

**AND AUTO MAKERS  
IN CLOSE WAR BOND**

Industry Sure of Government Aid for Mutual Benefit and Victory, Says Willys

By JOHN N. WILLYS  
President Willys-Overland Co., Inc.  
The Government is industry's best friend. In the industry the best of times, the war would be over very soon with a victory for our allies. Industry furnishes the life blood for a country at war as well as a country at peace. Without industrial activity hundreds of thousands of men would be out of work, products of all kinds would cease to be manufactured in adequate quantities and a financial panic would be an obvious result.

The Government therefore will fail to support industry, especially in trying times like these.

**AID FOR CARMAKERS SURE**  
Because the automobile business represents the third largest industry in the United States we manufacturers have a right to believe that we will receive every possible encouragement from the Government to fill the requirements of motorcar consumers during the war.

Furthermore, the automobile's utility record is one that immediately places it in the ranks of the most necessary commodities.

From the Government standpoint how would we efficiently get food, clothing, ammunition and other necessary fighting equipment to our armies without motorcars? We could not do it and as the same time compete on an even basis with the opposing forces.

**100,000 TRUCKS IN WAR**  
In Europe there are already 100,000 motortrucks in war service, not to mention the tens of thousands of passenger cars, motor ambulances and so on.

Paris was saved by the rushing of 100,000 French troops in passenger cars, omnibuses and taxicabs from behind Paris for the battle of the Marne. Verdun was saved by motortrucks when supplies were made available that could not have been obtained in no other way.

British Knights-motored tanks, a product of the automobile industry, brought a victory at Cambrai.

Heavy guns, so essential in this war, are hauled into position by motor vehicles. Armored motorcars have been used most successfully against rifle and machine-gun fire.

**THE LIBERTY MOTOR**  
The Liberty airplane motor was developed in automobile factories by automobile engineers, and they are to be built by the tens of thousands this coming year. The automobile producers also developed the standardized army motortrucks.

Just as the automobile business has made the airplane possible, so are the manufacturing facilities of the industry sufficiently extensive to produce most of the materials required by the army with the exception of foodstuffs.

Already we are making not only motortrucks, passenger vehicles, ambulances and tractors for the Government, but also scale gun caissons and



Did ye ever head Harry Lauder tell his story about "a wee doch an' dorrin"? Weel, ye'll not be surprised, perhaps, to be told that Harry got these words frae another Harry, name ither than J. Harry Schumacker, of Philadelphia. For everybody kens that Harry Schumacker is the man that sells the Dorrin automobile. He's not "a wee doch," but he's certainly "a gran' dorrin!"

parts, recoil checks, mine anchors and shells. It furthermore is entirely feasible for the industry to produce steel helmets, all sorts of forgings, stampings, castings, tents, wagon covers and so on.

The rubber tire companies are even now making gas masks and fabric for airplanes and balloons.

In response to the call of the War Board motor vehicles are rapidly coming to the relief of the congested railroads. Approximately 2,700,000 passenger cars are at work in rural communities, replacing horses, carrying millions of pounds of produce to market and saving farmers countless millions and hours of time.

With man-power scarcer than ever before, with the horse and mule market virtually exhausted by the war demands of the last three years—more than half a million of them having been shipped abroad annually since the outbreak of the war—motorcars are a necessity.

For these reasons the automobile industry is receiving whole-hearted Government support.

**MARMON INCLOSED SEATS**  
Limousine, Sedan and Town Cars Show Improvements

Considerable attention has been paid by the Nordyke & Marmon Company to closed-car models, of which three types are furnished—limousine, sedan and town car. In the limousine there is room for five passengers in the inclosed compartment. The auxiliary seats fold forward and out of the way when not in use. The general design of the body has been greatly improved in appearance.

The town car is the same as the limousine, except that the roof does not extend over the driver's compartment. However, provision is made for protecting the driver.

**Why Motor Is Third Biggest Industry**

Capital invested . . . . .	\$736,000,000
Wholesale value of vehicles produced in last fiscal year . . . . .	\$917,470,988
Parts and materials by automobile manufacturers in last fiscal year . . . . .	\$480,000,000
Wages and salaries paid in fiscal year ended June 30, 1917 . . . . .	\$275,000,000
Motor vehicle manufacturers in United States . . . . .	550
Commercial vehicle manufacturers . . . . .	372
Passenger vehicle manufacturers . . . . .	238
States in which factories are located . . . . .	32
Workers employed . . . . .	280,000
Motor vehicles produced in last fiscal year . . . . .	1,806,194
Passenger cars produced . . . . .	1,693,994
Commercial cars produced . . . . .	112,200
Production passenger cars in calendar year 1917 . . . . .	1,795,640
Production commercial cars in calendar year 1917 . . . . .	181,348
Average price of passenger cars produced in 1917 . . . . .	\$720

**Use Your Engine as Brake**  
The practice of using the engine as a brake is advisable, especially on steep mountain roads. It insures safety, saves the brake and cools the engine, which would be reason enough for doing it. The usual procedure is to use the foot brake for a while and then change to the emergency brake. This relieves the brake linings, but doesn't cool the drums, as the two brakes, internal and external, use the same drum. So by using the engine gears the brakes are relieved of much duty. The engine is cooled by this process.

