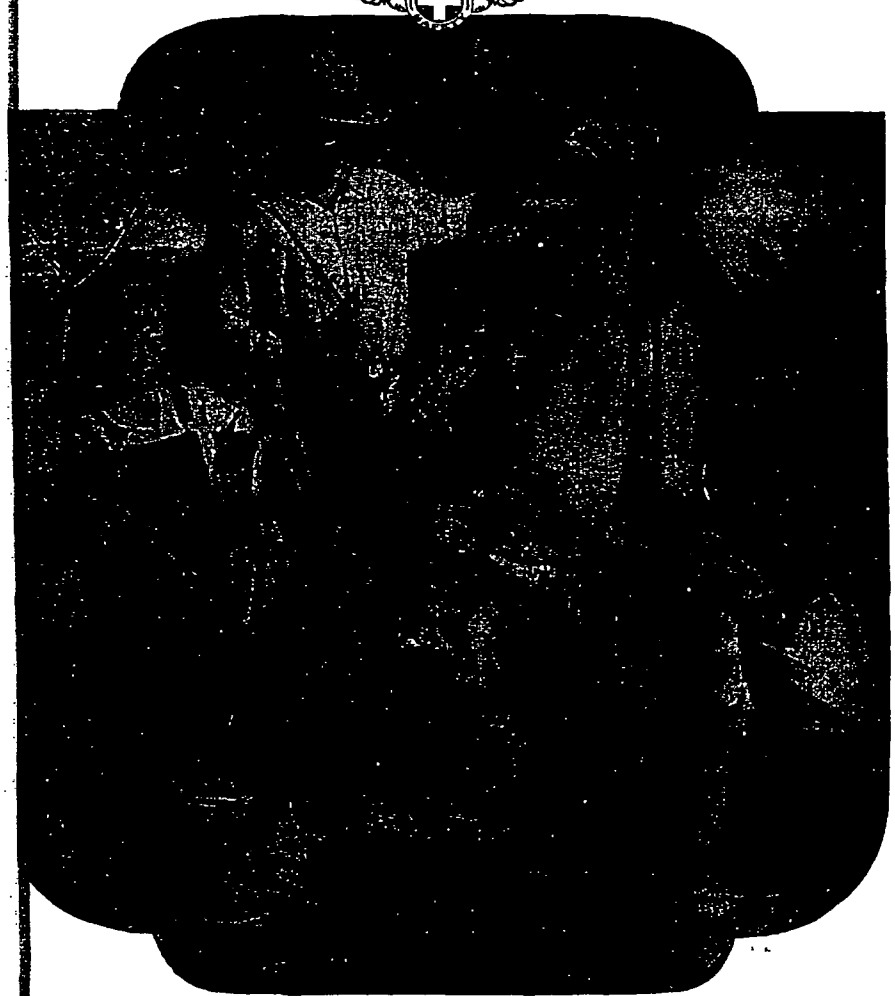
National Safety News

JULY *Published by the National Safety Council* 1929



SPEND YOUR VACATION OUTDOORS FOR HEALTH

SC-CC-000150

National Safety News

Published monthly in the interest of accident prevention and the health of industrial workers

CARMAN T. FISH, Editor
G. M. BRIGGS, Associate Editor — STANLEY H. KERSHAW, Poster Editor

VOLUME XX — July, 1929 — NUMBER 1

In This Issue

Keep Them Well and Keep Them Working—*Justin W. McEachren* 10
Trophy or Goat? 12
Humanizing Industry—*Harry A. Hopf* 13
Education—the Part It Plays in Safety—*John H. Finley, LL.D.* 15
Those Who Do Not Die—*Timothy Leary, M. D.* 16
Their Accident Rate Wasn't High—*Carman T. Fish* 17
Keeping the Oiler Out of Machinery—*G. M. Briggs* 19
Flying Demands Fitness—*Wade H. Miller, M. D.* 21
Eyes That See Avoid Accidents—*W. H. Kindy* 23
Precautions That Prevent Accidents in Oxy-Acetylene Welding—*J. B. Manor* 25
The Navy Adopts Industry's Methods—*W. P. Biggs* 27
Points of Hazard in the Woodworking Plant—*Wilbert J. Rudolph* 29
Traits That Make Unsafe Trainmen—*Clinton D. Smith* 31
The Small Plant Needs a Safety Organization—*John D. Stuart* 34
An Efficient Guard for the Platen Press 36
California Teams Compete in State First-Aid Meet 46
What's New on the Annual Congress Program? 52
Announce Winners in National Safety Competition 54
Safe Practices Get Results—*Elmo D. Murphey* 60
Regional Safety Meetings 62
Nominate N. S. C. Directors for 1929-30 72

Departments

Editorial 9
Industrial Health 38
The Safety Exchange 40
The Honor Roll 48
New Publications 50
Personals 58
Timely Topics for Safety Committees 68
Accidental Deaths in the United States 80
The Safety Poster Service 82
New Members, N. S. C. 85
With the Manufacturer 91
The Buyers' Service 94
Coming Events 96

Contents of previous issues of the National Safety News may be found by consulting the Industrial Arts Index in your library.

Copyright 1929 by National Safety Council. Printed in U. S. A. Published monthly. Entered as second class matter June 1, 1921, at the Post Office at Chicago, Ill., under the act of March 3, 1879.

The subscription price to members for extra copies of the NATIONAL SAFETY NEWS is $4.00 per year. Single copies, 40 cents. Reduced quantity prices for yearly subscriptions and single copies on request. Subscriptions are available only to members of the National Safety Council.
Member Audit Bureau of Circulations.

NATIONAL SAFETY COUNCIL
Cooperative—Non-Commercial—Non-Political—Non-Sectarian
108 East Ohio Street, Chicago, U. S. A.
Office of the Education Division, 1 Park Ave., New York City

Officers of the National Safety Council 1928-29

Henry A. Reninger, President.
Ernest W. Beck, Vice-President for Industrial Safety.
Charles E. Hill, Vice-President for Public Relations.
Miller McClintock, Vice-President for Public Safety.
George Opp, Vice-President for Territorial Councils.
C. E. Pettibone, Vice-President for Finance.
George E. Sanford, Vice-President for Engineering.
Arthur M. Tode, Vice-President for Membership.
Albert W. Whitney, Vice-President for Education.
Prof. C.-E. A. Winslow, Vice-President for Health.
G. T. Hellmuth, Treasurer.
W. H. Cameron, Managing Director.

