caterpillar tractors. It requires four wagonloads to fill the bodies of the trailers on the trucks.

able-bodied men—work that might easily and innocently have been misdirected, and wasted, but was not wasted, which, on the contrary, was actually conserved and turned toward the cultivation of rich valley land and made to produce food for our people and for our allies—that was a thing worth saving, wasn't it? It was an achievement, you agree. Of course you do. You've been doing your bit in food conservation. "Food will win the war," the Food Administration told us. We believed it. We raised food, and we saved it, and we won the war.

This is a conservation story. It is a story of what was done in a particular instance by modern means and methods; it tells what a big sugar company did with three White motor trucks. Here in brief are the particulars:

The Spreckels Sugar Company has a large refinery in the town of Spreckels, Cal. At this place sugar is made from beets. The requisite beets are grown in the adjacent and outlying lands of the Salinas Valley. Vast acreage in this region is devoted to sugar beet culture, and at various distances from its factory, the Spreckels Company itself owns and maintains extensive ranches for the growing of its raw material. Ranch Number 11 is 40 miles away.

**Transportation Problem Poser.** The comparative remoteness of some of the sugar company's productive beet lands in relation to the railroad has for some time past furnished that corporation with a transportation problem of no trivial proportions. This problem has hitherto had its most acute angle in a certain two-mile haul with a beet-cleaning station at one end and a spur track of the Southern Pacific Railroad at the other, and with the Salinas River between the two. As a usual thing the stream bed is as dry as a W. Hohensollern sermon. It is empty of water except in the rainy season, but it has been known to be full of trouble the whole year through whenever there was hauling to be done between those two points. The most persistent form which this copious trouble took was sand. Strong currents of wind are in perpetual afternoon motion along that channel, and these winds are forever scooping the sand out in grooves and ridging it up in drifts and piling it high in dunes.

How to get a large tonnage of beets across these difficult two miles lying between the cleaning station and the railroad was the question which the Spreckels company's engineers were called on to answer. Three modes of transportation suggested themselves as follows:

First—By a narrow-gauge railroad with a bridge approximately 100 rods in length reaching across the river.

Second—By an aerial cable tramway.

Third—By motor trucks with trailers.

**Engineers Choose Trucks.** After a thoroughgoing survey of the obstacles to be surmounted, the engineers in the sugar company's employ decided upon White trucks as the most efficient means by which their task could be accomplished. Three five-ton White trucks of the Good Roads type, with standard equipment of steel wheels all around and with 20-inch steel rear tires and three trailers with bodies 20 feet long by 19 feet wide, were purchased for the purpose. Since their use began these trucks have been continuously at work without interruption.

Preparatory to their installation a cheap roadway was hastily laid down across the soft sand of the stream bed. This roadway was made of a two-foot stratum of brush with a layer of wet straw, manure and sand packed on top. Then parallel with the road, four brush barriers, 200 feet apart and extending the width of the river, and from six to 10 feet in height, were erected as a protection against sand drifts which otherwise would soon obliterate the track.

**Large Trailers Are Used.** The trailer bodies designed and built by the sugar company are constructed each with an inverted V shaped bottom. The sides of the bodies are divided perpendicularly in the middle; they are hinged at the top, and they are fastened at the bottom to wire cables running on pulleys. These cables pass through the false bottom to fas-

tenness on drums which are operated by means of hand wheels at the back of the driver's seat. Thus each of the sides is in the nature of two gates opening outward for the release of the load. The unloading process is simplicity itself. The gate locks are unfastened, the gates swing out, and by gravity the beets drop on either side into hopper bins whence endless belt conveyors lift them to a chute down which they pass into the freight cars of the railroad. One man only is all the help required to operate the truck and trailer.

The routine of one of these trucks is as follows: A day's work for a White truck, as cut out for the vehicle by the equipment now, and hitherto in use, is to deliver at the railroad what three 75-horsepower tractors and three eight-horse wagon teams haul to the cleaning station. The three White trucks and trailers with three men are depended on to deliver at the railroad 360 tons to 400 tons of beets daily. In so doing these trucks release the energies of 160 farm horses, together with 20 horse-drawn heavy wagons, and 40 men. Each truck completes its round trip every 75 minutes, including loading-time, and, when loaded only to its rated capacity, it delivers 15 tons each trip. Were tractors employed on this haul instead of the White trucks, seven 75-horsepower tractors and 14 men would be required to do the work. Such tractors would require three hours and 45 minutes to make the round trip.