**CARAVANS LEAVE FLINT**  
Each Fleet Has Captain Who Pilots the Flock

Through summer and fall, and continuing in the present, in spite of drifts and below-zero weather, Buick motorcars have been driven away from Flint, Mich., where they are built, toward all the points of the compass. The Buick Company does not claim to have invented the "drive-away" method of clearing decks, because from the beginning of the industry that had been common

**DRIVING GLOVES HEATED BY CAR'S ELECTRICITY**

Fiat Testers Keep Hands Warm in Coldest Weather

All owners of cars equipped with electric lighting sets might profit by the experience of the Fiat testers and obtain a heating arrangement at virtually no cost. These men are called upon to test cars at extreme temperatures, and as test chassis cannot be fitted with windcreens the problem of keeping warm on Alpine roads is one of no small order. The Fiat testers are now supplied with electrically heated gloves, containing current from the lighting system on the car. The gloves have resistance wires set in the back between two layers of thin sheet asbestos. Connection is made to the electric light terminals at the most convenient points, and the fine flexible wires attached to the wrist of the gloves by pressure buttons. The wires are of sufficient length and are sufficiently flexible not to interfere in any way with driving, and the current passing through the resistance keeps the hands at a warm temperature on the coldest days. If it is necessary to leave the wheel the wires can be disconnected from the gloves merely by a pull on the push-button connectors.

While the Fiat drivers use this system of heating for the hands only, there is no reason why it should not be applied to the waistcoat and boots; indeed, in the aviation service of some of the Allies electric heating for all the clothing has already been adopted. Most motorists, probably, would be satisfied with heated gloves only, and by the method described can obtain these readily and cheaply.



It seems almost a shame to picture John C. Schwartz, of the firm of Gomery & Schwartz, all by himself when he's naturally of a chummy disposition. Old Hendrik Hudson sailed several miles up the Hudson River, but our Mr. Schwartz could sail from here to China on the Hudson automobiles he has sold.

enough in small lots for short distances, but Buick unquestionably developed the "drive-away" business into a system one step ahead of its competitors, and consequently was able to produce more cars than ever in a season which found many plants compelled to curtail operations through inability to get their goods to market.

Early in the summer the Buick sent scout cars from Flint in all directions, searching out the routes south, west and east which possessed the best roads. Clearly printed instructions, prepared from first-hand information, were handed to the captains of the various fleets of cars. Not only did these captains know which road to take at every turn, but also at which towns to stop, at which hotels to put up and in which garages to keep their cars overnight. Squads of efficient drivers were organized and maintained month after month. Day after day long cavalcades of Buicks, bound for faraway points, leave Flint. It is nothing to see, courting through the streets of Flint twenty or more Buicks marked up for towns in New Mexico, Louisiana or Florida.

**NO FOOLING THIS YEAR**

Crowds at Show Are There for Strictly Business Reasons

The proportion of people visiting the automobile show this year, who are there for actual business purposes instead of mere sight-seeing, is larger than ever before, declares L. S. Bowers, distributor of Liberty cars.

"I noticed particularly on Monday those people who stopped at the Liberty exhibit. There was not only a larger percentage of prospective car buyers, but there was also a greater proportion of dealers."

"The increasing necessity for the automobile for strictly utilitarian purposes, I assume, is in a great measure respon-

sible. Those who buy motorcars because they actually need them, and such buyers constitute 55 per cent of all automobile purchasers, are not given to flitting around from one exhibit to another and being content with mere surface inspection. They get down to business

immediately. And, needless to say, a man who wants to know about the quality of the car, and is satisfied with nothing less than thorough goodness in addition to grace and beauty of line, is exactly the kind of buyer we feel most confident of satisfying."

**Owners of Any Type of Automobile**

can learn something about the latest development in air-cooled motor cars with all of the advanced engineering principles embodied in a car designed and built by Arthur H. Holmes, President of the Holmes Automobile Company, Canton, Ohio, an organization of men with long experience in air-cooled motor cars, if they will look for the HOLMES CAR at the Automobile Show—January 12th to 19th, inclusive.