EXECUTIVE COMMITTEE

Members at Large

Ernest W. Beck, United States Rubber Co.
C. W. Burquist, Western Electric Co.
Joseph T. Davis, Attorney, St. Louis, Mo.
G. T. Hellmuth, Chicago, North Shore & Milwaukee Railroad Co.
Charles E. Hill, New York Central Lines.
Harold K. Ferguson, H. K. Ferguson Construction Co.
John Price Jackson, New York Edison Co.
Miller McClintock, Erskine Bureau, Harvard University.
George Opp, Detroit Edison Co.
C. E. Pettibone, American Mutual Liability Insurance Co.
Henry A. Reninger, Lehigh Portland Cement Co.
George E. Sanford, General Electric Co.
Estelle Stewart, U. S. Bureau of Labor Statistics.
Arthur M. Tode, The Texas Co.
A. J. Van Brunt, Public Service Corp. of New Jersey.
Harry M. Webber, Illinois Bell Telephone Co.
S. E. Whiting, Liberty Mutual Insurance Company.
Albert W. Whitney, National Bureau of Casualty & Surety Underwriters.
W. H. Winans, Union Carbide & Carbon Corp.
Prof. C.-E. A. Winslow, Yale University.
J. M. Wolfe, Youngstown Sheet & Tube Co.
W. H. Cameron, Managing Director.

Representing Sections

J. I. Banash, ASSE-Engineering.
R. E. Colville, Quarry.
E. H. Coucher, Automotive.
J. B. Gibson, Power Press.
L. E. Long, Steam Railroad.
J. Frank Ord, Textile.
C. W. Smith, Petroleum.

Representing Community Safety Councils

Ancil D. Brown, Syracuse, N. Y.
Clifford Davis, Memphis, Tenn.
Emil Koch, Kansas City, Mo.
A. L. Frost, New Haven, Conn.
Emil J. Riedesel, Delaware.
Frederick E. Schortemeier, Indianapolis, Ind.
Paul Van Cleef, Chicago.

Past Presidents

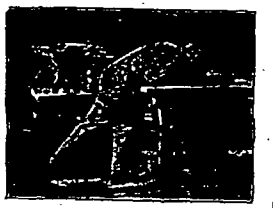
Robert W. Campbell
Arthur T. Mosey
Lew R. Palmer
David Van Schaack
Charles F. Tolman
Arthur H. Young
Marcus A. Dow
Lewis A. DeBlois
Carl B. Auel
Charles B. Bent
Walter G. King
Howard E. Hunt

Woodworking-Shop Floors

Every Safety Engineer knows that sawdust and shavings make slippery floors around woodworking machinery.

Because of the great hazard of slipping around such dangerous machinery every workman so exposed should have a sure footing.

To prevent the accidents due to *slipping* at such places and to relieve the muscular strain and fatigue that come with working all day while standing on a slippery surface, abrasive faced metal floor plates are effective.



Slippery floors cause accidents.



Abrasive metal floors are safe.

The only sure way to stop slipping accidents is to get rid of the slippery places

ABRASIVE METAL

American Abrasive Metals Co.
Fifty Church St., New York, N. Y.

SAFETY BOND SERVICE



Relief from Pain is Immediate
PYROL ... for burns and scalds

PYROL was especially formulated for hospital use. It is now exclusively employed in many of the leading institutions as their standard ward treatment.

The unusual effectiveness of PYROL in burns, and the rapidity with which it relieves pain in such cases, makes it particularly applicable to industrial first aid use.

It is, regularly, meeting urgent needs as the official burn treatment of many of the largest fire departments and industrial organizations.

PYROL combines the value of the *paraffin dressing* with that of a preventive of absorption of toxic matter. It stimulates and protects normal cell reproduction while *inhibiting bacterial* development. It soothes the injured area, and scarring is eliminated to an unusual degree.

If you have not used PYROL, try it! At our expense. Simply mail coupon below for a full-size, market package, FREE.

BULLARD-DAVIS, Inc.
67 Wall Street, New York City
Please send me free sample tube of PYROL.

BULLARD-DAVIS,
INCORPORATED
Exclusive Distributors to Industry
67 Wall St., New York — 275 8th St., San Francisco

Keep Them Well *and* Keep Them Working

Crane Company Makes a Substantial Profit Through Conservation of Employees' Health

By JUSTIN W. McEACHREN
Editor, Valve World, Crane Company, Chicago



The sanitarium at Crane Farms where employees regain health and strength under pleasant surroundings and skilled medical care.

THE historic, continuing problem of industry—as far as its human producing units are concerned—may be expressed something like this:

Keep them. Keep them well. Keep them busy.

The industrialist's dream of Heaven is a low labor turn-over, and a cheerful, healthy, stable producing force.

It seems logical that an industrial organization, engaged in the manufacture of products intended for the comfort, health and happiness of humanity, early in its development should have seen the desirability of having those products produced by comfortable, healthy and cheerful employees.

It is just as logical to assume that the purposes of production and of increasing the comfort and conserving the health of its employees, were practically the same; that is, both were intended to be materially profitable.

The reasoning was that a cheerful, healthy worker naturally would produce a better quality at a better profit than would be produced by a worker below normal physically, and mentally. A well man works better, therefore more profitably, than a sick one.

The establishment of a medical department by Crane Company was just as practically considered as any other department of its extensive activities. It promised to make the business more profitable. Health had an economic value as capable of producing dividends as fabricated steel and brass and iron. It is true that the humanitarian, sentimental, altruistic phase of the undertaking had its influence. But the dominant impulse was the prospect of increased and more profitable business.

Crane Company offers general health supervision to all of its employees—approximately 10,000 in Chicago and about an equal number in the other divisions and departments of the organization. It gives a somewhat extensive medical treatment to those needing doctor's services on account of sickness. A complete medical and surgical service is provided for those unable to work by reason of injury due to industrial accidents. In addition, many who are injured by non-industrial accidents also are cared for.

Pre-Entrance Examination

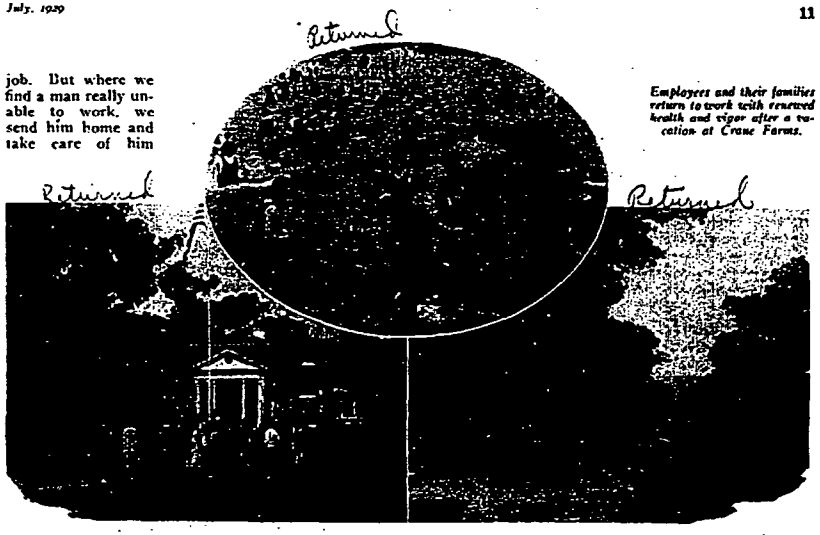
The general health supervision begins with the pre-entrance examination of those starting to work. By this examination we are able to locate remedial defects and diseases. Such applicants are advised regarding treatment, and when the disability is removed, they may be again considered for engagement.

