

HELICOPTER WILL DISPLACE PLANE, THINKS ENGINEER

Peter Cooper Hewitt Says U. S. Should Not Ignore Weapon of Amazing Possibilities.

Paris, Feb. 5.—(U. S.)—France is leaving no stone unturned in her effort to be adequately prepared for any future conflict with Germany.

There is at present feverish interest on the part of the French in the possibilities of developing the helicopter, a flying machine which is proposed as a substitute for the airplane.

Peter Cooper Hewitt, the famous American engineer and inventor, who is at present in Paris, is said to be engaged by the French government in connection with the helicopter.

NOT AIDING FRANCE
Hewitt, when questioned by a staff correspondent of Universal Service, denied he was doing any work for the French government, but took the opportunity to declare that the American government was making a serious mistake in abandoning experiments begun in 1918 with the helicopter.

Hewitt built a helicopter for the United States during the war, and had the world conflict continued much longer it would have been used, along with the airplane, on the western front. Since that time, according to Hewitt, all work on this machine has been suspended.

URGES U. S. TO ACT

Hewitt says: "At this moment, when the United States is about to undertake the building of the largest fleet in the world, I should like to call attention to the fact that one of the most potent weapons against the navy is being overlooked by American naval and military authorities.

"This weapon is the helicopter, a machine which mounts straight upward from the ground, flies in any direction without turning as an airplane does, and is capable of landing on any surface.

IS ALL STEEL

"The helicopter is a strange looking affair with two propellers of large diameter rotating in opposite directions on a central shaft. These propellers may be run by motors of any horsepower. The machine I designed for the government in 1918 was operated by a 200-horsepower motor, capable of making a lift of 400 pounds.

"The entire machine is built of steel except for the ribs of the propeller blades and the blade covering, which is of sheet aluminum. The propellers of this machine were each 51 feet in diameter. The power transmission shafts are concentric and driven by two motors.

"This machine not only has the power of flying much faster than any airplane built, but is capable of changing direction as quick as a flash. It can fly in any weather and is free from all danger of fire, since it is built entirely of metal. It needs little space to start from and very little in which to land.

CAN REST LIGHTLY

"If it is necessary to land on a roof which is too fragile to receive the entire weight of the machine, the aviator may so adjust the speed of the propellers that a landing can be made without putting the full weight on the roof.

"Landings can be made in swamps and morasses, even on the surface of the water without pontoons. Exact landings can be made on the earth, a thing impossible today with the airplane.

"This helicopter is the weapon of the future. A nation well supplied with helicopters can absolutely wipe out the finest and most efficient navy in the world. Ports and harbors can be demolished in a night.

HAS COMMERCIAL VALUE

"I realize that many machines, many devices and inventions have been proposed with the claim that they would accomplish miracles. But I claim that the helicopter is founded on a genuine scientific basis and that with further experimentation it will take its place as one of the indispensable creations of civilization.

"Its value is not only military, but it will absolutely supplant the airplane. It will prove more reliable, cheaper to construct and easier to handle.