Mr. Holmes was formerly Vice President and for seven years Chief Engineer of the Franklin Automobile Company. In the Holmes Company he has associated with him some of the most substantial industrial men of the Middle West.

Car can also be seen at 441-51 North Broad street during show week.

FOLDER ON REQUEST

**Holmes Philadelphia Company**

R. M. McCormick, Manager

441-51 N. Broad Street

Bell Phone

Poplar 3040-41

Keystone

Race 3824-25

**Oldsmobile**  
**Booth 34 at the show**  
will contain all the new Oldsmobile models. Look at them carefully and note the results attained through 20 years of manufacturing progress.  
**Larsen Oldsmobile Co.**  
231-33 N. Broad St.

**MOST COMPLETE Accessory Display**  
in the **AUTO SHOW**  
Booth A, 11 and 12  
**MAIN AISLE, RED ROOM**  
See the Demonstration of Gabriel Rebound Snubbers Stromberg Carburetors Gray & Davis Ford Starting and Lighting Systems Kellogg Pumps Garage Equipment and Specialties.  
**J. H. McCullough & Son**  
219 North Broad St.

**National**  
—with airplane-type motor

The feature of the National Exhibit at the Automobile Show is the airplane-type motor, which we believe will outperform any other genuinely stock car motor in the world.

The full range of National body styles is available in both Six and Twelve Cylinder Models

NATIONAL MOTOR CAR & VEHICLE CORP., INDIANAPOLIS  
Eighteenth Successful Year

**SAMUEL EARLEY MOTOR CO.**  
675 N. Broad St., Philadelphia  
Space 46, Blue Room, at the Show

**LOOK FOR International ON THE HOOD**  
A MARK OF QUALITY AND AN ASSURANCE OF SERVICE

**A Truck with a Record for plain efficiency second to none.**

"Why didn't I make the change sooner?" the purchaser of an **International Motor Truck** recently asked one of our salesmen. It is a question that sooner or later passes through the minds of about 99% of the men who make the change to **International Motor Truck** transportation.

The salesman knew the answer to the question, and it was not to the purchaser's discredit. The latter simply had no way of comparing either the service rendered or the cost of maintaining his horse-and-wagon equipment with the service and cost of motor trucks. Time is required for the business men of the coun-

try, juggling at the same time a dozen problems in addition to the hauling problem, to learn the facts. Long time is required to convince them of the loss they are sustaining through the use of out-of-date equipment.

We can cite many examples among Philadelphia owners in order to show the tenacity with which the **International Motor Truck** clings to its job. We have figures in abundance that we will submit to prospective motor truck owners that will show them the exact relative efficiency of horses and motor trucks and prove the superiority of the **International**. Stop in and let us discuss your delivery problems.

**A Model for Every Need—Four Sizes—1500, 2000, 3000, 4000 Pounds Capacity**

LITERATURE ON REQUEST

**International Harvester Company of America**  
216-220 North Twenty-third Street  
Factory Branch and Service Station—211-213 N. 22d St.  
Bell, Spruce 2385

**Serves Saves**

**Membership Means this to you**

Prompt and courteous service at stations. Club service at hotels and garages listed only after careful investigation and selected because they meet the club's high standard. 2 1/2 cents per gallon saving on highest grade gasoline; tires and tubes at 15% to 20% saving; a saving of from 10% to 40% on all accessories and automobile parts.

An effectual Legal Department that, without expense to you, takes care of all legal difficulties connected with the running of your car. Join now. Full information gladly furnished at Service Stations or Executive Offices in Drexel Building.

Meet our representative any day this week in Ledger Central Balcony.

**Service Stations**  
Full-Crew Street (G'n)

**BRISCOE**

"It is a mistaken notion of the meaning of conservation that would prompt you to defer purchasing a car. . . . To the busy man or woman, the spirit of conservation dictates the purchase of a low priced car, one with an established, national reputation for performance and economical upkeep. . . . In some time, enabling you to do more. . . . The **Briscoe** of **Gomery & Schwartz** points at you only when you ride negligently. . . ."—H. NAAHED.

**YOU** can conscientiously buy a 1918 **BRISCOE**, knowing that you are upholding the Government's stand on conservation.

Added to the many high-priced car features that have characterized **BRISCOE** of the past, this series is handsomer in appearance, contains new refinements of furnishings and finish and has already shown unusual records for economy of upkeep.

The famous Half-Million-Dollar Motor maintains consistent records of 25 miles to the gallon of gas and better. Easy riding is more pronounced and **BRISCOE** still holds its title as "The roomiest car in its price-class."

5-Pass. Touring; 2-Pass. Runabout, \$725.00 f. o. b. Jackson, Mich., and war tax.

**GRIEB & THOMAS**  
306 North Broad St.  
Bell—Spruce 5847