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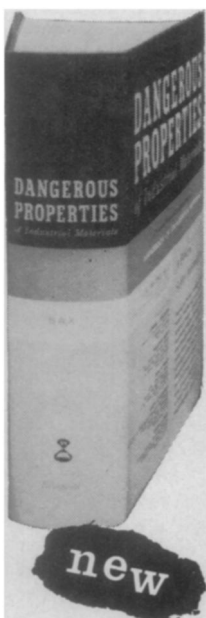
of Industrial Materials

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SCIENCE NEWS LETTER for January 25, 1958

ENGINEERING

Improve Driver Safety

➤ **MORE SAFETY** features and built-in comfort for the driver will be featured in trucks of the near future, engineers at the Society of Automotive Engineers meeting in Detroit were told.

Four experts on automotive design and safety reported future truck cabs will offer greater visibility, easy-to-reach controls, adjustable seats and pleasing appearance. The trucks will be easier to drive, park and service.

Theodore Ornas, International Harvester Co., Chicago, said new truck cabs will contain a wide range of improvements, but still be small enough to satisfy owners who are restricted by size laws, small parking spaces and loading areas.

Engineers have been able to incorporate the suggestions of safety and health experts into designs for truck tractors only 81 inches long.

Prof. Ross A. McFarland and Richard G. Domey, Harvard School of Public Health, Boston, reported that most existing truck cabs they had examined are too small for more than one-third of America's truck drivers, the seat sizes and contours in some cases did not meet human body specifications, and none of the seats met Harvard's minimum standards of adjustability.

In almost every truck inspected the place-

ment, dimensions, and degree and direction of adjustability of seats "clearly favored the smaller driver."

The Harvard survey showed wide truck-to-truck differences in instrument panels, but there is evidence that dials and gauges have been placed closer to the driver since publication of a similar survey in 1954. Nearly one-fourth of the hand controls in ten trucks examined "were considered to be located too far away from the operator."

Julius Gaussoin, Silver Eagle Co., Portland, Ore., referring to the cab as the truck driver's "office," said that "if each item that is functional were studied toward making an efficient, comfortable and easily managed truck driver's office it appears that we would have safer and happier drivers."

Mr. Gaussoin based his view on a survey of drivers operating a wide variety of trucks. For example, he said drivers want brake pedals that are wide and low, such as those on passenger cars, not long and narrow as they are on many trucks. Safer emergency brakes, larger mirrors and adjustable steering wheels are also wanted by the drivers.

Each of the experts who addressed the meeting emphasized the need for improved comfort, pointing out that fatigue is the driver's greatest menace.

Science News Letter, January 25, 1958

MEDICINE

Transfusions Carry Threat

➤ **AT LEAST** half of all blood transfusions given today are unnecessary and carry a "hidden threat" of death when given to a girl or woman of child-bearing age.

This is reported by Dr. Bruce Chown, University of Manitoba, Winnipeg, who warns the threat remains no matter how carefully the donor blood is selected.

"Blood has always had a mystical quality; its use in the operating room is often more mystical than scientific," he reports.

Most transfusions given to women under 45 are given in relation to pregnancy and probably not one per cent of them could be classed as lifesaving. The damage they do, however, may show up years later.

He describes the case of a woman given a routine transfusion after a miscarriage in 1951. She recovered quickly and left the hospital in a few days.

"Death played his trump card" five years later when the woman gave birth to a baby with erythroblastosis, a blood condition in which the cells are not fully matured. The baby died before it could be transfused.

The condition was not due to Rh or similar factors, but to an entirely unrelated blood group system.

"The most careful selection of the donor blood under our present methods of selection would not have prevented the sensitization of the mother and the sequent death of the baby," he says.

The woman had changed doctors since 1951 so the first one never knew about the bad result of his "good" treatment, Dr. Chown concludes in the *Canadian Medical Association Journal* (Dec. 11, 1957).

Science News Letter, January 25, 1958

GENERAL SCIENCE

Scientists Petition UN To Halt Bomb Tests

➤ **A PETITION** to the United Nations to stop testing any nuclear bombs, signed by 9,235 scientists from 44 countries, has been submitted to the United Nations by Dr. Linus Pauling, University of California chemist and Nobelist.

The petition urges that the tests be halted by international agreement. It was signed by 35 other Nobel Prize winners, 101 members of the U. S. National Academy of Sciences, 35 Fellows of the Royal Society of London, 216 members and correspondents of the Academy of Sciences of the U.S.S.R., and leading scientists of other countries.

Dr. Pauling prepared the petition as an individual scientist and it was signed by other scientists as individuals. No organization was involved in the formulation of the petition or the collection of signatures.

Science News Letter, January 25, 1958