

National Safety News

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APRIL 1948

PLAINTIFF'S EXHIBIT

NSC-156

The LITTLE KING

by
O. SOGLOW

Registered U. S. Patent Office.

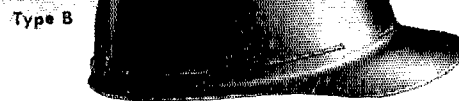
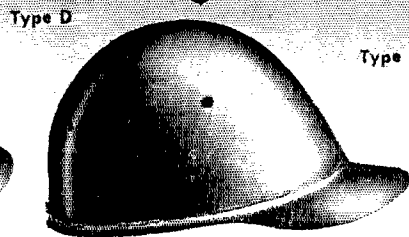
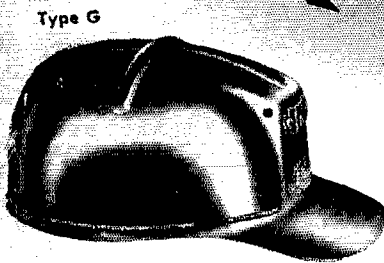
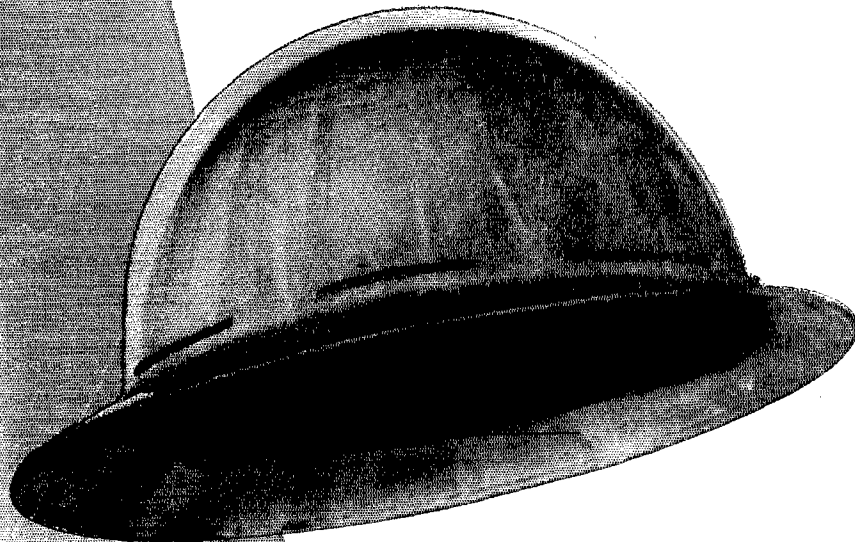
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PLANT

LET'S ALL
HELP
KEEP THE
FLOOR
CLEAN

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O. SOGLOW

**HIGH-PRESSURE MOLDED
OF LAMINATED BAKELITE**
*-The hats that take care
of their heads!*



M.S.A.

Skullgards

FEATURES

- Light and Comfortable
- Tremendous resistance to impact
- Weatherproof
- Cannot Soften, Swell or Gain in Weight
- High Dielectric Strength
- Natural Ventilation
- 7 Popular Types

Year after year, Skullgards lead in popularity for every head protection need, because these are the work hats that have every advantage today's workers need . . . strength, assured by *high pressure* molding of finest materials . . . unquestioned durability . . . lightweight balance on the head . . . and easy fitting comfort that makes friends with the wearer from the start! Check the features—write for the detailed Skullgard story in Bulletin DK-11.



MINE SAFETY APPLIANCES COMPANY

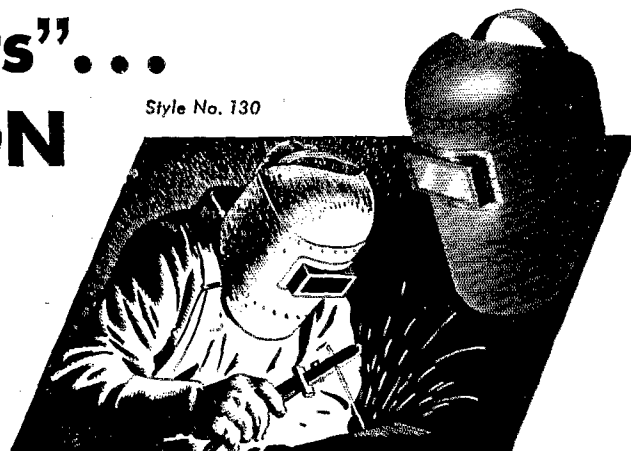
Braddock, Thomas and Meade Sts. • Pittsburgh 8, Pa.

District Representatives in Principal Cities

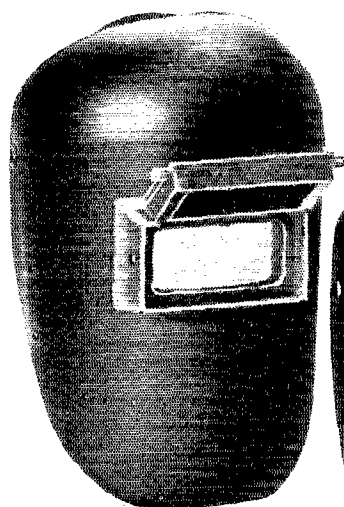
In Canada: MINE SAFETY APPLIANCES COMPANY OF CANADA, LIMITED
TORONTO • MONTREAL • CALGARY • VANCOUVER • NEW GLASGOW, N.S.

under "Arc Lights"... think of WILLSON

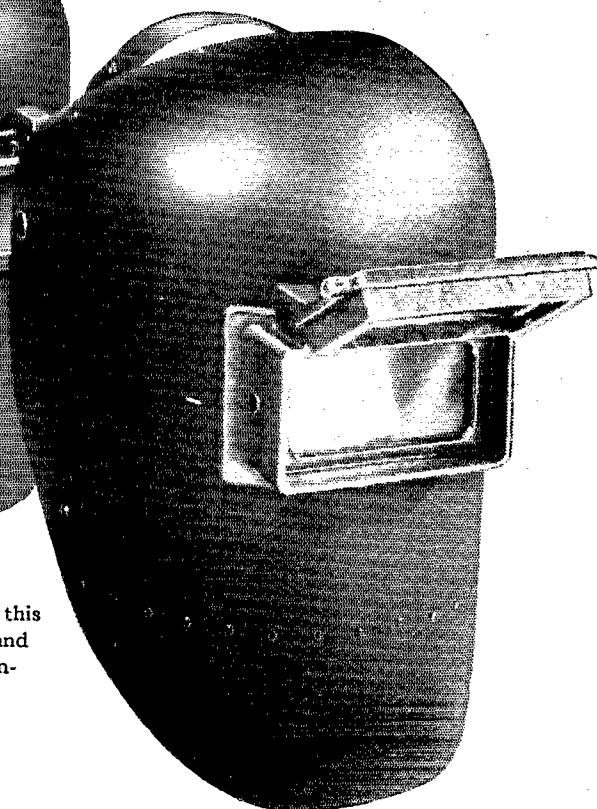
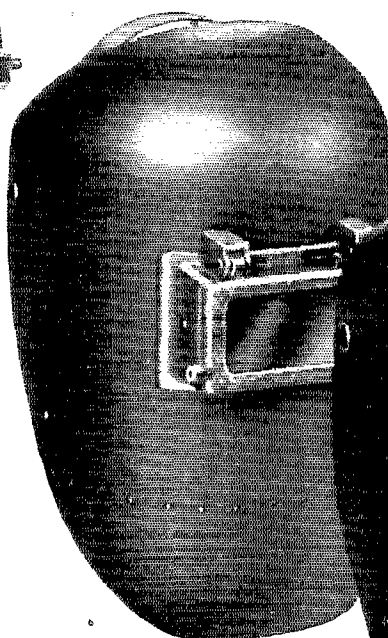
Style No. 130



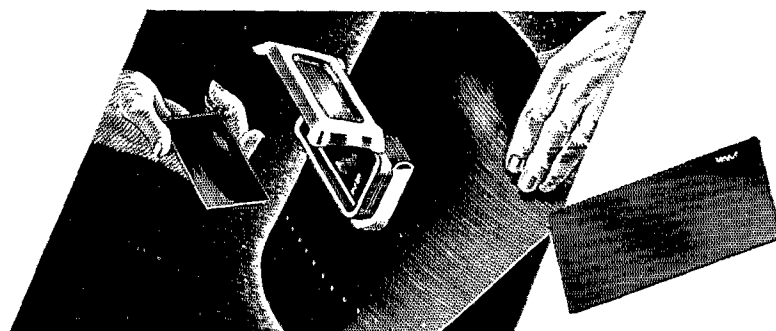
A LITTLE MONEY GOES A LONG WAY. . . to give dependable protection to face and eyes in this ruggedly built, low cost helmet. Willson-Weld glass in non-corrosive metal holder.



Style No. 605



GIVE WELDERS' EYES A LIFT . . . Flip-front on this one piece helmet allows quick, easy inspection and is convenient for working in close quarters. Willson-Weld Glass in hinged portion.



WW THE MARK OF MEASURED PROTECTION . . . The Willson-Weld* trade-mark on welding glass is your assurance of accurate grading for density of shade and thickness to meet or exceed government specifications.

For complete information on these products and their application, as well as many more eye and respiratory protective devices, get in touch with your nearest Willson distributor or write us direct.

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DOUBLE
PRODUCTS INCORPORATED

Established 1870

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*Reg. U. S. Pat. Off.

NATIONAL SAFETY NEWS



Published Monthly by the
National Safety Council

APRIL, 1948

Vol. 57, No. 4

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THE COVER: Otto Soglow's famous cartoon character, "The Little King," is now working for accident prevention. This illustration is one of a series of posters designed especially for the National Safety Council by nationally known cartoonists and made available through courtesy of PUCK, the Comic Weekly. Copyright 1948 King Features Syndicate, Inc. See page 22.

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RALPH MOSES, *Art Director*

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National Safety Council

20 North Wacker Drive

Chicago 6, Illinois

New York Office—300 Chrysler Bldg.,

New York 17. Western Office—

111 Sutter Street, San Francisco

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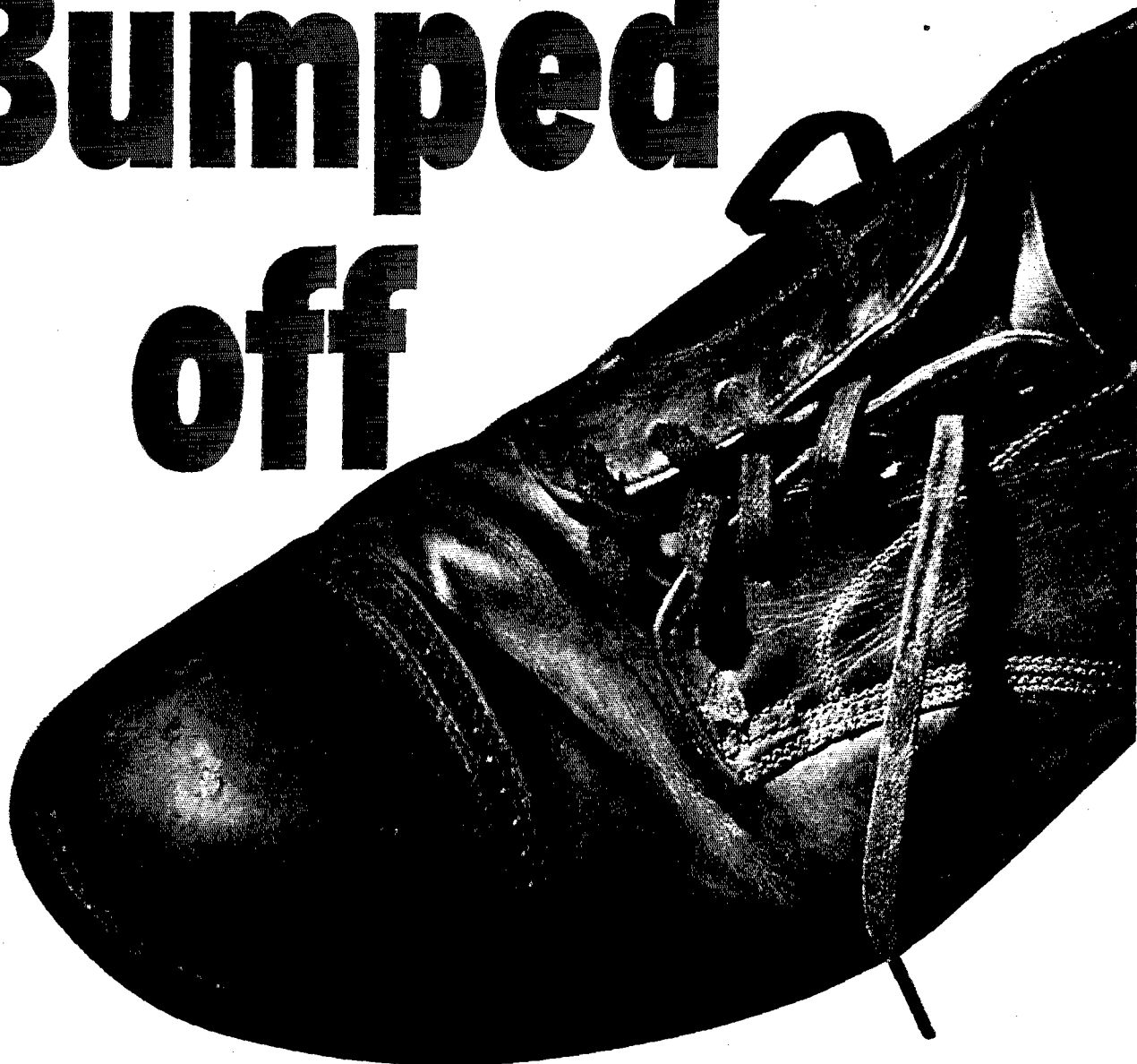
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Statements and opinions advanced in signed articles are the personal expressions of their authors, not necessarily those of the National Safety Council.

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26,800 copies of this issue were printed.

Bumped off



A workman was careless. A truck was moving. Then it happened! The truck, loaded with 2½ bone-breaking tons, lumbered right over this Lehigh. The workman wearing it yelped and clawed at the truck. The driver slammed on the brakes and leaped to help. But the yell was of fright, not pain. That tremendous mountain of weight just "bumped off" the Lockrim* Steel Toe Box without even denting it! Not a toe was touched. That's protection, Lehigh brand, the kind you can depend on. Why don't YOU?

*U. M. Reg.

FREE

See the complete Lehigh line . . . over 38 new and different types of safety shoes and boots. Send for the new Lehigh Safety Shoe and Boot Catalog #14A today.



LEHIGH

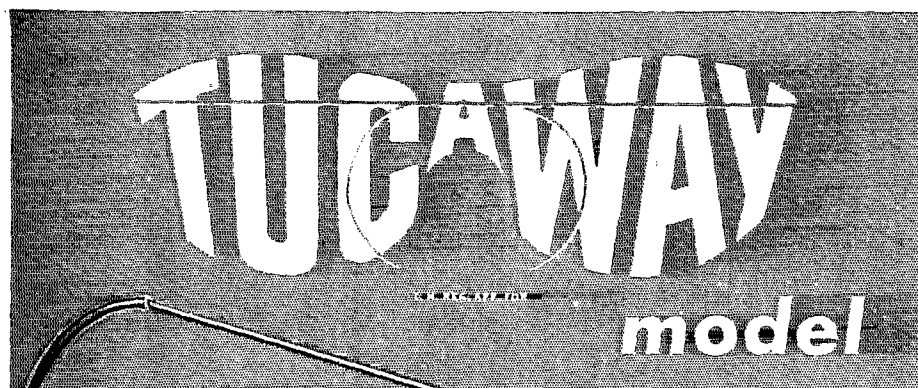
Division of the
ENDICOTT JOHNSON
CORPORATION

SAFETY SHOE COMPANY
ALLENTOWN, PA.

WESTERN OFFICE 1216 AND SPRUCE, ST. LOUIS 2, MO

NEW @Y@SAVERS

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...another Watchemoket first!

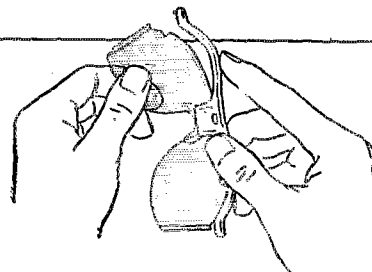
'They took two years to complete! Two years of "try and try again." But the results are revolutionary... For TucAway goggles are the **first and only** goggles of their kind. The two shatterproof, optically perfect, Impax* plastic lenses are securely socketed in deep, strong channels, yet are instantly replaceable. Retrax* metal temples can be telescoped to fit any headsize. (Also available with non-telescoping, universal-fit, plastic temples.) The Plexene plastic frame

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With three different types of Shatterproof, Optically Perfect, Replaceable Lenses—G2 (Regular Green), G3 (Medium Green), or Clear.

Click...and the lens snaps out!

Click....and another lens locks in!

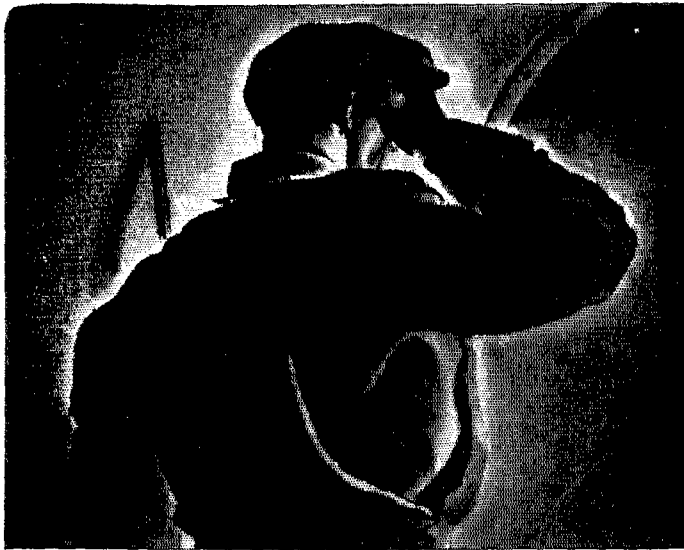


ST. M. REG.

WATCHEMOKET OPTICAL CO., INC.,
PROVIDENCE 3, RHODE ISLAND

In Canada: Levitt Safety Appliances Co., Toronto 12, Ont.
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Production Up, Workers' Skill and Morale on Top When You Put a Coppus Blower or Heat-Killer In!

Here, in the cool, fresh air circulated onto the job by a Coppus "Blue Ribbon" Blower or Exhauster, you'll find just what you were looking for —

A sure way to get the most from every man-hour . . . near furnaces . . . in tanks . . . underground cable manholes . . . in confined spaces . . . around hot processes.

Easily adaptable to a wide variety of purposes, every Coppus Blower and Exhauster is portable, and on each of them the "Blue Ribbon" is the sign of Coppus precision workmanship and trouble-free, long-lasting strength.



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**THE BLOWERS THAT PUT MORE MINUTES
IN EVERY MAN-HOUR**

CABLE MANHOLE AND TANK VENTILATORS — BOILER MANHOLE BLOWERS AND EXHAUSTERS — HEAT KILLERS — SHIPHOLD VENTILATORS . . . DESIGNED FOR YOUR INDUSTRY — ENGINEERED FOR YOU

MAIL THIS COUPON To Coppus Engineering Corp., 124 Park Avenue, Worcester 2, Mass. Sales offices in THOMAS' REGISTER. Other "Blue Ribbon" Products in BEST'S SAFETY DIRECTORY.

PLEASE SEND ME INFORMATION ON SUPPLYING FRESH AIR TO MEN WORKING:

- | | | |
|--|--|---|
| ☐ in tanks, tank cars, drums, etc. | ☐ on boiler repair jobs. | ☐ exhausting welding fumes. |
| ☐ in underground cable manholes. | COOLING: | ☐ stirring up stagnant air wherever men are working or material is drying. |
| ☐ in aeroplane fusilages, wings, etc. | ☐ motors, generators, switchboards. | ☐ drying of walls, sheets; etc., after treated with coating material. |
| ☐ on coke ovens. | ☐ wires and sheets. | |
| ☐ on steam-heated rubber processes. | ☐ general man cooling. | |
| | ☐ around cracking stills. | |

NAME.....

COMPANY.....

ADDRESS.....

CITY.....

(Write here any special ventilating problem you may have.) }

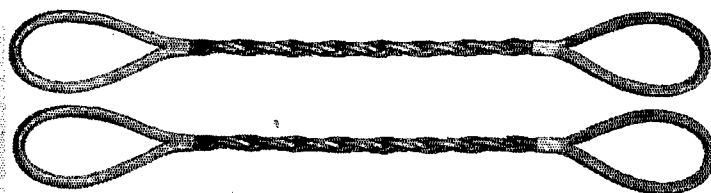
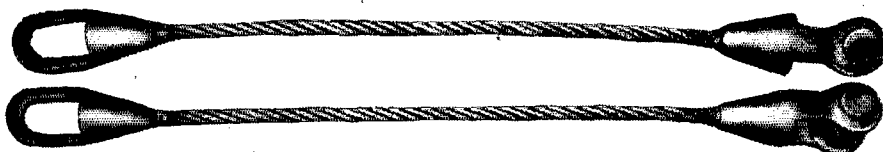
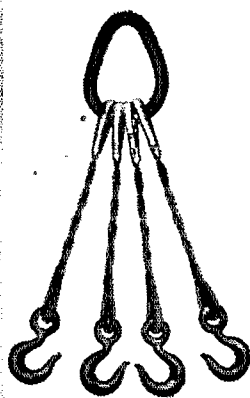


B R E C K

B r e c k H a n d C l e a n e r

What a worker washes his hands with is sometimes as important to safety engineering as the materials he works with. Breck Hand Cleaner was made to take the place of harsh soaps to remove oil, cooling lubricants, cutting compounds and petroleum solvents. It is a mild and bland cleaner that helps to prevent chapped hands in the winter months. Workers who must constantly wash their hands will find Breck Hand Cleaner lessens the chances of dry, cracked skin.

