

Fast Modern Autos Held Perilous, With Safety Sacrificed for Style

Power Is Too Great for Control Mechanisms, Low Bodies Make Vital Parts Vulnerable and Impair Driver's Vision, M. I. T. Expert Tells Conference Here.

Modern streamlined automobiles were condemned yesterday at the Greater New York Safety Conference as possessing many hazards which are building up the accident rate "in an alarming manner."

Speaking at one of the closing sessions of the annual conference in the Hotel Astor, Dean A. Fales, Associate Professor of Automotive Engineering at the Massachusetts Institute of Technology, declared that "if the present style trend continues, automobiles are going to be increasingly dangerous to drive."

"It is admitted that style has powerful sales value," he continued, "but when style in any way adversely affects the safe operation of such a potentially dangerous weapon as a fast motor car, that style must be curbed. If cars are produced that in time become unsafe, the industry at that later date will suffer for its present haste and lack of attention to safety features."

"Art and Color Boys" Scored.

Mr. Fales asserted that "the big men in the automobile industry today are the art and color boys," and that modern designing and construction were "merely stylizing, not streamlining at all." If the engineer were free to build the car of today, he said, "it would be like a long suit of woolen underwear, but it would have no sales appeal."

While contending that the modern cars were structurally safe, Mr. Fales admitted that safety was being sacrificed for style in making vital parts of the car vulnerable to obstacles encountered on bad roads and ramps. He noted that statistics showed 500,000 "unexplainable" automobile accidents in 1934.

"Many of the new cars are so much faster and smoother than the older cars that the driver is deceived as to his speed, and when he meets an emergency, both he and his vehicle are unable to cope with it," he declared.

"Several years ago a manufacturer produced a new model that was more powerful and much smoother than the previous model. The accident rate on the new model trebled that of the previous model. The same situation exists at present with another car that is so much faster and smoother than last year's models that its accident rate is building up in an alarming manner.

"The proposal to govern all cars so that they cannot exceed fifty miles an hour is dangerous. Some operators would tamper with the governors. It would be better to apply governors to drivers than to vehicles. Steering is sluggish due to the ease of operation that is so popular. With the present steering ratios it is impossible to correct a quick skid and the driver has no 'feel' of his vehicle.

"Low ground clearances and long overhanging rear structures cause many vulnerable parts of vehicles to be damaged. Higher ground clearances would not only eliminate much damage to exhaust systems, steering mechanisms, power plants, but could also contribute to easy riding by allowing the springs greater movement."

Hazards in Tires.

Mr. Fales termed improperly inflated and worn tires "one of the greatest hazards to safe driving." Accurate tire pressure gauges, he said, were hard to find, some of them in use at filling stations varying from five to ten pounds. He said accurate gauges should be made compulsory.

Driving seats in the new cars, he declared, were designed like lounging chairs when they should be built to place the driver in a comfortable, but alert position, such as one would assume at a dinner or card table. Mr. Fales said he arrived at some of his conclusions after many 500-mile drives over New England hills and level and curved roads.

"The driver should be able to see out of the vehicle under all conditions," he continued. "The driver's eyes should be protected from reflections and glares. In too many of the new vehicles door handles, gear shift, levers, wind shields and dash boards interfere with steering. Pedals are often so closely grouped that they cannot be quickly operated. High, long engine hoods prevent proper traffic vision.

"Low roofs and rounded bodies cause blind spots at the wind shield pillars. Low roofs make high traffic lights difficult to see. Low seats and low roofs make rear vision so limited that reversing a car becomes an adventure and not a properly controlled manoeuvre.

"Wind shields that are steeply inclined and have no outside protecting visors cause glare and eye strain, especially when lightly

coated with dust or dirt. These wind shields are practically impossible to defrost. Vee wind shields cause confusing reflections in night driving in the rain.

"The vacuum ventilating systems so generally used can and do draw fumes and dust into the vehicle bodies. This is a far more serious hazard than is commonly known. Many cars have dangerous and even lethal quantities of carbon monoxide in the bodies under certain driving conditions.

Defects in Body Structure.

"Modern bodies have great rigidity, but in many cases cause drumming that in time wears on the occupants and tends to deaden the mental alertness of the driver. The present style in rounded and sagging running boards presents a slippery and dangerous surface when wet or icy. In too many cars the use of tire chains is discouraged by the mud guards and wheel housings and on some cars tire chains cannot be used.

"The power plants in motor vehicles have been developed to a point far in excess of the road-holding, steering and braking abilities of the vehicles. In order to contribute to highway safety drivers must be educated in high-speed driving. Vehicles must be kept in the best of condition by compulsory inspection and by owner education. If safer vehicles are to be built more consideration must be given to the driver."

Charles A. Harnett, New York State Commissioner of Motor Vehicles, told the gathering that more than 3,400,000 drivers were now under license and regulation in the State and that the approach to the problem of controlling accidents was through the driver.

"Not more than 15 per cent of our drivers cause all the trouble and get into the courts for one violation or another in any one year and many of these violations are of purely minor character," he said. "Our job is to protect the pedestrian and the 85 per cent of drivers whom we regard as 'good' drivers from the acts and dangers of the reckless, drunken, speeding operator."

Mr. Harnett told of Governor Lehman's highway safety program and urged that the present penalties for drunken drivers be increased from the six months' mandatory period of license revocation to at least one year—if not two years. He also urged an increase in the police force patrolling the State highways and the establishment of a traffic commission to bring about uniformity of practices, rules and regulations. He urged that the teaching of highway safety be extended in the public schools.

Few Held Able to Drive Fast.

"Excessive speed is one of the real dangers on the highways today," he said, "and probably not more than one in 1,000 is physically and mentally equipped to operate a motor car safely at more than fifty miles an hour. The new car of today easily permits of a speed of seventy, eighty and even ninety miles an hour and many who buy them are not satisfied until they have demonstrated by tests that these cars will actually run at the advertised speed.

"With a person injured every five minutes and an individual killed every three hours, the motor accident problem has exacted a toll greater than war, pestilence or plague."

W. L. Cross Jr., chief engineer of the Motor Vehicle Department of Connecticut and son of the Governor of that State, also discussed driving hazards, noting that the installation of highway lights had proved so effective in reducing accidents after dark that their value could no longer be ignored.

William Junkin Cox of the engineering department of Yale University spoke on the hazards of the pedestrian in motor traffic. Ernest J. Swift, vice chairman of the National Red Cross, spoke of the need for roadside first-aid stations.

Mrs. William Kinnicutt Draper, chairman of the board of the New York Chapter of the Red Cross, announced that the Red Cross here would start a home accident-prevention campaign on April 6 in cooperation with the Board of Education.

The final address of the conference was made by Roger Williams, chairman of the general conference committee, over the radio. He said the registered attendance of the annual conference, started seven years ago, had grown from 700 then to 6,200 this year. More than eighty organizations cooperated in the conference, which had for its slogan "It's intelligent to be safe."