

NEW LAW IS FOUND FOR HEADLIGHTS

Looks as if the Confusion of the Past Was Over.

ALBANY, May 11.—New York State has a new motor vehicle headlight law, one that came into existence last Wednesday with the signature of the Governor and one which it is hoped will do away with the confusion over headlights that has existed among motorists in this State for the last year. It is expected that the new headlight law will go far in removing the danger and annoyance that has characterized night driving in this State up to the present time. The law confers on the office of Secretary of State Francis M. Hugo the authority that has been lacking the last year to officially name such headlights as come within the requirements following tests before technical experts or boards. The law is the most important to automobilists of any enacted at the recent session of the Legislature. Its effects will be far reaching and will serve to lessen the toll of death and injury attributable to glaring headlights.

The bill followed a lengthy conference in Secretary Hugo's office of headlight experts and others. All information and assistance was sought toward framing a law that would do away with the perplexity that has existed among the automobilists of this State for several months, persons who are perfectly willing to obey the law, but found themselves confronted with one so complicated that dozens of different versions resulted and the law became a dead letter so far as any real observance was concerned. There will be little time lost in getting the new law in working shape. Secretary of State Hugo will at once adopt uniform specifications. The new law states that any person or concern may submit to the Secretary of State a device for controlling the front lights of motor vehicles to the end that this device shall then be submitted to a test by the United States Bureau of Standards or any qualified testing laboratory not interested in any way in lamps or headlighting apparatus, or to a disinterested, qualified technical expert or experts from the physical laboratory of a university or technical school in this State. The fee will be \$50. The Secretary of State is also given the power to test out the device on the road as he may see fit.

Following a notice from the bureau, laboratory or technical expert testing the device to the effect that it complies with the provisions of the law and suitably the maximum candle power to be used with it. Secretary Hugo may then issue a certificate to the effect that the device has been made and that the device meets with the law and prescribing the candle power to be used. Those dissatisfied with the results of the test are given the right of appeal to the United States Bureau of Standards, whose decision shall be final. Among the other new provisions of the law are these: Every motor vehicle when running at night or from one-half hour after sunset to one-half hour before sunrise at least two lighted lamps in front of approximately equal power, but not exceeding twenty-four candle power unless a greater power has been prescribed under one of the subdivisions of the new law. The lighted lamp in the rear must be such that the number of lighted lamps are legible at least fifty feet away.

The front lights must be so adjusted and operated as to avoid dangerous glare or dazzle and so that no dazzling light projected to the left of the axis of the vehicle when measured 75 feet or more ahead of the lamps shall rise above 42 inches on the level service on which the vehicle stands. There must also be sufficient side light to reveal any object 10 feet to both sides of a car at a point 10 feet ahead of the lamps. All this, however, which has been a puzzle to ninety-nine out of every hundred motorists, will be taken care of in the tests. Lists will be furnished by Secretary Hugo, making public, as is the case in other States, of lights that come within New York's law.

The law further states that front lights are to be visible at least 200 feet in the direction in which the car is going, and when it is on a highway not well enough lighted to reveal any object straight ahead 200 feet away, such front lights shall be of sufficient intensity to reveal that object at least 200 feet away. This, however, is not to apply to motor trucks, described in subdivision 4 of the law.

The motor truck situation is taken care of by requiring that on motor trucks of two tons carrying capacity or over, so constructed that they cannot exceed fifteen miles an hour, the lights shall be visible at least 200 feet, and where the vehicle is on a highway not so lighted as to reveal any object straight ahead 200 feet, the front lights shall be sufficient to disclose any object 75 feet ahead. Motor vehicles when standing must display two lights in front and a red one in the rear visible at least 100 feet distant.

A new edition of New York State's motor vehicle laws will be off the press within a few days. Mr. Hugo is planning a widespread distribution of these booklets through automobile clubs and similar organizations. Copies also may be obtained on request.

KEEP YOUR CAR WELL OILED.

Also Look After Alignment of Its Wheels.