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that's the right sling
for safe, easy load handling

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NO. 942



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Plexiglas

FOR information on how to give your workers needed protection—write for free copy of the booklet “PLEXIGLAS ON GUARD.” It contains pictures of many different types of sturdy, transparent shields actually being used in industry today. It shows why PLEXIGLAS—permanently clear as optical glass, tough and shatter-resistant, quickly cleaned with soap and water, easily fabricated into any shape—is so readily adaptable to safety requirements.

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Chemicals for the Textile, Paper, Ceramic, Rubber, Leather, and other Industries





Journey of a Word

Stranger than any Jules Verne fiction is the trip your voice takes by telephone. It spans the continent in one-twelfth of a second — over a private speedway with green traffic lights all the way.

Your voice is changed into electrical waves so that it can travel over the wires. Some waves travel too fast, and have to be slowed down, so others

can keep pace. Waves get tired, and electronic amplifiers give them new energy to speed them on.

All arrive at journey's end on split-second schedule and out steps your voice — changed back into words again. The wonder of it is that the words sound like you and are you — with your own tone and mood and personality.

Bell Telephone Laboratories design, improve and fit together the millions of intricate parts that make possible the journey of your words. It is a job that never ends.

It is this constant work of improvement that helps the Bell System give you the best and the most economical telephone service in the world.

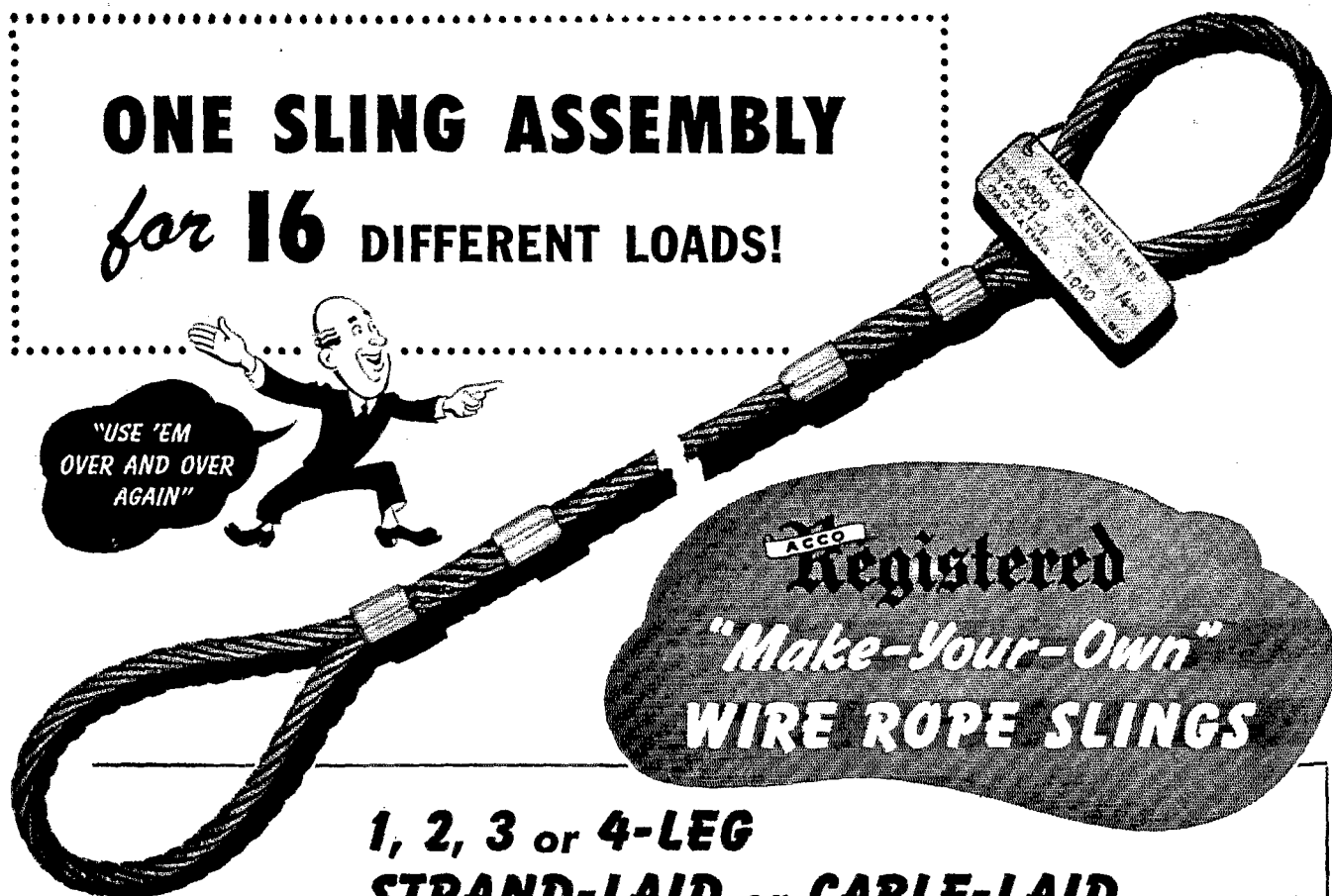
BELL TELEPHONE SYSTEM



ONE SLING ASSEMBLY

for **16** DIFFERENT LOADS!

"USE 'EM
OVER AND OVER
AGAIN"



ACCO Registered
"Make-Your-Own"
WIRE ROPE SLINGS

1, 2, 3 or 4-LEG
STRAND-LAID or CABLE-LAID
BASKET, BRIDLE, or CHOKER

*You can make as many as 16 different slings for 16 different loads from the parts of
an ACCO Registered "Make-Your-Own" 4-leg Wire Rope Sling with ACCO special fittings*

You carry sling units with standard Acco-Loc Safety Loops, and the necessary Acco links, shackles, and hooks. Parts are interchangeable. You can use one, two, or three of the four

legs with or without fittings for basket, bridle, or choker hitches. One or two 4-leg Acco "Make-Your-Own" Slings frequently do the work of a dozen odd lengths and diameters of old-fashioned slings. And if you need only one or two legs, with or without fittings, that's all you buy.

Acco Registered Slings are proof-tested at the factory at twice their rated capacities. The fittings are tested, too, but at two and one-half times their rated capacities. Safety factor is 5 to 1 and the Registry Certificate warrants the rated capacity at that safety factor. The metal identification tag on each sling leg tells the rated capacity. There is no guesswork.

There's far too much to the full story of Acco Registered Slings to tell here. Call your mill supply house today—or write to the nearest Acco office listed below for a copy of the S-2 "Make-Your-Own" SLING folder. It tells all about Acco Registered Strand-Laid and Cable-Laid Slings. It contains the answer to a lot of complicated sling problems.



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AMERICAN CHAIN & CABLE



In Business for Your Safety

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WIRE ROPE
SLINGS

I'LL SAVE YOU HALF... Moving, Lifting and Stacking Your Materials!



ALL YOU DO IS
PRESS THE BUTTON!

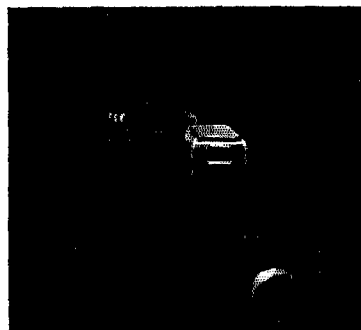
MUSCLE MIKE Makes Tons *Feather-Light* with TRANS-TRIPLETS' *Feather-Touch* Operation



PLATFORM TRANSPORTER—Lifts and moves 2,000, 4,000 and 6,000 pound loads with feather-touch of thumb on buttons. Pallet and platform models. With ATCO Electric Lift or DUAL-LIFT Foot Pump.



TRANSTACKER—Combines all features of Transporter, with a high-lift feature for stacking of 2,000 to 5,000 pound loads in seconds. Light in weight for limited floor and elevator capacities.



TRANSTRACTOR will push or pull 6,000 pounds all day long... or up to 20,000 pounds intermittently, depending on type of load. Transporter power unit and finger-tip button control.

Yes... all you have to do is PRESS THE BUTTON... and presto, Automatic's TRANS-TRIPLETS you see pictured here, move, lift, tow... and even stack your material with amazing touch-of-thumb ease. Tons of raw material or finished product are made FEATHER-LIGHT... are moved efficiently into, around, and out of your plant with FEATHER-TOUCH operation!

A miracle of scientific engineering puts Muscle Mike, the mighty midget in TRANS-TRIPLETS' electric power units, to work for you. Labor's load is lightened, workers are released for more productive work, and management's load is lightened too.

For it is a matter of record, that Automatic's Transporters, Transtackers and Transtractors... alone, or in combination... have cut handling costs as much as 60% in all kinds of industries.

One plant, with a single Transporter, cut handling costs \$24,480.00 in one year. Workers gained a bonus of freedom from gruelling, back-breaking manual handling, production was accelerated, orders filled faster, customers got quicker service.

Investigate how you can put these industry-tested wonders of electric moving and lifting power to work for you. They pay for themselves in a surprisingly short time, give you permanent relief from the high overhead of manual material handling. Mail the coupon for complete facts.

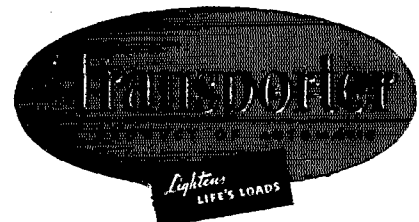
Safety Features

POSITIVE MECHANICAL BRAKE. Most effective brake on any motorized hand truck... will stop and hold on any incline truck will climb, simply by raising or lowering guide handle.

POSITIVE DEAD-MAN CONTROL. When hand is taken off steering handle, it flips back, unit stops dead, and current is shut off.

NO GROUNDED CIRCUITS. Operators need not fear electric shocks.

Only Motorized Hand Truck and Battery Charger That Carry the Underwriters Laboratory Seal. Neither truck nor charger are fire hazards.



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"THE TRANSPORTER
NEWSREEL"

Starring the Trans-triplets
Narrated by Muscle Mike

AUTOMATIC TRANSPORTATION COMPANY

DIV. OF THE YALE & TOWNE MFG. CO.

135 West 87th Street, Dept. D-8, Chicago 20, Ill.

Send me complete facts on how I can cut my material handling costs with Automatic's TRANS-TRIPLETS line of motorized hand trucks.

☐ Transporter ☐ Transtacker ☐ Transtractor
☐ Have an ATCO Specialist make a free survey of my material handling costs.
☐ Schedule me for showing of "Transporter Newsreel"

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By..... Position.....

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City..... Zone..... State.....

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all the advantages
of iodine

FOR TOPICAL APPLICATION

with no
disadvantages

BACTERIOSTATIC

FUNGISTATIC

NON-IRRITATING

WATER MISCIBLE

Samples and brochure
sent upon request.



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BRAND

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OF "FREE" IODINE IN SOLUSALVE***

Many years of research and clinical usage have left iodine the uncontested bactericidal agent. Published reports show that "the iodine solution can be diluted over eighty times and still be as bactericidal as the strongest of the other germicides."¹

Vaseline now makes it possible to utilize the high bactericidal power of iodine against both gram-negative and gram-positive organisms without the old discomfort of "smarting," burning and staining.

Vaseline Ointment—"free" iodine in a bland, non-irritating base—is indicated wherever effective topical antisepsis is required: infectious dermatoses, cuts, burns and lacerations. Vaseline Ointment has the added advantage of being noninjurious to even delicate skin and may be used safely under bandages or surgical dressings.

*Solubase Brand

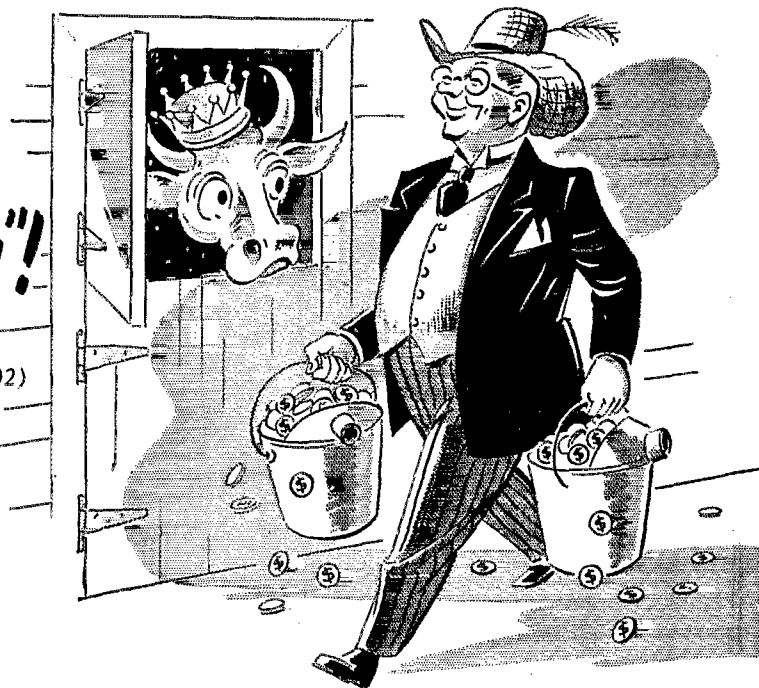
1. New England J. Med. 213:279

Vaseline Company 407 SOUTH DEARBORN STREET • CHICAGO 5, ILLINOIS

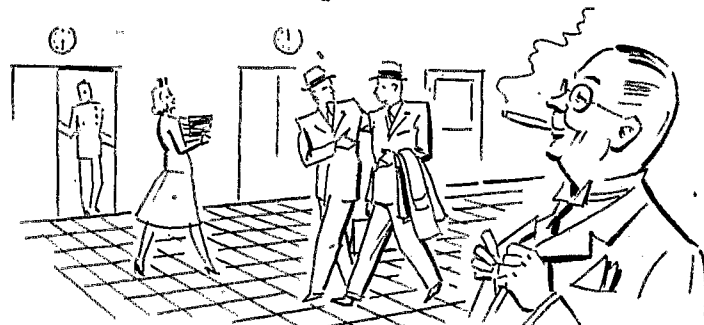
Mr. Higby milked \$19,000 from a "sacred cow"!

(Case History #102)

Skyrocketing upkeep costs were throwing Mr. Higby's budget out of kilter. Floor care alone took \$60,000 in wax and work each year. Yet floors looked poorly . . . and were always slick. Accidents, and their costs, added to his mounting troubles.



Is there an "out"? Mr. Higby found the answer in the interesting Legge book. It told of "sacred cows" in floor upkeep . . . and how they ran up costs. His was there, too—old-fashioned maintenance methods.



How to save \$19,000 It was easy once out-dated ideas were routed out. A Legge expert developed a scientific floor program that gave bright-looking, Non-Slip floors. Costly accidents stopped. And costs per year tumbled \$19,000.

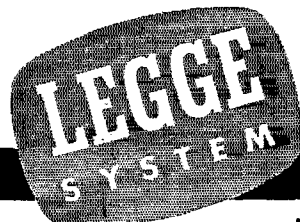
FREE! THIS BOOK MAY ANSWER YOUR \$64 QUESTION

Maintaining floors often costs more than you suspect. If you're spending too much, out-dated "sacred cows" and "hidden" items are probably to blame. How to spot them and avoid them is the theme of our booklet, "Mr. Higby Learned about Floor Safety the Hard Way."

This revealing book also tells how a Legge floor technician tailors a modern program to your needs that gives bright-looking, Non-Slip floors at savings up to 50%.



A 10-minute reading of this book may show you how to save much. So send for it, without obligation. Clip the coupon to your letter-head and mail.



OF NON-SLIP FLOOR MAINTENANCE

WALTER G. LEGGE COMPANY, INC.

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Los Angeles • Washington, D. C. • Denver • Rochester • Pittsburgh • Detroit

WALTER G. LEGGE CO., INC.
11 West 42nd St., New York 18, N. Y.
360 N. Michigan Ave., Chicago 1, Ill.
Gentlemen:
Please send me your free book, "Mr. Higby Learned About Floor Safety the Hard Way."

Signed _____
Title _____
Type of Floor _____
Area _____ sq. ft. N 10

VISIT BOOTH 61, Greater N. Y. Safety Council's 18th Annual Convention & Exposition, Hotel Pennsylvania, April 13-14-15-16.

National Safety News, April, 1948



WON'T BURN

Not even the flame from an oxyacetylen torch will ignite FIRE CHIEF Finished Canvas. But that's only part of the story. FIRE CHIEF Finish also resists water, wear, weather and mildew. It is permanent . . . and actually increases the life of canvas several times.

FIRE CHIEF Finish is available in any of three ways:

- *Specify* FIRE CHIEF Finished Hooperwood Duck, or . . .
- *Send* fabrics to our mills for FIRE CHIEF treatment, or . . .
- *Apply* FIRE CHIEF Compound to new or used untreated canvas.

For canvas products with a future—specify FIRE CHIEF. We invite your further inquiry.

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LEAF OF ROMAN DIPTYCH

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... Victoria and Albert Museum

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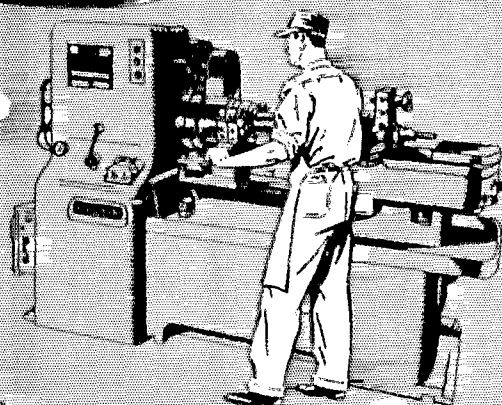
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PAX HYSPEED has also gained national acceptance because of its outstanding efficiency, safety and economical bulk which have made it the quality but inexpensive leader among all granulated skin cleansers made without an emollient.

48-D



ON THE JOB



OR OFF



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These four sturdy oxfords with HY-TEST'S exclusive Anchor Flange Steel Box Toes are especially designed to appeal to the men in your plant who insist on dress shoe style as well as safety shoe protection.

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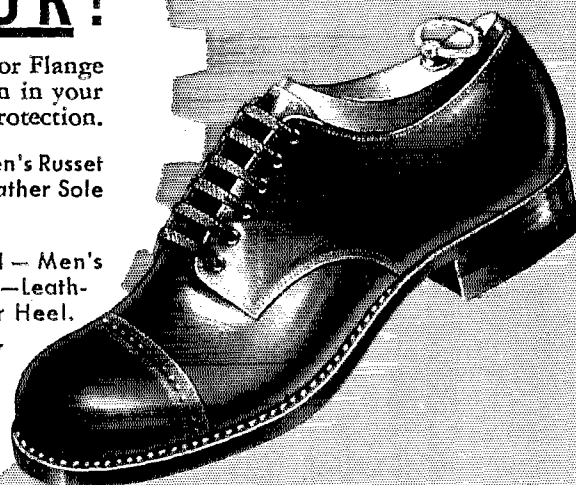
Lower Left—H712—Men's Brown Kip Blu. Oxford—Leather Sole—Half Rubber Heel.

Lower Right—H741-1—Men's Brown Calf Blu. Oxford—Leather Sole—Half Rubber Heel.

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National Safety News

APRIL, 1948

YOUR COMPANY AND YOUR COMMUNITY

There is a deadly epidemic raging outside your factory gates!

It is maiming and killing members of your working team—your laborers, your skilled mechanics, your executives. It is harassing your employees by striking at members of their families. It is straining the facilities of your local government and your civic organizations. It is draining off a large amount of the money your concern pours into the community through its pay-rolls and taxes.

The epidemic is accidents. Accidents off the job do far more damage to industry's human resources than do accidents on the job. In 1947, 37,500 workers died from accidental injuries which occurred off the job, as compared to only 17,000 fatally injured at work. About 2,400,000 workers were injured in off-the-job accidents last year.

Many considerations—self interest, civic responsibility, industrial efficiency, public and personnel relations, and morality—combine to make a most powerful argument for active support by your company of your community's fight against the accident epidemic.

In many communities, Green Cross for Safety campaigns, locally organized and directed, will reach their climax in May. In other communities, campaigns are scheduled for later in the year.

The safety-minded business leader is in a strategic position to lead such a community effort. By taking leadership in the Green Cross campaign, you can benefit both your community and your company.

In any case, your support will be solicited. You may be asked to take an active part in the drive. You will certainly be asked for financial support.

I hope that when your cooperation is requested, you will greet the Green Cross campaigners as your friends and co-workers. I hope that you will respond to their appeals for help with a real understanding of the value of Green Cross work to you, your company, your workers, and your family.

We can smash this epidemic! We can make our communities healthier, happier, more prosperous.

Every dollar raised in your community for the Green Cross will be spent for YOU AND YOURS.

Ned H. Dearborn

GLAMORLESS?

SEVERAL years ago a speaker at a regional safety conference referred to housekeeping and sanitation as the "glamorless twins."

That, unfortunately, is just what they are in many plants, and they live up to the name. That negative attitude has undoubtedly been responsible for much of the indifferent housekeeping in industry.

Cleaning is non-productive work—a good place to keep down expenses. Many people, including some employers, have the notion that it is something to be done by anybody who hasn't the intelligence, physical endurance, or skill to do anything else. (Any housewife knows that isn't so).

Some plants, it must be admitted, don't show their keep. They do not stimulate the janitor's pride of accomplishment. It isn't inspiring to push a broom or mop over floors of crumbling concrete or splintered wood, or to scrub walls long overdue for a coat of paint. And there is little incentive to keep a dark, obsolete washroom spic and span.

We can find plenty of positive examples. Some plants are maintained as show places for their advertising value, because a reputation for cleanliness adds to

the sales appeal of the product. But many companies like cleanliness and beauty for their own sakes and for their influence on employee morale and public relations.

Manufacturers of lighting equipment have helped to improve working conditions, and they have a valued ally in paint. Dirt and disorder are much more conspicuous under good light.