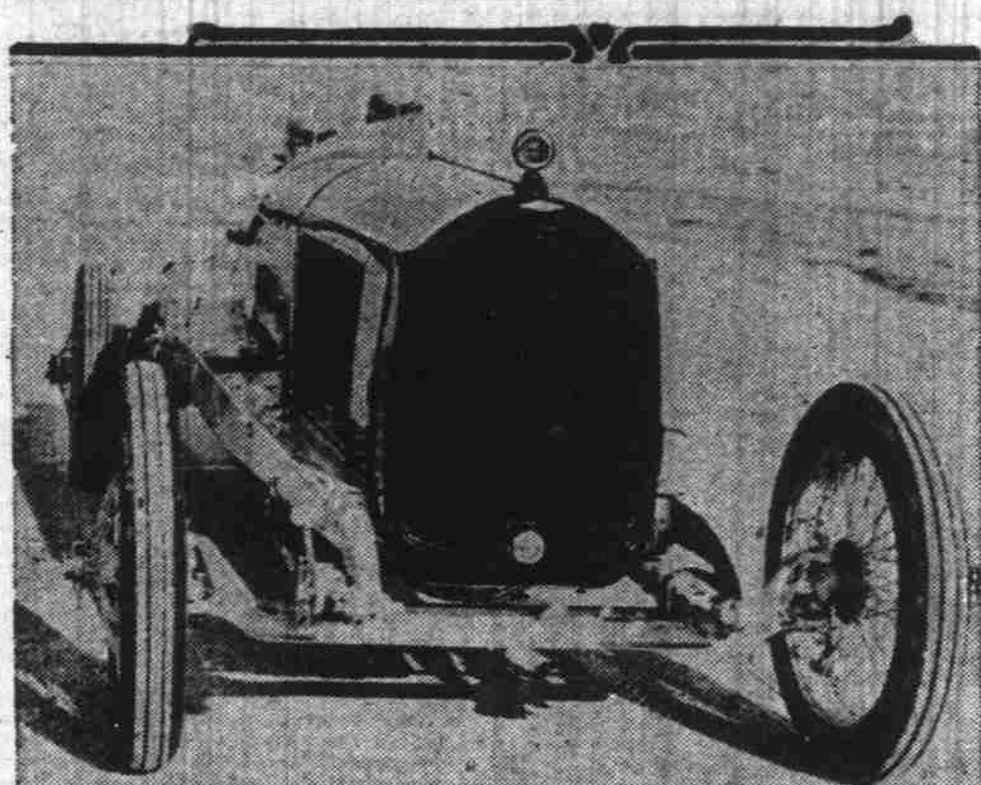
"No government can afford to overlook the development of the helicopter. The French are at the present time conducting a series of experiments with the machine. The American government has done nothing since I built one in 1918. I make a special plea to the American people through Universal Service to urge their government to continue with its experiments.

MINIMIZES DANGER

"I have been told that the reason experiments with the helicopter have ceased was because its development was at the present in a stage in which experiments endangered life.

"What a curious attitude. How far would the world have gone in the development of the airplane if men had not risked their lives in an attempt to perfect its flight. To be sure, lives will be lost, but spent lives are always the toll of progress."

STOCK CAR BREAKS RECORD



This Paige Six stock car broke the world's record for the mile in stock car classes recently when Ralph Mulford, premier race driver, tore over Daytona sands at a little less than two miles to the minute. This is the car that did the trick, and Mulford is seen at the wheel. The photo was recently received by Cook & Gill Co., local Paige distributors.

STOCK CAR RECORD IS BROKEN AGAIN

Mulford Drives Paige Mile in 35:01 Seconds at Daytona on January 21.

The world's stock car record for speed now belongs officially to the Paige. On Friday, January 21, at 12:12 o'clock in the afternoon, a Paige "6-66" Daytona stock model, driven by Ralph Mulford, covered a mile straightaway on Atlantic beach, Daytona, Florida, in 35:01 seconds, thus breaking all existing stock car records of any piston displacement.

Checked, measured, timed and authenticated by officials of the racing board of the American Automobile association, this record is now the official stock car speed mark for all the world. Mulford drove the Paige over the yielding Florida sands from tape to tape at the breath-taking pace of 102.8 miles an hour.

Fred J. Wagner was the official timer, using an automatic electrical timing device, and F. E. Edwards, technical representative of the American Automobile association, checked the chassis. The course had previously been laid out and measured by the official surveyor.

All the necessary requirements and regulations having been complied with, the Paige's feat of moving at a rate of 102.8 miles an hour and covering a mile in 35.01 seconds was officially declared to be the world's stock car speed record.

The remarkable feature of the record made by the Paige is not alone the speed attained, although speeds of better than 100 miles an hour were undreamed of in the automobile world of 10 years ago. The significant fact is that a car designed and built for the daily service of the average owner should have in it, besides very desirable elements of dependability, the extra power and stamina to withstand without any additional reinforcement, the tremendous additional strains attendant on a speed of almost two miles a minute.

