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National Safety Council

Incorporated

TWENTY-THIRD ANNUAL
SAFETY CONGRESS



Cleveland, Ohio

October 1 to October 5, 1934

The Cleveland, Carter and Statler Hotels

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National Safety Council

Incorporated

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ASSOCIATION OF IRON AND STEEL ELECTRICAL ENGINEERS

ROBERT W. CAMPBELL

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A. W. WHITNEY, Vice-President for Education.

W. E. WORTH, Vice-President for Finance and Treasurer.

W. H. CAMERON, Managing Director and Secretary.

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J. I. BANASH, Past President.

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R. B. FORTUIN, Lehigh Valley Safety Council.

HARRY GUILBERT, The Pullman Company.

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G. T. HELLMUTH, Chicago, North Shore & Milwaukee Railroad Co.

HON. HAROLD G. HOFFMAN, Street & Highway Traffic Section.

THOMAS P. KEARNS, Industrial Commission of Ohio.

WALTER G. KING, Past President.

A. E. LUNDSTEADT, Delivery, Taxicab & Bus Section.
 THOS. H. MACDONALD, United States Department of Agriculture.
 T. McARTHUR, Peoria Safety Council.
 McCLINTOCK, Harvard University.
 H. McKENNEY, Illinois Steel Company, South Works.
 D. McWHORTER, Safety Div., Memphis Chamber of Commerce.
 H. T. MARTIN, Fisk Rubber Company.
 T. O. MARTIN, Employees' Publication Section.
 W. MATSON, Minnesota Safety Council.
 MEHREN, Portland Cement Association.
 O. MEISNER, Power Press Section.
 G. METZGER, Mining Section.
 W. MILLARD, Accident Prevention Equipment Manufacturers' Section.
 AROLD L. MINER, E. I. duPont de Nemours & Co., Inc.
 HENRY J. MINEUR, Elizabeth Safety Council.
 LAWRENCE M. MOORE, Eastbay Safety Council.
 B. MORLEY, Industrial Accident Prevention Associations.
 JOHN A. OARTEL, Carnegie Steel Company,
 GEORGE C. A. OPP, The Detroit Edison Company.
 R. PALMER, Equitable Life Assurance Society.
 C. PARKER, Brooklyn Safety Council.
 DAVID A. PATTON, Newark Safety Council.
 E. PETTIBONE, American Mutual Liability Insurance Company.
 GEN. GEORGE B. PILLSBURY, War Department.
 J. B. POWER, Seattle Traffic & Safety Council.
 C. E. RALSTON, Western Pennsylvania Safety Council.
 ALBERT S. REGULA, Industrial Relations Counselors, Inc.
 LE. COL. HENRY A. RENINGER, Lehigh Portland Cement Company.
 MARINUS RITER, Paterson Safety Council.
 G. E. SANFORD, General Electric Company.
 HENRY G. SCHAFFNER, Erie Safety Council.
 A. SCHENDEL, Food Section.
 ROBERT L. SCHMITT, Louisville Safety Council.
 V. SCHREIBER, Transit Section.
 HARRY A. SCHULTZ, United States Steel Corporation.
 CHARLES B. SCOTT, Bureau of Safety, Inc.
 LESTER D. SEYMOUR, Aeronautical Section.
 EARL S. SHARTZER, Utica Safety Council.
 H. SHEETS, Madison County Safety Council.
 L. A. SHOUDY, Bethlehem Steel Company.
 WEST L. SIMONDS, New Haven Safety Council.
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 W. SMITH, Standard Oil Company (Indiana).
 WALTER DENT SMITH, Delaware Safety Council.
 T. SOLENSTEN, Elliott Service Company.
 C. SPRING, Lansdale, Pa.
 GEORGE R. STEPHENS, Safety Bureau, Buffalo Chamber of Commerce.
 S. STORRS, United Railways & Electric Co.

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6 *Twenty-third Annual Safety Congress—National Safety Council*

ROBERT I CATLIN, Actna Casualty & Surety Co
 CARL C CLIMENTS, Refrigeration Section.
 ROSCOE D CONLIN, Railway Safety Council
 H. HERBERT CORSON, Safety Dept., Nashville Chamber of Commerce
 J F CULLINLY, Bethlehem Steel Company
 EDWARD DIANA, Boston Elevated Railway.
 E A DAVIDSON, Consulting Engineer
 RICHARD H DAVIS, Blackstone Valley Safety Council
 CHARLES D. DAWSON, Grand Rapids Safety Council
 LEWIS A DeBOIS, Consulting Engineer.
 JAY E DECKER, Mason City Safety Council
 JAMES B DOUGLAS, The Philadelphia Gas Works Company.
 LOUIS I DUBLIN, Metropolitan Life Insurance Company
 CHARLES H EAMPS, Textile Section
 D D FENNELL, Consulting Engineer
 D L FENNEL, Kansas City Safety Council.
 DONALD A FINKBEINER, Toledo Safety Council
 CAPT. E W FISKE, Jr., Marine Section
 HOWARD B FONDA, Burroughs Wellcome & Co (U S A) Inc
 R B FORTIN, Lehigh Valley Safety Council
 E N GOLDSTINE, Construction Section
 OTTO M GRAVES, The General Crushed Stone Co
 HARRY GUILBERT, The Pullman Company
 ISAIAH HALE, The Atchison, Topeka & Santa Fe Railway Co.
 MERLE C HALL, Automotive & Machine Shop Section
 MATOR BOILING H HANDY, Richmond Safety Council
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 CHAS E HILL, New York Central Lines.
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 LEN JENSEN, Berkeley Traffic Safety Commission
 EDGAR P KARLF, York County Safety Council
 THOMAS P KEARNS, Industrial Commission of Ohio
 K T KILMER, Detroit Industrial Safety Council
 IRA V KEPNER, Pennsylvania Salt Manufacturing Co
 E J KREHL, Public Utilities Section
 FRANKLIN M KREML, Evanston Safety Council
 C L LaFountaine, Great Northern Railway Co
 FRANK J LANAHAN, Fort Pitt Malleable Iron Co
 JOHN LAUFEMAN, Meat Packing Tanning & Leather Industries Section
 SIMON LAZARUS, Safety Council Columbus (Ohio) Chamber of Commerce
 JOSEPH LEBICH, Rochester Safety Council
 DR R M LEECH, New York Department of Education
 G O LOCKWOOD, Petroleum Section
 J F LONG, The Delaware & Hudson Railroad Corp
 W R LOYD, Safety Div., Birmingham Chamber of Commerce

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Officers and Directors

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FRANKLIN M. KREML, Evanston Safety Council.
JOHN E. LONG, The Delaware & Hudson Railroad Corp.
JOS. H. MACDONALD, United States Department of Agriculture.
J. J. MEHREN, Portland Cement Association.
W. MILLARD, Accident Prevention Manufacturers' Section.
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W. E. WORTH, International Harvester Company.
ARTHUR H. YOUNG, Past President.

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WILLIAM F. ARDERN, Safety Div., Milwaukee Association of Commerce.
A. L. ARMSTRONG, Eastman Kodak Company.
WILLIAM H. BAKER, Quarry Section.
J. I. BANASH, Consulting Engineer.
H. D. BANTA, Paper & Pulp Section.
ERNEST W. BECK, United States Rubber Products, Inc.
W. A. BENNETT, Worcester Safety Council.
C. W. BERGQUIST, Western Electric Company.
DAVID S. BEYER, Liberty Mutual Insurance Company.
F. BLANK, Jones & Laughlin Steel Corp.
C. F. BORKENHAGEN, Kenosha Safety Council.
W. W. BRAUN, Wood Products Section.
COL. PHIL H. BROCKMAN, St. Louis Safety Council.
FREDERICK D. CALLUM, Baltimore Safety Council.
W. H. CAMERON, National Safety Council.
J. L. CARNEY, Chicago Safety Council.
J. CARROW, American Railway Association.

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TWENTY-THIRD ANNUAL SAFETY CONGRESS
NATIONAL SAFETY COUNCIL



Accident Prevention Equipment Manufacturers' Section

Officers 1933-34

General Chairman—BUELL W. NUTT, Safety Equipment Service Company, Cleveland, Ohio.

Vice-Chairman—I. W. MILLARD, Industrial Gloves Corporation, Danville, Ill.

Secretary—GEORGE S. SHULL, Safety First Supply Company, Pittsburgh, Pa.

Treasurer—L. J. BOWKER, Mine Safety Appliances Company, Pittsburgh, Pa.

Executive Committee at Large—

E. W. BULLARD, E. D. Bullard Company, San Francisco, Calif.

FREDERICK WAHLERT, Pulmosan Safety Equipment Corporation, Brooklyn, N. Y.

CHARLES H. GALLAWAY, American Optical Company, Southbridge, Mass.

BUSINESS SESSION

September 30, 1934

The annual business meeting of the Accident Prevention Equipment Manufacturers' Section was called to order after a pleasant dinner by General Chairman Buell W. Nutt, Safety Equipment Service Company, Cleveland, who presided. Reports were heard from the General Chairman and the Chairmen of Standing Committees on activities during the past year. The report of the Nominating Committee was then called for, and new officers for the Section were nominated and elected as follows:

Chairman—Irwin W. Millard, Secretary, Industrial Gloves Corporation, Danville, Ill.

Vice-Chairman—George Shull, President, Safety First Supply Co., Brady Bldg., Pittsburgh, Pa.

Secretary—William Wahlert, Pulmosan Safety Equipment Corp., 176 Johnson St., Brooklyn, N. Y.

Treasurer—L. E. Dickson, Vice-President, Standard Safety Equipment Co., 75 East Wacker Drive, Chicago, Ill.