Paint used to have a strictly utilitarian appeal. "Save the surface and you save all," was the slogan of the painters. Decoration was secondary, as far as industry was concerned. Upper walls and ceilings were often painted white to conserve light but dadoes and machines were covered with practical gray which didn't show the dirt.

But that was before the color experts went to work. Armed with scientific facts, they convinced the management of many a plant that delicate tints were practical in the shop; they not only gave employees an emotional lift but proper contrasts made it easier to see the work.

There will always be a lot of drudgery in house-keeping, but the work can't be called glamorless when it brings real results.

THE ATOM and SAFETY

By SIDNEY J. WILLIAMS



WE WERE about to visit a key department of a key plant of the Atomic Energy Commission. This department was "hot," that is, highly radioactive material was handled. Before entering, each of us had to take off most his clothing and don white coveralls, cap, overshoes, goggles and rubber gloves, and hang a gas mask around his neck, just in case. Thus protected, we went through a series of buildings which seemed as spotless as a hospital operating room. Each process was carried on in a fully enclosed cabinet with exhaust hood at the top, glass front, and remote control by the operator. Frequent monitoring insured that radiation in the air did not exceed the tolerance level, which is about equal to that occurring naturally at the altitude of Denver.

On almost the same September day, at another large AEC project which we had just left, two electricians were working on a high tension circuit in a vacant building. Because "no one else was in the building" they had failed to lock open the main switch. Someone came in, closed the switch and one of the workers was electrocuted.

"We" were the 12-man Safety and Industrial Health Advisory Board appointed by the Atomic Energy Commission to visit its principal plants, inquire into its safety and health organization and procedures, and report our findings and recommendations. The two incidents just mentioned illustrate what we found. On the one

hand, the early and thorough study of radiation hazards and the measures for protection of employees against such hazards have no parallel in industrial history. From inception of the Manhattan Project to the present only two deaths from radiation have been reported.

On the other hand, men have been and still are being killed and injured from such common causes as electrocution, falls, equipment and machin-

Safety and Industrial Health Advisory Board, The Atomic Energy Commission

Sidney J. Williams (Chairman), Assistant to the President, National Safety Council, Chicago.

Horatio Bond, Chief Engineer, National Fire Protection Association, Boston, Mass.

Dr. Philip Drinker, Harvard School of Public Health, Boston, Mass.

Robert H. Albisser, Safety Director, Merck & Co., Inc., Rahway, N. J.

William F. Brown, Safety Director, Consolidated Edison Company of New York, New York City.

Bernard R. Caldwell, Deputy Chief of Police, Los Angeles, Calif.

Dr. Abel Wolman, Head, Department of Sanitary Engineering, Johns Hopkins University, Baltimore, Md.

Arthur E. Gorman, Sanitary Engineer, Office of the Housing Expediter, Washington, D. C.

Herbert M. Parker, Assistant Superintendent, Medical Department, General Electric Company, Hanford, Wash.

Dr. Hymer L. Friedell, Director, Department of Radiology, University Hospitals of Cleveland, Cleveland, Ohio.

Richard Fondiller, President, Woodward & Fondiller, New York.

Jack J. Smick, Associate Actuary, Woodward & Fondiller, New York.

ery and the like. A remarkably aggressive safety policy and program, strongly supported by top management, have however held the over-all frequency rate, up until mid-1947, to 6.55 and the severity rate to 1.01, despite all the problems presented by construction hazards, new and untried equipment, a hastily recruited working force and tremendous wartime pressure.*

The three-week field trip of the Advisory Board started with an orientation session in Washington, followed by visits to Oak Ridge, Tenn., Chicago, Los Alamos, N. Mex., Berkeley, Calif., Richland, Wash., the New York Office and the new Brookhaven Laboratory on Long Island.

Few Americans have any conception of the magnitude, complexity and vital importance of the manifold operations for which the Atomic Energy Commission is now responsible. Even those who studied the Smythe Report two years ago are apt to think only of the mammoth separation plants at Oak Ridge, the plutonium plant at Richland and the very hush-hush bomb production at Los Alamos. Few realize that even in the midst of these urgent military operations a great deal of research has been and still is going on; that extensive research work is under way in the Radiation Laboratory of the University of California at Berkeley, in the Argonne

*See NATIONAL SAFETY NEWS, October, 1945, page 74, February, 1946; page 32, and June, 1946, page 20.

Members of the Safety and Industrial Health Advisory Committee of the Atomic Energy Commission and members of the AEC and General Electric Company staffs at Hanford Engineering Works. Front row, left to right: Y. R. Holmquist, chief, safety office, Atomic Energy Commission; R. C. Hageman, AEC; Jack J. Smith, Richard Fondiller, Sidney J. Williams; Dr. R. R. Sachs, GE; Bernard R. Caldwell; Carleton Shugg, AEC; Rear row: David F. Shaw, AEC; Dr. Philip Drinker; Robert H. Althiser; Dr. Herbert M. Parker; Harolda Band; C. N. Gross, GE; Arthur E. Gorman; D. G. Sturges, AEC; William F. Brown; Dr. W. D. Norwood, GE.

National Laboratory conducted by the University of Chicago (for which construction of a new and much larger plant is about to start), at the Brookhaven Laboratory on Long Island, and at many universities and other facilities all over the country. Brookhaven, utilizing the former Army Camp Upton, and with construction about to start on many new buildings, is operated by the Associated Universities, Inc., composed of nine major eastern universities and colleges.

This tremendous research program, far more important in the long run than the production of atomic weapons, runs the gamut from pure research into the nature of atomic structure and forces to the uses of radioactive materials for the study and cure of diseases and the industrial

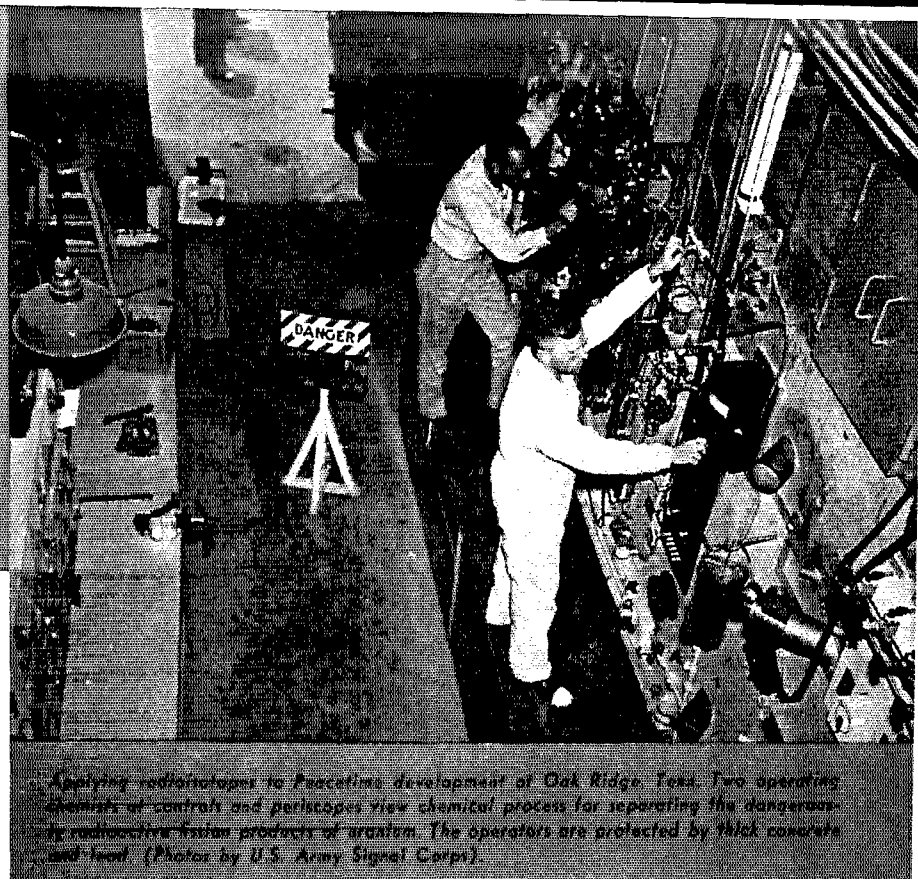
and other peacetime uses of atomic power.

In addition, AEC has a host of corollary enterprises including mines, transportation, warehousing and many others. None of the projects is conducted directly by the Commission; each is a contract operation and the contractors are of all sizes and kinds. All major contracts are on a basis of cost plus a fixed fee. Compensation insurance is handled

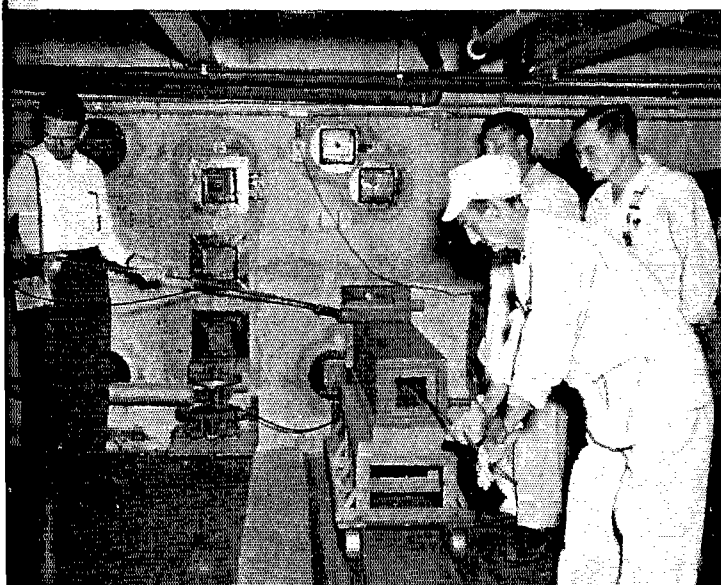
through private companies but also on a cost plus basis. Fire losses are not insured, except on some of the smaller research and supply contracts. Holding casualty costs to a minimum has thus meant a large saving to the taxpayer.

Throughout these diverse and far-flung enterprises the Atomic Energy Commission has a definite statutory as well as a moral responsibility for

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Applying radiotopes to peacetime development at Oak Ridge, Tenn. Two operating chemists at controls and periscopes view chemical process for separating the dangerous radioactive fission products of uranium. The operators are protected by thick concrete and lead. (Photos by U.S. Army Signal Corps)



Operators pulling on isotope stringer from the pile. A health physicist is monitoring the job.



A health physicist checks a radiotope in a chipping container. Containers are of lead.

When you use Portable Electric Tools

By B. B. RAMEY

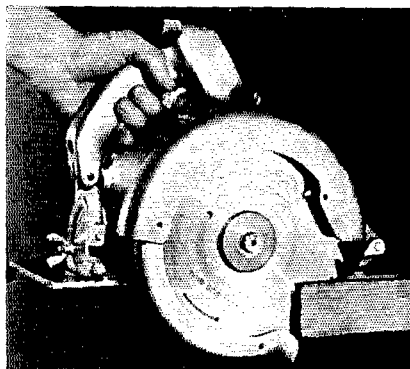
PORTABLE electric tools have made a phenomenal contribution to industrial production in the years since their introduction and it is probable that millions of profitable and efficient man-years could be chalked up to their credit.

They permit the application of the speed, accuracy and efficiency of power machinery on any job, anywhere, however isolated the operation. They are available in compact models that may be used in confined areas. They are ruggedly built and, ordinarily, can be counted on for long and trouble-free service.

However well they are constructed, portable electric tools are subject to much use. Being portable, they may be subjected to more abuse than stationary machines. Therefore, buyers and users should be fully aware of the necessity for regular inspection and maintenance, since neglect may lead to serious, perhaps fatal, injury to the operator.

Injury resulting from portable electric tools may be traced to electrical or mechanical faults, or to unskilled use.

B. B. Ramey is a research engineer for the Black & Decker Mfg. Co. This article is condensed from his address before the Safety Engineers' Club of Philadelphia.



The guard around the blade on this portable saw is retracted as the saw is pushed into the wood and returns automatically to cover the blade after the saw has passed through the wood.

Motors for such tools usually are made by the larger manufacturers who subject them to rigid tests and deliver a product that is rugged and dependable. Further inspections are made as the tool is assembled and the final tests of the completed instrument are most exacting.

Even so, there can be no positive guarantee that some mishap will not short the electrical circuit after it is put into use, creating a potential shock hazard for the operator.

For that reason, the proper grounding of the tool each time it is placed in use is highly important.

Accidental grounding, causing the current to pass through the body of the operator, in my opinion, is responsible for more accidents with portable electric tools than any other cause. Whether the shock thus produced causes injury or death depends on a number of conditions, such as the effectiveness of the short circuit, the resistance of the operator's body, the part of the body through which current passes, and the working environment, which control the value of the worker's connection with the ground.

Severity of the shock depends, not upon voltage alone, but upon the amount of current passing through the body. For that reason, one should not take chances with so-called "low-voltage" currents.

Involuntary muscular contraction which occurs with amperages as low as 5 to 20 milliamperes may lessen or heighten the severity of the shock. It may cause the operator to drop or fall away from the charged object, thus breaking the connection, or it may cause him to grasp more tightly or to fall on a surface that forms a more deadly connection.

Grounding Plugs

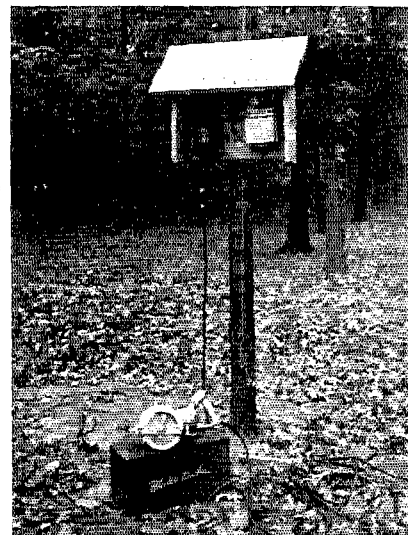
In order to protect the operator in case of accidental grounding of the electrical circuit to the tool hous-

ing, most of the larger manufacturers equip portable electric tools with a cord having an extra wire for safe grounding, from the tool case to a water pipe, ground rod or receptacle box. The only drawback is that operators may neglect to attach the ground connection.

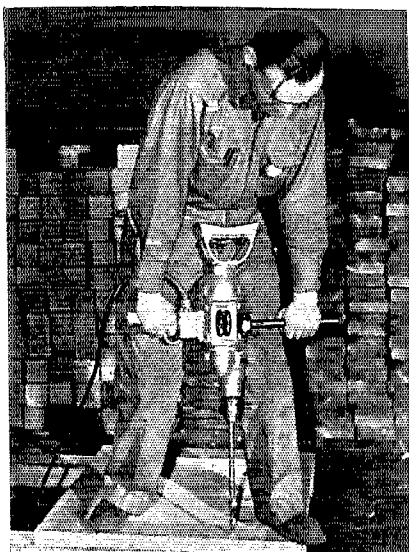
A multi-pole plug and receptacle, four poles for three-phase and three poles for single-phase or D.C., one pole being for the other end of the ground wire, is recognized as the best arrangement if the wiring is taken care of by a competent person, so that the case of the tool is not made alive by incorrect wiring of plug and receptacle.

The multi-pole plug and receptacle are not mandatory under the National Electrical Code but I believe that in time this will become a requirement. In the meantime, work is being done toward developing a three-pole plug for single phase use, and a three-pole receptacle that will accommodate the standard two-pole plugs.

A short circuit in the motor of portable tools may or may not result in injury to the operator. If in the field coil or the armature winding,



Meter installation on a construction job. Note ground connection to a pipe driven in the earth.



In using an electric drill the operator should make sure of his footing, get a firm grip on the drill with both hands, and have the cord arranged so he will not become tangled up with it. Goggles and safety shoes would help, too.

it generally results in poor performance. If it occurs in the switch or the leads in the switch handle, the operator may suffer a burn.

Mechanical Causes

One of the possible mechanical causes of portable tool accidents can be the breaking of the drill or any tool that is being used in the chuck, so that the operator is thrown off balance or is struck by the broken piece. Drill bits and taper reamers may jam in the work thus stopping rotation of the tool spindle and causing rotation of the motor housing. This throws the full torque of the motor to the operator's hands, and may throw him or tear loose from his hands.

Housing screws may become loose and result in some part of the tool coming off.

The operator should so place himself that he will be ready for any contingency to prevent being thrown. This is especially important where working on scaffolding, platforms or ladders and in positions where footing is poor.

To protect users of portable tools under such conditions, most of these tools are supplied with safety switches which release as soon as the operator's finger leaves the trigger. Switch locks, provided for using portable tools in fixtures, such as drill stands, should not be used in portable operation.

Grinders and tools of this type are supplied with guards to confine the

pieces if a wheel should shatter because of excessive speeds but greatest care is needed in selecting wheels rated for the speed recommended on the name plate of the tool.

In the case of the portable sanders, complete guarding is not practical as the operator cannot see the work. Sanding disks may be torn and pieces may fly if they get caught on sharp edges or in recesses. This calls for special care in operation.

Maintenance

Periodical check-up of the tools should be made in a department set up for that purpose. For instance, a cord that shows abrasion can be replaced, a switch that is faulty can be repaired. Plug connections should be checked to prevent short circuiting. Worn brushes, if allowed to go too far, may cause damage to an armature. Inspection and changing of the brushes will prevent such a condition.

This periodical inspection also would discover loose screws and any other mechanical failures of the tool.

A carefully laid out maintenance program for portable electric tools pays dividends, from the standpoint of safety for the operator and from a cost standpoint.

Training

Serious accidents may result if switches are left closed. The guard that is supplied with the grinding tools should always be in place. Goggles should be used at all times



Testing grounds on electric equipment. A nail is placed in the back of a flashlight with a lead attached to the other terminal. The lead is attached to the ground wire at the socket and the nail is touched to various points on the drill. If the light burns, the ground wire is satisfactory. With a flashlight even a bad connection will show up because the voltage is low. Three-wire cord is used for grounding. (Jeffersonville Boat and Machine Company).

for eye protection in the use of any type of grinding or sanding tool.

Operators should be taught to handle the cord properly to prevent tripping hazards as well as to prolong its life. Having the cord suspended overhead whenever possible is good practice.

Standard portable electric tools are not safe to use in a gaseous or dust laden atmospheres. The motors are of the series universal type for use on AC or DC and have commutators and brushes. Sparks at the commutator (perfect commutation at all times not being attainable) may provide ignition for an explosion.

In such conditions a special totally enclosed tool is required.

Operators should be trained to keep their fingers away from the moving part of the tool. This is especially important in the case of portable electric saws.

The majority of the saws that are made have a fixed guard over the upper part of the blade and a lower telescoping guard that moves to uncover the blade as it is pushed into the material.

While these telescoping guards are designed and built to perform satisfactorily, sawdust and other materials may clog the mounting. If the guard sticks, the operator should have it corrected. Under no circumstances should he try to move the guard while

ELECTRIC HAND TOOLS

(Suggestions in Using)

1. Keep tools in good condition, cleaned, oiled and repaired.
2. It is good practice to use an extra wire to ground the tool casing when in use, if one has not been built in.
3. Use only approved and inspected extension cord.
4. Always examine both the cord and connections carefully before using. Damaged cord and defective plugs and switches may be dangerous.
5. Never hang an extension cord over nails or other sharp edges; or allow it to become kinked; or leave it where a truck may run over it. Wire or insulation will be damaged.
6. Protect the cord against contact with oil, hot surfaces, and chemicals. These may damage the insulation.
7. It is bad practice to patch any serious injury to cord insulation with tape. Shorten the cord or get a new one.
8. Wear goggles while using electric hand tools if there is any danger of flying particles.
9. Do not use a portable electric tool in the presence of flammable vapors or gases.
10. Store extension cord in a clean dry place where it can lie loosely coiled.



SAFETY INSTRUCTION CARD No. 343

Serious work for the funny folk...

through the cooperation of

THE famous cartoon characters are going to work for safety.

The friends who have amused and entertained you for years through the comic supplement of your Sunday newspaper are taking time out from their serial escapades to do a job for the National Safety Council.

Starting this month, new colored posters featuring famous funny folk will be released during the rest of 1948, offering advice or providing horrible example to keep us ordinary humans from getting hurt. Wherever we go, in the shop, at play or on the street, we are likely to be greeted by their graphic messages.

However imaginary, these comic characters are people of influence with an assured following, and it appears likely that the new series will prove popular among members who



post them as well as the workers who will read them.

We need not believe in fairies and dragons in order to admit that we follow with avid interest the adventures of Prince Valiant or Tarzan much as we listen to a friend's account of his vacation trip. Dagwood and Blondie are like amusing and high-spirited neighbors, and Mickey Mouse is so much a part of our accustomed ken that we would not be greatly amazed to meet him on the street.

Hard-headed business men were

among the first to recognize the "reality" of these characters by paying high prices for the right to use their names in "testimonial" selling copy. And the ads paid off, selling soap and breakfast food as fast as the testimonials of "lovely" debut daughters or Back Bay families or of "distinguished" tycoons of commerce.

The comic strip technique has been recognized generally for its tremendous propaganda value and, accordingly, has been adapted to numerous types of educational promotion. Religious leaders, even, have started using the comic strip pattern to interest young and old in the story of the Bible.

Recognizing the potential influence of these comic characters and the natural obligation of the famous to lend their efforts to movements for the common welfare, Puck, the Comic Weekly, through King Features Syndicate, has decided to enlist some of its most famous cartoon people in the war on accidents.

