

Reprint from *The New York Times* June 22, 1925.

TETRAETHYL LEAD FATAL TO MAKERS

An Industrial Peril Which the
Washington Inquiry Into Gasoline Does Not Cover.

8 Dead, 300 Ill, in 1 Plant

Dangers in Producing the Chemical Compound Shown in Record at Deep Water, N. J.

Deaths Since Plant Closed

Illness Begins With Hallucinations of Butterflies and Terminates in Violent Insanity and Death.

Deaths in Tetraethyl Gas Production at a Single Plant

Sept. 21, 1923 — FRANK W. DURR, 37 years old, dye worker, died at Penns Grove, N. J.; attended by Dr. Raymond B. Jarratt.

July 30, 1924 — JOSEPH CIANCI, 24 years old, dye works operator; died at Salem (N. J.) Memorial Hospital; attended by Dr. Harry W. Lee.

Aug. 12, 1924 — FRANK HANLEY, 23 years old, dye worker; received at Salem Hospital with gastric ulcer and underwent operation, but went insane subsequently from tetraethyl lead poisoning; attended by Dr. F. H. Church.

Oct. 20, 1924 — SIM JONES, 47 years old, negro janitor at plant; died in Salem Hospital; attended by Dr. Lee.

Feb. 13, 1925 — FREDERICK W.

11 at Delaware Hospital in Wilmington after doing some work in the plant. The death certificate gives typhoid as the cause.

Mrs. Mary Casey of 606 Spruce Street, Wilmington, a cousin of Demesse and his closest relative in this country, told me of a conversation with Dr. Lawrence J. Rigney, whom she called into the case.

"He said there were typhoid germs in the body," she explained, "but that John's lead poisoning didn't help him any."

Efforts to reach Dr. Rigney were unsuccessful. Not he, but Dr. John R. Russo, a member of the hospital staff, signed the death certificate. When asked about the symptoms of the Demesse case he said he had no recollection of it and he reported several hours later that he could find no record of it at the hospital. The death certificate gave no contributory cause of death, nor was there any answer in the certificate to the question: "Where was disease contracted if not at place of death?" This space was left blank.

Demesse was a widower, 35 years old. At du Pont headquarters the point was stressed that if poisoning had contributed to his death his relatives would have demanded a settlement.

Death After Three Attacks

The first tetraethyl poisoning of medical record was that of Harry A. Zanes, now 53 years old, who lives at 97 I street, in Carney's point, an industrial town owned by the du Ponts adjoining Deep Water. He became ill on Sept. 9, 1923, and went to the emergency hospital maintained by the du Ponts on their reservation of six square miles across the Delaware River from Wilmington, where the chemical and smokeless powder plants are grouped. After treatment he went back to work, but a week later had to go home. He couldn't eat, and on rare occasions when he slept he suffered from frightful nightmares. On Sept. 19 he became violent and two trained nurses were assigned to care for him.

"The patient has twitching muscular contractions," the nurses recorded; "respiration rapid, pulse shallow." And a little later: "Patient's head is thrown

In the old tetraethyl plant there was a series of explosions and fires, which occurred from chemical reactions while the autoclaves, huge mixing vats, were being emptied or cleaned. From these there were no deaths, but there were many injuries. C. D. Porch, superintendent of the plant, was himself badly burned, and some of the chemists required medical treatment. Arrangements were made with the Salem (N. J.) Memorial Hospital, to which the du Ponts give annual contributions, to care for patients from Deep Water, and such cases have been its chief source of revenue. An executive of "the dye works" is on the hospital's Board of Managers.

All the men who died in 1924, and one in 1925, were under treatment at this hospital. They were hard to manage on account of their violence, and the du Ponts, in addition to paying all medical expenses and providing for the families, sent male nurses to attend and restrain the patients.

An official of the hospital told me that Joseph Cianci, the victim in July, a man of great strength, had actually by his insane violence overturned the bed to which he was strapped; but Miss Hanna B. Harris, Superintendent, denied this.

"I've seen him actually lift the bed three or four inches off the floor by his struggles," she said, "but I'm sure he was never as bad as that."