**Utility Deciding Factor.** In making White motor trucks their choice for the duty described, the Spreckels Company's engineers were considerably influenced by an economic factor which was really not a part of the problem in hand. This factor was the flexible and all-the-year utility of motor trucks as compared with a cable tramway or with a narrow-gauge railroad. Of course, a cable tramway or a railway would mean relatively a much greater outlay of money for equipment and installation. But, besides the larger outlay, there had to be faced the fact that the thing got in return for such a big expenditure could be used for only a period during the beet delivery season of 70 days out of 365. The constant usefulness of motor trucks was a weight in the scale of trained judgment which was too heavy to be overcome.

The trucks I've been discussing will be kept at work practically the whole year round, not only as the beet-hauling season is over the steel-tired wheels will be removed and rubber-tired wheels will be put in their stead, and, on rubber tires, these vehicles may be operated over the paved highways. Then these convertible all-purpose trucks will be hauling great loads everywhere for the sugar company's factory and for its numerous ranches. And, by the way, these big 15-ton units turn around in a diameter of 40 feet.

valuable. In my mind there is no doubt that the good roads of France saved her in two instances." Colonel Robert H. Tyndall, of the 150th Field Artillery, thus writes from "over there" to a fellow Hoosier, Chairman Carl G. Fisher, of the A. A. A. touring board. It will be remembered that these two were closely associated several years ago in the transcontinental tour from Indianapolis to San Francisco, when much of the route of the Lincoln Highway was decided upon. Colonel Tyndall is an inveterate road driver and has covered thousands of miles of good, bad and indifferent American highways. In his letter "home," he goes on to say:

"I have seen movements of troops made in the dark which would have been impossible in any other country than France. Here the roadmakers have scientifically planted trees that absorb draught on the side and at the same time shelter the highways so as to keep them just moist enough. In some instances you will find a tall poplar standing higher than the rest of the trees bordering the road, at every kilometer, so that you can readily measure distances with the eye.

"One of the great things they do here is to repair a road and even make an entirely new surface without interfering with the stream of traffic. In one campaign we were in, over a thousand trucks passed my regiment, each carrying 25 soldiers. This was for reinforcement of the flank and was done without the slightest confusion. One does not find here the little holes that cause so much trouble, remaining in a road. The potted places are immediately filled and drained, right up to the front line, almost.

"As far as being able to orient one's self, I think from now on I can drive blindfolded any place in the United States, as most of my driving on the front has been at night, and the roads wind around considerably over here. I don't have lights and neither do the trucks and other vehicles coming in opposite directions. We are not allowed to use the klaxon horn, as this is the method employed for a gas alarm. Sometimes I really wonder how we get through with it all, but it shows how a person can become accustomed to most anything, and we train ourselves to see in the dark."

That a big road plan is near at hand in this country is the opinion of many leading highway advocates. Chairman George C. Diehl, of the A. A. A. good roads board, summarizes the idea in this manner: "One hundred million dollars a year appropriated by the Federal Government on a definite, tangible national highway system will work wonders in the form of from five to 10 thousand miles of splendid highway, made up partly of sections already sufficient in quality, partly in sections to be rebuilt, and partly of entirely new construction. State and local appropriations will be encouraged, and these subdivisions, largely because of Federal roads, will enormously increase road expenditures."

**PELICAN CITY ROAD SURFACED**—Basalt From Odessa District Proves Good Highway Covering. KLAMATH FALLS, Or., Nov. 30.—(Special).—The new clinders which are being brought down from the Odessa district on the west side of Upper Klamath Lake for surfacing the new county road to Pelican City, near here, are going to prove the best material

**ROAD BOOSTERS TO MEET**—HIGHWAY CONGRESS WILL CON-VENE IN CHICAGO. Government, State and Association Leaders Will Map Out Development Programme. The forthcoming highway congress, to be held in Chicago, December 4 and 5, promises to be one of the most notable gatherings of its kind ever assembled. In addition to the officials of the various state highway departments and the representatives of the United States government, the following organizations will be officially represented: The Lincoln Highway Association, the Lincoln-American Automobile Association, the National Highway Association, the National Old Trails Road Association, the American Road Builders' Association, the Pacific Coast Defense League, the Dixie Highway Association, the Jefferson Highway Association, the Yellowstone Trail Association, the Pikes Peak Ocean to Ocean Highway Association and the Old Spanish Trail.