It sometimes happens that we run across those not suited for our work. We do not wish to take any one who has tuberculosis, valvular heart disease, epilepsy, venereal disease, etc. It also sometimes happens that the individual selected for work is not physically suited for the intended job. In such instances the medical department cooperates with the employment department in placing the man where he is best fitted.

Cases unable to work because of sickness are reported to the medical department. Inquiry is made to determine whether or not the person so reporting has a physician in attendance. If so, then our visiting nurse cooperates with the attending physician in charge of the patient. If no physician is in attendance, medical treatment is furnished by our medical department.

We urge all of our employees, in case of sickness, to secure the services of their family physician. But where there is no family physician, we step in and do what we can for him. If the patient is able to call at our medical building for treatment, this is done. Cases are in the hands of our competent nurses, and when they report that additional service is needed, our own physicians give it.

Employees who are working and feel indisposed, may call at the medical department at any time during the day, by getting the necessary pass from their foremen. In this way we take care of a large number of trivial cases, headaches, constipation, colds in the head, etc., so that the employees are kept on the job. But where we find a man really unable to work, we send him home and take care of him until he is physically fit once more.



Employees and their families return to work with renewed health and vigor after a vacation at Crane Farms.

All employees who are off work for six days or longer, no matter what the cause must have a pass from the medical department before they can resume work. By this rule the department has opportunity to pass upon the employee's physical condition as a precautionary measure; and this plan takes the place of periodic examinations.

All accidental injuries are taken care of by the medical department. Trivial cases are able to return to work after first aid. If subsequent dressings are needed, the employee comes to the medical department on the advice of nurse or physician.

If the accident is serious enough, the patient is sent home or to a hospital, whichever is deemed best. Full hospital care is furnished and everything is done for the patient until the disability is removed.

We find a large number of our employees injured by non-industrial accidents—falls on sidewalks, by automobiles, street cars, home accidents, etc. These persons prefer to be treated by our own medical department, and sometimes they are not able to have their own medical attention. We take care of these cases the same as though the accidents had happened in our shops. Of course, in case hospitalization is needed, the patient pays his own hospital bill.

We find that some men, after confinement in their homes or in a hospital, are not yet able to return to work, though they are no longer sick. For these we have provided a sanitarium. Such cases are sent to Crane Farms, where, under care of a nurse, proper diet, exercise and expert supervision, they convalesce more readily, and go back to work in much better condition than if they had loafed around the house for two or three weeks.

The "Run Down" Employee

Again, employees are sometimes "run down." They really are not sick, but they do need rehabilitation. This type of case also is sent to Crane Farms.

There are border-line cases, not tubercular, but on the verge of tuberculosis—that is, anemic, underweight, poor appetite, living conditions not up to par. This type of case also goes to Crane Farms, where we find they make splendid improvement and come back to work with increased vitality; and in addition with the knowledge of how to care for themselves, as taught in our sanitarium.

We do not take contagious or active tubercular cases at our sanitarium. The City of Chicago and Cook County make very good provisions for care of tubercular cases; and those needing hospitalization or institutional care are sent to one of the public institutions.

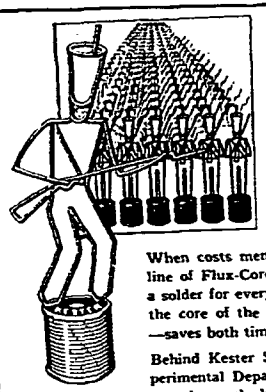
There are some cases that can get along as well at home, under supervision and proper environment. In such instances we have had sleeping porches arranged. In this way, keeping the patient under observation of the visiting nurse, a built-up resistive force is reached and the disease is arrested. If we find that the sputum is negative for tuberculosis after repeated examinations, and there is no danger of contagion, we send this type of patient to the sanitarium at Crane Farms for a few weeks.

Our medical building is in front of the company's extensive works in Chicago. The staff consists of two or more physicians and a number of qualified nurses. The building is fully equipped for all emergency work, and includes a dental office.

The main object of the department is to prevent disease and accident. Next, to care for those who may become sick or injured, and to get them back to work as soon as possible. The department feels that it has not done its duty to the company until it has performed all its obligations to the individual.

We have no benefit society, but the company pays sick benefits not to exceed fifteen dollars a week to any employee who is unable to

(Continued on page 73)



On Guard *between* You *and* High Costs

When costs menace profits—call on the Kester line of Flux-Core Solders. In the Kester line is a solder for every purpose, with the flux right in the core of the solder—simplifies the operation—saves both time and money.

Behind Kester Solder is our Research and Experimental Department—at your service to help you choose the best flux-core solder for your particular operation. Write us today. No obligation.

Established 1899
KESTER SOLDER COMPANY
Formerly CHICAGO SOLDER COMPANY
4204 Wrightwood Ave. Chicago

KESTER SOLDER
FLUX-CORE



PROTECTOSEAL
SAFETY CANS

Comply with Insurance Companies' fire regulations and are listed as standard by the Underwriters' Laboratories and Factory Mutuals.

All Protectoseal Safety Cans are equipped with screen flame baffle. Screen does not allow flame to enter reservoir chamber—preventing internal ignition. Spout and fill openings are protected whether caps are on or off.

The greatest care and materials of highest quality are used in their construction. They are manufactured in 1 quart, 2 quart, 1, 2, 3, and 5 gallon sizes.

We manufacture safety devices for hazardous liquids.

Let us quote on your requirements.

THE PROTECTOSEAL COMPANY
226 North Sheldon Street, CHICAGO, ILLINOIS

Nominate N.S.C. Directors For 1929-30

To the Members of the National Safety Council:

As provided by the by-laws of the National Safety Council, I transmit to you herewith the report of the nominating committee composed of Messrs. J. A. Northwood, chairman, Howard B. Fonda, T. G. Brabston, Herman Spoehrer, and Elmer L. Hewitt.

This committee has unanimously nominated the following for election as directors of the National Safety Council at the Annual Meeting in Chicago, on September 30, 1929, to succeed the directors whose terms of office expire at that time, and to hold office for three years:

H. B. Flowers, president, New Orleans Public Service, Inc., New Orleans, La.

T. W. Bachus, vice-president and general manager, Hercules Powder Company, Wilmington, Del.

Paxton Mendelssohn, philanthropist, Detroit, Mich.

The names of the folowing directors whose terms of office expire September 30, 1929, are submitted for re-election:

Lewis A. DeBlois.
G. T. Hellmuth.
Miller McClintock.
W. A. McGonagle.
John A. Oartel.
C. E. Pettibone.
Henry A. Reninger.
Dr. A. D. Risteen.
Charles B. Scott.
Harry M. Webber.
Albert W. Whitney.
W. H. Winans.

In addition to these nominations by the committee, the by-laws provide that "not less than ten members may, in writing, make their nominations for successors to the directors whose terms of office shall expire in that year, upon filing the same in writing with the secretary of the Council at least 30 days prior to the date of the holding of the Annual Meeting."

The by-laws further provide that "no person may be voted for or elected a director who shall not have been regularly nominated in either of the manners above set forth"—that is, either by the nominating committee or as outlined in the preceding paragraph.

