

Hospital and the office of the Chief Medical Examiner, New York City. In 19 of these the pancreas condition was so severe as to be held responsible for the deaths. A history of long continued heavy indulgence in alcohol was obtained in 11 of these and in at least nine cases the onset of the pancreas disease was preceded by an alcoholic bout. The frequency with which inflammation of the pancreas and alcoholism are associated is indicated from the fact that 27 of the reported cases were found in about 150 consecutively autopsied cases of acute and chronic alcoholism dying in Bellevue Hospital.

The pancreas condition is not significantly associated with cirrhosis of the liver, Dr. Clark said. Cirrhosis of the liver was absent as often as it was present in the cases of the pancreas disease.

Science News Letter, April 6, 1940

Chemical Hardens Arteries

HARDENING of the arteries is due fundamentally and directly to undernourishment of the walls of the arteries, in the opinion of Dr. W. C. Hueper, New York City. Support for his theory appeared in experiments in which he treated rats with the chemical, erythrol tetranitrate. This substance lowers both blood pressure and the amount of oxygen in the blood. As a result, nourishment of the arteries might be impaired. In the experiments Dr. Hueper reported to the Pathologists' meeting, the rats after treatment with this substance developed sclerotic or hardened arteries of the heart, lung, kidneys and certain other organs.

Science News Letter, April 6, 1940

TECHNOLOGY

Novel Use of Paint In Industry's Building

VERMILION ceilings with center medallion done in white, walls caenstone color. This is how national headquarters for the paint, varnish and lacquer industries have decorated the entrance into their new offices in what was once the home of Vice-President Levi P. Morton. Other uses of color chosen for light reflection value as well as beauty: soft light blue on the walls of the stenographic room, walls of old burgandy in a room with a beautiful carved white Carrara marble fire place, laboratories in tints of pale green, yellow and gray, three shades of blue in another office, cafe au lait and muskmelon tint for still another office, and fireplace mantel in the library, vermilion, antiqued with black.

Science News Letter, April 6, 1940



DAMAGE

Half buried in a sand-bag pit a five-pound Barlow bomb produced enough concussion to knock the side off a nearby shed. In the illustration on the front cover of this week's "Science News Letter," the boards can be seen in the air as they leave the shed. The compression wave of this blast was strongly felt by observers behind distant sand-bag barricades. Photos on cover and this and facing pages by Fremont Davis, Science Service staff photographer.

MILITARY SCIENCE

Barlow Demonstrates Safety Of Oxygen-Carbon Bomb

But Experts Point to Long History of Such Explosives In War and Mining To Justify Their Strong Skepticism

See Front Cover

INVENTOR Lester P. Barlow and his colleague, G. B. Holderer, explosives consultant, did everything but jump on his liquid oxygen-carbon explosive bombs to prove their safety from shock, at the proving ground of the Glenn L. Martin airplane plant at Middle River, Md. They burned the bombs, fired rifle bullets into them, shot them out of a trench mortar 500 feet into the air, shot them against a steel plate so that they ricocheted 300 feet—all without explosions.

After each "safety" test they took the battered bomb and exploded it with startling effectiveness by blasting caps.

But unanswered riddles after a five-hour-long demonstration included the Barlow bomb's effectiveness compared with TNT and whether it could be applied to military purposes. In fairness to the inventor it must be said that in his recent demonstration he sought only to prove the safety of his explosive to shock.

Claim of Mr. Bar- (Turn to page 222)

THE Senate Military Affairs Committee may have burned the recent, secret testimony of Lester P. Barlow about his liquid oxygen-carbon bomb but it is likely that at least 99% of the facts about the explosive are contained in technical libraries and have been known for years.

There is more than a suspicion that Mr. Barlow's "glmite" explosive is just L.O.X. rechristened. L.O.X. stands for liquid oxygen explosive which is a term coined back in the 1920's by one of the nation's foremost authorities on the explosive properties of liquid oxygen and carbon: Dr. G. S. Rice, former chief mining engineer of the U. S. Bureau of Mines who retired in 1937.

From recent publicity one might think that Barlow's use of liquid oxygen adsorbed by powdered carbon was the newest of the new when, as a matter of fact, liquid oxygen explosives were among the reasons which made the German high command confidently prepared to begin the World War, as it could be substituted for nitrated explosives formerly obtained by importation from Chile.