**HIGHWAY CLEARED OF GLASS**—Automobile Club Collects 186 Pounds on Los Angeles Streets. LOS ANGELES, Cal., Nov. 30.—The "anti-glass week" observed by the Automobile Club of Southern California in Los Angeles resulted in the collection of 186 pounds of bits of glass on the streets, each piece of which was a constant menace to motorists. An average of 21 bad smears of tire-destroying substance were removed each day during the week of the campaign. Broken milk bottles, windshields and lamps were the chief contributors to the menace to automobiles. Although the anti-glass campaign lasted but one week, the Automobile Club has announced that it will clean glass from the roads anywhere in Southern California, upon a telephone request.

## ROADS SAVE FRANCE FROM TEUTON FOES

Highways Permit Rapid Movement of Troops.

### SCIENTIFIC METHODS USED

Two Million American Soldiers Will Return to United States as Good Roads Boosters.

"There will be a couple of million real 'road boosters' back in the United States now that the war is over, as I think all of the men over here appreciate how good roads can be made in-

thus far used in this locality, in the opinion of County Road Supervisor Dixon, who has rolled a short stretch as an experiment and is delighted with the way it packs and wears. The clinders are of a lava formation, reddish colored. There is a mountain composed of this material near Odessa.

The work on the Pelican City road, which will give the employes of the big sawmill there opportunity to get back and forth during the wet weather, is being rushed with all possible speed in order that the big payroll may have access to town this winter.

**NEW WAY TO START ENGINE**—With Rear Wheels Jacked Up, Put Gears in High. It sometimes happens that the starter fails to work and the hand crank has been left at home or mislaid. The first thought of most motorists on such occasions is to look around for another car to start the engine by towing the car with the gears engaged. Usually this means more or less delay in wait-

ing for the car to appear, arranging for hitching up, etc. The situation is doubly difficult if the car refuses to start when in the garage and the hand crank is not available. There is an easy way to get the engine going, however, which any motorist can employ without assistance. By jacking up one of the rear wheels securely, putting the gears in high and turning the uplifted wheel in the direction in which it revolves when driving the car forward, you will find that a few turns will start the engine. Be

sure to place your gearshift lever in neutral, however, before letting down the jacked-up wheel, or the car will plunge forward, with the resultant damage, and you will have the work to do all over again. For the same reason you must be sure that the vibration of the running motor will not upset the jack. Properly done, the operation of starting the engine in this way takes only a few moments. Don't race the engine when it is not drawing the car. There is no worse abuse.

# Cole Aero-EIGHT ANNOUNCEMENT

Government restrictions removed: Prices reduced \$300: Production increased 100%

Effective at once the prices of all Cole Aero-Eight models will be reduced \$300. We have been able to double our production and can make immediate deliveries at the restored prices. While our production was curtailed by Government order, we were able to supply less than 50% of the constantly increasing demand for our cars. The readjustment in our sales and production program for 1918-1919 will make it possible to meet the requirements of our patrons with greater certainty.