Executive Committee-at-Large—

J. T. Ryan, V-Pres., Mine Safety Appliances Co., 201 N. Braddock, Pittsburgh, Pa.

F. R. Davis, President, Davis Emergency Equipment Co., 55 Van Dam St., New York City.

R. W. Schuster, A. Pres. United Safety Equipment Co., Inc.
New York City
R. W. Nye, President Safety Equipment Co., Inc.
New York City

1933-1934

Accident Prevention Equipment Manufacturers

Who Made Exhibits at the Twenty Third Annual Safety Congress
and Exposition, Statler and Cleveland Hotels,
Cleveland, Ohio, October 1-5, 1933

Armstrong & Francis & Leante Inc. Chicago, Ill.
Fire protection equipment

American Optical Company, Southfield, Mich.
Industrial eye protection service

Bartley Products Corporation, Southfield, Mich.
Automotive testing equipment

Robert A. Bernard, Rochester, New York
Safety equipment for use in industry

Berry & Smith Company, New York City
Furnished rubber floor mats for use in industry

Bushnell-Koehler Manufacturing Company, Chicago, Ill.
Optical equipment products

Bureau Washburn Company, Milwaukee, Wis.
Fire protection equipment

Chicago Safety Company, St. Louis, Missouri
Safety shoe shoes

C. J. Fiske Company, Chicago, Illinois
Safety belts, straps, buckles, and tool bags

F. D. Ballard Company, San Francisco, Calif.
Safety equipment for mines and industry

Farquhar's Weathers & Company, U.S.A.
First aid and medical equipment

George E. Cabot Inc., Boston, Massachusetts
Furnished rubber floor mats for use in industry

Chicago Eye Shield Company, Chicago, Illinois
Furnished rubber floor mats for use in industry

Chicago & Company, Inc., Portland, Ore.
Safety shoe shoes

Chicago Hat & Aircraft Company, Chicago, Ill.
Furnished rubber floor mats for use in industry

Chicago Safety & Equipment Company, Chicago, Ill.
Furnished rubber floor mats for use in industry

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- Eagle Signal Corporation, Moline, Illinois
Traffic signal equipment and industrial timing equipment
- Elliott Service Company, New York City
Elimination of waste, promotion of efficiency and safety
- Evans Products Company, Detroit, Michigan
Railroad grade crossing and barrier and traffic signals
- The Gerson-Stewart Corporation, Cleveland, Ohio
Soaps, disinfectants and cleaners for planned sanitation
- Harley-Davidson Motor Company, Milwaukee, Wisconsin
Special police motorcycles and equipment
- Hunter Auto Equipment Company, Inc., New York City
Fleet specialties, rubber mirrors, stop and tail-lights
- Hynson, Westcott & Dunning, Inc., Baltimore, Maryland
Mercurochrome and Thantis lozenges
- Industrial Commission of Ohio, Columbus, Ohio
Accident record charts and graphs, educational safety literature
- International Shoe Company, St. Louis, Missouri
Safety shoes
- Junkin Safety Appliance Company, Louisville, Kentucky
Safety guards for punch presses
- Walter Kidde & Company, Inc., New York City
Permanently piped fire systems and portable extinguishers
- Lehigh Safety Shoe Company, Allentown, Pennsylvania
Safety shoes and boots
- Lima Cord Sole & Heel Company, Lima, Ohio
Non-slip soles and heels for footwear
- Liquid Carbonic Corporation, Chicago, Illinois
Fumigant for infestation control
- Macwhyte Company, Kenosha, Wisconsin
Wire rope and braided slings
- Martindale Electric Company, Cleveland, Ohio
Protective masks, safety roadway signals
- Metropolitan Life Insurance Company, New York City
Insurance, industrial group, etc.
- Mine Safety Appliance Company, Pittsburgh, Pennsylvania
Mine and industrial safety equipment
- National Automatic Safety Signal Company, Chicago, Illinois
Safety flash signal for rear of trucks
- National Safety Council, Chicago, Illinois
Poster, Library, Research and Education Divisions
- The Patent Scaffolding Company, Chicago, Illinois
Ladders and scaffolds for industry and construction
- Portable Lamp & Equipment Company, Pittsburgh, Pennsylvania
Electric mine lamps and safety equipment
- The Positive Safety Manufacturing Company, Cleveland, Ohio
Power press safety devices
- Protectoseal Company, Chicago, Illinois
Safety cans for washing, bench, storage, etc., tank fittings
- Pulmosan Safety Equipment Corporation, Brooklyn, New York
Respiratory protection and general safety equipment

152 *Twenty-third Annual Safety Congress* National Safety Council

- Pyrac Manufacturing Company, Newark, New Jersey
Hand fire extinguishers and systems
- Rice Wooden Sole Shoe Company, Inc., Columbus, Nebraska
Wooden sole safety footwear
- The Safety Clothing Company, Cleveland, Ohio
Safety clothing and equipment
- The Safety Equipment Service Company, Cleveland, Ohio
Goggles, safety clothing and other safety equipment
- Safety Trust Shoe Company, Holliston, Massachusetts
Safety shoes
- Safety Signal Devices, Inc., Chicago, Illinois
Safety stop-light for cars, trucks and buses
- The Service Recorder Company, Cleveland, Ohio
The Servis Recorder for trucks and buses
- Shepherd Safety Shoe Corporation, Chicago, Illinois
Safety shoes
- The Sight Light Corporation, New York City
Instruments for measuring light in industries, etc.
- Standard Safety Equipment Company, Chicago, Illinois
Dust protective equipment and general safety devices
- Stonchouse Signs, Inc., Denver, Colorado
Metal accident prevention signs
- The Surety Rubber Company, Carrollton, Ohio
Rubber safety equipment for linemen and industry
- Weaver Manufacturing Company, Springfield, Ill.
Automotive testing equipment
- West Disinfecting Company, Long Island City, New York
Disinfectants, insecticides and sanitary supplies
- Wilson Products, Inc., Reading, Pennsylvania
Eye, head and respiratory protective devices
- Wil-X-Mfg. Corporation, Brooklyn, New York
Fire extinguishers and equipment

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WENTY-THIRD ANNUAL SAFETY CONGRESS
NATIONAL SAFETY COUNCIL



Aeronautical Section

Officers 1933-34

Chairman, Lester D. Seymour, President, American Airways, Inc., Chicago, Illinois.
Vice-Chairman, Captain E. V. Rickenbacker, North American Aviation, Inc., New York City.
Secretary, W. Dean Keefer, Director, Industrial Safety Division, National Safety Council, Chicago, Illinois.

WEDNESDAY MORNING SESSION

October 3, 1934

The Aeronautical Section session was called to order by Mr. Paul Wright, of the American Airways, Inc., Chicago, who presided. Chairman Wright introduced Mr. John W. Burton, who made a brief address of welcome on behalf of the Convention City. Chairman Wright then introduced the first speaker.

Safety in Aviation

By J. H. DOOLITTLE

Aviation Manager, Shell Oil Company, St. Louis, Mo.

The speaker said in part: There are few of us who appreciate the great care that is exercised in the operation of a modern air transport line to assure safety and a degree of comfort as well. Any normal man or woman having average eyesight and no physical disabilities, and being possessed of average intelligence, can learn to fly an airplane in a relatively short time; but it is a far cry from the mere fact that one knows how to fly an airplane to the art of flying as practiced by airline pilots who have made it their profession. These pilots are not only masters of every branch of the art of ordinary flying, but must take a post graduate course in blind or instrument flying. This training is given in special airplanes equipped with a hooded cockpit and the pilot is obliged to fly by means of his instruments alone, as he cannot see outside the airplane.

Probably unknown to the vast majority of air travelers, there exists in every modern air transport company today a complete medical division which closely examines the physical and mental qualifications of all their pilots once every month or six weeks. The examination is strict and thorough, and is given by physicians trained in aeronautical work. These examinations are in addition to those required semi-annually by the United States Department of Commerce. The eye examination requires that the pilot have not only normal vision, but that his judgment of

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TWENTY-THIRD ANNUAL SAFETY CONGRESS NATIONAL SAFETY COUNCIL



Automotive and Machine Shop Section

Officers 1933-34

General Chairman—M. J. McCARTHY, Fisher Body Corp., Detroit, Mich.
Vice-Chairman—K. A. CALLAM, Detroit, Mich.
Secretary—G. E. SANFORD, General Electric Co., Schenectady, N. Y.
News Letter Editor—E. C. WALKER, Dodge Brothers Corp., Detroit, Mich.
Engineering Committee Chairman—W. W. JANZER, Seaman Body Corp., Milwaukee.
Health Committee Chairman—DR. A. F. LECKLIDER, Fisher Body Corp., Detroit.
Membership Committee Chairman—NILS JUELL, Hayes Body Corp., Grand Rapids.
Poster, Slides and Safety Kinks Committee Chairman—M. A. KROGER, Chevrolet Detroit Plants, General Motors Corp., Detroit, Mich.
Program Committee Chairman—M. A. CLARK, United States Rubber Co., Detroit.
Publicity Committee Chairman—W. A. BECHILL, Chrysler Corporation, Detroit.
Statistics Committee Chairman—C. W. BISHOP, Lycoming Manufacturing Co., Williamsport, Pa.

Members at Large—

L. E. AVERILL, C. H. Dockson Co., Detroit, Mich.
HOYT L. FRACHER, Detroit Steel Products Co., Detroit, Mich.
R. F. THALNER, Buick Motor Co., Flint, Mich.
R. A. SHAW, The Murray Corporation of America, Detroit, Mich.
CARL L. STORCK, Delco Products Div., General Motors Corp., Dayton, Ohio.

MONDAY AFTERNOON SESSION

October 1, 1934

The opening session of the Automotive and Machine Shop Section was called to order by General Chairman M. J. McCarthy, Fisher Body Corporation, Detroit, who presided. Chairman McCarthy introduced Mr. Charles H. Hazelton, Directing Manager, Foote-Burt Co., Cleveland, who made a brief address of welcome on be-

TWENTY-THIRD ANNUAL SAFETY CONGRESS
NATIONAL SAFETY COUNCIL



Cement Section

Officers 1933-34

General Chairman—J. B. ZOOK, Great Lakes Portland Cement Corp., Buffalo, N. Y.