W. H. CAMERON,
Managing Director.

Keep Them Well and Keep Them Working

(*Continued from page* 11)

work by reason of sickness, provided such employee has been with the company six months. The limit of the benefit is ten weeks, but this limit may be extended by request of the medical department.

Group insurance is carried for all employees, the policy becoming effective one year after the employee begins work for the company. The individual policy is for $500, increasing $100 each year until a maximum of $1,000 is reached.

There are two types of pensions. First, for employees 60 years of age and who have been with the company 20 years, or more. Second, a pension fund for employees who have been with the company for several years, but who are unable to work longer by reason of age, injury or sickness. A pension for widows also is provided.

In addition we have a home for widows and their half-orphan children. At this institution the children are given a good education and at the age of 16 or 17 they are supposed to begin work at some gainful and suitable occupation.

The following specific question was asked recently:

"In case of partial handicap due to accident or illness, is the employee given graduated or supervised work after return from the sanitarium?"

Dr. Andrew M. Harvey, head of our medical department, answers: "Yes. We aim to get a man back to work as quickly as possible after the accident or illness, as one of the best means for his full recovery. If the man is not able to do his regular work, we furnish some type of work that he can do, and when he is able to go to his regular job, he does so. Personally, I think that too much attention has been given to training men for work with which they are unfamiliar—for example, trying to make a wood-pattern maker out of a locomotive engineer. My experience has been that men do better work and get along better in their work if they can get back to the type of work they were doing before they were temporarily incapacitated. Of course, in case of sickness, such as tuberculosis or heart disease, frequently it is advisable to change the type of work and put the employees on jobs where they may 'carry on' in spite of their physical handicap. But this is true only in rare instances."

The record made by our medical department is an enviable one. Under certain types of work the State of Illinois requires monthly examination for occupational diseases. Therefore, we examine monthly certain men employed in the melting and manufacture of brass, nickel, in chromium plating, etc. But our main object is to maintain conditions so that such diseases do not arise. We have never had to report such a case to the state.

The fact that for a period of five years—the latest five-year period reported, 1922-1927—we topped the list for comparative purposes—that is, we had the smallest number of employees sick for eight days or longer—would seem to prove the effectiveness of our method of health supervision.

Does it pay?

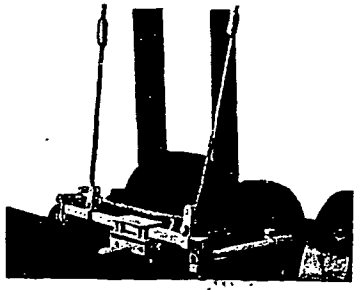
A general answer would be: We continue it, enlarge it, increase its scope and influence. We would not do this if it did not pay.

I venture to say that our medical department pays larger dividends continuously on the money invested in it than any of our producing departments.

The Reznor Quick-Acting, Safety Belt Shifter

is an intensely practical device for preventing accidents on lathes, drill presses, shapers and other tools with cone pulleys.

A sure booster of production!



The men like it!

Mr. Plant Manager—It would be a good idea for you to know why a long list of the best known plants in this country have equipped with Reznor Belt Shifters. Here is a real opportunity to make a showing in 1929.

REZNOR MFG. CO. - - - MERCER, PENNSYLVANIA

National Safety News

Index to Vol. XX, July-December, 1929, Inclusive

A

Abrasive Wheels: "Grinding wheel guard of unusual design." November, p. 96. Shield, July, p. 91.

Absenteeism: "Health and safety, or sickness and accident?" (Hoag), October, p. 99; 100.

Accident Proneness: "Discovering traits that make unsafe trainmen." (Smith), July, p. 31-32.

"Do traffic accidents happen by chance?" (Baker). September, p. 12-14.

Accident Records: American Rolling Mill Co., October, p. 138.

American Writing Paper Co., July, p. 46.

Astoria Light, Heat & Power Co., July, p. 45.

Atlantic Refining Co., August, p. 48.

Bethlehem Steel Co., December, p. 90.

Bird & Son, Inc., November, p. 96.

Carpenter Steel Co., July, p. 45.

Central Illinois Light Co., September, p. 84.

Chicago & Illinois Midland Railway, August, p. 52; September, p. 84.

Chrysler Corp., October, p. 138.

"Commonwealth pattern shop has five safe years," December, p. 42.

Consolidated Gas Co., July, p. 45.

Consolidated Cement Corp., July, p. 45.

Cornell Wood Products Co., July, p. 45.

Duquesne Light Co., December, p. 90.

Equitable Gas Co., September, p. 82.

Georgia Power Co., December, p. 90.

Hercules Powder Co., August, p. 52.

Himes, Edward, Lumber Co., September, p. 85.

Indiana Steel & Wire Co., October, p. 136.

Kearns-Gorsuch Bottle Co., July, p. 45.

Kellogg Co., August, p. 52.

Kenmont Coal Co., August, p. 52.

Marmon Motor Car Co., November, p. 96.

Matthieson Alkali Works, Inc., August, p. 52.

Metropolitan Iron Foundry, December, p. 90.

Midvale Co., July, p. 48.

Minas de Matahambre, July, p. 48.

Mountain Ice Co., September, p. 84.

"M. S. A. receives Rice trophy," September, p. 32.

Marmon Motor Car Co., November, p. 96.

National Carbon Co., August, p. 52; October, p. 138.

New Amsterdam Gas Co., July, p. 45; August, p. 52. (Correction.)

Phelps-Dodge Corp., September, p. 84.

Pittsburgh Limestone Co., September, p. 84-85.

Public Service Company of N. H., October, p. 136; November, p. 96.

Public Service Co., (Okla.), September, p. 85.

Pullman Co., December, p. 89.

"Pullman wins St. Louis Safety trophy," September, p. 14.

Raritan Copper Works, July, p. 48.

St. Louis Smelting & Refining Works, July, p. 48.

Shell Petroleum Corp., November, p. 96.

Standard Oil Company of California, October, p. 139.

Steel Co. of Canada, Ltd., December, p. 90.

Tennessee Copper Co., November, p. 96.

Union Carbide & Carbon Research Laboratories, Inc., October, p. 139; November, p. 97.

U. S. Industrial Alcohol Co., July, p. 48.

U. S. Refining Co., July, p. 48.

Western Union Telegraph Co., July, p. 48.

"Why industrial accident rates go up and down," (Grieve), August, p. 11-12.

Accident Reporting: "Cashing in on accident records." (Simpson), November, p. 19-20; 93-94.

Accidents—Causes: "Cashing in on accident records." (Simpson), November, p. 19-20; 93-94.

"Discovering traits that make unsafe trainmen," (Smith), July, p. 31-32.

"Do traffic accidents happen by chance?" (Baker), September, p. 12-14.

"Handling materials a serious accident problem of the food industry," (Beyer and Clair), December, p. 13-14; 65; 70.

In "Where accidents occur in the gas works," (Durfee), November, p. 38; 40.

"Inexperienced help causes many mishaps," December, p. 70.

"Mapping the bad spots," (Slocombe), September, p. 86; 88.

"Why industrial accident rates go up and down," (Grieve), August, p. 11-12.