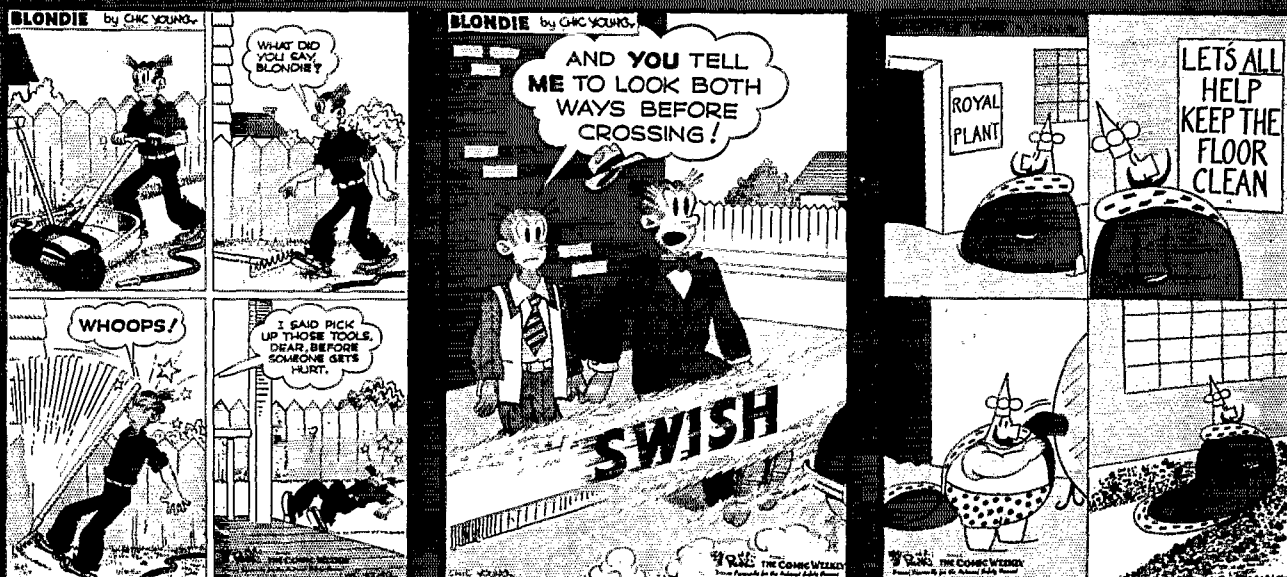
Popeye will be getting sound advice on lifting methods from Swee'pea. The Little King will give a pantomime lesson in plant housekeeping. Dagwood Bumstead will serve as an object lesson in an impetuous dash into the street.

Those three comprise the first re-





Drawn Especially for the National Safety Council



leases, for April. Others to come are reproduced on these pages. Altogether there will be 18 posters, two to be released each month throughout the year.

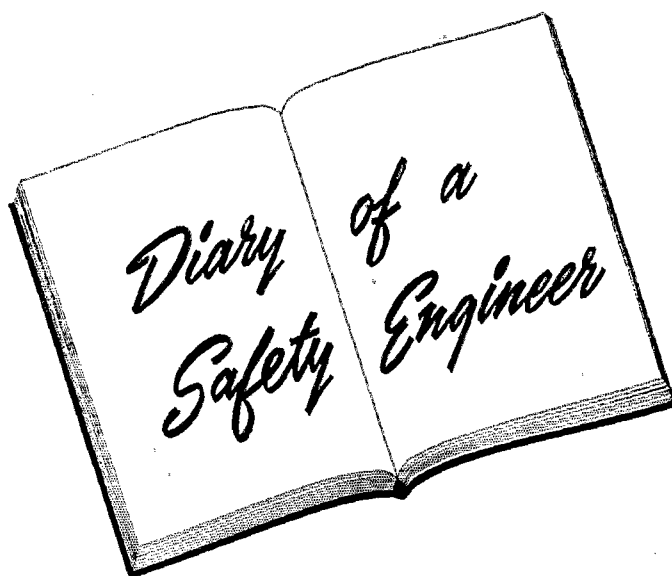
Some will be produced in four colors, others in two. A portion will be available in A and others in B size. They will be reproduced in miniature

form in the NATIONAL SAFETY NEWS poster pages each month as they are released. Those relating to traffic matters will be shown in PUBLIC SAFETY. Other strips to be featured in the series include the Katzenjammer Kids, Bringing Up Father, Mickey Mouse and Henry.

King Features Syndicate is work-

ing directly with the National Safety Council in selecting suitable copy themes and the drawings are being made by the famous creators of the comic characters.

Other famous comic strip creators have indicated a desire to join the forces of safety and it is hoped arrangements can be completed soon.



open house hangover

(Fiction)

By BILL ANDREWS

April 12, 1948

I feel like a cross between a nagging school teacher, a janitor, and a publicity man. I've been through a wearing, drudging month of work. The surface results are spectacular. This plant couldn't have looked as good as this the day the contractors turned over the keys to Barnes and Jackson 25 years ago. But this morning, with the big show over, and the production lines getting back to normal, I wonder if I've done anything of lasting significance for accident prevention.

It all started back in February, after Jackson agreed to keep me posted on up-coming changes in production and materials. A week after I had my session with him, his secretary sent me in a fat folder labeled "Silver Anniversary." In it was nothing on production or materials, but a great deal of carefully detailed public and employee relations plans for celebrating the 25th anniversary of Jackson-Barnes' operations in this city.

An elaborate press campaign was outlined. Radio time had been purchased, scripts written. It didn't seem to concern me, for safety was referred to only casually. But the plan all pointed toward a climax—and that climax was an "open house."

There was a revealing note in the outline of the open house program. The publicity men, bless them, had called for heavy emphasis on the plant's safety activities. But Jackson had slashed that out, commenting in

a marginal note, "Make the plant look safe, drill the working shifts in safety procedure. But include no reference to safety program in tour conductor's talks."

I knew what that meant. Jackson was still reserving judgment on the wisdom of continuing the program. It meant his expressed doubts and his ultimatum to produce results or else were not primarily based on distrust of me, but of the program.

But I saw what seemed to me to be an opportunity. I would take his instructions literally, and I would fight to get the plant made to look safe, and I would see that the skeleton crews who would work during the weekend-long open house (for demonstration purposes) had the hottest and heaviest dose of safety training ever seen this side of Pittsburgh.

I had a long session with our own harried public relations man, with Mac (representing labor relations), and with the firm of publicity specialists handling the promotion. The first thing I went after was house-keeping. We went over the plant from warehouse to front office, notebook in hand, listing examples of untidiness. And I saw that the list included references to related shortcomings—poor light, worn flooring, bad stock-piling. We made a pretty long list and took it into Jackson himself.

Jackson, it developed, was hipped on this program. He was proud of his plant, proud of its contribution to the community. He wanted his

best foot put forward so that his plant would be loved by the community as it has not always been loved in the past. He gave us a blanket OK, broad enough for a clear go ahead on everything in the list, and anything else we wanted, within reason.

So we had a meeting of foremen, and Jackson himself laid down the law. Mac and I and the publicity man took his law and translated it into details. The boys took it like lambs, because they, like Jackson, saw in the open house a chance to show off to their families and neighbors. The maintenance department began to get yells for paint and new trash cans and better light, not from us in the office, but from the foremen.

And in the departments, stock began to shift. The stuff that was turned up in the process must, in some cases, have been missed in two or three annual inventories. Reilly tells me that in the woodshop they found stuff they'd been looking for for a year.

By mid-March, Gorson (the maintenance foreman) and I started out on a road marking spree. He got hold of a gadget that paints a broad line on the floor as it is pushed through the shops. Our routine was simple. He and I would work a department, and have a long talk about the flow of traffic, the working space required around machines. Then, with chalk line, we'd mark out the aisle limits, and sometimes also the working space around a particular machine. In a week, the floor was laid out like a blue print, and the marked aisles and working spaces were cleared. At the same time, of

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Westinghouse Photo.

LIGHTNING

... and How to Dodge It

ABOUT nine-tenths of the fatalities and injuries from lightning occur in rural districts rather than in areas with many buildings or large buildings, according to data from the U. S. Census Bureau. People engaged in outdoor pursuits are most exposed to the hazards of lightning.

Although lightning usually strikes an isolated object on high ground, such as lone trees, farm buildings, country schoolhouses, and country churches, it does not always strike the highest object in the area.

Studies of industrial fatality reports show that deaths from lightning are rare in industry and do not occur in large plants. Large steel-frame buildings act as a shield to their occupants. Even though tall steel-frame buildings are frequently struck by lightning, the steel frame conducts the lightning to ground without its being noticed.

Where tall steel-frame buildings have a steel flagpole electrically connected to the building frame with the flagpole projecting well above the roof, it has not been found unsafe for people to go on the top of the building.

Persons working within metal shields, like those provided by tractor cabs, automobiles, trucks, cranes, draglines, power shovels, and the like,

Facts That Everyone Should Know and Use

This release will be useful for distribution to industrial employees, particularly those living or working in rural areas, to local newspapers, to school children with the suggestion that they take it home, and, through local councils, to community organizations.

are in no danger from a lightning stroke. Although the machine may be struck, a person within the shielded area does not provide an easy path for the bolt of lightning to pass to ground.

Evidence indicates that many lightning discharges pass through openings, such as open windows or doors, but the reason has never been positively determined.

What To Do

Upon the approach of an electrical storm, such of the following precautions as fit the situation at hand should be taken:

Discontinue operations which are out in the open.

Stop loading, unloading, or handling of flammable liquids or products in open containers in exposed places.

Discontinue the gauging of tanks containing flammable liquids.

Have employees leave the tops of tanks, buildings, and the like.

Discontinue work on fences, telephone lines, power lines, structural steel erection, pipelines, or other metal materials which might conduct a lightning charge.

Keep away from drain pipes on the outside of buildings, from steel towers, cranes, and other metal objects onto which a current might be induced.

Stay away from the crests of hills or other places where protection is not afforded by tall objects. Avoid isolated trees, small exposed sheds or outbuildings, wire fences, and telephone poles.

At the approach of an electrical storm, close all openings to outside air.

In case of an electrical storm, seek shelter:

In large buildings or buildings equipped with protection against lightning.

In a grove of trees, a cave, a ravine, or a gully.

In smaller buildings without protection against lightning, stay away from windows, stoves, fireplaces, radiators, telephones, and radios.

See also:

A.S.A. Code—Protection Against Lightning-C5; Safe Practices Pamphlets 31—"Industrial Fire Causes and Prevention," and 34—"Industrial Explosion Hazards," National Safety Council.

* * *

ACKNOWLEDGMENT

The first draft of this special release was prepared by the Metropolitan Chapter, American Society of Safety Engineers, and the final draft by the Engineering Committee of the Public Utilities Section, National Safety Council.

Cutting the cost of Poor Vision

By R. W. HABERSAT and J. M. DAVIS



Four Steps in Vision Safety Program:

1. Employees are tested periodically on the Ortho-Rater for safety checkup. Then test results are analyzed statistically with relation to past accident experience.
2. Next each employee is interviewed and informed if his visual performance meets the safety requirements of his job.

3. Employees not meeting safety visual standards are referred to a professional man of their own choice for further examination and eye care if needed.

4. Back on the job—Accidents are fewer for employees whose vision meets safety standards. In the future all new employees also should meet visual safety requirements.



1. Mounting evidence proves that inadequate visual performance and accidents frequently go hand in hand.

2. Accident costs can be reduced when scientific visual performance tests are used to help spot potential accident-prone workers.

The impact of these facts on industrial safety engineers can be measured by the rapid increase in industrial vision programs within the past three or four years. Safety men have long recognized that personal factors are a major cause of four out of every

five industrial accidents. Attention to visual performance as one of these personal factors offers a logical plan of attack upon our increasing yearly toll of accidents.

Proof that the accident-prone employee can be spotted with vision tests is not new.¹ Up to the present time such evidence has been gathered chiefly in heavy industries where the accident hazard has been fairly obvious. A recent experiment however, proves that even in a light industry

under conditions of relatively low hazard, a striking relationship exists between poor visual performance and a high frequency of accidents.

Furthermore, in the light of information available from this and other studies, it is evident that the minimum pattern of visual skills desirable for accident freedom varies for different industries and types of accident hazard. For example, in a heavy industry,² lack of good *distance vision*, and *depth perception* are characteristic of employees who experience a high frequency of injuries from accidents. On the other hand, in a light industry³ under different con-

¹ "Skillful Eyes Prevent Accidents", S. E. Wirt, and H. H. Leedke—Annual News Letter—Industrial Nursing Section, November, 1945, National Safety Council.

² "4 Points to Safety", N. F. Stump, Safety Engineering, November, 1945.

³ "Industrial Psychology", J. Tiffin, Prentice-Hall, 1947, Page 432.

⁴ "Spotting Accident-Prone Workers by Vision Tests", N. F. Stump, Factory Management and Maintenance, June, 1945

² Metal fabrication industry. See "A Statistical Study of Visual Functions and Safety", N. F. Stump, Journal of Applied Psychology, December, 1945.

³ Optical Industry.

R. W. HABERSAT is Research Analyst, Accident Prevention Research Department, and J. M. DAVIS is Safety Director, Bausch & Lomb Optical Company, Rochester, N.Y.

ditions of hazard, lack of good *near vision* and *color perception* are characteristic of those who frequently have injuries resulting from accidents.

Due to such variances, no single visual standard can effectively have industry-wide application. Every company should make an analysis of its own job hazards and accident experience before attempting to establish such standards. The most effective visual standard for spotting accident-prone workers can only be established by analysis of past accident experience. Accepted statistical methods should be used rather than guesswork.

The setting of a visual safety standard by statistical analysis is a comparatively simple task, providing adequate safety records are available. Most industrial concerns have these records. An acceptable and simple method of approach is to compare a group of employees who have had frequent accidents, with a group of employees who have had no accidents.

Any widespread differences between the groups may give a clue to the characteristics of accident-prone individuals. In using this type of approach it is not necessary to restrict the comparisons to vision alone. Personality or temperament, condition of health, attendance records, or other personal factors may be compared to get further clues as to why some people have many accidents while others have very few.

As part of its program to investigate the personal factors related to accident proneness, the Accident Prevention Research Department of Bausch & Lomb Optical Company recently conducted an experiment⁴ of

⁴ This experiment was patterned after a similar original experiment conducted in 1943 by N. F. Stump, at Revere Copper and Brass, Inc., Rome, N.Y.

YEARLY DISABILITY INJURY FREQUENCY

Injuries per 100 employees

Before Program	
1940	2.2
1941	2.4
1942	2.1
1943	2.5
After Program	
1944	1.8
1945	2.0
1946	1.6
1947	1.7

this nature by comparing the vision of a group of "high accident frequency" employees with the vision of a group of "accident free" employees.

In choosing the two groups of employees to be studied for the experiment, care was taken to "control," or hold constant for each group, certain factors known to have a relationship to accidents. These factors were: age, education, and job experience. For example, it is well known that inexperience on the job, and lack of complete job knowledge are often a cause of accidents. Likewise, certain age and educational levels have more accidents than do others. By keeping such factors at approximately equal levels in both the "high frequency" and "accident free" groups, any other important differences between the groups that might be a cause of accidents are more easily distinguished. Such controls were applied by selecting the groups as follows:

1. All employees who had three or more accidents resulting in injuries⁵ over an eighteen month period were considered as "high frequency" cases to be studied.

⁵ Types of injuries included were: fractures, bruises or contusions, sprains, cuts, abrasions, burns, lacerations, etc., or any other injury which could possibly have been caused by low visual performance. Such injuries as hernias, and back strains were not considered for the purposes of this study, because these are probably seldom caused by lack of visual skills.

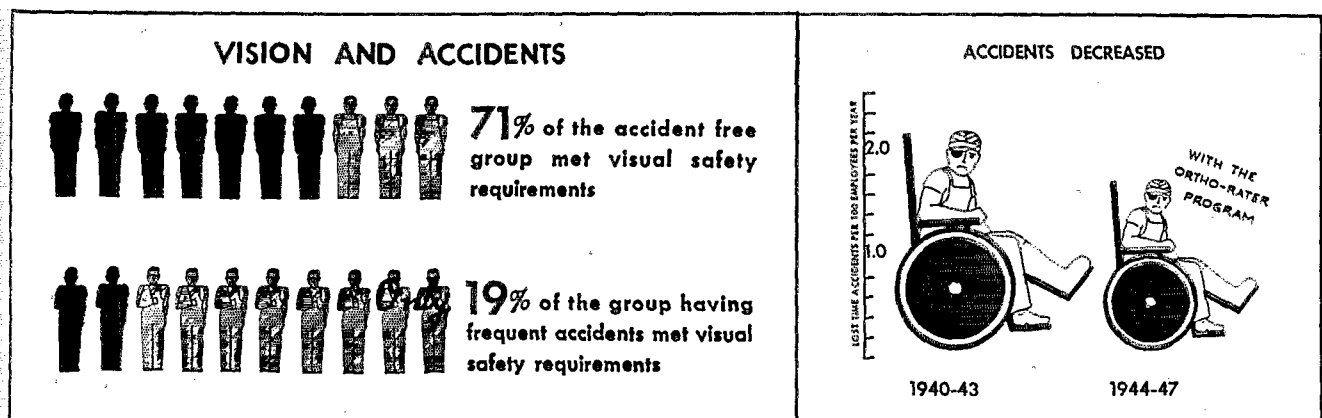
2. To each of the "high frequency" cases in the group above was matched an "injury free" employee on the same job, with the same age, education, and experience.

3. As a further control, employees who had received eye care or new glasses in the previous 18 months were eliminated from groups 1 and 2. These people could not be used in the study because their visual patterns at the time of the experiment would not be a true indication of their "seeing ability" during the entire 18 month period of the study.

Application of the above controls resulted in two groups of 42 persons each, who were closely matched, man for man in type of work, job experience, age, and education, but who were not matched in accident experience. These employees were next tested on the Bausch & Lomb Ortho-Rater, an instrument which measures twelve visual skills most important for success in industrial jobs.⁶ After the testing, the visual performance test cards were forwarded to the Occupational Research Center at Purdue University for statistical analysis to determine if any important differences existed between the visual performance levels of the "high frequency of accidents" group, and the "accident free" group.

Examination of the test scores revealed some significant differences between those who had accidents and those who had none. First, the overall visual performance of the "accident free" group was considerably superior to that of the "high frequency" group (see figure I). This advantage was definite and consistent in 11 out of 12 skills measured by the Ortho-Rater. Second, differences

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Members of the Industrial Conference (reading clockwise around the table) George H. Steel, (standing) Donald Vaughan, J. E. Moore, Clark Woodward, William Yant, George A. Jacoby, John Roche, George Greenwood, John Young, Frank Crandell, Oscar Nanfeldt, and Lloyd Blanchard and (seated at left, rear) Charles Moberg and Jake Ridinger.

Industrial Conference Meets

Plans for expanding and improving the services of the National Safety Council were initiated at Council headquarters February 23, when fourteen committee chairmen of the recently organized Industrial Conference spent the day studying methods and procedures of their various sections and reported preliminary outlines for the year's work.

George A. Jacoby of General Motors Corp., the Council's vice-president for industry and chairman of the Industrial Conference, opened the meeting with a statement of its purpose—to permit each chairman to familiarize himself with the functions, activities and materials related to his field of operations. On the basis of this data, each is to outline a program for the year's work and report at the meeting of his particular committee at a conference in New York April 11.

Recessing briefly, the conference reassembled in groups with various staff members to study specialized operations, methods of gathering and evaluating data and getting approvals, determining costs and so on. Exhaustive discussions throughout the morning gave each chairman a general picture of the problems facing his committee, clarifying technical details of procedure, pointing up the

value of certain methods and revealing existing flaws in others.

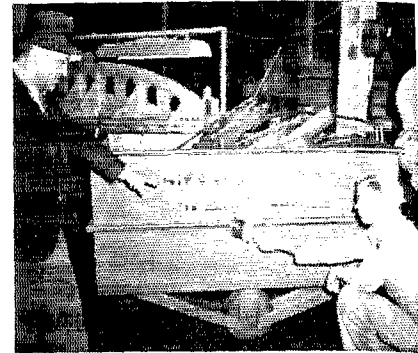
As a result, each chairman was prepared to report and make certain recommendations at the afternoon executive session. These reports will be used in setting up the program for the April meeting as well as guiding each subcommittee in planning its work.

One joint effort, to which all members pledged their cooperation, will be an endeavor to find more effective means of helping the high accident rate industries, such as lumbering, coal mining and others, to improve their safety performance.

Those attending were Mr. Jacoby, W. P. Yant, vice-chairman, and John M. Roche, staff secretary of the Industrial Conference; committee chairmen E. C. Woodward, Technical Publications; John Young, Congress Program; H. F. Reinhard, Associations; O. M. Nanfeldt, Small Plants, and J. L. Ridinger, Posters; and sub-committee chairman J. E. Moore. Industrial Manual; L. A. Blanchard, Safe Practices Pamphlets; F. L. Crandell, Data Sheets; George H. Steel, Membership Opinion Poll, and Donald Vaughan, Safetygraph, and C. F. Moberg, member of the Statistics and Contest sub-committee.

Moving Slogans Catch the Eye

The familiar principle that an object in motion attracts more attention



than a stationary object has been put to work in many plants where trucks carry safety messages. Above is an example from the Heintz Manufacturing Company, Philadelphia.

When the scrap trucks were being repainted, Anthony Bernard, foreman of the Trucking Department, thought the idle space could be used for safety advertising. The idea caught on and many slogans have been submitted. One man turned in 20.