Vice-Chairman—W. W. HAMILTON, Alpha Portland Cement Co., Easton, Pa.

Secretary—A. J. R. CURTIS, Portland Cement Association, Chicago, Ill.

News Letter Editor—JACK DEMPSTER, Canada Cement Co., Ltd., Port Colborne, Ontario, Canada.

Engineering Committee Chairman—FREDERICK B. HUNT, Nazareth Portland Cement Co., Nazareth, Pa.

Membership Committee Chairman—H. A. RENINGER, Lehigh Portland Cement Co., Allentown, Pa.

Poster Committee Chairman—M. P. GREER, Marquette Cement Manufacturing Co., Cape Girardeau, Mo.

Program Committee Chairman—D. B. COLEMAN, Missouri Portland Cement Co., St. Louis, Mo.

Members at Large—

R. B. FORTUIN, Pennsylvania-Dixie Cement Corp., Nazareth, Pa.

E. POSSELT, International Cement Corp., New York, N. Y.

C. E. RALSTON, Pittsburgh Plate Glass Co., Pittsburgh, Pa.

F. E. TOWN, Manitowoc Portland Cement Co., Manitowoc, Wis.

H. VANDERWERP, Medusa Portland Cement Co., Cleveland, Ohio.

TUESDAY MORNING SESSION

October 2, 1934

The opening session of the Cement Section was called to order by General Chairman J. B. Zook, Great Lakes Portland Cement Corp., Buffalo, New York, who presided. Chairman Zook introduced Mr. Edward J. Maguire, Vice President and Treasurer, Medusa Portland Cement Co., Cleveland, who made a brief address of welcome on behalf of the City of Cleveland. The General Chairman then presented, under the heading, "Our Work—Today and Tomorrow," some brief thoughts on the future activities of the section and followed with brief reports from the chairmen of standing committees. He then called for the report of the Nominating Committee, and new officers for the section were nominated and elected as follows:

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TWENTY-THIRD ANNUAL SAFETY CONGRESS
NATIONAL SAFETY COUNCIL



Chemical Section

Officers 1933-34

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General Chairman—JOHN ROACH, Deputy Commissioner of Labor, Trenton, N. J.
Vice-Chairman in Charge of Program—A. L. ARMSTRONG, Eastman Kodak Co., Rochester, N. Y.

Vice-Chairman in Charge of Engineering—G. H. MILLER, E. I. duPont de Nemours & Co., Wilmington, Del.

Secretary—RALPH O. KEEFER, Aluminum Company of America, Massena, N. Y.

News Letter Editor—JOHN MORONEY, Aluminum Company of America, Massena, N. Y.

Occupational Disease Committee Chairman—DR. LEONARD GREENBURG, Yale Medical School, New Haven, Conn.

Membership and Publicity Committee Chairman—S. D. KIRKPATRICK, Chemical and Metallurgical Engineering, New York, N. Y.

Statistics Committee Chairman—IRA V. KEPNER, Pennsylvania Salt Manufacturing Co., Menominee, Mich.

Members at Large—

DR. ELIZABETH B. BRICKER, Lititz, Pa.
F. E. CLANCY, JR., Mathieson, Alkali Works, Inc., Niagara Falls, N. Y.
F. W. DENNIS, Hooker Electrochemical Co., Niagara Falls, N. Y.
E. F. KING, Lever Brothers Co., Cambridge, Mass.
S. F. LARCHAR, Thomas A. Edison Industries, West Orange, N. J.
H. L. MINER, E. I. duPont de Nemours & Co., Wilmington, Del.
E. L. ROOT, Celluloid Corporation, Newark, N. J.
C. E. SEVRENS, Merrimac Chemical Co., Inc., Boston, Mass.
JOHN S. SHAW, Hercules Powder Co., Wilmington, Del.
R. C. STRATTON, The Travelers Insurance Co., Hartford, Conn.
PLUMMER WHEELER, American Cyanamid Co., Linden, N. J.
S. E. WHITING, Liberty Mutual Insurance Co., Boston, Mass.

MONDAY AFTERNOON SESSION

October 1, 1934

The opening session of the Chemical Section was called to order by General Chairman John Roach, Deputy Commissioner of Labor, State of New Jersey, Trenton, N. J. Chairman Roach introduced Dr. W. R. Veazey, head of the Chemical

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TWENTY-THIRD ANNUAL SAFETY CONGRESS NATIONAL SAFETY COUNCIL



Construction Section

Officers 1933-34

General Chairman—JOHN RUSSELL, JR., United Engineers & Constructors, Inc., Newark, N. J.

Vice-Chairman—W. G. WHEELER, Building Trades Employers' Association, New York, N. Y.

Vice-Chairman for Engineering Projects—P. R. MANETTA, JR., Thompson Starrett Co., New York, N. Y.

Vice-Chairman for Utility Construction—C. H. BLACK, Stone & Webster Engineering Corp., Boston, Mass.

Vice-Chairman for U. S. Engineer Department—CAPT. ELLIOTT VANDEVANTER, C. of E., Office of the Chief of Engineers, Washington, D. C.

Secretary—ROBERT MCKINLEY, General Accident Fire & Life Assurance Corp., Detroit, Mich.

News Letter Editor—EDGAR N. GOLDSTINE, (State Compensation Insurance Fund of Calif.), San Francisco, Calif.

Engineering Committee Chairman—J. C. FORESTER, The L. E. Myers Co., Chicago, Ill.

Membership Committee Chairman—NORMAN WELLINGS, Booth & Flinn, Ltd., Pittsburgh, Pa.

Poster Committee Chairman—JAMES N. DOYLE, James N. Doyle Adjustment Bureau, Reg'd., Montreal, Quebec, Can.

Program Committee Chairman—R. J. REIGELUTH, C. W. Blakeslee & Sons, New Haven, Conn.

Publicity Committee Chairman—THOMAS W. WALTON, Henry W. Horst Co., Philadelphia, Pa.

Statistics Committee Chairman—W. A. SNOW, Associated General Contractors of America, Inc., Washington, D. C.

Members at Large—

W. F. AUSTIN, Detroit, Mich.

MISS E. S. GHEE, McLaury Marble Corp., New York, N. Y.

W. R. RICHARDS, Bureau of Contract Information, Inc., Washington, D. C.

GEORGE WIDUA, Builders and Manufacturers Mutual Casualty Co., Chicago, Ill.

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TWENTY-THIRD ANNUAL SAFETY CONGRESS NATIONAL SAFETY COUNCIL



Delivery, Taxicab and Bus Section

Officers 1933-34

General Chairman—C. H. RUTH, The Evening Star, Washington, D. C.

Vice-Chairman for Bakery Fleets—A. E. CAMERON, Pie Bakeries, Inc., Newark, N. J.

Vice-Chairman for Beverage Fleets—T. A. SCHENDEL, Premier-Pabst Corp., Milwaukee, Wis.

Vice-Chairman for Bus Fleets—City—LEONARD E. MANUEL, United Motor Coach Company, Des Plaines, Ill.

Vice-Chairman for Inter-City Buses—EARL HENSLEY, Pacific Greyhound Lines, San Francisco, Calif.

Vice-Chairman for Dairy Fleets—A. E. LUNDSTEADT, Bowman Dairy Company, Chicago, Ill.

Vice-Chairman for Ice and Coal Fleets—L. W. DAWLEY, Southern United Ice Company, Jackson, Miss.

Vice-Chairman for Laundry Fleets—P. G. WEITZ, Park Laundry Co., Jamaica, N. Y.

Vice-Chairman for Newspaper Fleets—W. F. BURK, The Canton Repository, Canton, Ohio.

Vice-Chairman for Petroleum Fleets—C. W. SMITH, Standard Oil Company, Chicago, Ill.

Vice-Chairman for Public Utility Fleets—H. N. GAINER, New York and Queens Electric Light and Power Co., Long Island City, N. Y.

Vice-Chairman for Retail Store Fleets—C. G. HOBART, Wieboldt Stores, Inc., Chicago, Ill.

Vice-Chairman for Trucking—City—H. E. TREZISE, Koppers Seaboard Coke Co., Brooklyn, N. Y.

Vice-Chairman for Inter-City Trucking—D. M. MILES, Here Comes Meeks, Seven Mile, Ohio.

Program Committee Chairman—S. S. GREENBERG, Maxwell-Davis, Inc., Hartford, Conn.

Engineering Committee Chairman—A. D. PRENTICE, Hartford Accident & Indemnity Co., New York, N. Y.

Poster Committee Chairman—V. L. NUTLEY, Northwest Casualty Co., Seattle, Wash.

Statistics and Contest Committee Chairman—GEORGE A. MEYER, Southwestern Greyhound Lines, Inc., Texarkana, Ark.

Members at Large—

MARCUS A. DOW, Greyhound Management Co., Cleveland, Ohio.
ROBERT CLAIR, Liberty Mutual Insurance Company, Boston, Mass.
DALE HARMAN, Yellow Cab Company, Kansas City, Mo.
C. V. WELLS, Pillsbury Flour Mills Company, Minneapolis, Minn.
B. C. SKEEN, City Ice Company of Kansas City, Kansas City, Mo.
C. C. ROSENBERGER, Markel Service, Inc., Kansas City, Mo.
GEORGE WIDUA, Builders & Manufacturers Mutual Casualty Co., Chicago, Ill.

TUESDAY MORNING SESSION

October 2, 1934

The opening session of the Delivery, Taxicab and Bus Section was called to order by Mr. Clark T. McConnell, Chairman, Board of Directors, Great Eastern Stages, Inc., Cleveland, who presided. Chairman McConnell welcomed the delegates in the name of the Convention City, and then introduced the first speaker.

Maintenance for Safety's Sake

By G. E. WEAVER

Vice President, Weaver Manufacturing Co., Springfield, Ill.