Harry S. Houpt, president of the Hudson Motor Car Company of New York, says that owners would have fewer repair bills if they realized the importance of properly oiling their cars and of keeping them in proper alignment. "The average owner," he says, "may realize the vital importance of proper lubrication, but few understand the equal necessity of proper alignment. When the car first comes from the maker, all parts are properly aligned, but the careless driver quickly destroys this condition by improper handling. The most frequent cause of misalignment occurs in front wheels, resulting in excessive tire wear and tires being dragged over the ground in such a way as to be ruined after a few hundred miles of travel. The alignment of the front wheels is affected by the steering system, the front axle, the bearings and various other factors. The alignment of the rear wheels will result in mechanical derangements that will throw the parts out of alignment. Mistakes of judgment in driving will have a similar effect. In driving over a rough road if the brakes happen to be applied the rear wheels will be locked when they strike the ground again and the driving pinion will probably snap under the strain. These instances have been cited to show how easy it is for careless driving to twist various parts of the mechanism out of alignment. The trouble may not be apparent at once, but sooner or later the gears will growl."

COLE "EXTRAS" MAKE APPEAL.

Prospects Find the Equipment Is Very Unusual.

In designing their new Aero Eight models the Cole Motor Car Company has added almost a score of accessories and refinements that ordinarily must be procured as so-called "extras," but which contribute mightily to the comfort and utility of these new models. There are a motor meter, double door handles, rubber step pads and an eight day clock. Shock absorbers are provided at all four wheels. Plate glass curtain lights, are features of the top construction, which is of the automatically folding type.

One of the distinctive features is the patented wheel and tire carrier at the rear of the Aero Eight. The well designed bracket which forms the base of this device is fastened to a special sheet steel cross member at the rear of the frame that is secure and rigid. When an extra rim and spare tire are to be carried a three pronged spider is adjusted to the bracket and a locking device is provided that operates with the same key used to operate the ignition switch.

IMPROVING FOREST TO SAVE HIGHWAYS

Much Valuable Work Will Be Done if Amendment Is Passed.

By EUGENE M. TRAVIS, State Comptroller.

The State Comptroller apportions the millions of dollars annually spent for the improvement of State highways. The question of more and better highways in the Adirondack region is of particular interest to the motor fraternity. Touring automobilists are especially interested in having the existing roads improved and new ones developed. The welfare of these travellers is intimately bound up with the increased accessibility for tourists, campers and settlers of the entire Adirondack. The work of protecting the forests against fire is greatly facilitated by improved roads, enabling the prompt mobilization of men to fight fire. Motorists therefore heartily endorse the concurrent resolution adopted by the Legislature of 1918 amending the State Constitution so that the provisions of Section 7 of Article VII, "shall not prevent the Legislature from authorizing the cutting and removal of dead and fallen timber on lands in the forest preserve for fuel or other domestic purposes, or authorizing the cutting and use of timber by the State on such lands for the construction of roads and trails necessary for protection against fire and for egress and ingress."

If this resolution is adopted by the Legislature of 1919 it will be voted on by the people in November, 1919, and if approved by the electorate will become effective January 1, 1920. Its results will probably be to stimulate road building in the Adirondacks, making this lovely region even more so than to-day a "Mecca for tourists." Many an automobilist who has read of logging camps, river drives and the like will then be able to view the picturesque operations of logging and lumbering with the minimum of personal effort, and as for the operators themselves they will find that labor is attracted by the greater accessibility of the region. A network of good roads is an essential in modern forest management and in the education of the public to the best use of its forest wealth for permanent productiveness.

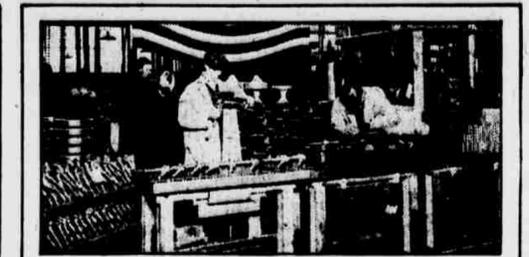
BUILDING THE MODERN AUTOMOBILE IS A FINE ART.

A Jaunt Through the Marmon Factory—No. 3.



ever, as sample gears are made up and will meet requirements. After the standards have been set and the materials ordered the inspection department begins its work. The gear blanks, after they are forged in the shops, are all tested very carefully in the rough. Before the inspector passes the rough forging he must be satisfied that the composition of the metal is right, that there are no defects in the forging and that it conforms in size to specifications governing this rough material. Next the rough gear blank is put in a lathe and turned down to a specified size, so that it is ready for the gear

The top photograph shows various steps in gear testing. At the left is the test of a differential gear and pinions. In the center is the test for hardness and at the right the gears are being paired on a testing fixture. Left Centre—Inspection of pinions, steves and connecting rods. Right Centre—Search inspection in grinding department. Lower Left—Floor inspection in grinding department. Lower Right—Floor inspection in gear cutting department.