Miss Harris did not admit at first that Frank Hanley's death in August was due to tetraethyl poisoning.

"He had an ulcer of the stomach and underwent an operation," she explained. But when she was told that the death certificate specified "acute intoxication lead tetraethyl" she was silent but later admitted it. As a fact the man escaped some time after the operation from the hospital to the street and was caught there. At du Pont headquarters it was admitted that this was a case of poisoning.

Sim Jones, negro janitor at "The House of the Butterflies," wore old shoes and absorbed the poison through his feet. It is fatal if inhaled or taken through the skin in sufficient quantities. In all, Miss Harris said, forty-eight cases were treated at Salem. Sim Jones was the last to die there in 1924.

and Dr. Harry W. Lee, chief surgeon of the du Pont staff at Deep Water, rushed the patient for treatment.

Even before this death Robert F. Huntsinger, 35 years old, had become ill and had insisted on going to his home at Bridgeton, twenty miles away in Cumberland County. He lived there at 120 Orchard Street. When he became violently insane Dr. E. C. Lyon, who was treating him and who is the county physician, took him to the Bridgeton Hospital, where it was found that the patient's condition was such he could not be cared for. Then he was taken to the Cumberland County Hospital for the Insane, where six men were required at times to restrain him. He died there Feb. 16, two days later. Dr. Lee went from Deep Water to help Dr. Lyon attend the patient.

A reporter for a Bridgeton newspaper asked the county physician whether he would ask for an inquest. "No," said Dr. Lyon, "it was not an accident. It was an occupational disease, and there is no occasion to call in the Coroner."

Plant Closed Soon Afterwards.

Dr. Lyon, who repeated this statement to me, was warm in his praise of the du Ponts for the care they exercised in behalf of their employees. The facts about the death were printed in the Bridgeton newspapers, and inquiries were made regarding it at du Pont headquarters. A statement was issued by the publicity department in which, after giving the facts of his illness, it was said:

"Meanwhile the company, because of his illness and the illness of Fred W. Fiebre (DeFiebre), a laborer who later died, has shut down the plant to make modifications to insure greater manufacturing safety. * * * The du Pont Company experienced trouble with men becoming poisoned in the early stages of the manufacture of this chemical, but for a year difficulties have diminished steadily and for the past several months, under full production, only slight trouble had been encountered until these recent fatal illnesses occurred."

The plant had, as a fact, been closed by order of Dr. Andrew F. McBride of Paterson, chief of the New Jersey State Labor Commission. Dr. McBride had been conducting a State-

and one of the doctors said to me once that he had never known an industrial malady which flew the red flag so quickly.

"The du Ponts are well known for their interest in their employees. They spare no expense to protect the health and lives of their men, and when one is hurt or loses his life, the company pays, in New Jersey and every other State where it has properties, higher compensation and pension rates than the law requires. It is a fact that we have a great deal of trouble inducing the men to be cautious. We have to protect them against themselves." Mr. Weston had heard of the workers' name for the plant.

"Some of them drew pictures of butterflies on the walls of the plant," he said. "This disease is somewhat like delirium tremens. Instead of seeing snakes, the men see butterflies."

Danger in Gas, Not Gasoline.

Since production began 300,000,000 gallons of ethyl gasoline have been distributed in twenty-eight States, from 12,000 filling stations, with no record of poisoning or ill-health from its use, according to Mr. Weston. The name "looney gas" is deceptive, in his view, in that it may apply to the ethyl gasoline instead of the fumes from tetraethyl lead.

Dr. Lynch, former chief surgeon at Deep Water, is now practicing medicine at Wilmington and occasionally has tetraethyl cases. He was reluctant to discuss the disease because he is no longer associated with the du Ponts, and said he had refrained from publishing a paper dealing with his year's experience in their service for the same reason.

"In several hundred cases which I treated during that first year," he said, "I did not lose one. Durr, who died while I was there, was under the care of his family physician. I had the first cases of the disease ever known. Although it is nervous and mental, neurologists had no clinical background for it. It was a brand new challenge to medical skill.

"We found that nightmares were the first symptom and that these were followed by insomnia. Then came restlessness and inability to eat. Sometimes a patient lost as much as