The speaker said in part: In the automotive industry there is too much repair and not enough maintenance, and too many managers that don't know the difference between repair and maintenance. The repairer fixes very little but the maintainer uses every means to prevent repairs. Maintenance takes care of the little things instead of allowing them to accumulate into heavy repair bills, interrupted operations and expensive claims.

It has been authentically reported that many companies make it so unpleasant for their drivers when they report poor brakes, bad steering or other defects, that they hesitate to register complaints for fear of losing employment.

The problem of safe transportation on highways is not so much what a comparatively few safety-conscious, well-financed and managed corporations can do, but what can be done through regulation to enforce safety maintenance and promote safe thinking among all motorists and fleet operators.

The answer to this maintenance problem surely lies in state or city operated inspection bureaus, where all vehicles are required to appear at intervals for inspection.

Memphis, Tennessee, is successfully operating such a bureau where all motor vehicles are required to appear once in six months for inspection, and a fee of fifty cents is charged, which maintains the station and gives to the city a surplus to be used for further street and highway safety. It has resulted in a 25 per cent decrease in fatalities and casualty underwriters have reported a very substantial decrease in property damage claims.

This station provides standardized inspection by trained operators. No repair work is done, no attendant is permitted to recommend any repair shop. The motorist may go to any shop he chooses or, if capable, he may do the necessary correcting himself. If he wishes suggestions or advice on the safe maintenance of his vehicle, a competent supervisor experienced in automotive work is available.

Fleet operators, especially those national in their scope, having well managed maintenance departments, found little or no trouble at this inspection bureau. But those organizations having shops of the "fix-it-up" type, or no shops at all, found their equipment in great need of repair. This was particularly true of the owner-

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TWENTY-THIRD ANNUAL SAFETY CONGRESS NATIONAL SAFETY COUNCIL



Food Section

Officers 1933-34

General Chairman—T. A. SCHENDEL, Premier-Pabst Corp., Milwaukee, Wis.

Vice-Chairman—FRANK A. HASSE, Corn Products Refining Co., Chicago, Ill.

Secretary and News Letter Editor—RUTH E. CADE, A. E. Staley Manufacturing Co., Decatur, Ill.

Engineering Committee Chairman—PAUL GOODNOUGH, Quaker Oats Co., Chicago, Ill.

Membership and Program Committee Chairman—W. C. WASHBURN, Sheffield Farms Co., Inc., New York, N. Y.

Poster Committee Chairman—ROBERT FLEMING, Kellogg Company, Battle Creek, Mich.

Publicity Committee Chairman—C. W. TURNING, Gooddard & Heinselman, Minneapolis, Minn.

Statistics Committee Chairman—J. J. LYONS, John F. Jelke Co., Chicago, Ill.

Slides and Safety Kinks Committee Chairman—PAIGE LEHMAN, Pillsbury Flour Mills, Minneapolis, Minn.

Members at Large—

WILLIAM F. BARRETT, Horn and Hardart Baking Co., Philadelphia, Pa.

W. P. BELL, California and Hawaiian Sugar Refining Corp., Crockett, Calif.

D. M. CLARK, Society of Grain Elevator Superintendents of North America, Chicago, Ill.

MORRIS COHEN, Schulze Baking Co., Kansas City, Mo.

C. W. DEMPSEY, Liquid Carbonic Corp., Chicago, Ill.

ALEXANDER DIENST, The National Sugar Refining Co., Long Island City, N. Y.

E. W. GREEN, Oahu Sugar Co., Ltd., Waipahu, Oahu, T. H.

C. E. GRIFFIN, The Axton-Fisher Tobacco Co., Louisville, Ky.

ELMER HEIMBACH, Manager, Americus Hotel, Allentown, Pa.

S. B. HORRELL, The Carey Salt Co., Hutchinson, Kansas.

ROBERT McDADE, Atlantic Sugar Refineries, Ltd., St. John, N. B., Canada.

HENRY J. MINEUR, Borden's, New York, N. Y.

ADOLPH PFEFFER, Adolph Pfeffer Rice Milling Co., Houston, Texas.

R. E. PROUTY, Aetna Life Insurance Co., New York, N. Y.

G. L. RHYS, John Morrell & Co., Ottumwa, Iowa.

THOMAS STROBHAR, Wagner-Taylor Co., Philadelphia, Pa.

WILLIAM A. SULLIVAN, Loose-Wiles Biscuit Co., Kansas City, Mo.
 VERN D. SUTTON, Postum Company, Inc., Battle Creek, Mich.
 R. W. UPSHAW, Anheuser-Busch, Inc., St. Louis, Mo.

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TUESDAY MORNING SESSION

October 2, 1934

The opening session of the Food Section was called to order by General Chairman T. A. Schendel, Premier-Pabst Corporation, Milwaukee, Wisconsin, who presided. The chairman first introduced Mr. W. E. Carter, Branch Manager, Cleveland Plant, Kroger Grocery & Baking Co., Cleveland, who made a brief address of welcome on behalf of the Convention City.

Chairman Schendel then presented a "Resumé of the Year's Activities," outlining some of the work of the section officers and praising the accomplishments of standing committees. He then called for the report of the Nominating Committee and new officers for the section were nominated and elected as follows:

General Chairman—T. A. Schendel, Premier-Pabst Corporation, Milwaukee, Wis.
Vice-Chairman in Charge of Membership—C. W. Dempsey, Liquid Carbonic Corp., Chicago, Ill.

Vice-Chairman—S. B. Horrell, The Carey Salt Co., Hutchinson, Kansas.

Secretary—D. M. Clark, Society of Grain Elevator Superintendents of North America, Chicago, Ill.

News Letter Editor—Frank A. Hasse, Corn Products Refining Co., Chicago, Ill.

Engineering Committee Chairman—G. L. Gore, Bruce Dodson & Co., Kansas City, Mo.

Health Committee Chairman—Robert Fleming, Kellogg Company, Battle Creek, Mich.

Poster Committee Chairman—William A. Sullivan, Loose-Wiles Biscuit Co., Kansas City, Mo.

Publicity Committee Chairman—Ruth E. Cade, A. E. Staley Manufacturing Co., Decatur, Ill.

Slides and Safety Kinks Committee Chairman—G. L. Rhys, John Morrell & Co., Ottumwa, Iowa.

Statistics Committee Chairman—C. W. Turning, Goddard & Heinselman, Minneapolis, Minn.

Directors—

Carl C. Clements, National Dairy Products Corp., New York, N. Y.

Ray J. Culkin, Rockwood & Co., Brooklyn, N. Y.

A. B. Dean, Commander-Larabee Corp., Minneapolis, Minn.

C. C. DeVivo, American Chiclet Co., Long Island City, N. Y.

Alexander Dienst, The National Sugar Refining Co., Long Island City, N. Y.

H. K. Eastman, The Hills Brothers Co., Brooklyn, N. Y.

A. D. Ferrari, Bohemian Distributing Co., Ltd., Los Angeles, Calif.

L. O. Green, Wilson & Co., Inc., Chicago, Ill.

E. C. Grether, The American Sugar Refining Co., New York, N. Y.

W. O. Ham, Southern Ice & Utilities Co., Dallas, Texas.

Theodore Krueger, Pennsylvania Hotel, New York, N. Y.

William P. Martin, South Texas Cotton Oil Co., Houston, Texas.

Henry J. Mineur, The Bordon Company, New York, N. Y.

R. R. Rogers, Penick & Ford Ltd, Inc., Cedar Rapids, Iowa.

A. C. Schroeder, Church & Dwight Co., Inc., Syracuse, N. Y.

G. H. Sibley, Jewel Tea Co., Inc., Barrington, Ill.

W. W. Smith, Smith Brothers, Inc., Poughkeepsie, N. Y.

Vern D. Sutton, Postum Company, Inc., Battle Creek, Mich.

Wilbur Thomas, Hage's, Limited, San Diego, Calif.

Lionel W. Udeil, United Fruit Co., Boston, Mass.

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TWENTY-THIRD ANNUAL SAFETY CONGRESS
NATIONAL SAFETY COUNCIL



Marine Section

Officers 1933-34

General Chairman—FRANK H. COGAN, Railroad Marine Service, New York, N. Y.

Vice-Chairman (in Charge of Posters and Slides)—ROBERT F. HAND, Standard Shipping Co., New York, N. Y.

Vice-Chairman (in Charge of Publicity)—ARTHUR M. TODE, Consulting Marine Engineer, New York, N. Y.

Vice-Chairman (for the Pacific Coast)—A. O. WOLL, General Petroleum Corp. of Calif., Terminal Island, Calif.

Secretary—E. C. HOLDEN, JR., United States P. & I. Agency, Inc., New York, N. Y.

News Letter Editor—HENRY BLACKSTONE, United States P. & I. Agency, Inc., San Francisco, Calif.

Engineering Committee Chairman—B. C. EDWARDS, Consulting Engineer, New York, N. Y.

Membership Committee Chairman—W. E. STEWARDSON, Colombian Steamship Co., New York, N. Y.

Program Committee Chairman—J. S. HUNTER, The Atlantic Refining Co., Philadelphia, Pa.

Statistics Committee Chairman—BENJAMIN H. SELF, Travelers Insurance Co., New York, N. Y.

Stevedoring Committee Chairman—F. C. GREGORY, United States Employees' Compensation Commission, Washington, D. C.

Members at Large—

FRANK E. AMES, Lykes, Bros.-Ripley Steamship Co., New Orleans, La.

W. P. BIGGS, Navy Department Safety Engineer, Washington, D. C.

C. F. BLACKTON, Erie Railroad Co., Jersey City, N. J.

A. R. BUSH, International Flare-Signal Co., New York, N. Y.

E. W. FISKE, JR., Standard-Vacuum Transportation Co., New York, N. Y.

CHARLES H. FLATHERS, Eastern Steamship Lines, Inc., Boston, Mass.