Bacteria in Water

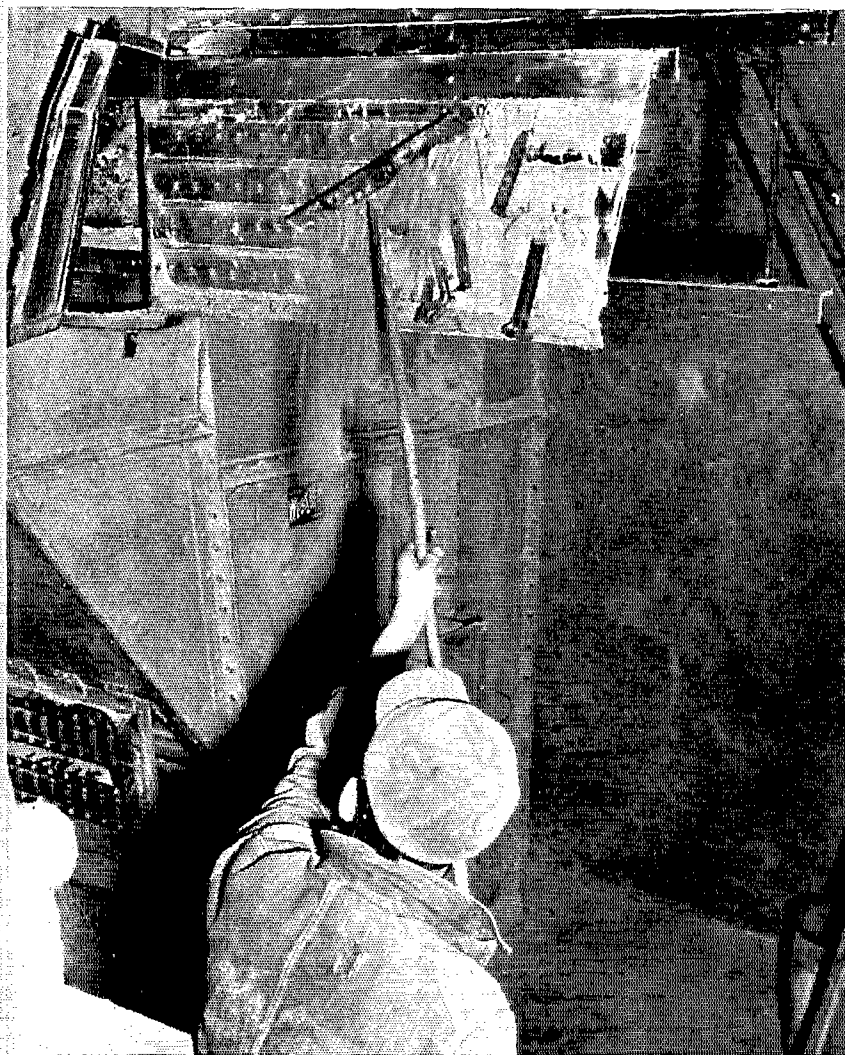
A common belief prevails that if water contains a great number of bacteria it is unsafe for drinking. The safety of the water is judged by the field conditions and possibilities of pollution surrounding the source and by the laboratory analyses. Safety of water from a laboratory standpoint is not determined by the number but by the kind of bacteria that are present.

Bacteria are like people; there are good ones and bad ones so far as human welfare is concerned, and all bacteria found in water are not harmful. Contrary to popular idea, a routine laboratory test does not indicate the presence of typhoid organisms. Although laboratory tests for the typhoid fever germs can be made and such tests have been done to establish the fact that they may be present, the process is too involved for ordinary laboratory procedure where the results are needed in a minimum of time. Fortunately, there is an easily recognizable bacterium which is invariably associated with typhoid, and this is sought in the routine laboratory examination.

—*Illinois Health Messenger.*

Tramp Iron in Grain Elevators

By G. R. WELLMON*



Removing collected tramp iron with a magnetic rake. The rake is a scraper made from magnetic material which holds it to the face of the magnet to remove collected material. In the lower left hand corner is the other double row plate unit which forms the gravity flow type of illustration shown in Fig. 4.

THE presence of tramp iron in grain entering terminal elevators is recognized as a serious fire and explosion hazard, a hazard which has contributed to heavy losses of life and property in the grain industry.

For many years this hazard has escaped most efforts for its effective control, primarily because of difficulty involved in providing the necessary magnetic protection where such pro-

tection can be installed under favorable operating conditions.

The introduction of the modern non-electric magnet has proved to be a practical solution to this problem. Powered by specially designed permanent alnico magnets, these compact separators make possible constant and uniform protection under the most advantageous conditions.

Before the development of modern permanent magnets, electro type separators were the only type of protec-

tion available for this service. Frequently they were of the heavy box or circular lifting magnet design usually suspended by crane or block and tackle over the flowing stream of grain. To remove the collected tramp iron, it was necessary to swing the magnet away from the belt and disconnect the electric power.

In the event of sudden power failure, accumulated tramp iron would be discharged into the grain flow. Pulley type separators were also employed, but excessive belt speeds in most instances limited their efficiency.

Operation of earlier electro types of magnetic separators in terminal elevators were limited by many critical factors among which the following are outstanding:

1. Enormous quantities of grain handled—at times exceeding 30,000 bushels per hour on a single conveyor belt.
2. Excessive conveyor belt speeds, ranging from 750 to 1000 feet per minute.
3. Grain flow depths 5 to 12 inches at the trough of the conveyor belt.
4. Restrictive space limitations at those points where tramp iron removal was most essential.

Removal of such foreign matter as car coupling pins, railroad spikes, lengths of broken chain, and other miscellaneous and equally dangerous tramp iron, under such conditions, requires the use of a powerful separator having a magnetic field capable of reaching out and penetrating deeply into heavy grain flows.

Permanent non-electric magnetic equipment, engineered for this specific terminal elevator application, is now meeting satisfactorily all requirements for tramp iron removal.

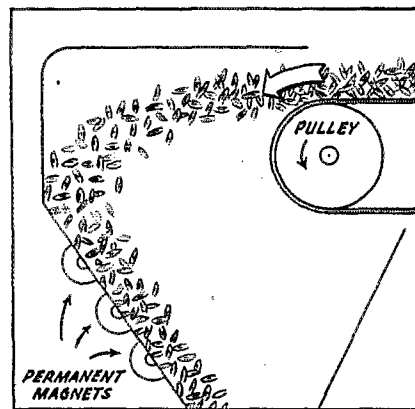
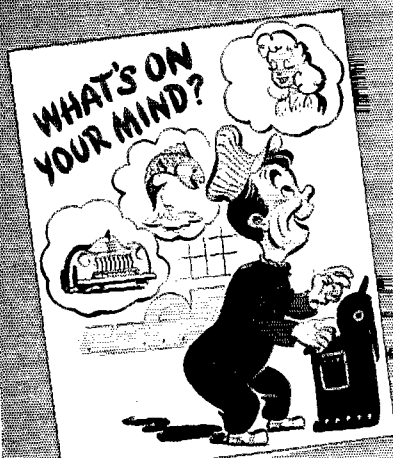
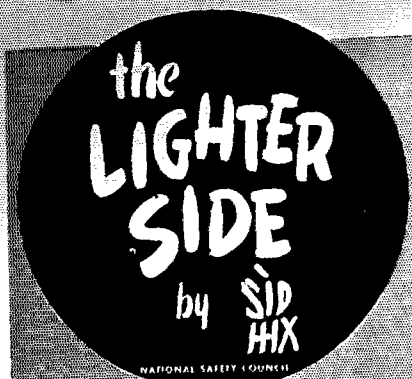


Figure 1. Double and triple row plate magnets located in a hopper just below the point where the grain strikes the backboard. In this position, magnets clean grain as it pauses momentarily in its downward path over the angled face of each unit as it flows into the bucket elevator.

*Eriez Manufacturing Company, Erie, Pa.



The many advantages of the new permanent alnico magnets have been well summarized in a recent statement by Factory Mutual Insurance Association of Hartford, Conn., who asserted that "The permanent magnet is simple, requires practically no maintenance other than cleaning of collected trash, easily understood and maintained by ordinary labor, not dependent upon outside source of power, relatively light in weight, extremely flexible in design, economic in cost and presents no additional fire hazard of its own to the process protected."

Correct usage of the permanent magnetic equipment is essential for a maximum operating efficiency. Generally speaking, installation is simple, however, due to the many existing variables, such applications require experienced engineering. Most elevators, for example, are fundamentally similar in design, but vary greatly in many details which need individual engineering.

To aid the development of effective magnetic protection for terminal elevators, the Eriez Manufacturing Company several years ago inaugurated a special experimental program for the study of this problem. Much of the test work was conducted with the co-operation of the Pennsylvania Railroad Grain Elevator at Erie, Pa., operated under the direction of T. L. Musser, Superintendent.

The result of this research program was the development of a more practical method of cleaning incoming grain, using permanent non-electric magnetic equipment.

Tramp iron removal, to be most beneficial, must take place when the

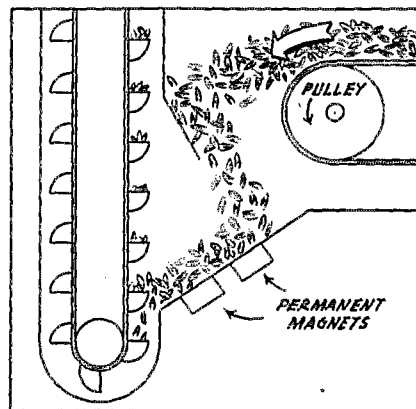


Figure 2. Use of a double or triple row of plate units in the bottom of a grain spout leading to the leg boot is another effective application of magnetic equipment. Grain is cleaned as it flows over the face of the separator after first striking an overhanging back-board.

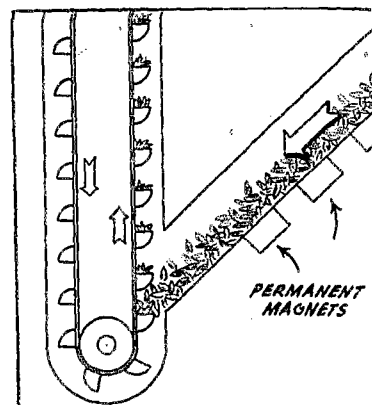


Figure 3. A variation of the installa shown in Figures 1 and 2 is the locatio the plate separators in a short intermed gravity chute at the end of the belt conv

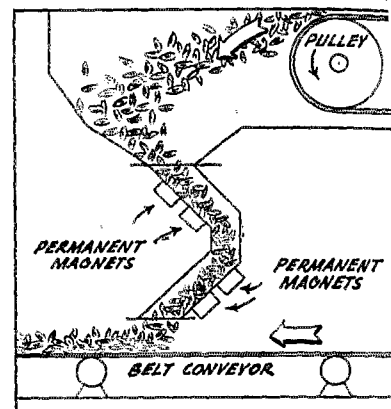


Figure 4. The vertical gravity flow hump the simplest installation. The principle of t hump is simple yet practical, producing tumbling action as the grain flows through dog-leg shaped structure and over a sing or double row of magnets in the bottom each of two angled chutes. In this manne tramp iron not removed by the first magn is caught and held by the second magne Having a specific gravity and therefore grea inertia, tramp iron forces its way through the grain and across the face of both magneti installations where it collects in its downwar travel. Hinged separators can be dropped fo easy cleaning.

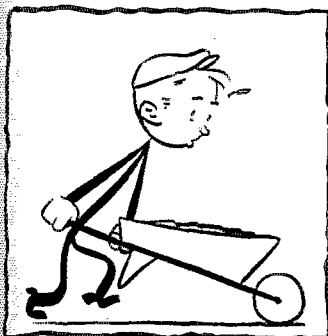
grain first enters the elevator. A thor ough analysis of primary conveying equipment will reveal the best metho of location for installation of the mag netic equipment. This information together with the necessary data on grain volume and depth of flow, per mit selection of correct style and size of magnetic separator.

Careful consideration must be giv en to these important factors:

1. At what location is the grain flowing at a minimum uniform depth and speed which will allow the separator to utilize its power to best advantage? (It should be emphasized that speed, depth, and uniform flow of the grain are the most vital factors).

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CAUSE AND CURE



Unsafe Scaffold

Laborer wheeling concrete batch to the pouring forms on a 15-foot scaffold suffered multiple fractures that caused several weeks lost time when the scaffold collapsed as a stringer cracked at a knothole.

Correction: Contractor ordered that superintendent on each job must be responsible for final approval of every scaffold before it could be placed in use. Carpenters were instructed about avoiding flaws in scaffold lumber.



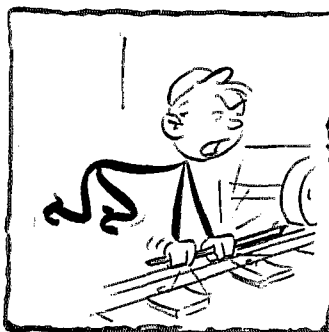
Home Cleaning

Welder was burned seriously when molten metal fell from his work, igniting his overalls which he had washed the day before in a mixture of kerosene and gasoline.

Correction: His foreman, after a first comment that "anyone should have better sense," feared others might share this ignorance of a common safety rule and emphasized the danger of gasoline as a cleaner at the next safety meeting.

Moving Cars

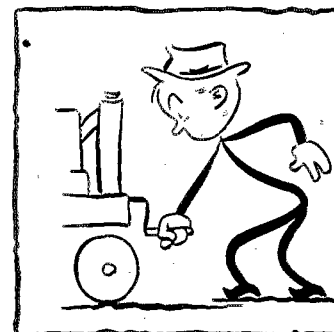
A worker trying to move a freight car by use of a pinch bar suffered skinned knuckles and a sprained back when the bar slipped on the wet rail as he applied his weight.



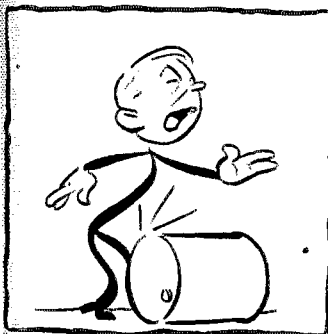
Correction: All freight handlers and other yard workers were instructed in the proper manner of bracing themselves to prevent falls and pinch bars and car movers used for moving cars were provided with disks to protect fingers.

Cranking Engine

An employee trying to start the gasoline engine of a concrete mixer suffered fracture of his right forearm when the engine backfired, causing the crank handle to strike his arm.



Correction: Starters were provided where possible, but workers required to crank were instructed to retard the spark control, to grasp the handle with thumb extended beside the hand, and to lift upward in quarter-turn strokes.



Unloading

A full 50-gallon drum pinned a helper's foot and leg against a wall when it fell from a truck bed as it was being unloaded, causing serious injuries.

Correction: Barrel skids should be used when one man is unloading drums of this size. If a helper is not available for unloading without skids and dropping of drums is permissible, he should have room to get out of the way.

Dust in Eyes

Three workers engaged in breaking concrete pavement with air hammers suffered lost time eye injuries and two loaders complained of irritation from rock dust in their eyes.

Correction: Although such operations were not common to these workers, all were given special instruction in eye protection, with emphasis on their personal responsibility to wear goggles on all jobs dangerous to the eyes.





The Smaller Plant

Hints for Department Supervisors and Managers of Smaller Plants

Safety Program Essentials

By JOHN M. ROCHE

THERE are approximately 8,000,000 employees in the industrial manufacturing establishments of this country, including 2,500,000 workers in plants employing fewer than 100 persons—ample evidence that the small plant safety problem is a real one.

Most safety engineers agree there is a definite need for more safety work in these so-called "smaller plants." Studies made by the National Safety Council show the frequency rates for plants in this group are 47 per cent higher than the general industrial average for all manufacturing industries.

There are many reasons for this. Most such plants do not have safety engineers, and in the great majority, no one person is assigned responsibility for accident prevention work. As a matter of fact, the only safety work done in such plants is that provided by the occasional visits of insurance company safety engineers, and no matter how excellent that work might be, one or two visits a year do not constitute the foundation of a good safety job.

Unless his accident experience is extremely bad, so that he is refused compensation insurance, the small plant operation usually is firm in the belief that his insurance company pays all his accident costs. He neglects the so-called "hidden costs" which may vary from two to four or more times the compensation and medical costs. He neglects the cost of no injury accidents which involve damage to product or equipment and gener-

ally considers the cost of such charges as part of the normal production loss.

A study of the accident records of almost any small plant will show that accidents are actually costing far out of proportion to their importance in the over-all operating scheme and that even a small amount of executive attention would pay relatively large dividends.

With these thoughts in mind, it can be seen that whatever work is done in the small plant to prevent accidents must not infringe too much upon the time of the operating executive and may not involve an expense of more than a dollar or two per employee.

Assign Responsibility

Within these limitations, organization for safety work is no different in the small plant than it is in the larger plant where special personnel are assigned and ample funds are provided to carry on a comprehensive accident prevention program.

In the small plant, it is just as necessary for management, or in this case, perhaps the owner, to have a real desire to prevent accidents which are occurring to his employees. He must back up that desire with specific interested action, seeing to it that a safe working environment is provided.

The first step in organizing for safety in the small plant is to assign responsibilities for accident prevention, on a part-time basis, to one individual. This man may be the owner himself, a superintendent, or a confidential assistant who might be charged with a variety of other duties. Unless such responsibilities are definitely assigned, no real safety work

will be done on a permanent basis. There may be sporadic bursts of activity, but these would depend upon the personal supervision by the plant manager himself.

Once an individual is given responsibility and arrangements have been made for reporting progress, or the lack of it, to management, a real effort can be made to reduce and control industrial accidents.

The first step that must be taken is to find out exactly what the accident problem is. Past accidents must be analyzed and predominant causes must be ascertained so that corrective steps may be taken to prevent recurrences. At the same time, a simple accident record system should be installed that will give information valuable in preventing other accidents.

Following the establishment of an accident record system, the premises must be made physically safe. Here the man responsible has three tools at his disposal: (1), His analysis of accidents which shows the physical conditions responsible for injuries; (2), Facts determined as a result of a plant inspection, and (3), His personal experience, which will indicate what conditions might cause accidents if permitted to exist.

For best results from an inspection, a small inspection committee should be formed on a permanent plan. This committee should make the initial inspections of the plant to correct conditions and thereafter should make periodic inspections. The recommendations developed as a result of the initial inspection should be promptly carried out so that a policy safety committee will have a foundation upon which to base discussions.

The policy safety committee should consist of a management representative, supervisory representatives and, if desired, one or more employees. It should be this committee's job at monthly or semi-monthly meetings to review accident experience, to sug-

John M. Roche is Manager of the Industrial Department, National Safety Council.

gest changes in safety policy, and to see to it that recommendations submitted by the inspection committee are carried out. The meeting of this committee need not last longer than thirty minutes and will not, if a business-like agenda is prepared for accident prevention. Given a reasonably well constructed and efficiently operated plant, the principal duty of this committee will be to dispose of recommendations and make suggestions.

Again, comparing a small plant with a larger plant, the safety training program differs only in size. The small plant needs safety posters to maintain interest of employees in the prevention of accidents. They need simple rule booklets, perhaps rules printed on cards rather than booklets, but above all, they need the proper introduction to safety in the plant upon employment.

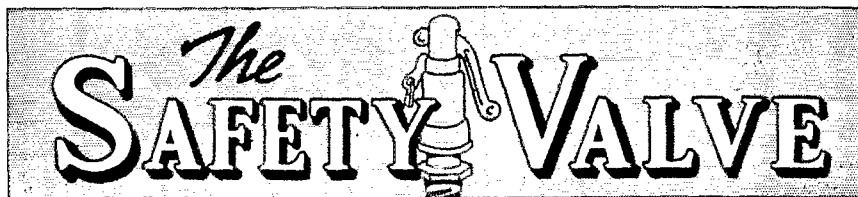
The older employees should, of course, explain what the company's safety policy is and they should be required to adhere to it.

When a new employee is hired, he should be given specific instructions in the safe way of doing the work to which he is assigned. It should not be assumed, no matter how simple, that he knows the job which he is to do. But rather, he should be carefully told what to do, shown what to do, and checked upon his performance by his supervisor. The company's safety policy should be explained to him, and he should be invited to ask questions on any point which he doesn't understand.

Group safety meetings should be held at regular intervals. With modern training techniques such as sound slidefilms, the safetygraph, and motion pictures, interest of employees in safety can be maintained at a small cost. Many film strips and motion pictures can be obtained from insurance carriers and local councils at no cost. In some cases, the insurance carrier or the local council will provide the equipment for using sound slidefilms and motion pictures and will send a man to conduct the meeting.

These meetings should be based on the plant's problems. Review of the accident record will dictate the subject of the meeting and, more important still, will show what direction the activities of the inspection com-

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Thoughts from the Orient

THOSE who regard the Orient is steeped in an enervating fatalism will undoubtedly be surprised at these translations of Indian poems sent in by Edward W. Miller, safety director, Headquarters, South Service Command, at Fort Rucker, T. H.:

SAFETY

*Who is he,
The man who passes in safety
These perilous pathways of life
And in safety comes to his journey's end,
The exceeding bliss of God's home?*

*He it is,
Whose reason is like to a charioteer,
Well skilled in his work;
And whose mind,
Like the chariot reins,
Is held firmly under control.*

*Awake,
Arise,
Learn from the wise their wisdom:*

*To traverse this pathway of life—
Thus they, the Sages, declare—
Is as hard as to walk on the edge of a razor.*

These verses are from a volume, *Songs from Prison—Translations of Indian Lyrics, made in Jail by M. K. Gandhi. Adapted for the Press by John S. Hoyland.* (George Allen & Unwin, Limited, London, 1934). Mr. Miller found the book in a second-hand book store in Honolulu.

The imagery of the lyrics is Oriental, but their point of view is quite modern and in thorough accord with Occidental ideas.

Humanizing Correspondence

ANSWERING letters the same day and keeping a clear desk are the characteristics of the true executive—the man who gets things done. (Few editors would rate "A" on this test).

The first challenge to this axiom I have seen is in *Management Briefs No. 12* (Rogers and Slade), quoted by *The Management Review*. The article points out that overemphasis on promptness often results in letters that lack depth and breadth and humanness.

One corporation president whose

letters possess these qualities in marked degree has a unique system, described in the article. For years he has separated his daily mail into two piles—"Strictly Routine" and "Double Exposure." Letters of the first type he dictates rapidly and signs *without reading*. (Not every man has such a dependable secretary).

"Double Exposure" letters he dictates thoughtfully and has typed on plain paper, triple spaced for easy revision. These letters are left overnight to season—or for three or four hours if they must be answered the same day.

The first draft may be satisfactory as to content, but he usually finds that a more expressive or less hackneyed word or phrase can be used here and there, or a brief paragraph added to humanize the exchange of correspondence.

