

DR. BELKNAP: The question is, whether toled is really as toxic as I intimated it might be, being permissible in only 200 parts per million. Is that right, Mr. Gummer?

MR. GUMAER: Yes.

DR. BELKNAP: As far as the official authority of that is concerned, it is taken from the code for safe concentrations of certain toxic substances used in industries, whose authors are Bowditch, Drinker, Haggard and Alice Hamilton which appeared in the June 1940 issue of the *Journal of Industrial Hygiene and Toxicology*.

I do not know whether there is any practical experimental work backing that up, but inasmuch as toled and xylo are very closely related to benzol, I assume that the authors felt that it as yet could not be given an entirely safe record, for instance, compared to gasoline.

I will say, among a group of workers who have been working with adequate protection for several years with toled solvents, I have seen no general reaction.

DR. HAMILTON: May I speak to that for just a moment? That presentation to which Dr. Belknap refers was got out simply because a small group of us felt that we might as well let the public know what was our best guess at the present moment with regard to maximum allowable concentrations of the most commonly used solvents. It is founded very largely on guesswork.

The quantity of 1,000 parts per million for gasoline is guess, and so is 200 parts of toled. We are hoping that we shall be able to give more accurate figures presently.

The American Standards Association has a committee at work in this field, with a small subcommittee. We have just finished dealing with two gases and two volatile solvents, carbon monoxide and benzol and carbon disulphide and hydrogen sulphide. There we have been able to get pretty accurate figures because we have data to go on.

We are now trying to deal with twelve others which are going to be increasingly important in the munitions industry. We hope to be able to give out more accurate figures then. But it is a very difficult problem. You see the only way we can get any accurate figure is by having a combined inquiry made by the physicians, the chemists and the ventilation engineers, because we have to know how many cases developed in a given workroom at a given concentration, and also at what concentration do no cases come.

We could do that with the four I have mentioned, but it means, as you see, a great deal of careful study in the factory and in the physicians' examining room. Bringing those two together, we can do it with regard to lead; we can do it pretty well with regard to mercury, and we have pretty good data with regard to zinc oxide fumes in galvanizing iron and brass foundries and zinc smelting; but the rest of the substances still are more or less in the realm of guesswork.

CHAIRMAN PAINE: May I, in your behalf and in behalf of the National Safety Council, thank the gentlemen on the platform who have so kindly led us in this discussion? Will you express that thanks by giving them a rising vote?

... The audience arose and applauded.

ADJOURNMENT

Off-the-Job Accidents

WEDNESDAY MORNING SESSION

October 9, 1940

The Panel Discussion on Off-the-Job Accidents was called to order by the Chairman, Julien H. Harvey, Managing Director, The National Conservation Bureau, New York City, who presided.

CHAIRMAN HARVEY: It is a pleasure to welcome you here this morning. By way of introduction, I simply want to make clear just what the National Safety Council has in mind by the phrase "Off-the-Job Accidents." All too frequently in previous sessions of this kind there has been a feeling that we were thinking in terms of "company" safety work. In one sense we are thinking of safety work on a community basis, but in another definite sense we are thinking of a program whereby an individual industry or company will consider the problem of accidents which occur to its employees during the hours when they are away from work. This movement had its inception some seven or eight years ago, following several surveys which showed that a very great preponderance of accidents occurred to employees after they had left the job, as compared to those which occurred while they were at work.

I recall one illustration in the East, where a well known national organization with many thousands of employees was doing a good job of safety work in its plants. Despite that fact, during a five-year period, 17 of their employees had been killed while at work, but during the same period 224 of their employees had been killed "after the whistle blew."

We found that situation repeated in many instances. Proceeding on the theory that industry is closer to its workers than other organizations can be, and that industry has been able to do a good job of accident prevention within the walls of its own plants, we felt that it might be possible for it, through a special program, to emerge its employees and do something to extend the hours of safety beyond the plant.

In our program this morning, we intend to take up certain problems, which will

appear as they are developed by our Panel of Safety and Industrial leaders before you. This will, however, be an open meeting, and we expect to have many excellent suggestions presented by persons in the audience, who will also ask the panel questions. The panel members are as follows:

Mrs. James E. Sims, Past State Chairman, American Home Department, Illinois Federation of Women's Clubs, Joliet, Ill.

Lestie J. Swenson, City Traffic Engineer, City of Chicago.

Harry E. Belt, District Commercial Superintendent, Indiana Bell Telephone Company, South Bend, Ind., and President of the South Bend Civic Safety Council.

Ralph W. Prindleton, Assistant General Manager, Massachusetts Safety Council, Boston.

Edward P. Dorfee, Assistant Manager, Insurance Department, Consolidated Edison Company of New York, Inc., New York City.

A. G. Bangenstock, Director of Safety, Western Electric Company, Kenosha, N. J.

R. H. Balenleifer, Safety Engineering Manager, Hardware Mutual Casualty Company, Stevens Point, Wis.

We will now proceed with the discussions. The first of the specific problems to be discussed will be: "The Value of 'Off-Duty' Safety Program." I will ask Mr. Dorfee to give us his ideas on that subject.

Value of the Program

E. P. DUFFEE: Mr. Chairman, I don't know how the title "off-the-job accidents" originated, but I do know that our present company program has what we consider real value. It dates back about four or five years when our general surgeon, one day, was laying his troubles on my shoulder. He told me that the chairman of the board was after him because our sickness payroll was approximately 3 per cent of our total annual payroll, which is \$50,000,000. The thought