F. P. FOISIE, Shipping Federation of the State of Washington, Seattle, Wash.

J. M. GRISIER, Alabama Dry Dock & Shipbuilding Co., Mobile, Ala.

WM. GROUNDWATER, Union Oil Co. of Calif., Los Angeles, Calif.

WM. F. JONES, Gulf Refining Co., New York, N. Y.

W. P. KAIN, Marine Surveyor, New York, N. Y.

R. K. KELLY, Tide Water Oil Co., New York, N. Y.

J. L. LUCKENBACH, American Bureau of Shipping, New York, N. Y.
 DANIEL J. MURPHY, Murphy, Cook & Co., Philadelphia, Pa.
 BYRON O. PICKARD, Pacific American Steamship Assn., San Francisco, Calif.
 E. J. ROBESON, JR., Newport News Shipbuilding and Dry Dock Co., Newport News, Va.
 J. K. ROBISON, Sinclair Navigation Co., New York, N. Y.
 J. C. ROHLFS, Standard Oil Company of Calif., San Francisco, Calif.
 H. L. SEWARD, Yale University, New Haven, Conn.
 ARTHUR R. SAVAGE, Peninsular & Occidental Steamship Co., Port Tampa, Fla.
 A. J. SMITH, Marine Office of America, New York, N. Y.
 J. H. TOMB, New York State Merchant Marine Academy, New York, N. Y.
 ELLIOTT VANDEVANTER, Capt., Office of the Chief of Engineers, Munitions Bldg., Washington, D. C.
 JOHN WRIGHT, American Export Line, New York, N. Y.
 G. D. ZEH, Associated Oil Co., San Francisco, Calif.

TUESDAY MORNING SESSION

October 2, 1934

The opening session of the Marine Section was called to order by General Chairman Frank H. Cogan, the Delaware, Lackawanna and Western Railroad Co., Hoboken, N. J., who presided. Chairman Cogan introduced Mr. Herbert C. Jackson, of the Interlake Steamship Co., Cleveland, who cordially welcomed the delegates in the name of the City of Cleveland.

Chairman Cogan then presented a brief review and preview of Marine Section activities during the past year, including the work of sectional officers and chairmen of committees. The chairman then introduced the first speaker.

The Economics of Accident Prevention in Handling Marine Cargo

By H. W. HEINRICH

Assistant Superintendent, Engineering and Inspection Division, The Travelers Insurance Co., Hartford, Conn.

The speaker said in part: According to data provided by the U. S. Department of Commerce, 342,489 tons of cargo valued at \$10,910,429,000 were handled for export and import in the United States in 1932. This includes cargo handled on the rivers and lakes as well as at ocean ports. The payroll required was \$188,000,000. Estimated payments for compensation and employers' liability claims and for medical and hospital services amounted to approximately \$14,000,000. In addition to this, the indirect costs of accidents in stevedoring work is approximately four times as much as the direct costs, or \$56,000,000.

From these data accident costs may be expressed in terms of tons and payroll, as follows:

Total cost per ton, 20c. Total cost per \$100 of payroll, \$37.

Part of total cost per ton not covered by insurance, 16c. Part of total cost per \$100 of payroll not covered by insurance, \$29.60.

It is fair to compare accident costs with other so-called overhead costs in handling cargo in order that a true picture of its relative importance may be had. Stevedoring operators in the Port of New York provide the following estimates: Overhead costs, .068; labor costs, .68; bid price, .90; profit, .13; accidents, .20.

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TWENTY-THIRD ANNUAL SAFETY CONGRESS
NATIONAL SAFETY COUNCIL



Metals Section

Officers 1933-34

- General Chairman*—E. F. BLANK, Jones & Laughlin Steel Corp., Pittsburgh, Pa.
Vice-Chairman—J. A. VOSS, Republic Steel Corporation, Youngstown, Ohio.
Vice-Chairman—H. W. DARR, Bethlehem Steel Company, Johnstown, Pa.
Secretary and News Letter Editor—A. BERQUIST, The Youngstown Sheet and Tube Company, East Chicago, Ind.
Engineering Committee Chairman—J. E. CULLINEY, Bethlehem Steel Company, Bethlehem, Pa.
Health Committee Chairman—DR. R. C. ENGEL, The Corrigan, McKinney Steel Company, Cleveland, Ohio.
Membership Committee Chairman—R. A. CHAFFIN, Continental Steel Corp., Kokomo, Ind.
Poster Committee Chairman—W. D. SPEIGHT, Keystone Steel & Wire Co., Peoria, Ill.
Program Committee Chairman—C. M. ALLEN, The American Rolling Mill Co., Middletown, Ohio.
Publicity Committee Chairman—A. M. LYTLE, The Newton Steel Company, Newton Falls, O.
Statistics Committee Chairman—C. E. RALSTON, Pittsburgh Plate Glass Co., Pittsburgh, Pa.
Slides and Safety Kinks Committee Chairman—J. A. OARTEL, Carnegie Steel Company, Pittsburgh, Pa.
Foundry Committee Chairman—F. G. BENNETT, The Buckeye Steel Castings Company, Columbus, Ohio.
Railway Car Builders Committee Chairman—P. J. BRAND, Pullman Car & Manufacturing Corporation, Pullman, Chicago, Ill.
- Members at Large*—
L. S. ADAM, Hubbard Steel Foundry, East Chicago, Ind.
J. A. COLTRIN, National Radiator Corporation, Johnstown, Pa.
H. M. CROGHAN, Inland Steel Company, East Chicago, Ind.
G. A. DAVIS, Illinois Steel Company, Chicago, Ill.
JOHN P. EIB, Illinois Steel Company, Joliet, Ill.
E. A. ELLIS, Wheeling Steel Corp., Wheeling, W. Va.
W. T. FILMER, The Youngstown Sheet and Tube Co., Youngstown, Ohio.
A. C. GIBSON, Spang, Chalfant & Company, Inc., Pittsburgh, Pa.

CHARLES W. HANKO, Pittsburgh Steel Co., Monessen, Pa.
 O. F. HARVEY, American Car and Foundry Co., New York, N. Y.
 S. E. HAWKES, MacWhyte Company, Kenosha, Wis.
 HARVEY G. HENSEL, The Youngstown Sheet and Tube Company, Chicago, Ill.
 W. J. IRELAND, Kohler Co., Kohler, Wis.
 W. A. JARVIS, The Chase Companies, Waterbury, Conn.
 F. A. LAUERMAN, Republic Steel Corporation, South Chicago, Ill.
 T. H. MCKENNEY, Illinois Steel Company, South Chicago, Ill.
 D. V. MEDALIE, Interlake Iron Corp., Chicago, Ill.
 W. E. MEGRAW, H. H. Robertson Company, Pittsburgh, Pa.
 ROBERT L. SCHMITT, Louisville Car Wheel and Railway Supply Company,
 Louisville, Ky.
 J. K. STAFFORD, Mississippi Valley Structural Steel Co., Decatur, Ill.

MONDAY AFTERNOON SESSION

October 1, 1934

The opening session of the Metals Section was called to order by General Chairman E. F. Blank, Jones & Laughlin Steel Corporation, Pittsburgh, Pa., who presided. Chairman Blank introduced Mr. Donald B. Gillies, President, Corrigan, McKinney Steel Co., Cleveland, who made a brief address of welcome on behalf of the Convention City.

General Chairman Blank then presented a brief "Resumé of the Year's Activities" of the Metals Section, giving in some detail the activities of officers and chairman of standing committees, whose work for the Section was highly valued. Chairman Blank then introduced the first speaker.

Practical Safety from an Operating Standpoint

By G. D. TRANTER

General Superintendent, Middletown Division, The American Rolling Mill Co.,
 Middletown, Ohio

The speaker said in part: If we seek the solution of the accident problem by the same methods used for operating control, we will more quickly improve the plant safety record. For example, safety rules must be regarded in the same manner as operating rules and practice. Some years ago, safety gates had been installed in the rear of open hearth furnaces for the protection of men working on tap holes and runners in a certain plant. The safety appliance was not accepted wholeheartedly by the furnace men until a helper fell off the backstanding and was fatally injured. But after this accident, the gates were always in place.

Here is another case. A gas maker was seriously injured during the burn-out of a gas producer. Investigation of the accident disclosed that the man had previously received a number of minor injuries while working on this particular job. It further developed that he was unsuited to this type of work because of age and previous training. If this man's foreman had considered these minor injuries in the light of a danger signal and transferred the man to a less hazardous job, this accident would have been prevented.

Discipline in accident prevention as well as in operation should be resorted to only when other means fail. Men usually respond willingly to proper inspiration and leadership. In case of a violation of safety rules, a word from the superintendent to the person who committed the act goes a long way. In going about the

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TWENTY-THIRD ANNUAL SAFETY CONGRESS NATIONAL SAFETY COUNCIL



Mining Section

Officers 1933-34

General Chairman—P. M. ARTHUR, American Zinc Company of Tennessee, Mascot, Tenn.

Vice-Chairman in Charge of Membership Coal Mines—FRANK B. DUNBAR, Pickands, Mather & Co., Mather, Pa.

Vice-Chairman in Charge of Membership Metal Mines—J. W. ALT, Calumet & Hecla Consolidated Copper Co., Calumet, Mich.

Vice-Chairman in Charge of Engineering—WM. G. METZGER, Hudson Coal Co., Scranton, Pa.

Secretary and News Letter Editor—DANIEL HARRINGTON, United States Bureau of Mines, Washington, D. C.

Entertainment Committee Chairman—J. T. RYAN, Mine Safety Appliances Co., Pittsburgh, Pa.

Poster and Slide Committee Chairman—J. J. FORBES, United States Bureau of Mines, Pittsburgh, Pa.

Program Committee Chairman—R. N. HOSLER, Coal Mine Section, Pennsylvania Compensation Rating & Inspection Bureau, Harrisburg, Pa.

Publicity Committee Chairman—M. R. BUDD, Explosives Engineer, Wilmington, Del.

Statistics Committee Chairman—W. W. ADAMS, United States Bureau of Mines, Washington, D. C.