Accidents—Costs: In "Cashing in on accident records," (Simpson), November, p. 19-20; 93-94.

In "Public education for public safety," December, p. 34; 36; 77.

"Why do small plants resist safety?" (Reimold), September, p. 15-16; 76-77.

"Hospitals share cost of traffic accidents," (Frankel), September, p. 82; 88.

Accidents—Statistics: Ager, In "Accidental injuries menace American youth," December, p. 59.

Bakeries, in "Baking company holds national 'Safety Always' week," December, p. 27.

Bus, in "Making the bus a safe neighbor on the highway," (Wood), October, p. 126.

"California industries reduce fatalities," July, p. 92.

"Children benefit from community safety work," (Battey), October, p. 66.

Cement Industry, in "Putting 'Punch' into a safety campaign." (Dempster), December, p. 25; 72.

"Connecticut issues study of motor-vehicle deaths," December, p. 78.

"Contest lowers frequency rates in public utilities," November, p. 56.

"Detroit fireworks ordinance prevents casualties," October, p. 122.

"Disasters appall the public," August, p. 63-64.

Electric Railways, in "Making the bus a safe neighbor on the highway," (Wood), October, p. 126.

Eye injuries, in "Goggles for the man or guards for the machines?" (Muir), September, 1929, p. 50; 52.

"Feet—keep in the clear or keep them covered," (Quesnel), September, p. 90; 92.

Gas Industry, in "Lacledе drivers win trophy," October, p. 90.

Gas Industry, in "Where accidents occur in the gas works," (Durfee), November, p. 38; 40.

Grade Crossings, in "More autos running into sides of trains," September, p. 85.

Home, July, p. 81; August, p. 79; September, p. 107; October, p. 141; November, p. 71; December, p. 78.

Hotels, "Safety behind the scenes in the world's largest hotel," (Briggs), October, p. 74-76.

Iron and Steel, in "Thirty-four mills compete in first Iron and Steel Contest," November, p. 54.

"Large plants are the safest," (Grieve), October, p. 107-108.

"Machine accidents decline in Massachusetts," December, p. 76.

Marine, in "Safety on the 'Leviathan'," (Bunker), October, p. 79-80; 142.

Mines, in "Pennsylvania reports mine accident experience," November, p. 40.

Mines, in "Supervision prevents falls of miners and materials," September, p. 96.

Minors, in, "Accidental injuries menace American youth," December, p. 89.

"More power—fewer accidents," (Sumner), September, p. 46; 48.

Navy Yards—U. S., July, p. 98.

"1929 Outlook for industrial safety," (Grieve), September, p. 31-32.

Non-Industrial: "Keep them well and keep them working." July, p. 10-11; 78.

Paper Industry, in "Contests keep down mishaps for Niagara Wall Paper," October, p. 123.

Paper Industry, in "Mills receive trophies in paper industry," November, p. 50; 52.

Petroleum, in, "Present 11 plaques in Petroleum Safety Contest." November, p. 55.

Public Utilities, in "Where accidents occur in the Gas Works," (Durfee), November, p. 38; 40.

Railroad Shops, in "Practical safety work in the Colonie shops," (Becker), October, p. 109-110; 157.

Railroads, Great Britain, October, p. 143.

Railroads, "Japan reports 200,000 rail accidents a year," October, p. 114.

Railroads, "Railroad executives praise National Safety Contest," October, p. 143.

Railroads, "Railway accidents, study in 21 countries," September, p. 111.

"Serious industrial accidents decline, 1926-1928," (Grieve), December, p. 21-22.

"Steel industry reduces accidents, 1913-1928," December, p. 48-49.

"Theater built without loss of life," August, p. 72.

"Why industrial accident rates go up and down," (Grieve), August, p. 11-12.

Accidents—Statistics—Foreign Countries: Great Britain, October, p. 143.

"Japan reports 200,000 rail accidents a year," October, p. 114.

Acids: "Hydrochloric acid clears well of corrosion," December, p. 30.

"Keeping sulphuric acid in safe confinement," September, p. 94; 96.

"Safety device for the acid retort," December, p. 30.

Aged Workers: "Investigate problem of the older workers," September, p. 52.

Africh, H. W.: "Gas explosion causes present no mysteries," September, p. 92; 124.

American Legion: "Legion post sponsors state-wide poster contest," September, p. 66.

American Public Health Association: "Industrial Hygiene Section Conference," (Saprington), November, p. 48.

"A. S. M. E. offers prize for best paper on safety," July, p. 38.

Anvils: "Now the anvil has a safety device," November, p. 29.

Armour & Co.: "No mistake about the safety committeemen," September, p. 30.

"Plants observe fire prevention week," December, p. 60.

Associated Industries, N. Y. State: "N. Y. plants compete in fifth state wide contest," November, p. 66.

Atlantic Refining Co.: "Inter-plant contests have reduced our accidents," (McKenty), August, p. 46.

"Australian Safety Council Holds Annual Meeting," October, p. 106.

Automobile Driving: "Bulletin board is adapted to special use," October, p. 105.

"Dairy company discourages stealing rides," August, p. 29.

"Do traffic accidents happen by chance?" (Baker), September, p. 12-14.

"Dummy hand signals for the truck driver," December, p. 20.

"Making safety part of the ice man's job," (Fish), August, p. 17-18; 70.

"New rear light on trailers will reduce accidents," November, p. 29.

"Prayer suggested for the motorist," September, p. 28.

"Public education for public safety," (Kemper), December, p. 34; 36; 77.

"This distribution truck has a sliding roof," November, p. 29.

"Training the bus driver," (Howell), September, p. 56; 121-122.

Automobile Driving—Drivers' Examinations: "Do traffic accidents happen by chance?" September, 1929, p. 12-14.

"Organizing safety inspection," (Smith), September, p. 42; 44.

Automobile Driving—Laws and Regulations: "Do traffic accidents happen by chance?" (Baker). September, p. 12-14.

Automobiles: "Vertical exhaust pipe now dissipates gases," September, p. 27.

Automobiles—Accident Statistics: Bus, in "Making the bus a safe neighbor on the highway," (Wood), October, p. 126.

"Cashing in on accident records," (Simpson), November, p. 19-20; 93-94.

"Children benefit from community safety work," (Battey), October, p. 66.

Cities: July, p. 80-81; August, p. 78-79; September, p. 106-107; October, p. 140-141; November, p. 70-71; December, p. 78.

"Hospitals share cost of traffic accidents," (Frankel), September, p. 82; 88.

"Tragic cases of those who do not die," (Leary), July, p. 16; 74-75.

Automobile Industry: Chrysler Corporation, October, p. 138.

Marmon Motor Car Co., November, p. 96.

Aviation: "Flying demands fitness," (Miller), July, p. 21-22.

In "Increasing navigation aids help marine safety," December, p. 92.

"Test extinguishing mediums on airplane fires," November, p. 105.

B

Babbitt: "This babbitt ladle has an adjustable opening," November, p. 28.

Baker, J. S.: "Do traffic accidents happen by chance?" September, p. 12-14.