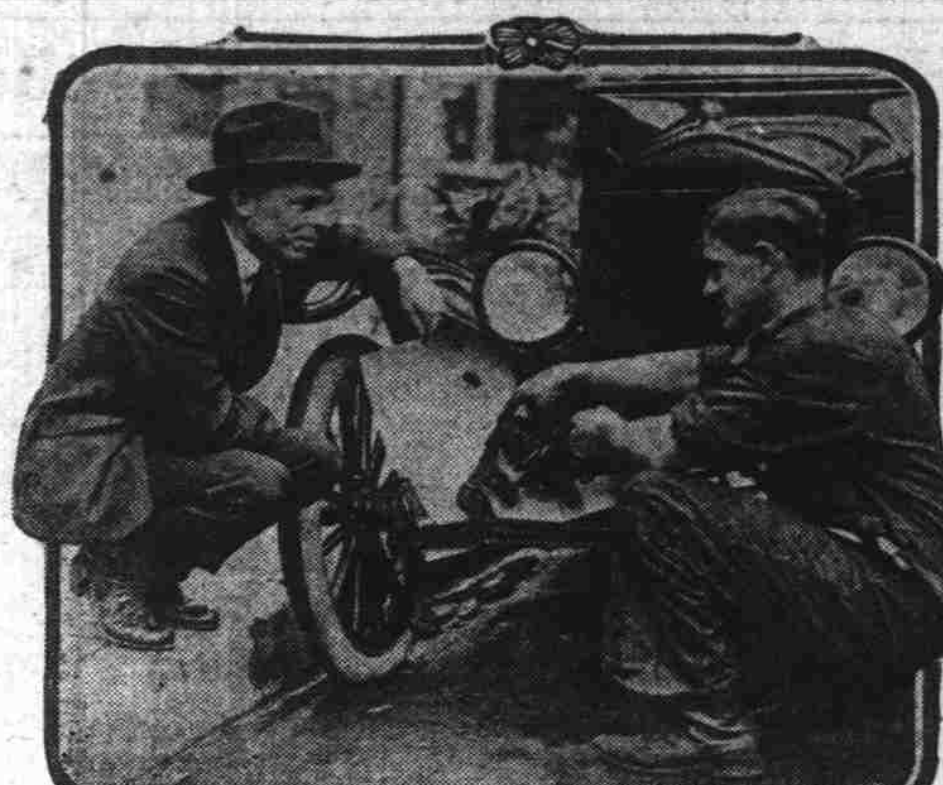
It will be remembered that a Paige "6-66" standard touring car climbed the Pike's Peak cog railroad, nine miles of almost impossible grades over ties, cattle guards, trestles and switches, without a mishap; and that another car of this model holds the 1920 record—20 minutes 51 2-5 seconds—for the fastest time to the summit of the peak over the motor highway.

If the springs are rusty they should be removed, taken apart, scraped and brushed to remove all rust. Use a wire brush for this work. Grease well with graphite grease before putting them back together. By taking out the spring bolts on both ends of the spring and taking off the spring clamps at the axle, the springs can easily be taken off. Be careful to see that these bolts and clamps are fastened securely when replacing the springs. To take the spring leaves apart, remove center bolt holding the leaves together and the pieces can easily be separated. Often times, when the leaves of a spring slide backward or forward, it is this bolt that is either broken or sheared in two pieces because of loosened clamps. A clamp bolt loosened in this way will often throw the whole machine out of line and will result in heavy wear on tires and hard steering.

Virtue of Flowers On Roads Emphasized

University of Oregon, Feb. 12.—The importance of preserving our native Oregon flowers and shrubs along the highways and in our parks was the subject of illustrated lectures given Friday evening at Albany and Saturday morning at Dallas by Professor A. R. Sweetser, head of the department of botany of the University of Oregon. Professor Sweetser is giving many lectures throughout the state on the necessity of protecting our flowers before ruthless and careless gathering has too greatly thinned them.

SPRING CAUSES MUCH TALK



The Hassler spring for Ford cars is the topic of conversation here, and the local trade, particularly among Ford dealers, was treated to some of the finer points of installation during the recent visit of A. R. Arnot of San Francisco, head of the Hassler Pacific company. Arnot is seen here on the left. On the right is Howard Douglas, the lightning installer of Hassler springs.