Members at Large—

W. H. COMINS, National Lead Co., St. Francois, Mo.

M. F. FAIRLIE, The Mining Corporation of Canada, Ltd., Toronto, Ont., Canada.

C. W. GIBBS, Harwick Coal and Coke Co., Pittsburgh, Pa.

H. C. HENRIE, Phelps Dodge Corp., Bisbee, Ariz.

THOMAS E. LIGHTFOOT, Koppers Coal Co., Pittsburgh, Pa.

LEE LONG, Clinchfield Coal Corp., Dante, Va.

GEORGE MARTINSON, Pickands, Mather & Co., Hibbing, Minn.

D. D. MOFFATT, Utah Copper Co., Salt Lake City, Utah.

M. W. PRICE, Jeddo-Highland Coal Co., Jeddo, Pa.

L. T. SICKA, St. Joseph Lead Co., Bonne Terre, Mo.

HOWARD I. YOUNG, American Zinc, Lead & Smelting Co., St. Louis, Mo.

TWENTY-THIRD ANNUAL SAFETY CONGRESS
NATIONAL SAFETY COUNCIL



Paper and Pulp Section

Officers 1933-34

- General Chairman*—H. G. GILSON, Oxford Paper Co., Rumford, Maine.
Vice-Chairman in Charge of Membership—H. D. BANTA, Hoberg Paper and Fibre Co., Green Bay, Wis.
Secretary and News Letter Editor—F. L. IRVIN, St. Croix Paper Co., Woodland, Maine.
Program Committee Chairman—E. E. Grant, The Crystal Tissue Co., Middletown, Ohio.
Engineering Committee Chairman—GEORGE J. ADAMS, International Paper Co., New York, N. Y.
Statistics Committee Chairman—R. I. DICKINSON, Cornell Wood Products Co., Cornell, Wis.
Health Committee Chairman—DR. L. H. FRECHTLING, The Champion Coated Paper Co., Hamilton, Ohio.
Poster Committee Chairman—DON C. HUNTER, Oxford Miami Paper Co., West Carrollton, Ohio.
Contest Committee Chairman—A. SCOTT DOWD, The Paper Industry, Chicago, Ill.
Members at Large—
ERNEST AUGUSTUS, The Mead Corp., Chillicothe, Ohio.
W. J. BRENNAN, State Department of Labor and Industry, Augusta, Maine.
E. R. BROWN, Oregon and Columbia Basin Division, National Safety Council, Portland, Oregon.
WM. H. BRYDGES, Bedford Pulp & Paper Co., Big Island, Va.
KENNETH L. FAIST, The Champion Coated Paper Co., Hamilton, Ohio.
W. A. GLEASON, Hammermill Paper Co., Erie, Pa.
JOHN LUNDRIGAN, International Paper Co., New York, N. Y.
W. J. PEACOCK, Northern Paper Mills, Green Bay, Wis.
J. J. PLZAK, Consolidated Water Power and Paper Co., Wisconsin Rapids, Wis.
SAMUEL PRUYN, Finch-Pruyn and Co., Inc., Glens Falls, N. Y.
B. D. ROGERS, Bird & Sons, Inc., East Walpole, Mass.
F. H. ROSEBUSH, Nekoosa-Edwards Paper Co., Port Edwards, Wis.

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TWENTY-THIRD ANNUAL SAFETY CONGRESS
NATIONAL SAFETY COUNCIL



Petroleum Section

Officers 1933-34

- General Chairman*—R. W. BLACK, Standard Oil Co. of N. J., Elizabeth, N. J.
Vice-Chairman—A. W. BREELAND, Lone Star Gas Co., Dallas, Texas.
Chairman, Atlantic Division—J. H. BROWN, Tide Water Oil Co., New York, N. Y.
Chairman, Great Lakes Division—J. H. HERBERT, Standard Oil Co. (Ohio), Cleveland, Ohio.
Chairman, Mid-Continent Division—A. A. ODELL, Barnsdall Refineries, Inc., Tulsa, Okla.
Chairman, Gulf Division—W. P. REYMOND, JR., Standard Oil Co. of Louisiana, Baton Rouge, La.
Chairman, Rocky Mountain Division—B. V. OSBORN, Standard Oil Co. (Ind.), Casper, Wyo.
Chairman, Pacific Division—J. K. ROBERTS, The Texas Co., Los Angeles, Calif.
News Letter Editor—G. O. LOCKWOOD, The Empire Companies, Bartlesville, Okla.
Engineering Committee Chairman—R. B. ROAPER, Humble Oil and Refining Co., Houston, Texas.
Health Committee Chairman—DR. R. A. JEWETT, General Petroleum Corporation of California, Los Angeles, Calif.
Poster Committee Chairman—H. J. WILSON, Associated Oil Co., San Francisco.
Program Committee Chairman—C. L. HIGHTOWER, United Gas Company, Houston, Texas.
Publicity Committee Chairman—J. L. RISINGER, Magnolia Petroleum Co., Dallas, Texas.
Statistics Committee Chairman—J. W. MYERS, Standard Oil Co. (N. J.), New York, N. Y.
Past General Chairmen—
R. S. BONSIB, Standard Oil Co. (N. J.), New York, N. Y.
V. R. CURRIE, The Texas Co., Houston, Texas.
R. E. DONOVAN, Standard Oil Company of Calif., San Francisco, Calif.
C. L. HIGHTOWER, United Gas Company, Houston, Texas.
GEO. F. PRUSSING, Union Oil Company of Calif., Los Angeles, Calif.
E. J. SENNE, Socony-Vacuum Corp., New York, N. Y.
C. W. SMITH, Standard Oil Co. (Ind.), Chicago, Ill.
D. J. WALLACE, Petroleum Safety Council, Tulsa, Okla.
Secretary—H. N. BLAKESLEE, American Petroleum Institute, Dallas, Texas.

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TWENTY-THIRD ANNUAL SAFETY CONGRESS
NATIONAL SAFETY COUNCIL



Power Press Section

Officers 1933-34

- General Chairman*—A. L. KAEMS, Simmons Company, Kenosha, Wis.
Vice-Chairman—H. L. VITS, Aluminum Goods Manufacturing Co., Manitowoc, Wis.
Secretary—G. A. KUECHENMEISTER, Dominion Forge and Stamping Co., Walkerville, Ont., Canada.
News Letter Editor—C. E. LIBBY, Scintilla Magneto Co., Sidney, N. Y.
Engineering Committee Chairman—LOUIS BORAKS, Liberty Mutual Insurance Co., Boston, Mass.
Exhibit Committee Chairman—B. F. ROCKHOFF, Detroit Steel Products Co., Detroit, Mich.
Health Committee Chairman—DR. GEORGE R. NICHOLS, American Can Co., Chicago, Ill.
Membership Committee Chairman—H. W. HOWSAM, Hubbard Spool Co., Chicago, Ill.
Poster Committee Chairman—G. S. THOMPSON, Gnau & Company, Detroit, Mich.
Program Committee Chairman—GEORGE H. BERRY, Western Electric Co., Chicago, Ill.
Publicity Committee Chairman—R. M. ZELDER, Edison General Electric Appliance Co., Chicago, Ill.
Statistics Committee Chairman—J. D. LYLE, Fisher Body Company of Cleveland, Cleveland, Ohio.
Slides and Safety Kinks Committee Chairman—E. J. WALLMAN, Great Lakes Forge Co., Chicago, Ill.
Members at Large—
T. O. MEISNER, American Can Co., Chicago, Ill.
J. W. HENNING, Automatic Electric Co., Chicago, Ill.
JOHN B. GIBSON, Western Electric Co., Chicago, Ill.
S. H. SLAYMAKER, Fairbanks, Morse and Co., Beloit, Wis.
W. J. GRAVES, Michigan Mutual Liability Co., Detroit, Mich.
E. J. SMITH, Western Electric Co., Chicago, Ill.

TWENTY-THIRD ANNUAL SAFETY CONGRESS
NATIONAL SAFETY COUNCIL



Public Utilities Section

Officers 1933-34

- General Chairman*—F. M. PEPPER, Illinois Bell Telephone Co., Chicago, Ill.
Vice-Chairman for Telegraph and Telephone Interests—D. W. WAIT, The Bell Telephone Co. of Pennsylvania, Pittsburgh, Pa.
Vice-Chairman for Gas Interests—E. J. KREH, Philadelphia Company, Pittsburgh, Pa.
Vice-Chairman for Electric Interests and Program—ROY M. GODWIN, Philadelphia Electric Co., Philadelphia, Pa.
Secretary—JOHN J. BARADA, Laclede Gas Light Co., St. Louis, Mo.
News Letter Editor—RAY A. EDWARDS, San Diego Consolidated Gas and Electric Co., San Diego, Calif.
Engineering Committee Chairman—W. H. MULLIGAN, Hydro-Electric Power Commission, Toronto, Ont., Canada.
Health Committee Chairman—DR. HART E. FISHER, Chicago Rapid Transit Co., Chicago, Ill.
Membership Committee Chairman—A. A. KLINGE, Public Service Co. of Colorado, Denver, Colo.
Poster and Film Strip Committee Chairman—H. W. LUECK, Commonwealth Edison Co., Chicago, Ill.
Publicity Committee Chairman—H. E. SHEDD, Appalachian Electric Power Co., Bluefield, W. Va.
Statistics and Contest Committee Chairman—W. H. BROWN, Northern States Power Co., Minneapolis, Minn.
Special Representatives—
J. M. BUSWELL, San Joaquin Light & Power Corp., Fresno, Calif.
S. C. DICKINSON, Pacific Gas and Electric Co., San Francisco, Calif.
PAUL R. KUHN, Penn Central Light and Power Co., Altoona, Pa.
W. R. LOYD, Alabama Power Co., Birmingham, Ala.
H. A. PROLEMY, Public Service Co. of Northern Illinois, Chicago, Ill.
JOHN STILWELL, Consolidated Gas Co. of New York, New York, N. Y.
W. A. BUCHANAN, Appalachian Electric Power Co., Welch, W. Va.
E. L. DONA, Niagara Hudson Power Corporation, Syracuse, N. Y.
Councilors—
E. S. BEAUMONT, The Peoples Gas Light & Coke Co., Chicago, Ill.
C. B. BOULET, Wisconsin Public Service Corp., Milwaukee, Wis.
B. B. MCCULLOCH, Bureau of Safety, Chicago, Ill.