Bakeries: "Baking company holds national 'Safety Always' week," December, p. 27.

"Guarding the hopper of the molding machine," September, p. 29.

In "Handling materials—a serious accident problem of the food industry," (Beyer and Clair), December, p. 13-14; 68; 70.

In "Trophy or goat?" July, p. 12; 70.

Balloons: "Attempt to fly Atlantic," December, p. 60.

Barrels: "Simple device for unloading oil barrel," September, p. 28.

"Vertical method of piling barrels," October, p. 105.

Battey, A. D.: "Children benefit from community safety work," October, p. 86.

Becker, H. G.: "Practical safety work in the Colonie shops," October, p. 109-110; 157.

Belts—Safety: See Harnesses.

Benzol: "Organizing safety inspection," (Smith), September, p. 42; 44.

In "Their accident rate wasn't high," (Fish), July, p. 17-18.

Beyer, D. S. and Clair, R.: "Handling material—a serious accident problem of the food industry," December, p. 13-14; 65; 70.

Biggs, W. P.: "Navy applies industry's methods," July, p. 27-28.

Boilers: "Glass guard for the steam boiler gage glass," November, p. 31.

Bonus Systems: "Training the bus driver," (Howell), September, p. 56; 121-122.

Bookbinding: "Their accident rate wasn't high," (Fish), July, p. 17-18.

Brakes—Automobiles: In "Getting the accident facts and educating the public," (Reeder), October, p. 113-114.

"Making the bus a safe neighbor on the highway," (Wood), October, p. 87-88; 126.

"Breaking the Seven Seals of Safety," (Burlingame), December, p. 17-18; 42.

Brewer, C. E.: "Recreation safeguards mind and body," August, p. 21-22; 73-74.

Briggs, G. M.: "Keeping the oiler out of machinery," July, p. 19-20.

"Safety behind the scenes in the world's largest hotel," October, p. 74-76.

Brooms: "One standard broom has been discarded," September, p. 28.

Bullard, E. W.: "California teams compete in first aid meet," July, p. 46.

Bulletin Boards: "Are you proud of your bulletin board?" December, p. 82.

"Be on the lookout for striking pictures," October, p. 150.

"Bulletin board is adapted to special use," October, p. 105.

"Candles for safety," December, p. 30.

"Give your bulletin board a personality," November, p. 98.

"Good order," October, p. 150.

"He knows his groceries," December, p. 82.

"Here's a suggestion," August, p. 82.

"How about a contest?" October, p. 150.

"Illumination," September, p. 114.

In "Safety behind the scenes in the world's largest hotel," (Briggs), October, p. 74-76.

"Location," July, 1929, p. 52.

"Portable bulletin board produces effect," July, p. 42.

"Practical safety work in the Colonie shops," (Becker), October, p. 109-110; 157.

"Removable background board saves trouble," November, p. 96.

"This dial keeps accident scores up to date," October, p. 103.

"Try a tripod," September, 1929, p. 114.

"Variety," August, 1929, p. 82.

"What do you do with old posters?" September, 1929, p. 114.

Bulletins: See Posters.

Bumpers: "Bumper device keeps car from rolling," October, p. 103.

"Efficiency and safety in handling materials," October, p. 104.

Bunker, W. L.: "Safety on the Leviathan," October, 1929, p. 79-80; 142.

Bureau of Public Accident Prevention: In "Cashing in on accident records," (Simpson), November, p. 19-20; 93-94.

Burlingame, L. D.: "Breaking the seven seals of safety," December, p. 17-18; 42.

Burns: "Cement burns need prompt attention," October, p. 103.

Bus Transportation: "Making the bus a safe neighbor on the highway," (Wood), October, p. 87-88; 126.

"Training the bus driver," (Howell), September, p. 56; 121-122.

C

Cages: "Safety device for the acid retort," December, p. 30.

Calendar: "Safety calendar deserves special attention," November, p. 78.

Calenders: "Slotted nip guard on this machine," September, p. 30.

Camera: "Cheap camera aids in city clean-up," October, p. 125.

Campaigns—Industrial: "Baking company holds national 'Safety Always' week," December, p. 27.

"Bidding for the employee interest in safety," October, p. 102.

In "Safety on the Leviathan," (Bunker), October, p. 79-80; 142.

"Increased safety activity follows merger," August, p. 68-70.

"New York industries plan new safety campaign," July, p. 66

"N. Y. City industries plan safety drive," November, p. 104.

"N. Y. Governor names Labor Safety Board," August, p. 52.

"N. Y. plants compete in fifth state-wide contest," November, p. 66.

"Putting 'Punch' into a safety campaign," (Dempster), December, p. 25; 72.

"This clock tells about accidents and games," (Standard Oil Co.), August, p. 28.

"Trophy or goat?" July, p. 12; 70.

"Y. M. C. A. sponsors industrial safety contest," September, p. 14.

Candee, S. W.: "Where industrial safety work is most effective," August, p. 42-75.

Carbide: "Carbide dispenser cleverly designed," September, p. 27.

Carbon Dioxide: "How carbon dioxide is used to extinguish fire," (Leerburger), September, p. 74; 106.

Carbon Monoxide: "Vertical exhaust pipe now dissipates gases," September, p. 27.

Carbon Tetrachloride: "Safe and efficient cleaners for metal parts," October, p. 125; 129.

Cartoons: "Careless man's nightmare," (Lowry), September, p. 56.
"If you like cartooning, here are some pointers." (Youngren), December, p. 82.

Carts: "Protecting the convenient work cart," August, p. 27.

Cement Industry: "Cement burns need prompt attention," October, p. 103.
Consolidated Cement Corp., July, p. 45.
"Putting 'Punch' into a safety campaign," (Dempster), December, p. 25; 72.

Chains: "Bronze chains may resist action of acids," August, p. 26.
"Grounding transmission and distribution lines," (Johnson), August, p. 15-16; 56-57.

Chairmen—N. S. C.: Officers — Lists; November, p. 42; 44; 84; 92.

Chemical Industry: Hercules Powder Co., August, p. 52.
Matheson Alkali Works, Inc., August, p. 52.
National Carbon Co., August, p. 52; October, p. 139.
Union Carbide & Carbon Research Laboratories, Inc., October, p. 139.
Union Carbide & Carbon Corp., November, p. 97.
U. S. Industrial Alcohol Co., July, p. 45.

Children—Safety Work With: "Dairy company discourages stealing rides," August, p. 29.
"Baking company holds 'Safety Always' week," December, p. 27.
"Education—the part it plays in safety," (Finley), July, p. 15; 75.
"Home safety in the community," (Miller), October, p. 94; 96; 134.
In "Getting the accident facts and educating the public," (Reeder), October, p. 113-114.
"Junior high school patrol wins city's approval," December, p. 29.
"Legion post sponsors state-wide poster contest," September, p. 66.
"Messenger boys join junior safety council," December, p. 90.
"Mexican children learn thrift and safety at school," December, p. 66.
"Recreation safeguards mind and body," (Brewer), August, p. 21-22; 73-74.
"Schools not liable for injuries to patrol boys," July, p. 20.
"Significance of child safety," (Wishart), December, p. 10-11.
"Stimulating safety among school children," December, p. 28.