Sometimes he revises letters drastically. By the time he reviews them, his subconscious mind has raised points that did not occur to him while he was dictating—the points you remember after the letter has been mailed.

This sounds like a lot of work, but the executive claims that it not only improves the letters but actually cuts down the volume of correspondence. Every important letter is carefully thought out, and so complete and definite that it eliminates much back-and-forth correspondence to cover all angles of a situation.

There is one time when this Double Exposure system is particularly desirable. That is in replying to a letter that gets under your skin. Dictate as hot a reply as you like—with due regard for your stenographer's ears. It will relieve your feelings. But let it cool over night. Chances are you won't mail it next morning. And the letter that blistered your hide probably wouldn't have been sent if the writer could have read it next morning.

Carman Fish

Spring Again

...and that Means Clean-up!

FROM March through May—depending on the latitude—"clean-up weeks" are held in countless plants, communities and homes. Fire and accident hazards and eyesores disappear, temporarily, at least, in the flurry of housecleaning zeal.

There are those who argue that housekeeping should be a continuous affair, not just a spring spurt. There is no argument there, but there is also reason to believe that brief campaigns which hit one problem hard are also helpful. They are particularly useful for seasonal topics. Although keeping clean shouldn't be limited to any particular season, the impulse to freshen up gets a big boost in the spring when Nature sets an example.

Also, there are winter accumulations of grime and litter which seem more conspicuous when the days get longer. So the safety program may well take advantage of the spirit of the season and freshen up the premises.

Housekeeping has often been slighted because of the prevalent attitude that it merely means keeping aisles clear and collecting and disposing of dirt. Those elementary phases are important enough but they are just a start.

There is more to housekeeping than meets the eye. Keeping the plant neat and attractive is desirable for its own sake but the benefits in health and efficiency are far-reaching. The

housekeeping set-up and program includes more than the clean-up squad.

Many housekeeping problems start when the plant is built and the equipment installed. Inadequate work and storage space mean constant trouble. But that is too big a problem to discuss here.

Safety, after all, means making the best of things as they are, and a few changes will often help while waiting for a new or enlarged plant. Better timing of material movements, changes of layout to permit more effective use of floor space, and mechanical equipment for handling materials,



are part of the long-range housekeeping program.

But the job at hand is to get the place spic and span, to take care of details that have been neglected during the winter, and to awaken the interest of employees in the appearance and cleanliness of their work place. It is hoped, too, that the lessons of the campaign will carry over into the succeeding months.

While interest is concentrated on the spring cleaning is a good time to examine the whole housekeeping set-up and recommend any desirable changes. In some small plants, and some not so small, the practice has been to hire one or more porters and tell them not to spare the elbow grease. Plans and schedules are often lacking and responsibility is vague.

In some plants housekeeping is a function of the safety department,

but the safety director has a very definite interest in the program. Where it is the job of some other department, a little tactful promotion may help to bring about considerable improvement.

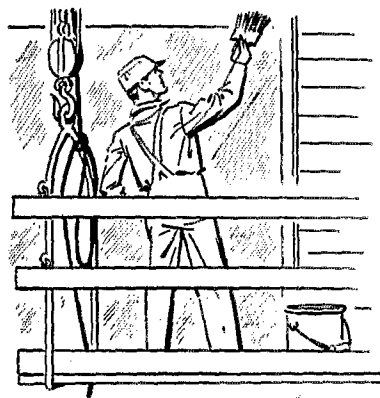
The Program

The first step is the appointment of a supervisor, part or full time, to set up and carry out the program. He should have a reasonable allowance for labor, equipment and supplies.

Department heads should be consulted on all problems involving their departments. The maintenance force can make an important contribution in the maintenance of equipment. That includes production machinery and the equipment used by the janitor force, such as ladders, vacuum cleaners, floor machines, etc.

Itemized orders for regular cleaning of all sections of the plant and grounds should be provided. There will be daily, weekly, monthly and quarterly chores to be done by the janitors, such as cleaning of sanitary facilities, windows, lighting fixtures, etc.

To make the program work, a routine must be established for periodic inspections. Check lists are essential. Each plant has its own problems, but a suggested list covering most of the general items can be obtained from the National Safety Council.





Promoting the Campaign

To arouse interest, every available channel of publicity should be used. The following are suggested:

Bulletin boards. Many posters on this subject are available and they can be supplemented effectively with local material. Use some "before and after" photographs of conditions in the plant. Feature accidents that have been caused by poor housekeeping. Watch the local press for stories of fires. If housekeeping was involved, post a brief summary of the facts. Once a week, chart progress made to date in the campaign.

Posters should be left up from three to five days. They should not be crowded with other material.

Employee publications should be used freely. Some of the material suggested for bulletin board display may be used more effectively in the publication. The camera can provide much material, some of it posed and some of it, perhaps, just as the photographer found it. Standings of contests should be recorded but not in too great detail. Messages from executives to employees may also be used.

Contests. to be successful, require careful planning, close supervision and proper timing, also good promotional publicity.

Sound slidefilms are suitable for groups of from 20 to 50 employees. A comfortable, well ventilated meeting room is important. The film should be shown to the group, then tied in to the plant with a discussion of 15 to 20 minutes.

Suggestion systems can concentrate on housekeeping suggestions during the campaign. If no regular system is in operation, a contest may be held for the period with prizes for prac-

tical suggestions. Every suggestion should be acknowledged.

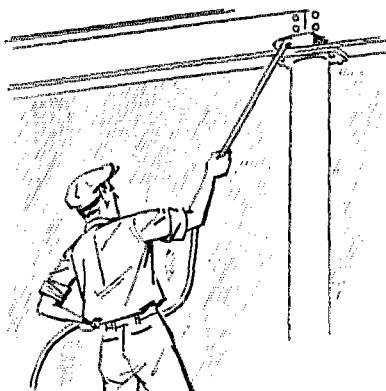
Offices are not free from housekeeping hazards and office workers should be included in the campaign.

Landscaping

More and more, industries are recognizing the value of attractive grounds, and where space permits have done much to beautify their surroundings. Last year the American Association of Nurserymen sent a questionnaire on the subject of factory landscaping as an aspect of community relations.

Among the factors listed, good-housekeeping in plants and offices ranked first, followed by participating in civic activities and practices regarding visitors, with landscaping fourth.

Labor relations, though influenced



by attractive surroundings, were purposely omitted from this survey.

At the beginning of this year, the National Association of Manufacturers reported, nurserymen were expecting a prosperous year due in part, among other things, to the growing interest among factory managements in trees and shrubs.

Factory owners are in the market for trees, shrubs, and flowering plants for two principal reasons, says the NAM. First, it is furthering good "employee relations" to make factory grounds beautiful. Particularly is this true among companies that employ large numbers of women.

The second reason is that it is good "community relations" to beautify factory grounds, especially if the factory is near a good residence district. Owners have found that nearby prop-

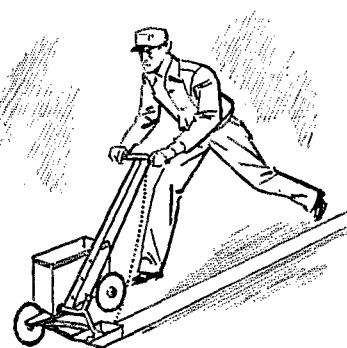


erty owners won't object to a factory that is one of the beauty spots of the neighborhood.

These Help

Not all of the measures that improve housekeeping involve large expenditures or drastic revision of operating practices. Here are some of the things that remedy common defects in housekeeping:

1. Supply an adequate number of well constructed trash containers.
2. Set up a schedule for frequent emptying of such containers.
3. Mark aisle lines and keep such lines maintained.
4. Provide plenty of clean-up equipment.
5. Add to the janitor force if necessary.
6. Provide a printed list of reasonable housekeeping rules.
7. Direct supervisors to enforce such rules, and follow through.
8. Provide adequate storage facilities for inactive stock and stock in process.
9. Eliminate obsolete stock, parts and waste.
10. Keep floors, ramps, stairs in good repair.
11. Provide adequate lighting, both general and operational.
12. Clean windows, skylights, lighting fixtures regularly.
13. Set up system and facilities for control of hand tools.
14. Have enough splash guards and drip pans.
15. Allow employees enough time to keep workplaces in good order.





H. W. Marsh



Louis Glazer



R. T. Solensten



Harry L. White



Robert Hutchinson

They Won Their "Green Spurs"

TEN men shared top honors in the National Safety Council Fall Roundup of new members.

Tied for first place in terms of number of new members corralled were: Herman Marsh, North Carolina Industrial Commission, Lexington, N. C.; Louis Glazer, roundup boss for the Wood Products Section and insurance manager for Dierks Lumber and Coal Company, Kansas City, Mo.; and R. T. Solensten, vice-president, Elliott Service Company, New York, and the Council's former Vice President for Membership. Each of these GREEN SPURS winners corralled five mavericks.

Harry L. White, manager of the New Haven Dairy, New Haven, Conn., and the New Haven Safety Council's Vice President for Membership, took first place honors for amount of new membership dues—\$374.75. Mr. White also came in second for number of new memberships. Robert W. Hutchinson, of Marsh and McLennan, Chicago, was second place new-dues winner, and first place number-of-members winner Herman Marsh also won third place for new dues.

Five men tied for third place in number of new members corralled: Captain Edward C. Holden, Jr., United States P & I Agency, Inc. and roundup boss for the Marine Section; Frank W. Lawrence, Jr., Southern Dairies, Inc., Washington, D. C.; Construction Section Roundup Boss Harold Sneed, Dewalt, Inc., Lancaster, Pa.; Michael Harrigan, safety director for W. Lowenthal Co., Cohoes, N. Y., and D. K. Yorath, Secretary of the Canadian Western Natural Gas Company, Calgary, Alberta.

Percentage-wise, the Railroad Sec-

tion won first place in the Roundup with a 5.6 percent increase in their membership. Since the majority of railroads in this country have belonged to the Council for years—long before the Roundup started—the Railroad Section now has almost 100 percent of its potential enrollment.

The Food Section corralled the greatest number of new members. And according to the Food Section Executive Committee, the Roundup was just the beginning. At a committee meeting in December they assigned themselves membership prospects and started their own campaign to strengthen the Food Section.

The Coal Mining and Textile Sections each had a five percent increase in memberships, tying them for second place in the percentage rankings.

The Wood Products Section, with 4 percent increase, came in third.

In number of new members corralled, the Automotive and Machine Shop Section ran a close second to the Food Section—one less member—and the Textile Section was in third place.

Fall Roundup prospects are still sending in their applications for membership, and probably will continue to do so for the next six months. So final Roundup results cannot yet be totaled.

This much can be said definitely however. The Roundup accomplished its main objective—reviving membership participation in building the Council. The challenging job of strengthening the safety movement has been started.

AUDITOR'S REPORT

See facing page

*To the Members of
National Safety Council, Inc.*

We have examined the balance sheet of National Safety Council, Inc., at December, 1947 and the statement of income and expenses for the year then ended, have reviewed the system of internal control and the accounting procedures of the Council and, without making a detailed audit of the transactions, have examined or tested accounting records of the Council and other supporting evidence, by methods and to the extent we deemed appropriate. Our examination was made in accordance with generally ac-

cepted auditing standards and included all procedures which we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and statement of income and expenses present fairly the position of National Safety Council, Inc. at December 31, 1947, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ARTHUR YOUNG & CO.

*Chicago, Illinois,
February 11, 1948*

NATIONAL SAFETY COUNCIL, INC.

BALANCE SHEET—DECEMBER 31, 1947

ASSETS		LIABILITIES	
CURRENT ASSETS:		CURRENT LIABILITIES:	
Cash in banks and on hand.....	\$180,913.04	Accounts payable—	
U. S. Government securities, at cost		Trade	\$ 95,646.26
(market value, \$188,788.33).....	188,131.88	Other—including withheld taxes.....	16,616.81
Accounts receivable—		Total current liabilities.....	\$112,263.07
Dues and services to members, less			
reserve, \$11,117.81	\$234,200.65	UNEXPENDED FUND BALANCES:	
Accrued interest on bonds and miscel-		Winter Driving Hazards Study.....	\$ 50.87
laneous	2,476.79	Farm Safety Program.....	10,876.05
	236,677.44		10,926.92
Inventories of paper, printing supplies		DEFERRED INCOME:	
and postage, at cost.....	27,615.59	Unfulfilled memberships and service con-	
		tracts	420,000.00
Total current assets.....	\$633,337.95	APPROPRIATION FOR AMERICAN SOCIETY OF	
FIXED ASSETS:		SAFETY ENGINEERS RESEARCH PROJECTS....	35,455.07
Furniture and fixtures.....	\$ 1.00	FUNDS AVAILABLE FOR CURRENT SAFETY	
Printing machinery and equipment.....	1.00	PROGRAMS:	
	2.00	Balance, December 31, 1946.....	\$ 15,764.45
DEFERRED CHARGES	29,140.41	Add: Excess of income over expenses	
		for the year ended December 31, 1947	68,070.85
		Balance, December 31, 1947.....	83,835.30
	<u>\$662,480.36</u>		<u>\$662,480.36</u>

Note: Funds collected by National Safety Council, Inc. Public Service Fund are not taken into account in the above balance sheet. Green Cross Campaign collections are similarly treated. The unexpended balance of such funds at December 31, 1947 consisted of cash, \$24,186.66, and contributions pledged, \$400.

STATEMENT OF INCOME AND EXPENSES

For the Year Ended December 31, 1947

INCOME:		EXPENSES:	
Operating—		Accounting	\$ 37,493.43
Membership dues	\$ 625,765.83	Administrative	170,830.97
Sales of publications.....	402,140.67	Contingent fund	1,011.40
Advertising	183,552.62	Executive	82,055.72
Posters	184,333.63	Field organization	103,702.19
Calendars	176,356.76	Fund raising	38,461.17
Films and sound slides.....	54,216.44	Green Cross campaign.....	10,169.40
Other materials	72,094.19	Industrial safety	108,566.26
Congress 1947	55,744.80	Membership	153,426.82
Miscellaneous	4,379.03	Personnel	15,054.86
Printing department, inter-depart-		Planning	6,111.93
ment transactions	85,686.17	Public information	152,485.22
	\$1,844,261.14	Public safety	147,503.79
Deduct: Increase in reserve for un-		Membership service publications and	
fulfilled membership and service		materials	624,077.31
contracts	80,000.00	Research	73,021.17
	<u>\$1,764,261.14</u>	Service	320,985.77
Public service and other contributive		Automotive Safety Foundation.....	89,781.21
income	456,303.79	Winter Driving Hazards Study.....	11,288.17
Other—		Public service publications.....	17,873.78
Interest on investments.....	\$ 5,411.49		2,163,900.57
Consulting fees	1,870.00		
Member training course fees.....	4,125.00		
	11,406.49		
	<u>\$2,231,971.42</u>	Excess of income over expenses for the	
		year	\$ 68,070.85

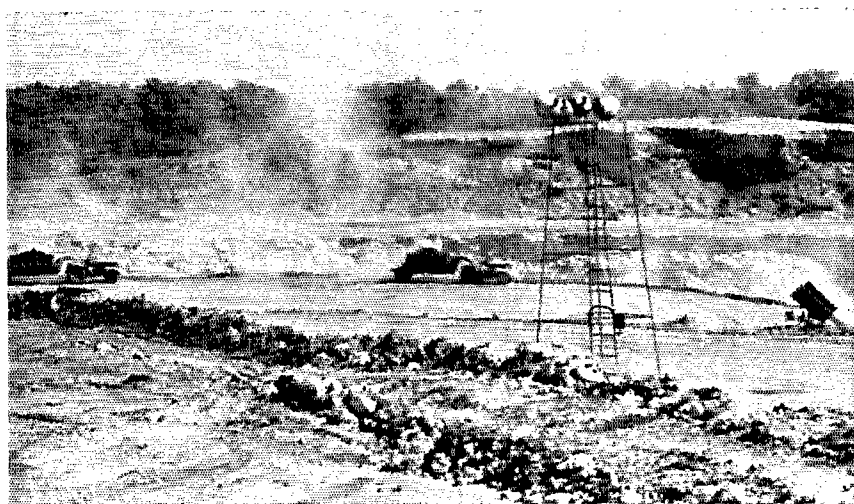


Figure 2. Floodlighting equipment for night operations at the Marquette Cement Manufacturing Company's quarry at Oglesby, Illinois.

13. Physical defects, such as a weak heart or poor eyesight, may be factors in accidents. Therefore, a pre-employment medical examination, followed by periodic examinations, is recommended for operators.

14. The establishment of a definite procedure for inspection (required daily by some companies) and maintenance of equipment are recommended whether equipment is new or old. Generally, the operator is responsible for inspecting the mechanical condition and reporting unsafe conditions.

15. An inspection list should include brakes, clutches, clamps, hooks, floors (for grease and oil), running boards (for ice and other slippery conditions), and handholds.

16. Electrical parts of shovels, including trailing cables, should be inspected and maintained by an electrician.

17. A special inspection of suspension cables, including fastenings, should be made at least once a month because failure of these cables may cause serious accidents and property damage. Hoisting cable is particularly likely to show wear at cross-over and change of layer points on drums. The cable should be securely fastened to the drum, and there should be at least two full turns on the drum at all times.

Maintenance

18. Maintenance work, such as repairing and adjusting, is a major source of accidents which result in

injuries. A study made by the U. S. Corps of Engineers shows that the severity of such injuries is high, the average time charge per lost-time case (excluding fatalities) being about 240 days. Therefore, supervisors, repairmen, and operators should realize the hazards and strictly follow safe practices.

19. When the operator makes repairs and moves or leaves the equipment, it is his responsibility to set the brakes, secure the boom, lower the dipper or bucket to the ground, take the machine out of gear, and do whatever else is necessary to prevent accidental movement.

20. Before making repairs or adjustments, an operator should be sure also that the equipment is in a safe position where it will not be endangered by falling or sliding rock or earth. Accidents in which men are injured and shovels damaged often occur when the shovel is shut down for repairs too close to the face. Such accidents are likely to occur if the rock formation is faulted or develops cracks extending back from the face after blasting.

21. Before undertaking any work, repairmen should notify the operator about the nature and location of the job. If work is to be done on or near moving parts, the controls should be locked out or tagged. The lock or tag should be removed only by the repairman. Unless these precautions are taken, operators may start equipment and seriously injure repairmen.

22. These precautions are essential

also when such parts as the tracks on which small shovels revolve are to be oiled and greased.

23. Permanent disabilities frequently result from accidents which occur when work is being done on or around gears, sheaves, drums, and similar parts in motion. If these parts *must* be in motion while work is being done on or around them, they should be turned slowly by hand if possible.

24. Maintenance men frequently are caught by moving gears when the guards are removed for convenience in making repairs. Oiling or greasing may be done safely if devices designed to keep the operator's hands at a safe distance are used.

25. Men also take hold of the cables just ahead of the sheaves, and their hands are jerked into sheaves. To guide cable being wound on a drum, a bar should be used. The



Figure 3. Jumping from mobile equipment causes frequent injuries.

drums turn too fast for the hands to be used safely.

26. A repair job on a shovel is not complete until guards, plates, and other safety devices have been replaced.

27. Handling heavy parts of equipment often results in strains, toe fractures, and other injuries.* The awkward positions necessary for making repairs increase the likelihood of these injuries.

28. By providing sufficient help and suitable materials for blocking, the

*Some companies use a crane mounted on a truck for heavy repair work.

foreman can make this work safer and easier. The men should be trained to bend the knees, not the back, when lifting, to take a good grip, and to follow other safe handling practices.

29. Gloves and loose clothing are unsafe dress for repairmen, especially when they are working around slowly moving parts. Loose trousers, for instance, can be caught and jerk the feet into moving drums or gears.

30. It is essential that repairmen wear safety shoes. They should also wear goggles, especially when they use hammers and other shock tools.

Operating Practices

31. A sound procedure in training operators to work safely is to stress the practices that eliminate the most frequent and serious accidents, and to require observance of these practices.

32. A shovel may be utilized effectively to eliminate frequent serious injuries and property damage from falls of rock.* Large rocks close to the face, for example, may be set out in a safe place for drilling.

33. Since operators and their helpers are frequently struck by falling rock, they should be trained to ex-

*Other ways of using a shovel are described in Industrial Data Sheet Cement and Quarry No. 2, *Falling or Sliding Rock in Quarries*.

amine the face for loose rock and should be careful to avoid dangerous slides, which may also damage the shovel and stop production.

34. Some slides are ascribed to "unusual conditions," such as a faulted rock formation. Frozen or frosted chunks of ore, sand, and similar materials are very dangerous. Frozen banks of such materials should not be undercut. The operator should be familiar with unusual conditions and know how to offset the dangers.

35. Operators should know and observe the load limits of the equipment. Bad accidents have resulted when booms on draglines and cranes collapsed because of overloading. The manufacturer's limitations for loads at various angles of the boom should be strictly observed.

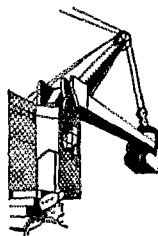
36. That heavy loads may cause overturning is especially likely on soft or sloping ground. The crane should always be level before it is put into operation.

37. Some operators of small shovels, when digging, attempt to take too large a bite, thereby using excessive power. This unsafe operating practice causes the machine to pitch so that the operator and the oiler are thrown against the frame or other parts of the machine with the possibility of injury.

38. Buckets and dippers should be filled to capacity but not to overflow.

POWER SHOVELS, DRAGLINES, etc. (Operation)

1. Do not overload buckets or booms.
2. Do not undercut the bank.
3. Before hoisting track or materials, give a signal and wait until all workers are in the clear.
4. Never swing a load over an engine or a truck until the driver has dismounted and is in the clear.
5. Load trucks or cars evenly so that material does not overhang the sides.
6. Shut off the power and secure all movable parts before you repair or leave your machine.
7. Use the handhold in getting on or off equipment. Do not jump.
8. Keep floors and running boards free of grease, ice, and debris.



SAFETY INSTRUCTION CARD No. 696
National Safety Council PRINTED IN U.S.A.