Yakima County Finds Way to Get Around Highway Bonding Act

Yakima, Feb. 12.—County commissioners here have let the contract for paving four miles of road extending from Grandview to connect with the Sunnyside-Mabton pavement for approximately \$125,000. The contractor, the Standard Asphalt Paving company of Spokane, takes payment in district improvement bonds and sells these bonds on the market. In this way the county is permitted to proceed with its road improvement program in spite of the provisions of the law that forbids the sale of improvement bonds at less than par. Recently the board advertised for bids on road bonds and could get no offer at par and had to reject all offers, but by paying the contractor in bonds taken at par they find a way to finance such improvement as they wish to put over this year.

Forest Rangers to Have Motorcycles

Uncle Sam has decided to equip his forest rangers in the state of Idaho with motorcycles for patrol work and as aides in reducing the fire hazard in the huge area of timberlands included in the Shoshone county forest reserve. Two hundred men are at present engaged in trail building in this section in preparation for motorcycle patrolling. All trails now are being widened to three feet or more with a maximum grade of 8 per cent.

NEW SECRETARY WILL HAVE CHARGE OF CLUB



Alfred B. Shearer
The newly appointed assistant secretary of the Oregon State Motor association, who will hold down the post vacated by George Chambers. Shearer is well known here, having been at one time connected with the First National bank.

Ford

THE UNIVERSAL CAR

Announcement:

Mr. Edsel B. Ford, President of the Ford Motor Company, gives out the following statement:

"The price of the FORDSON Tractor has been reduced from \$790.00 to \$625.00, F. O. B. Detroit, effective immediately."

This price change has been made possible through lower costs of materials and the fact that we are now located in our new Tractor Plant with greatly increased economic manufacturing facilities in immediate connection with our foundry and machine shops and large blast furnaces, where iron is poured directly from the ore, giving us maximum efficiency with the power to reduce cost of production, and down comes the price in line with our policy to market our products at the lowest possible figure without in any way affecting our high standard of quality.

We are particularly pleased in being able to bring about this big reduction in price at this time, because the farmer needs all the help we can give him, and this big cut in price will be the means of placing a valuable power unit within the reach of practically every one of them, not to mention industrial and commercial concerns which likewise have benefited through its use and are already realizing to a much greater extent its value as a power and hauling unit. But particularly has the FORDSON Tractor proved a most valuable factor in the saving of farm labor, at the same time increasing the per acre crop yield as well as making possible a utilization of previously uncultivated land, to say nothing of removing no end of drudgery.

There is no question that the use of machine power on the farm is the greatest advancement made in the development of agriculture, not only in money saving and money making results, as well as raising the standards of living on the farm to a much higher level, but because of its proved value in making every type of land more productive, and consequently our desire to place the FORDSON within the reach of all.

THERE IS NO CHANGE IN THE PRESENT FORD CAR AND TRUCK PRICES, which are already at the lowest possible figure, and now with rock bottom reached on the tractor price a further reduction in price on either the Car, Truck or Tractor is out of the question; in fact, the big price cuts have been made in anticipation of continuous maximum production, and increases may be necessary before long if a large volume of new business is not obtained. Therefore, present prices of Ford products cannot be guaranteed against possible increases.

Ask for the book "The Fordson at Work," which will be supplied free of cost. Let us demonstrate the value of the Fordson on your farm, in your factory, lumber yard, coal yard or in any general hauling or power work you have to do, and let us have your order for a Fordson.

