

SEES DEADLY GAS A PERIL IN STREETS

Dr. Henderson Warns Public Against Auto Exhaust of Tetra-Ethyl Lead.

WORSE THAN TUBERCULOSIS

Yale Professor Describes Its Ef- fects as Insidious. Develop- ing After Years.

ATTACKS BUREAU OF MINES

Charges That Corporation Financed Its Inquiry—Says Billions Are Involved.

Dr. Yandell Henderson, Professor of Applied Physiology at Yale University and a leading investigator of the action of gases on the human body, said last night that the use of tetra-ethyl lead, or the so-called "looneygas," would cause vast number of the population to suffer from slow lead poisoning with hardening of the arteries, rapidly decaying teeth, weakening of certain muscles and other symptoms. Dr. Henderson was a speaker before the American Society of Safety Engineers and International Safety Council at the Engineering Societies Building.

The public is not in great danger of the acute poisoning which caused several deaths and many cases of insanity recently at the Standard Oil and du Pont plants, but the breathing day by day of fine lead dust from automobiles using the leaded gasoline will produce chronic lead poisoning on a large scale in the populations of cities, according to Dr. Henderson. He said that if a man had his choice between the two diseases, he would choose tuberculosis rather than lead poisoning.

Dr. Henderson attacked the Bureau of Mines, accusing it of arriving at an unwarranted conclusion in favor of lead gasoline after improper investigation financed by the Ethyl Gas Corporation.

Dr. Henderson attacked the Administration, charging neglect on its part to investigate intelligently what he described as the greatest health menace which ever faced the public.

"The economy which the Government is practicing just now," he said, "involves the elimination of many extremely valuable investigations and the curtailment of funds for such scientific work as is continued."

Billions of Dollars Involved.

The commercial interests involved in the use of leaded gasoline amounts, according to Dr. Henderson, "to literally billions of dollars." In attacking the Bureau of Mines the Yale scientist said that it had investigated the danger to the public of acute lead poisoning only and had failed even to take into account the possibility that the atmosphere might be polluted to such an extent along automobile thoroughfares that those who worked or lived along such streets would gradually absorb lead in sufficient quantities to poison them in the course of months.

"Perhaps," said Dr. Henderson, "if leaded gasoline kills enough people soon enough to impress the public, we may get from Congress a much-needed law and appropriation for the control of harmful substances other than foods. But it seems more likely that the conditions will grow worse so gradually and the development of lead poisoning will come on so insidiously (for this is the nature of the disease) that leaded gasoline will be in nearly universal use and large numbers of cars will have been sold that can run only on that fuel before the public and the Government awaken to the situation.

"Tetraethyl lead is added to gasoline in the motors, which prevents knocking and increases the efficiency of gasoline. Its use is forbidden in New York City.

Sees Menace to Health.

"This is probably the greatest single question in the field of public health that has ever faced the American public," said Dr. Henderson. "It is the question whether scientific experts are to be consulted, and the action of the Government guided by their advice; or whether, on the contrary, commercial interests are to be allowed to subordinate every other consideration to that of profit. The size of the financial interests involved is stupendous. It is not a matter of millions or even hundreds of millions of dollars, but literally of billions.

"Except in New York and its immediate neighborhood, this leaded gasoline is being introduced everywhere throughout the country as fast as it can be supplied. It is sold now at little or no profit. The profit is in the future and will consist in control of the gasoline business and control of the automobile industry. The power or combination of powers that holds the patents on tetraethyl lead will be the only one that will be able to make the cars that we all want to buy; the improved cars for which we will discard those we now have. The power will also control the fuel on which those new cars will run. The financial stake is almost inconceivably great."

Danger in Garages.

Saying that the danger of acute lead poisoning such as occurred in the plants at Elizabeth and Wilmington will be guarded against successfully, he continued:

"In garages and repair shops, where conditions are already unhealthy on account of carbon monoxide, there will be added the hazard of slow but severe lead poisoning. For many years the earnest efforts of public health authorities and investigators have been aimed to decrease the frequency and intensity of lead poisoning. Lead poisoning has been the great single industrial disease and has caused an enormous amount of chronic illness and many deaths. Some sanitary authorities advocate forbidding by law the use of white lead paints. Now, just as this industrial health hazard is being decreased effectively in the pottery, it threatens to become a trade disease for the ever increasing thousands of men employed around garages and repair shops.

After attributing to Government over-economy the failure of the Public Health Service or other branch of the Government to hold a disinterested and Government-financed investigation of the leaded gasoline hazard, Dr. Henderson continued:

"An investigation is indeed being carried on at the Bureau of Mines Experiment Station in Pittsburgh. This investigation is financed by the Ethyl Gas Corporation. A first report has been published which concludes in effect that no considerable public health hazard is involved. Other sanitary experts have criticized this report severely. In particular Dr. David Edsall, Dean of the Harvard Medical School, and Professor C. K. Drinker of the Harvard School of Public Health have published a paper showing the unreliable character of the Bureau of Mines report. I fully concur in every point that Drs. Edsall and Drinker have made against that report. In spite of protests, the investigators in the Bureau of Mines have used experimental conditions which are fundamentally unsuited to afford information on the real issue. The first essential of any good experiment is that it shall reproduce effectively real conditions, or the essential factor in the real conditions. This requirement is not met in that investigation. It was planned as if there were doubt as to whether or not lead dust is harmful, and as if the danger were merely that of immediate acute poisoning.