Figure 5. Safety Instruction Card No. 696 is a concise summary of safe operating rules for employees.

ing; rock falls endanger workers and equipment and cause excessive spillage.

39. All workers should be aware of the possibility that rock may fall when dippers are filled and swung. A good operator does not swing a load over an engine and does not load a truck until the driver has dismounted and is in the clear, unless the cab is designed to protect the driver.

40. Loading should not be done from the blind side. Cars and trucks should be loaded evenly so that earth or rocks do not overhang the sides.

41. An operator has responsibility for the safety of other men working around the equipment. It is essential for him to observe and keep constantly in mind the positions of other workers and for him not to move or swing the equipment while the men are in dangerous locations. Otherwise, they may be struck by falling rock, squeezed between the shovel and the bank or similar pinch point, or struck by the dipper or other parts of the equipment. One company has equipped the shovel with a siren which the operator blows before any special movements are made.

42. The men in turn should warn the operator not to move equipment while they are in a danger zone.

—To page 72

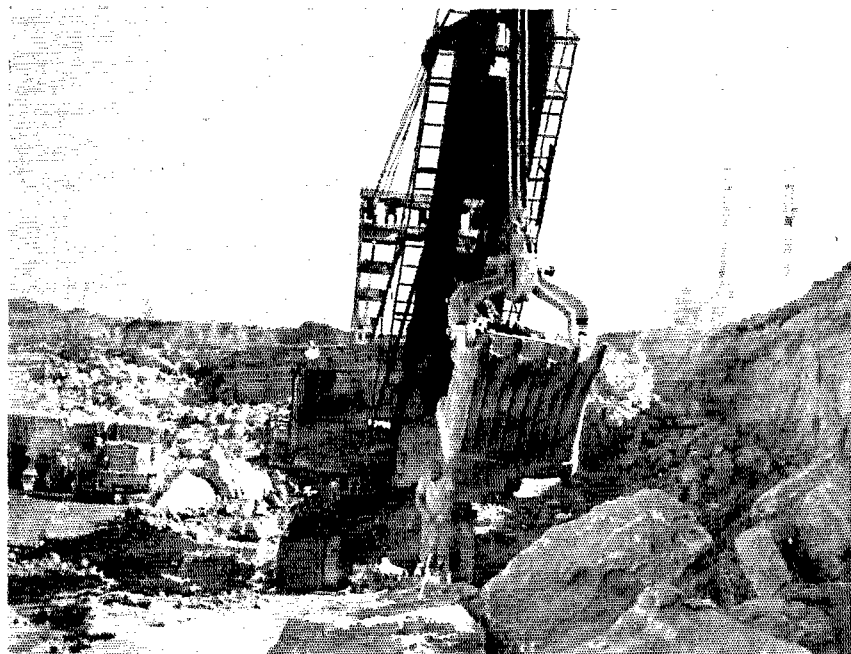


Figure 4. Workmen should be thoroughly impressed with the danger of performing any work within the range of swing of shovels and similar equipment.

Reasons Why THE *Finnell* DRY SCRUBBER CLEANS FASTER...More Thoroughly

A unique combination of labor-saving features is responsible for the greater speed and thoroughness with which the *Finnell* Dry Scrubber cleans grease-caked floors.

Equipped with two powerful scarifying brushes, this *Finnell* digs through and quickly loosens the most stubborn coatings of dirt, oil, grease, and shavings—as the special couplings adjust brushes to floor irregularities, to get into indentations and grooves that rigid coupling brushes would pass over and miss.

To re-sharpen the brushes of the *Finnell* Dry Scrubber, simply flip the switch. That reverses the motion of the brushes and re-sharpens them *automatically*... while working. Eliminates the need for frequent changing of brushes by hand in order to maintain a good cutting edge.

Low construction makes it easy to clean around and beneath equipment, and the adjustable handle adapts the machine to operator's height for most effective working position.

Various types and sizes of wire scarifying brushes are interchangeable in the brush rings of this *Finnell* and, with other brush rings, the machine can be used for wet scrubbing, steel-wooling, waxing, and polishing. Ruggedly constructed. Has heavy duty G. E. Motor, oversize Timken Roller Bearings, special bronze worm gears, leak-proof gear case.

For free floor survey, consultation, or literature, phone or write nearest *Finnell* branch or *Finnell* System, Inc., 2204 East Street, Elkhart, Indiana. Canadian Office: Ottawa, Ontario.

Reversible Switch
re-sharpens brushes automatically

Adjustable Handle
adapts machine to operator's height

Low Gear Case
allows cleaning beneath equipment

Flexible Brushes
adjust to floor irregularities

Everything
FINNELL
for Floor Care

FINNELL SYSTEM, INC.
Pioneers and Specialists in
FLOOR-MAINTENANCE EQUIPMENT AND SUPPLIES

BRANCHES
IN ALL
PRINCIPAL
CITIES

For Distinguished Service

Companies which have won the National Safety Council's
Award of Honor for Distinguished Service to Safety

American Brakeblok

Division of American Brake Shoe Co., Detroit, Mich. — For operating 1,672,981 man-hours without a disabling injury from October 1, 1946, to October 31, 1947. The award was presented February 12 by Arthur S. Kelly, staff representative, Power Press Section, NSC.

American Bridge Co.

Ambridge Plant, Ambridge, Pa. — For operating 1,300,000 man-hours without a disabling injury from September 17 to November 10, 1947. The award was presented by Harry H. Brainerd, executive manager of the Western Pennsylvania Safety Council and member of the Board of Directors, NSC, at a dinner at Ambridge Country Club, February 13.

American Rolling Mill Co.

East Works, Middletown Division, Middletown, Ohio — For operating 2,280,000 man-hours without a disabling injury from December 18, 1946, to March 14, 1947. The award was presented October 21, 1947, at a joint meeting of labor and management, Hotel Manchester, Middletown.

Bauer & Black

Division of Kendall Co., Chicago — A second award, for operating 1,757,300 man-hours without a disabling injury from January 16 to October 1, 1947. Award was presented December 4 by Ray Ketchmark, staff representative, Textile Section, NSC.

Calif. Research Corp.,

Richmond Laboratories

Richmond, Calif. — For operating 1,398,658 man-hours without a disabling injury from August 21, 1946, to July 25, 1947. The award was presented March 2 by Robert A. Pike, field representative, Western Region, NSC.

Carnegie-Illinois Steel Corp.

Edgar Thomson Works, Braddock, Pa. — For operating 1,654,001 man-

hours without a disabling injury from June 29 to August 25, 1947. Award was presented October 13, 1947.

Chatham Manufacturing Co.

Elkin, N. C. — A second award: 1947 accident frequency and severity only 22 per cent and 9 per cent respectively of the group averages, with reductions in both rates as compared with 1946. Award was presented January 15.

Columbia Steel Co.

Torrance Works, Torrance, Calif. — For operating 1,811,088 man-hours without a disabling injury from April 8 to November 27, 1946. Award was presented at Torrance by Col. F. C. Lynch, manager, Greater Los Angeles Safety Council.

E. I. du Pont

de Nemours & Co.

Louisville Works, Louisville, Ky. — For operating 1,249,029 man-hours without a disabling injury from April 28 to December 19, 1947. The award was presented by Ned H. Dearborn, president of the National Safety Council, at the Annual Meeting of the Louisville Safety Council, Brown Hotel, Louisville, February 10.

Metropolitan Edison Co.

Reading, Pa. — For operating 2,605,235 man-hours without a disabling injury from May 9, 1946, to April 7, 1947.

Rheem Manufacturing Co.

Chicago — For operating 1,200,000 man-hours without a disabling injury from July 3 to December 30, 1947. The award was presented at a supervisors' luncheon on February 16 by Arthur S. Kelly, staff representative, Power Press Section, NSC. (A second award).

Riegel Paper Corp.

Milford, N. J. — Accident frequency reduced 42 per cent and severity 79 per cent in 1946 as compared with

1945. Award was presented December 2, 1947, by G. R. Casey, Tredwell Engineering Co., president of the Lehigh Valley Safety Council, at an evening meeting of the supervisory force.

Shell Chemical Co.

Shell Point Plant, Pittsburg, Calif. — Accident frequency reduced 71 per cent and severity 61 per cent in 1946 as compared with 1945. The award was presented by Robert A. Pike, field representative, Western Region, NSC.

Swift & Co.

Kansas City Plant, Kansas City, Kans. — For operating 1,021,057 man-hours without a disabling injury from January 25 to April 15, 1947. The award was presented January 28, by Sidney J. Williams, assistant to the president, NSC, at the annual Swift "Family Party." Attending the ceremony were John Holmes, president of Swift & Co., Chicago; the mayors of four cities, and chamber of commerce and safety council officials, and 3500 employees and members of their families.

The Texas Co.

Delaware River Terminal, Claymont, Del. — For operating 1,071,313 man-hours without a disabling injury from December 10, 1943, to September 30, 1947.

West Tulsa Works, Tulsa, Okla. — For operating 1,131,039 man-hours without a disabling injury from October 19, 1945, to September 30, 1947. Award was presented at Tulsa, December 15, 1947.

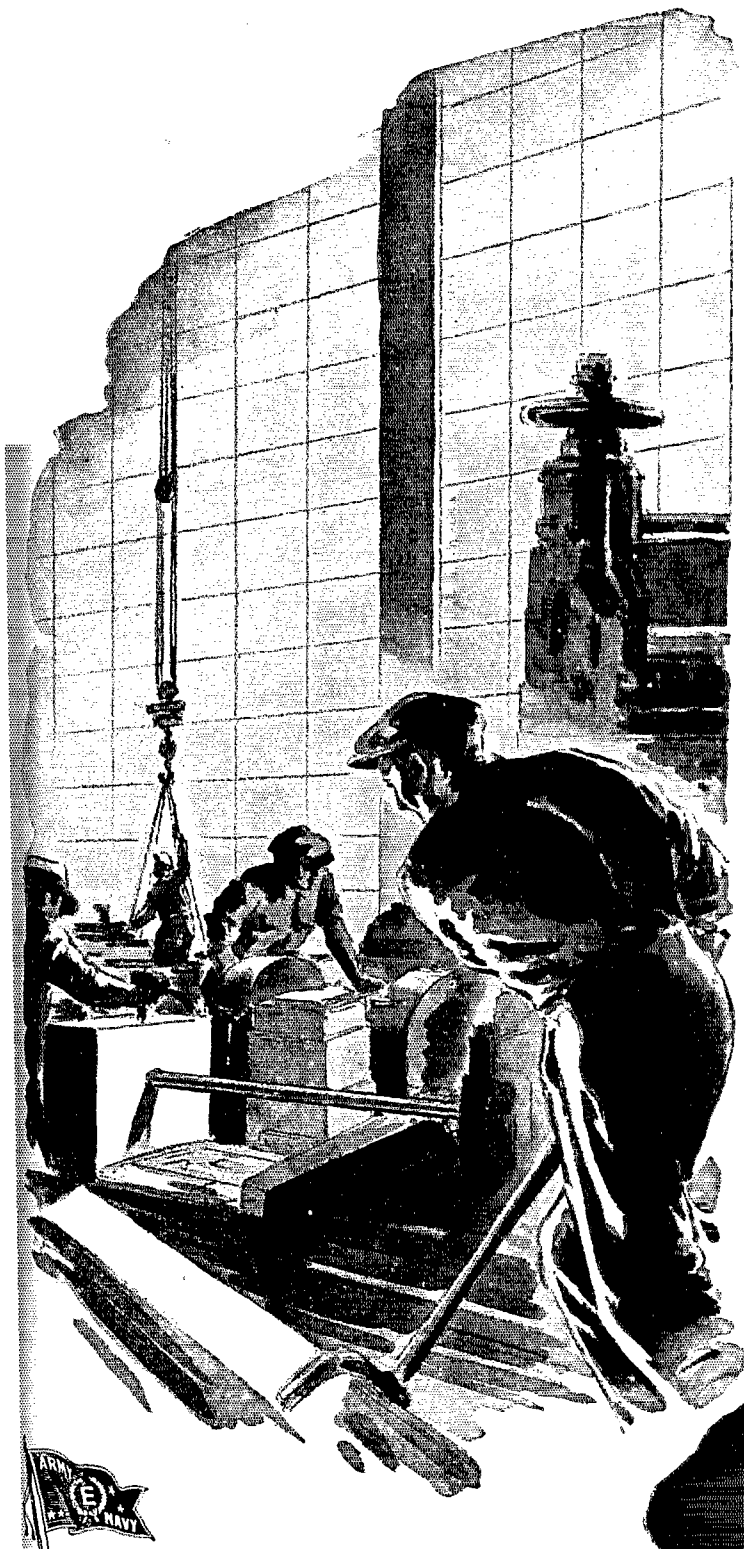
"And Then What Happened?"

That is the title of a department in the *Illinois Central Magazine* devoted to a review of recent accidents on the system. An introductory paragraph describes the setting and the events leading up to the accident.

The subhead, "And Then What Happened?" is followed by the details of the accident. Concluding the item is a paragraph in bold-face type explaining how it could have been prevented.

There are two periods when fishing is good . . . before you get there and after you leave.

Prevent INFECTION



Extensive clinical use of Mercurochrome over a period of twenty-five years has clearly demonstrated its antiseptic value.

Prevention of infection is important in reducing lost time due to accidental injuries. Even minor wounds should be properly treated because they may lead to serious infections if neglected.

Mercurochrome (H. W. & D. brand of merbromin, dibromoxymercurifluorescein-sodium) is one of the best antiseptics for first aid use. It is accepted by the Council on Pharmacy and Chemistry of the American Medical Association for this purpose. The 2% aqueous solution is not irritating and may be applied safely to wounds.

Injuries are reported promptly when Mercurochrome is the routine antiseptic because treatment is not painful.

Other advantages are that the solution keeps indefinitely and the color shows where it has been applied.

Keep a bottle of Mercurochrome handy for the first aid care of all wounds.



HYNISON, WESTCOTT & DUNN, INC.

Baltimore, Md.

Industrial Health

Highlights in Industrial Medicine, Hygiene and Nursing
compiled by F. A. Van Atta, Industrial Department, NSC

Interviewing and Counseling

Basic Principles and Techniques of Interviewing and Counseling, by Leonard E. Himler. *Industrial Medicine* 16:529-534 (November, 1947).

The successful counselor must have a mature well balanced personality and be capable of building up an understanding between himself and the person being interviewed without becoming emotionally involved in the problems being discussed. He must also free his activities of the limitations which may result from strong convictions about others, other peoples' status or activities.

The counselor must become adept at eliciting information without producing hostility since even the individual asking for help on a problem will frequently avoid talking about the central issue, either consciously or unconsciously.

It is not possible to draw a sharp line between interviewing and counseling but for definition counseling is said to begin when the interview goes beyond the exchange of factual and objective information. Counseling is necessarily a long procedure since any fundamental attitudes influencing behavior are apt to be deeply rooted and to be modified only by a continuing process of growth.

The non-professional counselor need not be concerned with matters of diagnosis except for determining whether the problem is moderate or severe in degree. When the emotional factors are complex and deeply seated and when physical complaints are a part of the problems the professionally trained therapist should be called upon. Referral to the psychiatrist should be discussed frankly as one of the responsibilities of counseling and if there is resistance to the suggestion it should be carried out step by step with the aid of reassurance and suggestion.

Skilled listening is one of the most useful parts of the counseling technique. This involves primarily re-

fraining from giving premature advice and asking questions which will direct the individual's attention to his own internal problems rather than to his external reactions to them. This method permits the individual to gradually express his real underlying feelings and to initiate his own corrective measures.

Reassurance may be of usefulness in counseling but it should be given only with regard to specific topics in which the counselor is competent to express a judgment.

When notes are made of an interview they should be of such a nature that they can be written in plain view and the person being interviewed can be permitted to read them if he wishes. They should in any case be brief and factual.

There are 35 rules of procedure in interviews which cannot well be abstracted but which should be studied in the original.

Problems of Eyesight Conservation

Vision in Industry, by Hedwig S. Kuhn. *Transactions the American Academy of Ophthalmology and Otolaryngology*, September-October, 1947, Pages 54 to 62.

The first services to industry by ophthalmologists were the medical and surgical care of eye patients. This has been done for many years but it is still not completely appreciated that the man with an injured eye should be sent directly from the plant to the ophthalmologist. An equally important point is that the plant personnel should have specific standing orders for the treatment of emergency eye cases prepared by the ophthalmologist.

If the injury to the eye is by a splash of chemical or a toxic vapor the most important first aid measure is immediate and thorough irrigation of the eye. It should be washed out at the point of injury with the lid open and then irrigated under anesthesia by a trained individual before the patient is sent to an ophthalmologist.

The medical consultant to the plant should make a careful and thorough study of the eye hazards in the plant and should suggest to the plant management the type of eye protective equipment which should be used for each hazard.

There has been a great deal of interest in pre-placement visual testing. This should be named and used as evaluation of the individual skill rather than as a screening process.

There are, for instance, a considerable number of monocular jobs upon which an individual blind in one eye can be placed and upon which he will be better fitted than a two-eyed individual. Proper use of such placement and presently available techniques will eventually benefit both management and the employees.

One question of great practical importance is the amount of eye data to be determined and recorded in a particular plant and the type of instrument with which it can best be recorded. This cannot be answered in general since it is necessary in any case to set up a visual testing program which will meet the most pressing needs first and gradually build from there to a program which will give the information that it would be desirable to have.

The important thing is not the particular information which is taken down or the particular instrument which is used, since all of the available ones are technically satisfactory, but it is to have a program, a purpose for the information recorded on each individual and a plan for the use of the collected data in the future.

The visual consultant in industry will need to know something of the basic principles of illumination engineering. Industrial management will and should expect to be guided in general as to what illumination is required and feasible.

The industrial specialist also has a responsibility in bringing some of the specialized industrial knowledge to the general medical societies in order to get better understanding and cooperation between the practitioner in private practice and the industrial practitioner.

There can also be no general decision as to whether such industrial eye work should be done in the plant, in the office or in a hospital. This depends upon the local conditions of

transportation and the physical layout of the facilities. The important thing is to set up a situation where the work is done expeditiously and efficiently as well as competently.

The legal situation in industrial work is extremely complex and a great deal of work should be done to adjust the great inequalities and serious injustices both to employees and to management which are found in the various states.

In general it should be urged that "Attention be given to essential objectives, basic techniques, and human relations with less emphasis on minor details. Flexibility and good will spell success."

Skin Diseases Among Paint Workers

On Occupational Diseases of the Skin Among Paint Factory Workers, Painters, Polishers and Varnishers in Finland, A clinical and experimental study by Veikko Pirila. Supplement 16 to Acta Dermato-Venereologica Vol. 27.

The author studied 1,142 workers employed in the three largest paint factories in Finland and in a number of painting firms. 103 of these individuals had had occupational dermatitis.

He divides the paint factory workers roughly into three groups according to nature of the work: (1) Paint Workers, (2) Washers and Charwomen, (3) Outdoor Workers and Office Employees. The greatest relative number of cases of dermatitis had developed in the washing and cleaning work, the incidence being 66.7 per cent whereas less than 20 per cent of the paint workers showed dermatitis. 61½ per cent of the painters and less than 4 per cent of the spray painters had had any occupational dermatitis. Two of the cases among the spray painters were due to the handling of turpentine.

The main cause of the dermatoses was the use of Finnish sulfate and kiln turpentine as the result of the war shortage of imported solvents. Experimental examination of the various fractions of the Finnish turpentine indicated that its highly irritating nature is due to the high boiling fraction containing carene, limonene and dipentene. Hypersensitivity to various pigments, resins and driers was demonstrated in a number of cases.

Hypersensitivity to substances employed at work was demonstrated in

Draft Code for Rubber Machinery



The users subcommittee of the American Standards Committee on the Safety Code for Rubber Mills and Calenders sponsored jointly by the National Safety Council and the International Association of Accident Boards and Commissions. This meeting was held at the Firestone Tire and Rubber Company, Akron, Ohio, January 29. The draft of a code revision for consideration by the full committee was practically completed. Members shown in the picture (clockwise) are:

E. W. Beck, U. S. Rubber Co.
Gordon E. Frank, Hewitt-Robbins Inc.
T. H. Boyd, Manhattan Rubber Manufacturing Division of Raybestos-Manhattan, Inc.

a total of almost 28 per cent of the cases of dermatitis.

The dermatitis occurred shortly after the commencement of work among the charwomen, 72 per cent of cases occurring during the first year. Only 35 per cent of the factory workers and 91½ per cent of the painters and polishers had dermatitis during their first year's work.

In most instances the dermatitis was of long duration. About half of the cases required more than six months for a cure and 35 per cent of the workers with dermatitis had to permanently give up their work.

Little attention was given to preventive measures as it was thought that the time available was too short for any preventive measures to show their real effect. The only suggestions which the author makes are the elimination of the Finnish turpentine, the use of personal protective equipment,

R. S. Ferguson, Goodyear Tire & Rubber Co.
J. M. Kerrigan, U. S. Rubber Reclaiming Co.
W. J. Secrest, The Firestone Tire & Rubber Co.
R. A. Bullock, Corduroy Rubber Co.
A. S. MacLeod, U. S. Rubber Co.
F. A. Van Atta, National Safety Council.
Glen D. Cross, The Firestone Tire & Rubber Co.
W. L. Schnider, B. F. Goodrich Co.
R. W. Fickes, Goodyear Tire & Rubber Co.
S. A. Wright, Inland Manufacturing Division, General Motors Corp.
J. J. Loge, General Tire & Rubber Co.
J. T. Kidney, Goodyear Tire & Rubber Co.
William Dooling, Hood Rubber Co.

and avoidance of contact with solvents in general.

Treatment of Burns

Thermal Burns by George S. Bergh, M.D. Industrial Medicine 17:9-11 (January, 1948).

The evidence of injury in a first degree burn is redness and swelling of the skin. There are no blisters.