Chip Screens: "Others are well protected by this screen," December, p. 31.

Chip Shields: "Flying chips are stopped by this safeguard," August, p. 28.
"Goggles for the man, or guards for the machine." (Muir), September, p. 50; 52.
"Novel chip breaker and guard assure safety," October, p. 104.
"Now the anvil has a safety device," November, p. 29.

Christmas: "Candles for safety," December, p. 20.
Editorials, December, p. 9.

Chute Gate: "Chute gate reduces accidents," November, p. 30.

Clair, R. and Beyer, D. S.: "Handling materials—a serious accident problem of the food industry," December, p. 13-14; 68-70.

Clamps: In "Practical safety work in the Colonie shops," (Becker), October, p. 109-110; 157.

Cleaning Fluids: "Safe and efficient cleaners for metal parts." October, p. 125; 139.

Clocks: "Safety slogans displayed by time clock," November, p. 30.
"This clock tells about accidents and games," August, p. 25.
"Turnstile and time card box spread safety," December, p. 25.
"U. S. Rubber Co. accidents drop in May drive," August, p. 46.

Clothing—Industrial: "Keeping the oiler out of machinery," (Briggs), July, p. 19-20.
In "Women invade men's industrial meetings," (Jonsberg), October, p. 89-90.
"Navy applies industry's methods," (Biggs), July, p. 27-28.
"Utility 'all-weather' suit," October, p. 159.

Clothing—Loose: In "Training safe workers for tomorrow's jobs," (Graham), September, 1929, p. 10-11; 77.

Cold Weather Hazards: See Winter Hazards.

Coleman, C. W.: "Show them the savings," September, p. 26.

Colors: "Organizing safety inspection," (Smith), September, p. 42-44.
"Visibility versus hazard," (Peterson), November, p. 32.

Committees: In "Baking company holds national 'Safety Always' week," December, p. 27.
"Increased safety activity follows merger," August, p. 68-70.
"No mistake about the safety committeemen," September, p. 30.
"Study safe practices pamphlets when committees grow stale," November, p. 72.

Compensators: "Centralized motor units avoid confusion," October, p. 104.

Compressed Air: See Hammers, Pneumatic.

Conferences: "Coming Events," July, p. 92; August, p. 51; September, p. 113; October, p. 141; November, p. 71; December, p. 79.
"Industrial Hygiene Section, A. P. H. A." (Sappington), November, p. 45.
"International Conference on Safety at Sea strengthens safety code," July, p. 77.
"Lake Superior Mining Conference meets at Duluth," August, p. 89.
"N. J. calls Second Highway Conference," November, p. 69.
"Northwestern Pennsylvania Safety Conference," July, p. 64.
"Ohio Valley Safety Conference," July, p. 66.
"Rocky Mountain Conference to be held," November, 15-16, p. 92.
"Second Annual Gulf States Safety Conference," July, p. 64.

Congress—N. S. C.—1929—Chicago: "Chicago unites in planning Safety Week," October, p. 132.
"College course in safety," September, p. 9.
"Congress program highlights," August, p. 27; 60.
"Health sessions at the Congress," (Sappington), November, p. 48.
"Interest and attendance reach New mark at Congress," November, p. 15-16; 67.
"On the Congress Programs," (photographs of speakers), October, p. 106.
"Safety event of 1929," September, p. 33-40.
"Significance of the Congress," November, p. 9.
"Since 1912," October, p. 69.
"Taking in the exposition," (MacKnight), November, p. 34; 36.
"What's new on the annual Congress Program?" July, p. 32.

"Connecticut Issues Study of Motor-Vehicle Deaths," December, p. 78.

Conner, J. F.: "Safeguards for pneumatic hammers," September, p. 60.

Construction Industry: "Loan companies can aid construction safety," September, p. 122.
"Modern skyscraper holds out an apron," August, p. 30.
"Pitfalls on the construction job," December, p. 40.
"Substantial guarding for the elevator shaft," August, p. 29.

Contests: "All around good work won this safety trophy," December, p. 88.
"Alleg[illegible] division wins Penn-sylvania [illegible] p. 89.
"[illegible] winners of Plant Publication Contest," November, p. 97.
"Banner awarded to Rochester, N. Y.," November 5, p. 18.
"Contest [illegible]ers frequency rates in public utilities," November, p. 56.
"Contests keep down mishaps for Niagara Wall Paper," October, p. 123.
Duquesne Light Co., December, p. 90.
"Governor congratulates mill on safety trophy," December, p. 12.
"How about a good 81?" October, 1929, p. 150.
"[illegible] First-Aid Meet at Kansas City," November, p. 63.
"Inter-plant contests have reduced our accidents," (McKenty), August, p. 46.
"Laclede drivers win trophy," October, p. 90.
"Legion post sponsors state-wide poster contest," September, p. 66.
"Mills receive trophies in paper industry," November, p. 60; 62.
"New Jersey Launches second industrial contest," October, p. 86.
"N. Y. City industries plan safety drive," November, p. 101.
"N. Y. plants compete in Fifth State-wide Contest," November, p. 66.
"Penn-Ohio System wins trophy in N. E. L. A. Contest," November, p. 105.
"Petroleum Section, annual safety contest," July, p. 62; August, p. 92; November, p. 58.
"Pullman Co. distributes trophy posters," August, p. 26.
"Pullman wins St. Louis safety trophy," September, p. 14.
"Railroad executives praise National Safety contest," October, p. 143.
"Stimulating safety among school children," December, p. 28.
"Thirty-four mills compete in first iron and steel contest," November, p. 54.
"U. S. Rubber Co. accidents drop in May drive," August, p. 46.
"Win W. Va. first-aid title," November, p. 76.
"Y. M. C. A. sponsors industrial safety contest," September, p. 14.

Conveying Machinery: "Busy conveyor carries safety messages," July, p. 40.
"This hopper fed conveyor removes waste," December, p. 31.

Corrosion: "Checking up in the oil refinery," (Ziegler), September, p. 62; 102-103.
"Hydrochloric acid clears well of corrosion," December, p. 20.
"Keeping sulphuric acid in safe confinement," September, p. 94; 96.
"Small heating unit keeps the switch box dry," October, p. 104.
"When corrosion may weaken hand rails," October, p. 102.

Couplings: "Dairy company discourages stealing rides," August, p. 29.
"Safety coupling for the pneumatic tool," December, p. 28.
"This coupling device insures employees safety," November, p. 31.

Crane Company: "Keep them well and keep them working," (McEachren), July, p. 10-11; 73.

Cranes: "Safeguarding the crane block thoroughly," September, p. 28.
"Teamwork for the crane and wheelbarrow," October, p. 103.
"Temporary support for the heavy boom," August, p. 30.

Cranes—Locomotive: "Guarding the locomotive crane reduces accidents," August, p. 29. Noted as patented device, September, p. 111.

Currie, R. D. and Forbes, J. J.: "Wholesale first-aid training reduces mine accidents," November, p. 27; 64-66.