H. L. MEADE, Ohio Bell Telephone Co., Cleveland, Ohio.

H. W. MOSES, Edison Electric Illuminating Co., Boston, Mass.

GEORGE OPP, Detroit Edison Co., Detroit, Mich.

C. B. SCOTT, Bureau of Safety, Chicago, Ill.

J. L. VANDEGRIFT, The Chesapeake & Potomac Telephone Co., Washington, D. C.

H. F. WEBB, West Penn Electric Co., Pittsburgh, Pa.

H. M. WEBBER, Illinois Bell Telephone Co., Chicago, Ill.

TUESDAY MORNING SESSION

October 2, 1934

The opening session of the Public Utilities Section was called to order by General Chairman F. M. Pepper, Illinois Bell Telephone Company, Chicago, who presided. Chairman Pepper gave a brief resumé of the activities of the Section during the past year, dwelling upon the work done by officers and standing committees, which he praised highly. He then introduced Charles E. Henderson, Public Relations Department, Ohio Gas Company, who welcomed the delegates on behalf of the Convention city. Chairman Pepper then introduced the first speaker.

Electric Shock

By W. B. KOUWENHOVEN

Professor of Electrical Engineering, The Johns Hopkins University,
Baltimore, Maryland

The speaker said in part: The number of accidents due to electricity is apparently increasing and this is particularly true of those caused by contact with low voltage circuits. MacLachlan, in 1930, and again in 1934, published excellent summaries of cases of electric shock. His results show that accidents reach their peak in the summer months, and that the current path through the body is usually from the right hand to the feet.

In every case of electric shock there are certain factors that influence the resulting injury. These are the type of circuit, its voltage, current and resistance, the points of contact with the circuit and the duration of the shock.

In a series of experimental studies carried out at the Johns Hopkins University, in which the author was associated with Dr. O. R. Langworthy of the School of Medicine, and Dr. D. R. Hooker of the School of Hygiene, three types of circuits have been used: namely, continuous or direct current circuits, alternating currents of commercial frequencies, and the discharge of an impulse or surge generator. Constant voltage circuits were used wherever possible because they are the ones found in both industry and the home.

The individual is subjected to less chance of injury in making contact with a 110 volt direct current circuit than with an alternating current one of the same voltage. In fact the speaker has only been able to learn of one authentic case of death on a 120 volt direct current circuit. In this instance a man was working inside of a Scotch marine boiler at a temperature of 112 degrees F. He had with him a defective portable light supplied from a 120 volt direct current circuit. In Italy there is on record a case of a man who was electrocuted on a 46 volt alternating current circuit. Experiments using 110-220 volt alternating and direct current circuits on rats gave similar findings.

At higher voltages, 1,000 volts or over, the direct current shocks produce greater injury than the alternating current ones, particularly if the brain or nerve centers lie in the path of the current. A comparison of the two commercial frequencies shows

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TWENTY-THIRD ANNUAL SAFETY CONGRESS
NATIONAL SAFETY COUNCIL



Quarry Section

Officers 1933-34

General Chairman—OTHO M. GRAVES, The General Crushed Stone Co., Easton, Pa.

Vice-Chairman—WILLIAM H. BAKER, J. E. Baker Co., York, Pa.

Secretary and News Letter Editor—V. P. AHEARN, National Sand and Gravel Association, Washintgon, D. C.

Poster Committee Chairman—H. F. YOTTER, The General Crushed Stone Co., Easton, Pa.

Publicity Committee Chairman—J. R. BOYD, National Crushed Stone Association, Washington, D. C.

Statistics Committee Chairman—W. W. ADAMS, United States Bureau of Mines, Washington, D. C.

Members at Large—

NORMAN G. HOUGH, The National Lime Association, Washington, D. C.

H. V. OWENS, Eastern Rock Products, Inc., Utica, N. Y.

JOHN PRINCE, Stewart Sand and Material Co., Kansas City, Mo.

A. L. WORTHEN, The Connecticut Quarries Co., Inc., New Haven, Conn.

WEDNESDAY MORNING SESSION

October 3, 1934

The opening session of the Quarry Section was called to order by John Campbell, Director, Bureau of Inspection, Pennsylvania Department of Labor and Industry, Harrisburg, Pa., who presided. This was scheduled to be a joint session with the Cement Section. Chairman Campbell introduced P. A. Mori, Works Manager, Cleveland Quarries Company, Amherst, Ohio, who made a brief address of welcome to the delegates on the part of the city of Cleveland.

In lieu of the annual report of the general chairman Otho M. Graves, who was unable to be present, a lengthy wire was read from him expressing his regrets. Chairman Campbell then introduced the first speaker.

TWENTY-THIRD ANNUAL SAFETY CONGRESS
NATIONAL SAFETY COUNCIL



Refrigeration Section

Officers 1933-34

General Chairman—L. W. DAWLEY, Southern United Ice Company, Jackson, Miss.

Vice-Chairmen—

T. A. ADAMS, Union Terminal Cold Storage Co., New York, N. Y.

CARL C. CLEMENTS, National Dairy Products Corporation, New York, N. Y.

W. S. WILCOX, E. B. Higley & Co., Mason City, Ia.

Secretary—EDWARD H. FOX, Chicago, Ill.

News Letter Editor—W. O. HAM, Southern Ice & Utilities Co., Dallas, Texas.

Engineering Committee Chairman—EMERSON A. BRANDT, National Association of Ice Industries, Chicago, Ill.

Membership Committee Chairman—COL. P. A. WEATHERED, Houston, Texas.

Poster Committee Chairman—B. C. SKEEN, City Ice Company of Kansas City, Kansas City, Mo.

Publicity Committee Chairman—O. J. WILLOUGHBY, Refrigeration Publishing Co., Atlanta, Ga.

Statistics Committee Chairman—HERMAN HILLENBACH, American Ice Company, care of Knickerbocker Ice Company, New York, N. Y.

Members at Large—

A. J. AUTHENRIETH, Chicago, Ill.

A. H. BAER, Carbondale Machine Co., Carbondale, Pa.

GEORGE B. BRIGHT, George B. Bright Company, Detroit, Mich.

G. H. GENDER, The City Ice & Fuel Co., Cleveland, Ohio.

J. ALBERT GREENE, Geyser Ice Co., Waco, Texas.

H. F. HIRSCHFIELD, Wisconsin Ice & Coal Co., Milwaukee, Wis.

E. G. HITT, American Associated Mutual Insurance Co., Atlanta, Ga.

H. L. LINCOLN, The Union Ice Co., San Francisco, Calif.

L. T. McARTHUR, Peoria Service Co., Peoria, Ill.

B. B. McCULLOCH, Bureau of Safety, Chicago, Ill.

JOSEPH MOUDRY, Chicago Ice Producers Mutual Liability Co., Chicago, Ill.

J. F. NICKERSON, American Institute of Refrigeration, Chicago, Ill.

W. M. O'KEEFE, American Warehousemen's Association, Chicago, Ill.

GARDNER POOLE, American Institute of Refrigeration, Boston, Mass.

H. L. TRASK, United States Cold Storage Company, Kansas City, Mo.

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TWENTY-THIRD ANNUAL SAFETY CONGRESS NATIONAL SAFETY COUNCIL



Rubber Section

Officers 1933-34

- General Chairman*—H. W. Low, Miller Rubber Products Co., Inc., Akron, Ohio.
Vice-Chairman in Charge of Program—B. F. GERPHEIDE, The Goodyear Tire & Rubber Co., Akron, Ohio.
Secretary—A. M. DIETZ, Pennsylvania Rubber Co., Jeanette, Pa.
News Letter Editor—R. A. BULLOCK, Corduroy Rubber Co., Grand Rapids, Mich.
Engineering Committee Chairman—W. L. SCHNEIDER, The B. F. Goodrich Co., Akron, Ohio.
Health Committee—
Dr. W. S. ASH, United States Tire Co., Inc., Detroit, Mich.
Dr. J. NEWTON SHIRLEY, Hood Rubber Co., Inc., Watertown, Mass.
Membership Committee Chairman—E. W. BECK, United States Rubber Co., New York, N. Y.
Poster Committee Chairman—OLIVER HOPKINS, National India Rubber Co., Providence, R. I.
Publicity Committee Chairman—R. W. MORSE, The Firestone Tire and Rubber Co., Akron, Ohio.
Statistics Committee Chairman—JOHN J. LOGE, The General Tire and Rubber Co., Akron, Ohio.
Slides and Safety Kinks Committee Chairman—H. A. WALKER, The Goodyear Tire and Rubber Co., Akron, Ohio.
Members at Large—
C. F. HORAN, Hood Rubber Co., Watertown, Mass.
J. T. KIDNEY, The Goodyear Tire and Rubber Co., Akron, Ohio.
M. A. QUIRK, Samson Tire and Rubber Co., Los Angeles, Calif.
CHARLES F. SMITH, U. S. Rubber Reclaiming Co., Inc., Buffalo, N. Y.

TUESDAY MORNING SESSION

October 2, 1934

The opening session of the Rubber Section was called to order by General Chairman H. W. Low, Miller Rubber Products Co., Inc., Akron, Ohio, who presided. The chairman gave a brief resume of the Rubber Section activities during the past

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TWENTY-THIRD ANNUAL SAFETY CONGRESS NATIONAL SAFETY COUNCIL



Safety Section, A R A - Steam Railroad Section, N S C

Chairman—C. L. LAFONTAINE, Great Northern Railway Co., St. Paul, Minn.
First Vice-Chairman—H. A. PARISH, Chicago & North Western Railway, Chicago.
Second Vice-Chairman—W. H. FAILING, Central Railroad of New Jersey.
Secretary—J. C. CAVISTON, American Railway Association, New York City.