To appreciate fully the care and attention given to making every part of the car as nearly perfect as possible one should select several pieces and follow them through the various operations—from the raw material to the finished product ready to become a weeping part of the machine. Let us take an example, then, and see the number and kind of tests that are made, the multitude of examinations by trained men using accurate measuring instruments to make certain that each piece, no matter how small, meets the requirements, determined not only by the theory of mechanics but also by thorough tests in the experimental departments. A transmission gear, for example, must be made of a special analysis steel. The gear must do a certain work, and to meet the stresses put upon it the steel must be of a character to withstand these strains throughout years of service. The engineering department determines the kind of steel to be used and orders that the gear blanks from which the gear is to be turned shall be forged of a steel having the properties which it specifies. The engineering department does not stop at theory, how-

ever, before specifications for production are put into the shop the sample gears are tested thoroughly to be sure that they shape machine. The inspector is ever on the watch in this operation. He sees to it that the lathe man does his work

The Liberty Battle Plane. "She'll Beat Anything in the World."

Digest these facts about the Liberty battle plane and cheer up. They come from a trained observer who went up 15,000 feet in one of them and after spending at 133 miles an hour and doing a variety of turns and flips for an hour came back to earth with the exclamation: "She'll beat anything in the world!" E. Leroy Pelletier, a well known Detroit automobile and airplane authority, is the man who made the trip and he knows what he is talking about. He "went up" at Dayton, Ohio, last week with the idea that the machine was not right. He frankly admits he had criticized it severely on the strength of information given to him by men he supposed knew what they were talking about. He came down from his ride above the clouds one of the strongest supporters of "the greatest plane in the world."

It required some nerve to make the flight Pelletier did when it was only the second time he had been in the air. But he was after the truth first and got it. Here are some of his observations: 1. The Liberty battle plane, carrying two men and four guns, has 430 horse-power and a straightaway speed of 133 miles an hour. 2. The Liberty battle plane does not require castor oil, as all other planes do. Regular everyday cylinder oil is quite good enough. It does not require any special grade of gasoline either. 3. The Liberty battle plane is faster than any of the other types of planes in use along the battle front. It will outdistance in its own specialties any of the other specialized planes. 4. The Liberty battle plane, carrying two men and full fighting equipment, has climbed 16,000 feet in 7 minutes and 13 seconds and 21,300 feet in 30 minutes. The former American climbing record was 16,000 feet in 8 hours. 5. The Liberty battle plane has gone as high as 22,000 feet. The world's altitude record, held by an Italian plane is 26,000 feet. With a new carburetor, recently perfected, the experts confidently expect the Liberty to go to 23,000 feet. 6. The Liberty battle plane, thanks to Yankee ingenuity, is almost entirely free from vibration at the high altitudes because of the angle at which its cylinders are set. This in itself is a most remarkable accomplishment.

The Case Pleases New Yorkers.



Sales Manager Schary of the H. A. Sanders Motor Corporation is enthusiastic over the fact that the big Case plant in Racine, Wis., has its entire output for 1918 already built, thus enabling him to make immediate deliveries.

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SIX SPLENDID BODY TYPES

Seven-Passenger Touring Car, \$1895	Four-Passenger Roadster, \$1895
Four-Passenger Dispatch Car, \$1675	Convertible Sedan, \$2295
Convertible Coupe, \$2195	Limousine, \$2895

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That Smart Custom Made Look

The smart, individual appearance of this Moon Six-66 immediately places it in the class of the "custom-built" car. The view here given shows the beauty of its long, symmetrical lines. Note the high radiator, the short backward-tilted windshield and the ease-giving roominess of both front and rear seats.

Its graceful symmetry reflects the latest designs in motor car construction. There is continued satisfaction in its silent, sweet-running Continental engine that gives assurance of great reserve power.

Every detail of equipment and appointment is chosen on the basis of quality. It is consistent with fourteen years of Moon history that no car is put out which does not conform in every particular with the best and latest proven ideas in automobile design and construction.

Because of extra long, scientifically designed springs, patented seats and cushions and perfect chassis balance, it is a particularly easy riding car, and a revelation in the hands of the woman motorist.

In buying this Moon Six-66 you obtain a car whose intrinsic value is so satisfying you wonder such an unusual car can be built at such a moderate price.

Six-66-7 Pass. Touring, \$1985	Six-45-7 Pass. Touring, \$1785
Six-66-4 Pass Club Roadster, 1985	Six-36-5 Pass. Touring, 1295

A few cars available for early delivery.