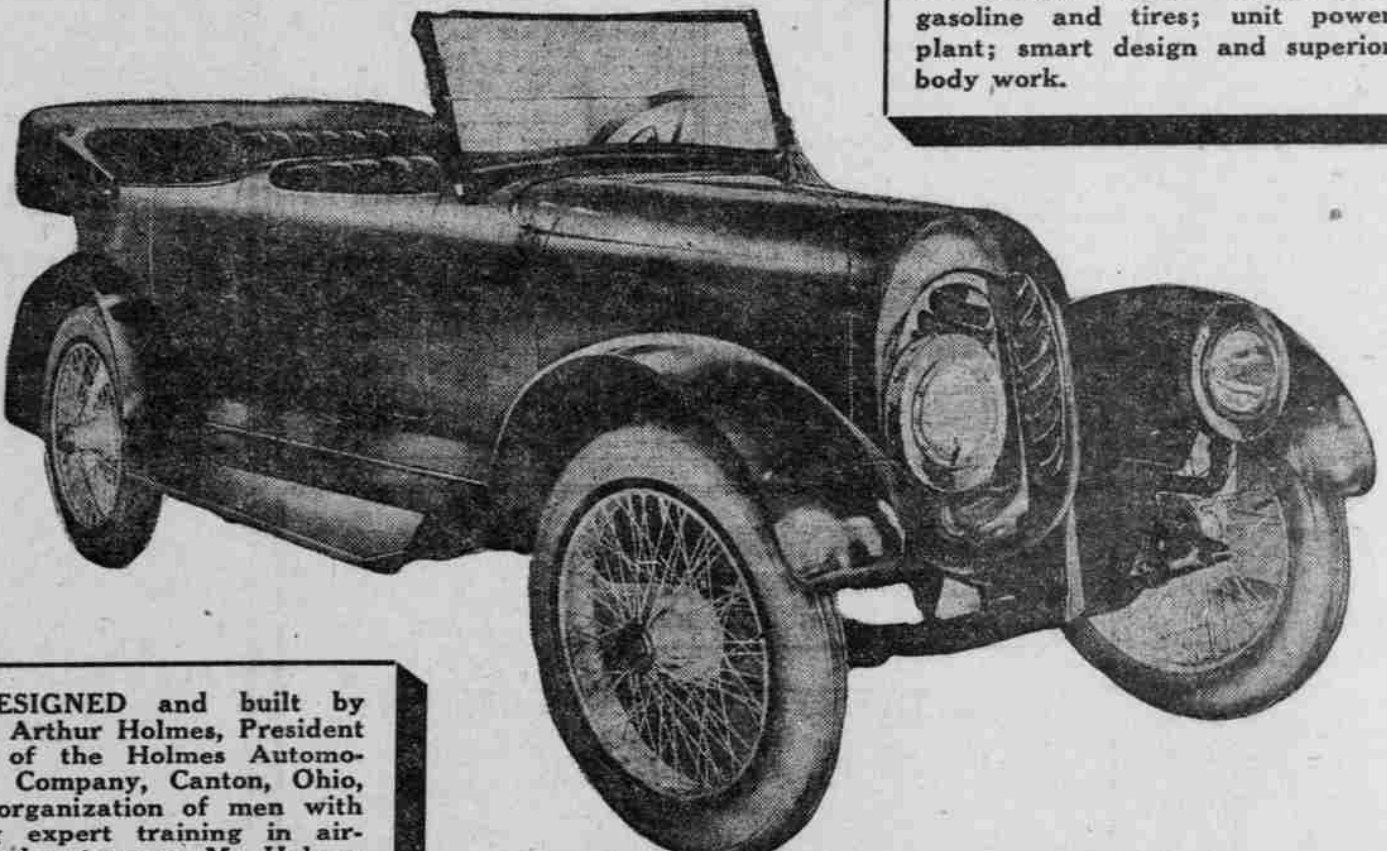
## NORTHWEST AUTO CO.

Alder at Chapman  
Broadway 1460—A 2336

COLE MOTOR CAR COMPANY, Indianapolis, U.S.A.

# THE HOLMES CAR AIR COOLED

SEVEN passenger; full elliptic springs; higher mileage from gasoline and tires; unit power plant; smart design and superior body work.



DESIGNED and built by Arthur Holmes, President of the Holmes Automobile Company, Canton, Ohio, an organization of men with long expert training in air-cooled motor cars. Mr. Holmes was formerly Vice-President and for seven years Chief Engineer of the Franklin Automobile Company.

**BUICK EXPERTS**  
BUICK REPAIRS EXCLUSIVELY  
32,000 sq. ft. floor space. Live or dead storage. Cheap rates.  
PARTS SUPPLIES  
PORTLAND BUICK REPAIR CO.  
N. W. Cor. Sixteenth and Jefferson St.  
Portland, Or. Main 3419

McNeff Tractor & Auto Company, (Inc.) 225 Pittcock Block  
Northwest Distributors Portland, Oregon