A complete report of these sessions is published by the American Railway Association in a booklet entitled, "Proceedings of the Fourteenth Annual Meeting of the Safety Section, Cleveland, Ohio, October 2-4, 1934." Copies of the booklet are available from the Association of American Railroads, N. Y. C. The following is a condensed record.

TUESDAY MORNING SESSION

October 2, 1934

The opening session of the Safety Section, American Railway Association—Steam Railroad Section, National Safety Council was called to order by Chairman C. L. LaFountaine, Great Northern Railway, St. Paul, Minnesota, who presided. The invocation was delivered by L. G. Bentley, Chesapeake and Ohio Railway. The report of the Secretary, J. C. Caviston, New York City, in which he outlined briefly the activities of officers and standing committees during the last year, was read and approved. The Chairman then presented his annual report.

Annual Report of the Chairman

By C. L. LA FOUNTAINE

Great Northern Railway, St. Paul, Minn.

The speaker said in part: Let us go back for a moment to the resolution adopted at our annual meeting in 1924, which set a goal calling for reduction, based on the 1923 record, of 35 per cent in casualties to employees on duty, Class I railroads, by

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was called for and it was pre-
pared by the Department of Insurance and
Fire, Raleigh, N. C.
American Railway Association in
Cleveland, Ohio, October 2 to 4, 1934,
led to:
The Equitable Life Assurance
Company's record of employee casualty statis-

Safety, Interstate Commerce
Conditions and Practices In-
surance Bureau of Safety, also for his
cooperation of the Bureau of
Safety on the American Railways.
General Safety Supervisor.
of the Section during his term

and energetic services during

Northern Pacific Railway, for
the Program Committee, thereby
Annual Convention;
such a commendable cause as

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be spread upon the records of
all of those recognized herein."
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was on election of officers for the
is presented by H. S. Corbin.
d, as follows:

ty, Pennsylvania Railroad;
Attorney, Central Railroad Com-
missioner of Safety, Missouri Pa-

President, Erie Railroad; and
Central Lines.
ent of Safety, Chicago, Rock

ment of Safety and Sanitation,

Superintendent System, Atchi-
Blakemore, Superintendent of
mph, Supervisor of Safety and
C. Murphy, Superintendent of
J. C. Yocum, Manager, Safety
Naha Railway.

TWENTY-THIRD ANNUAL SAFETY CONGRESS NATIONAL SAFETY COUNCIL



Textile Section

Officers 1933-34

General Chairman—CHARLES H. EAMES, Lowell Textile Institute, Lowell, Mass.
Vice-Chairman in Charge of Program—IGNATIUS MACNULTY, 81 Wallace St.,
Malden, Mass.

Vice-Chairman—M. W. HEISS, Proximity Manufacturing Co., Greensboro, N. C.

Vice-Chairman—B. R. BROWN, Columbia Mills, Inc., Chicago, Ill.

Secretary and News Letter Editor—E. E. PLACE, American Mutual Liability In-
surance Co., Boston, Mass.

Engineering Committee Chairman—PAUL W. VIETS, Plymouth Cordage Co., North
Plymouth, Mass.

Membership Committee Chairman—E. G. PADGETT, North Carolina Industrial Com-
mission, Raleigh, N. C.

Poster Committee Chairman—FRED W. SEHL, Aetna Life Insurance Co., Hartford,
Conn.

Statistics Committee Chairman—J. T. TROLINGER, American Bemberg Corp., and
American Glanzstoff Corp., Elizabethton, Tenn.

Members at Large—

ARTHUR BARLOW, Armstrong Cork Co., Lancaster, Pa

RUSSELL T. FISHER, The National Association of Cotton Manufacturers, Bos-
ton, Mass.

WALTER HUMPHREYS, National Association of Wool Manufacturers, Boston,
Mass.

TUESDAY MORNING SESSION

October 2, 1934

The opening session of the Textile Section was called to order by Acting Chair-
man E. E. Place, American Mutual Liability Insurance Co., Boston, Mass., who
presided. Chairman Place introduced George Richman, Secretary, Richman Broth-
ers Company, Cleveland, Ohio, who made a brief welcoming address to the delegates
on behalf of the Convention City.

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TWENTY-THIRD ANNUAL SAFETY CONGRESS NATIONAL SAFETY COUNCIL



Transit Section

Officers 1933-34

General Chairman—RAY A. FINCH, Bureau of Safety, Chicago, Ill.

Vice-Chairmen—

PAUL HODSON, East St. Louis Railway Co., East St. Louis, Ill.

W. A. BROWN, Tennessee Electric Power Co., Nashville, Tenn.

Secretary—H. V. Schreiber, Capital Traction Co., Washington, D. C.

News Letter Editor—ERNEST G. COX, Chicago North Shore and Milwaukee Rail-
road Co., Highwood, Ill.

Engineering Committee Chairman—W. G. CLEVENGER, Northern Indiana Public
Service Co., Hammond, Ind.

Membership Committee Chairman—A. E. PARKER, Winnipeg Electric Co., Winni-
peg, Canada.

Poster Committee Chairman—HAROLD F. WEBB, West Penn Electric Co., Pittsburgh,
Pa.

Program Committee Chairman—PAUL R. KUHN, Penn Central Light and Power
Co., Altoona, Pa.

Publicity Committee Chairman—WILLIAM PASCHE, Chicago Surface Lines, Chi-
cago, Ill.

Statistics Committee Chairman—E. E. GROVER, The Columbus Railway, Power &
Light Co., Columbus, Ohio.

Members at Large—

M. W. BRIDGES, Chicago Rapid Transit Co., Chicago, Ill.

RALPH C. BUSH, Transit Mutual Insurance Co., Boston, Mass.

R. W. EMERSON, The Cleveland Railway Co., Cleveland, Ohio.

H. C. FOSS, Savannah Electric and Power Co., Savannah, Ga.

G. C. HECKER, American Transit Association, New York, N. Y.

G. T. HELLMUTH, Chicago North Shore and Milwaukee Railroad Co., Chicago,
Ill.

H. M. KEYSER, Washington Railway & Electric Co., Washington, D. C.

E. J. KREH, Philadelphia Co., Pittsburgh, Pa.

B. G. NOAH, Duluth Superior Transit Co., Duluth, Minn.

SAMUEL H. REID, Diener-Dugas Fire Extinguisher Corp., Chicago, Ill.

A. P. SCHENDORF, National Pneumatic Co., Rahway, N. J.

GLENN H. SHAW, Ohio Edison Co., Akron, Ohio.

GEORGE R. WHITMORE, Illinois Power and Light Corp., Peoria, Ill.

MONDAY AFTERNOON SESSION

October 1, 1934

The opening session of the Transit Section was called to order by Ralph C. Bush, Transit Mutual Insurance Co., of Boston, Mass., who presided. Chairman Bush introduced Mr. R. W. Emerson, Vice-President and General Manager, the Cleveland Railway Co., who welcomed the delegates on behalf of the Convention City. The Chairman presented a brief resumé of the activities of officers and standing committees of the section during the past year, praising their work. He then introduced the first speaker.

Physical Examination in Accident Prevention

By HART E. FISHER, M.D., F.A.C.S.

Chief Surgeon, Chicago Rapid Transit Company

The speaker was accompanied by two assistants and a full equipment of apparatus, with which he demonstrated his procedure, and spoke in part as follows:)

The technique of our examination is so arranged that each step follows in sequence, so that very little lost motion is had and the course of the examination proceeds smoothly and quickly. First comes the examination of the eyes as to their visual acuity, both for distant vision and near vision. No one will deny that good vision is an essential prerequisite to safe work performance, and more imperative is good sight in the transportation industry. It is important to detect evidence of eye strain, which undetected may produce headaches, dizziness, fatigue, blurring, which in itself may distract the attention of the employee away from his work and produce an accident. Examination is also made of the chambers of the eyes to detect any change through insidious disease that might interfere with the man's vision in the performance of his duties. Also a test is made of the mobility of the eyeball to determine if the eyeballs rotate together in all directions and that there is no divergence or convergence of the eyes (cross eyes). The pupils of the eyes are also tested as to their reaction to light and accommodation and if there is an insidious disease of the nervous system there it will be revealed.

Examination of near vision is important in train service employees, as well as those working about moving machinery. Those so afflicted find it difficult to efficiently and safely perform work close at hand. An employee whose work requires close and constant attention will suffer eyestrain unless his eyes are normal or his error of vision corrected. You must bear in mind the fact that glasses are a hazard to the man working in a shop about machinery due to fogging, blurred if not clean, and the danger of breaking the glasses from flying objects. Glasses are often lost or left at home and the employee is handicapped without them.

Up to this point you have seen what usually is considered sufficient to approve a person's eyes as normal for the work he is to perform; but here is where we rest in false security, for the test as described may show normal vision, and other tests are essential if we are to have more than a reasonable doubt as to the perfection of our visual apparatus. The two most important tests yet to be made are those for the detection of depth perception which determines the man's ability to properly judge distance, speed and space. The other is the determining and graphically plotting of the fields of vision of the employee. This latter test reveals those persons who, on account of narrowed fields of vision, are unable to see approaching objects from the rear or the side and as a result an accident occurs. Failure to properly see objects approaching from the rear or side is very often the direct cause of many

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TWENTY-THIRD ANNUAL SAFETY CONGRESS
NATIONAL SAFETY COUNCIL



Wood Products Section

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MONDAY AFTERNOON SESSION

October 1, 1934

The opening session of the Wood Products Section was called to order by General Chairman Louis W. Kerberg, Mengel Body Company, Louisville, Kentucky, who presided. The chairman introduced Mr. D. L. Sampson, Superintendent,