Cylinders: "Storage rack for the gas cylinders," August, p. 30.

D

Dams: In "Disasters appall the public," August, p. 63-64.

Davis, C. G.: In "Street and highway traffic section organized," December, p. 48.

Davis, J. J.: "Universal safety—the ideal of our industrial future," August, p. 10; 76-77.

Delaware & Hudson Co.: "Practical work in the Colonie shops," (Becker), October, p. 109-110; 157.

Dempster, Jack: "Putting 'punch' into a safety campaign," December, p. 25; 72.

Denny, E. H.: "Metal mines need good ventilation," October, p. 83-85; 145-147.

Detroit Public Schools: "Training safe workers for tomorrow's jobs," (Graham), September, p. 10-11; 77.

Disasters: "Disasters appall the public," August, p. 63-64.

Diseases—Occupational: "Industrial Health," (Sappington), October, p. 118; December, p. 44.

Drills: "Novel chip breaker and guard assure safety," October, p. 104.

Drop Hammers: "Drop hammer pulls the arms out of danger," September, p. 29.

Drums: "Keeping sulphuric acid in safe confinement," September, p. 94; 96.

Durfee, E. P.: "Where accidents occur in the gas works," November, p. 38; 40.

Dust Health Hazards: "Wetting down muck piles in Tri-State mines," August, p. 31.

E

Editorials: "Accident bookkeepers," (Forney), December, p. 9.
"Asking questions," (Jacobs), September, p. 9.
"Christmas story," December, p. 9.
"College course in safety," September, p. 9.
"David Van Schaack," December, p. 9.
"Fire prevention week," October, p. 69.
"Good advertising," August, p. 9.
"Great souls and level heads," July, p. 9.
"Hazardous holidays," July, p. 9.
"Internationalism of safety," (Cameron), October, p. 69.
"Light's Golden Jubilee," October, p. 69.
"The mouth as a safety valve," August, p. 9.
"News-Letters," (Ferguson), September, p. 9.
"No vacation for safety," (Wheeler), August, p. 9.
"Office of the future," September, p. 9.
"Our tenth anniversary," November, p. 9.
"Responsibility," (Ferguson), December, p. 9.
"Safeguarding machinery at its source," November, p. 9.
"Safety on the air," August, p. 9.
"Significance of the Congress," November, p. 9.
"Since 1912," October, p. 69.
"Vacation time," July, p. 9.

Education: "Cincinnati firemen become expert first-aiders," December, p. 52.
In "Getting the accident facts and educating the public," (Reeder), October, p. 113-114.
In "Where accidents occur in the gas works," (Durfee), November, p. 38; 40.
"The part it plays in safety," (Finley), July, p. 15; 75.
"Wholesale first-aid training reduces mine accidents," (Forbes & Currie), November, p. 27; 64-65.

Electrical Equipment: "Efficient slaves of intelligent masters," (Ryan), October, p. 116; 126.
"Where tape barrier warns of danger," July, p. 41.

Electrical Hazards: "Efficient slaves of intelligent masters," (Ryan), October, p. 116; 126.
"Grounding transmission and distribution lines," (Johnson), August, p. 15-16; 56-57.
"Sewn soles are safer," July, p. 18.
"When the utility employee can help the doctor," (Wilson), October, p. 81-82.

Electric Railways: "Discovering traits that make unsafe trainmen," (Smith), July, p. 31-32.
"Mapping the bad spots," (Shoemaker), September, p. 66. 88.
"Operator has to get inside the railing," November, p. 31.
"They got quite a kick out of this safety kink," (*Spanish poster on mirror*), December, p. 29.

Elevators: Accidents, (Koster), September, p. 107.
"Pitfalls on the construction job," December, p. 40.
"Substantial guarding for the elevator shaft," August, p. 29.
"This elevator gate folds under the car," September, p. 28.

Embossing Machines — Guarding: In "Their accident rate wasn't high," (Fish), July, p. 17-18.

Employees' Publication Section, N. S. C.: "Announce winners of Plant Magazine contest," November, p. 97.

Employees—Training: "Discovering traits that make unsafe trainmen," (Smith), July, p. 31-32.

Endicott Johnson Corp.: "Fighting fire before it starts," November, p. 21-22; 52.

Executive Committee—N. S. C.: November, p. 42.

Exhibits: "Armour & Co. plants observe fire prevention week," December, p. 60.
"Bidding for the employee interest in safety," October, p. 102.
"Exhibitors' section of the Eighteenth Annual Safety Congress and Exposition," October, p. 1-60.
"Laclede drivers win trophy," October, p. 90.
Library—N. S. C.: Booth at Congress, November, p. 18.
"Manikins demonstrate prone pressure method," December, p. 54.
"Taking in the exposition," (MacKnight), November, p. 34; 36.
"This display aroused interest," September, p. 48.

Explosions: "Gas explosion causes present no mysteries," (Ahrich), September, p. 92; 124.

Explosives: "Metal punch preferable for priming dynamite," August, p. 92.

Eye Protection: "Calls glass-topped desk an enemy to eyesight," November, p. 36.
"Conserving eyesight is good business," (Ralston), December, p. 19-20.
"Eyes that see avoid accidents," (Kindy), July, p. 23-24.
"Goggles for the man or guards for the machines?" (Muir), September, p. 50; 52.
"Navy applies industry's methods," (Biggs), July, p. 27-28.

F

Fatigue: In "Conserving eyesight is good business," (Ralston), December, p. 19-20.
"Posture and fatigue," (Garner), August, p. 34; 36.

Feet: "Industry's losses from foot ailments," (Scott), August, p. 20.
"Keep feet in the clear or keep them covered," (Quesnel), September, p. 90; 92.

Fences: In "Planning future highways for safety," (Shoemaker), October, p. 91-92; 187.

"Final Judgment": (Foley), December, p. 22; 74.

Finley, J. H.: "Education—the part it plays in safety," July, p. 15; 75.

Fire Alarms: "Industrial fire alarm system," November, p. 105.

Fire Departments: In "Fighting fire before it starts," November, p. 21-22; 52.
"Cincinnati firemen become expert first aiders," December, p. 52.

Fire Extinguishers: "How carbon dioxide is used to *extinguish fires*," (Leerburger), September, p. 54; 108.
"Test extinguishing mediums on airplane fires," November, p. 105.
"Visibility versus hazard," (Peterson), November, p. 32.

Fire Prevention: "Armour & Co., plants observe fire prevention week," December, p. 60.
"Cheap camera aids in city clean-up," October, p. 125.
"Checking up in the oil refinery," (Ziegler), September, p. 62; 102-103.
"Evidence points to light bulb as disaster cause," (Cleveland Clinic), July, p. 14.
"Fighting fire before it starts," November, p. 21-22; 52.
"Fire prevention week," October, p. 69.
In "Safety on the Leviathan," (Bunker), October, p. 79-80; 142.
"Metal mines need good ventilation," (Denny), October, p. 83-85; 145-147.
"Protecting a modern building," September, p. 120.
"Self-extinguishing fags for careless smokers," September, p. 104.
"Test extinguishing mediums on airplane fires," November, p. 105.