Chassis	\$360.00	Touring (With Starter)	\$510.00
Runabout (Regular)	\$395.00	Coupe (With Starter)	\$745.00
Runabout (With Starter)	\$465.00	Sedan (With Starter)	\$795.00
Touring (Regular)	\$440.00	Truck (Pneumatic Tires)	\$545.00

The Prices Listed Above Are F. O. B. Detroit

For Sale by the Following Authorized Ford Dealers

Francis Motor Car Co.	Wm. L. Hughson Co.	Talbot & Casey, Inc.
Grand Avenue at Hawthorne	Broadway at Davis	East Ankeny at Grand
Palace Garage Co.	Rushlight & Penney	Robinson-Smith Co.
Twelfth Street at Stark	East Third at Broadway	Sixth at Madison

"The Weather Is Always Good in a Ford Sedan"

Springs Conceal Motor Birds Must Lubricate Leaves Often

By Mike De Cleo

Some people recommend chasing a bird with a handful of salt, but the only way to chase a "birdie" that lives somewhere in an automobile is to have a handful of grease along. It's lubrication, mates, or the lack of it, that makes the birdies in your car sing their sweet melodies. The question is how to find them and muzzle their bills, or beaks, so they can't whistle. What can one do to a machine that runs along sounding as if it were an assembly of some dozen stomach aches?

Noises or thumps oftentimes result from spring leaves rubbing together. This is a common source of birdsong, and one of the hardest to locate, and usually is a result of poor spring lubrication. Failing to lubricate the springs and bolts and bushings is to overlook something essential. They slide or shift from their proper places and produce the squeak as they move. And not only do they squeak, but they eventually wear out from neglect. Every few months the spring leaves should be lubricated with graphite grease. This also aids in preserving the leaves and sometimes keeps them from breaking.

To repair the spring or spring bolts, place a jack under the frame of the car to relieve the spring of all strain. If the car is in good condition and no

leaves need to be removed, lubricate by driving a wedge between the leaves and forcing the grease in between them. The bolts should be lubricated every day or so, and if there are grease cups, turn them down occasionally. If the car is equipped with oil cups or the Alemite system, attention to the bolts once or twice a week will do away with much of the squeaking a motorist has to listen to.

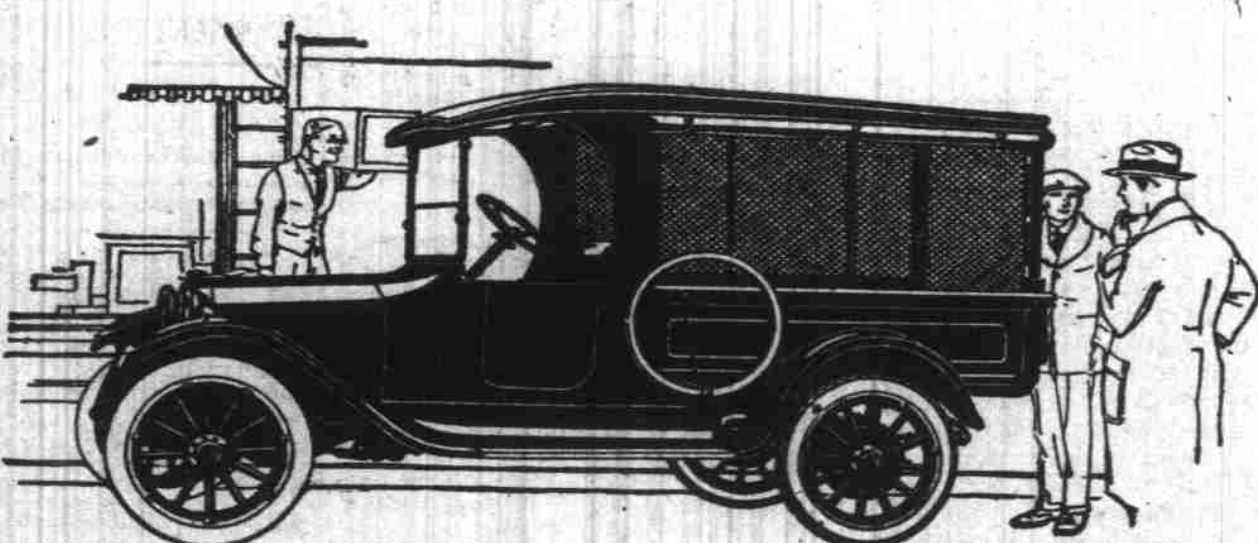
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DODGE BROTHERS BUSINESS CAR

It attracts those who are thoughtful about the quality of the things they use, but who also keep a careful eye on their spending and saving.

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—THAT'S ALL—