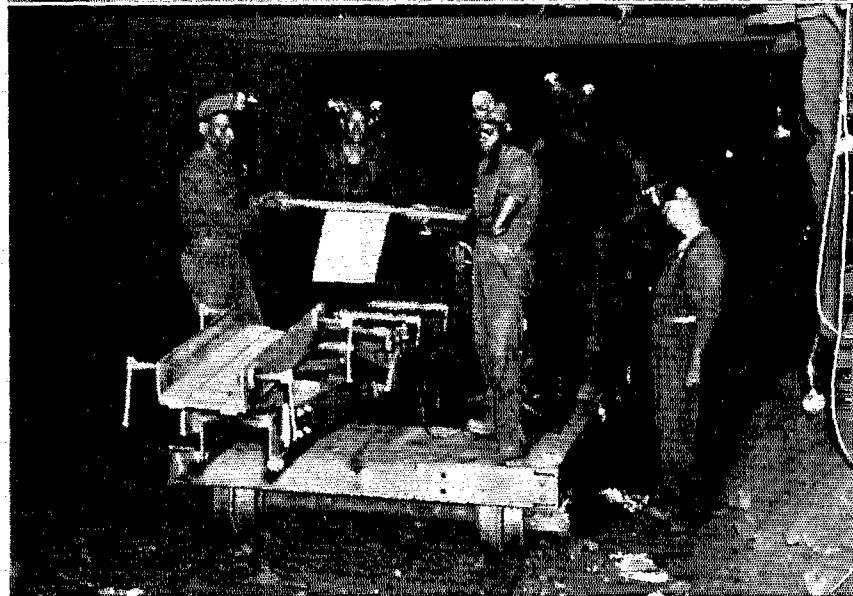
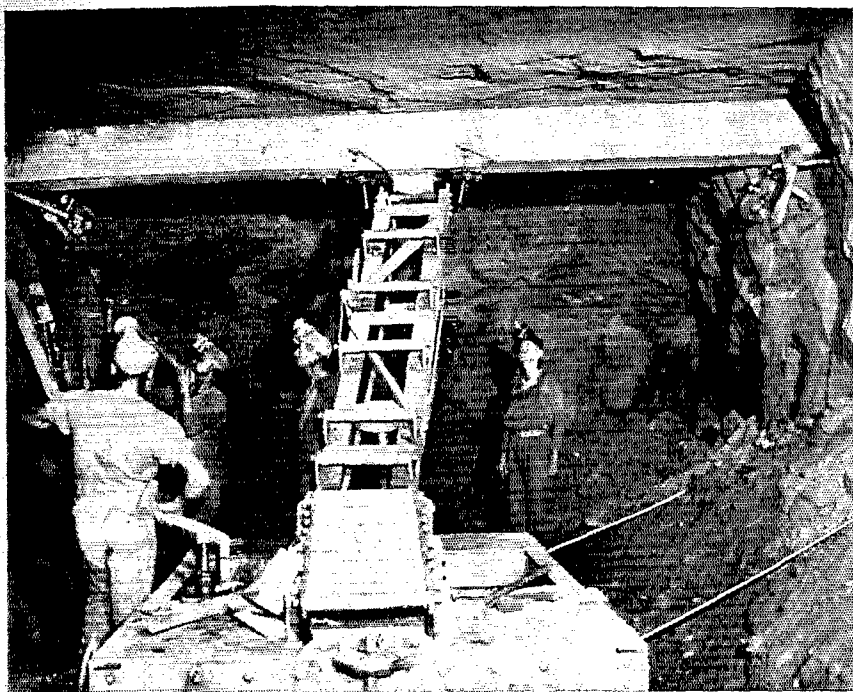
There is a more severe inflammation in second degree burns and blisters are formed. The skin may appear white or red depending on how severe the burn is but in any case it will regenerate itself.

The whole thickness of the skin is destroyed in a third degree burn and cannot regenerate in either third degree burns or fourth degree burns in which the tissue is carbonized.

In addition to the damage to the skin and underlying tissue there may

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Timber-Setting Truck in Mine



The accompanying photos show use of a timber-setting truck to set a heavy timber cross collar in position against the roof of an ore mine of United States Steel Corporation in the Birmingham, Alabama, district operated by its subsidiary, Tennessee Coal, Iron and Railroad Company. Rollers facilitate movement of the timber. The timber is clamped securely in place in the cradle on the end of the boom.

The boom is raised hydraulically by means of a hand pump on the side of the truck to raise the cross collar against the roof and hold it there until anchored on the rib pins. A ratchet device prevents the boom from drop-

ping in the event of trouble with the hydraulic system. The 10-foot boom swung 45 degrees to either side of the track to position the timber in place against the mine roof until it can be anchored.

The upper photo shows a cross collar in position. The lower view shows the machine in position to set it.

Institute Launches Health Campaign in Industry

DR. ANTHONY J. LANZA, formerly associate medical director of the Metropolitan Life Insurance Company and widely known writer on industrial

hygiene, is now director of the Institute of Industrial Medicine of the New York University - Bellevue Medical Center, New York. Dr. Lanza, who was with the United States Public Health Service from 1907 to 1920, rendered notable service during two world wars. During the recent war he headed the army's health program for war workers.

The Institute under Dr. Lanza's direction is launching a new campaign for industrial health. It will train doctors for this special field and carry on research to reduce health hazards. By fall, the Institute plans a one-year course in industrial medicine for graduate physicians and also for nurses and engineers. Preventive medicine will be stressed.

Many companies now have well staffed and well equipped medical departments, but about 80 per cent of American workers are in plants which do not have even part time medical service.

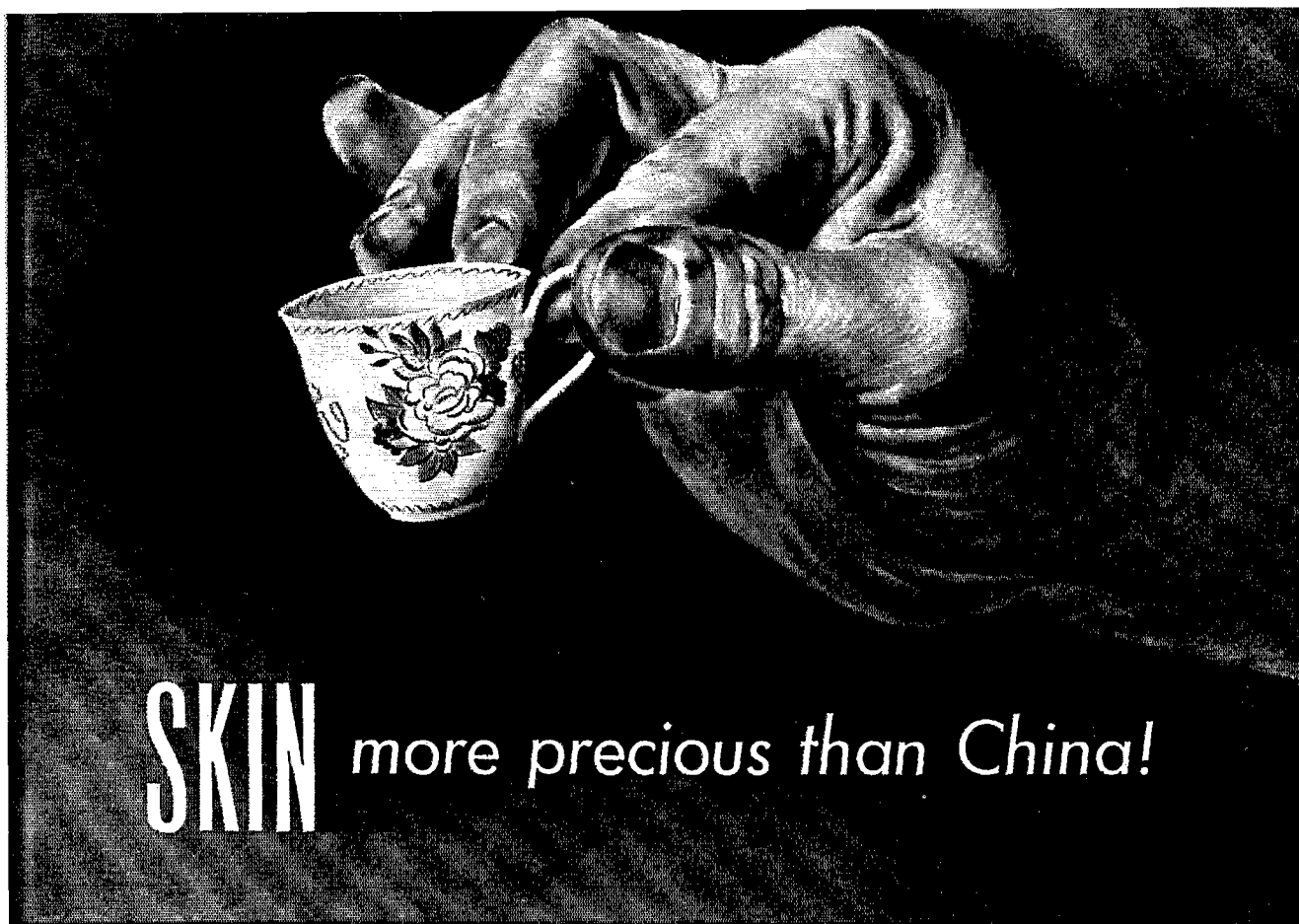
A toxicology laboratory has already been started at the Institute to aid industries using materials with potential health hazards. An industrial physiology laboratory is also being planned with the objective of adapting machines to men, rather than men to machines.

Report Progress in Rehabilitation

An all-time record number of disabled men and women will be fully rehabilitated into self-sustaining employment during the current fiscal year if the rate of increase established by the Federal-State system of vocational rehabilitation for civilians in the first six months is maintained. Michael J. Shortley, director of the Office of Vocational Rehabilitation, reported to Federal Security Administrator Oscar R. Ewing.

The increase was 29 per cent. If this is maintained, Shortley said, the year will bring full rehabilitation to 56,000 disabled men and women. The number rehabilitated in 1947 was 44,000. At 1948's half-way mark, there were 21,125 rehabilitations compared to 16,401 at the same point last year.

Of the 52 States and territories which participate in the civilian program of vocational rehabilitation, 39 showed increases this year over their figures for the first two quarters of 1947, and 12 had decreases.



SKIN more precious than China!

They're more precious to industry than all the china in the universe. But like china, workers' hands are readily vulnerable to damage. Skin-injuring industrial operations and chemical irritants in your plant see to that!

While you can't always avoid exposure to these dangers, you can help safeguard skin against the ailments caused by them. Simply have your workers gently rub the proper West Protective Cream on their skin be-

fore they start work. Thus, they are assured of *safe, smooth, lasting protection.*

Since they are scientifically prepared, industry everywhere finds West Protective Creams effective precautions against nearly every dermatitis hazard that comes to mind. These creams come in six different types—and either penetrate the skin or remain on the surface—according to the special type of protection required.

To keep your workers safer on the job—and production efficiency up—consult one of almost 500 trained West Representatives from coast-to-coast. He's fully qualified to explain the advantages of these highly effective West Protective Creams.



Send for Free Chart



PRODUCTS THAT PROMOTE SANITATION

WEST *Company* DISINFECTING

42-16 West Street, Long Island City 1, N. Y.

"Make Safety Rate in '48"

By WALTER W. WOOD



"Make Safety Rate in '48" was the slogan which won for Miss Edna Wheeler the prize of \$50, which she is receiving in the above photo. In the background is the contest publicity with the "apple a day" theme.

IN AN effort to stimulate the safety-consciousness, the Vineland plant of the Kimble Glass Division of Owens-Illinois Glass Company recently conducted a safety slogan contest using an apple theme. The apple was chosen because of its association with the well-known proverb, "An apple a day keeps the doctor away."

The contest was begun with a "teaser" program which consisted of picture cut-outs of a large red apple carrying the wording "Watch for Apple Day." These paper apples were suspended by string throughout the plant and on bulletin boards. Other material consisted of posters and word-of-mouth stories as to the nature of Apple Day.

After one week of the "teaser" campaign which started all types of rumors and aroused great interest the slogan contest was begun. On the eighth day after the start of the teaser program, each employee was presented with a real large red apple and a small 3x5 inch card of explana-

tion and an entry blank containing the contest rules.

On the same day all the teaser material was replaced by a larger apple cut-out which carried a sample safety slogan. In addition, new posters supplanted the "teaser" posters.

To encourage submitting of slo-

gans, three cash prizes of \$25, \$10, and \$5 were offered in each of the six divisions of the plant for the slogans selected. Each division had its own judging committee to select the winners.

The division winners were then judged by a special committee appointed by the plant manager for selection as the all-plant winner. The selection as all-plant winner carried an additional \$25 prize.

During the two-week period in which the slogan contest was conducted, additional promotional material was contained in the monthly employee magazine.

In judging the slogans submitted, each division judge and the special committee judges were guided in their selection by four points which were given them on dittoed cards.

Following the close of the slogan contest, three 8x8 foot boards were erected on the lawn near the main plant entrance. These boards carried information regarding the percentage of slogans submitted according to department population and the three winning slogans from each division. Immediately following the final selection of winners, a news story was prepared and given to the local city newspaper. It was printed in its entirety. In addition, the employee magazine also carried a story on the contest.

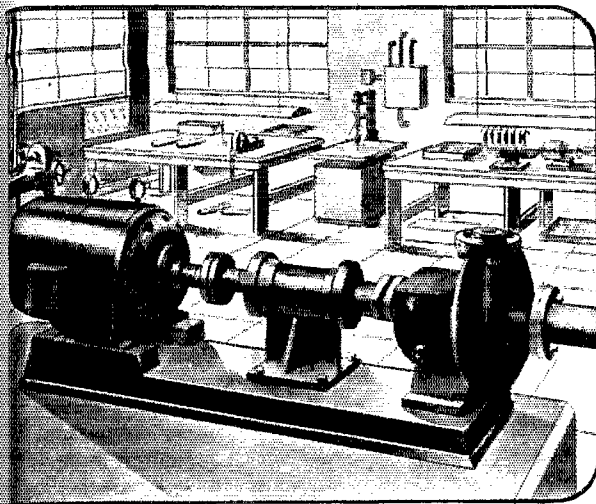
The contest received further publicity when the news story was given to each of the other plants of the Owens-Illinois Glass Company organi-

Highway Trailer Publicizes Safety

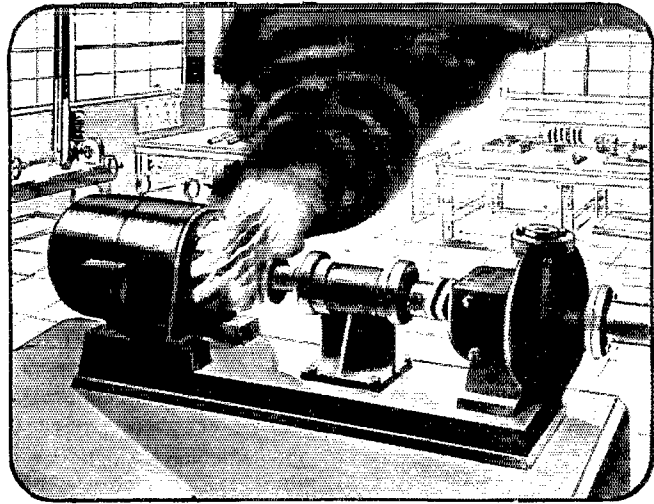


The Koss Construction Company, of Des Moines, Iowa, loses no opportunity to tell the public about safety. On construction jobs, conspicuous signs carry messages. The company is now operating a fleet of 14 highway trailers, like the one shown above, for use as field offices, repair parts storage and transportation of equipment. Large multi-colored signs on the vehicles give publicity to modern highways, the National Safety Council, and the Associated General Contractors.

Walter W. Wood is Divisional Personnel Director, Kimble Glass Company—Division of Owens-Illinois Glass Company, Vineland, N. J.



Before a small motor—



can touch off a major fire—

CATCH THE FLAMES IN TIME



THE *Kidde* WAY!

Overworked or overloaded motors in your plant—even the smallest—can be a potential fire hazard. Play safe—keep *Kidde** Portable Extinguishers close at hand!

A *Kidde* Portable discharges dry, clean carbon dioxide (CO₂) that can quickly put out electrical fires—without damaging the insulation or corroding metal parts. Since

CO₂ is non-conducting, a *Kidde* Portable is safe to use even if circuits are live.

Sizes range from 2½ to 25 pounds CO₂ capacity—a size for every need in portables. All *Kidde* Portables have fast-acting, easy-to-use TRIGGER-FINGER CONTROL. Ask a *Kidde* representative for full details.

*Also sold under the name "LUX."



The words "Kidde" and "Lux" and the Kidde seal are trade-marks of Walter Kidde & Company, Inc.

Kidde

**FIRE PROTECTION
HEADQUARTERS**

Walter Kidde & Company, Inc. • 445 Main Street, Belleville 9, N. J.

zation by the O-I News Service. It was also printed in the monthly *Personnel Newsnotes* which is distributed to supervision throughout the company.

Follow-up of the contest was the taking of pictures of slogan winners being presented with their awards by the division head. After the slogan contest had been ended, a small card was presented to each employee thanking him for his part in the contest. The card was presented over the signature of the plant manager.

As a further follow-up of the slogan contest and continuing safety promotion, a folding paper apple carry-

ing a safety message inside, was given to each employee.

Throughout the slogan contest the apple theme was predominant. From the first "teaser" material through the follow-up, the apple played a major role in the hope of recalling and fixing in the mind of each person the idea that "an apple a day makes safety pay."

The success of the program is shown by the fact that 2005 entries were submitted. It was also evident that people had become more safety conscious since only one accident occurred since the start of the program.

Serving the Printing Industry



Members of the executive committee of the recently organized Printing and Publishing Committee of the National Safety Council met at the Government Printing Office, Washington, D. C., January 9, to outline a program for the industry.

Seated around the table, from left to right, in the above picture are:

Dr. Irving L. Berman, Government Printing Office.

D. Raeburn Rosendaal, safety director, Courier-Journal and Louisville Times. (Chairman Publicity Committee).

M. B. Pittman, safety director, Standard Register Co. (Chairman, Technical Committee).

C. T. Thomas, Bureau of Engraving and Printing.

Eugene P. Ernest, safety officer, Government Printing Office.

Nick Pilipovich, Judd & Detweiler, Inc.

James W. Shields, Judd & Detweiler, Inc.

W. A. Anderson, mechanical superintendent, Government Printing Office.

Lillian Stemp, personnel and safety director, W. B. Conkey Co. (Secretary and

News Letter Editor).
Walter R. Smith, safety director, R. R. Donnelley & Sons Co. (General Chairman).
Ray Ketchmark, staff representative, NSC.
Robert F. Corner, personnel assistant and safety director, Meredith Publishing Co. (Chairman Program Committee).

Richard Squires, engineer, National Publishing Co.

Frank Dobbins, superintendent, Rufus H. Darby Printing Co.

Gordon Durr, Washington Planograph.

B. J. Taymans, assistant general manager, Printing Industry of America, Inc.

J. Raymond Tiffany, general counsel, Book Manufacturers' Institute, Inc., arrived shortly after the picture was taken.

Christen Union Pacific Safety Car

The Union Pacific Railroad Company's new "Safety Car" was formally christened on Thursday, January 8, in the railroad yards adjoining the Omaha union depot.

The ceremony was attended by several hundred citizens, Omaha Safety Council officers, public officials and



Union Pacific employees. Tom A. Burke of the National Safety Council staff officiated in the traditional ceremony.

Mr. Burke mentioned the pioneer safety work of the late president, Carl Gray, and William Jeffers, who is now retired, both of whom were actively interested in community as well as railroad safety.

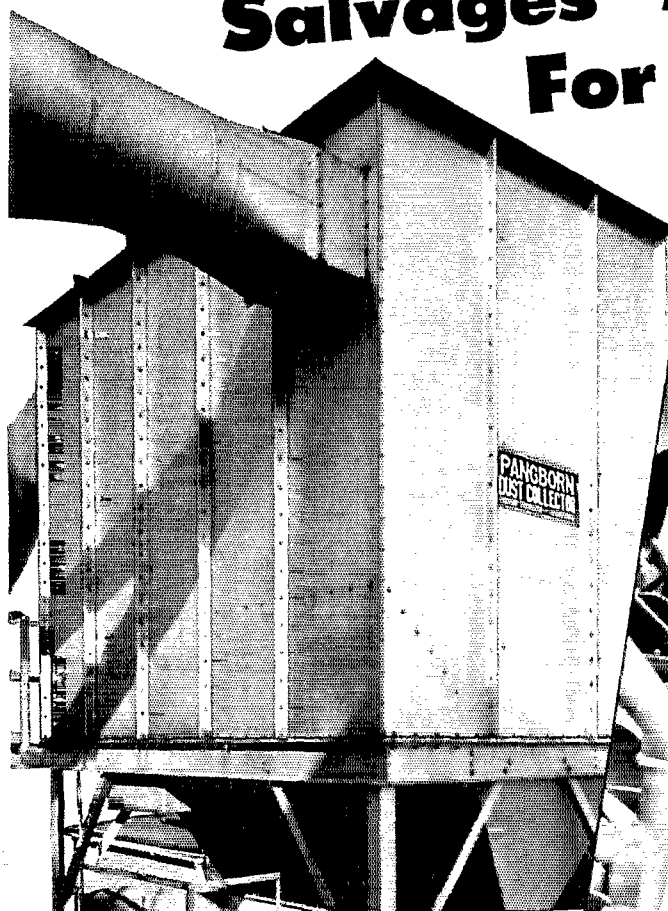
"These fine public-spirited traditions are being carried on by President Ashby, Vice-President Lynch, Superintendent of Safety Lewis and the many thousands of safety-minded Union Pacific employees," he said. "To the Union Pacific employees, here and everywhere in the system, this safety car is dedicated."

The car will be used for regular safety meetings of company employees in every community along the Union Pacific lines. It will also serve as an attraction for school children who will be invited to visit the car at every stop, to see motion pictures and learn something about safety. The car seats 70 and has living accommodations for a film operator and a safety instructor who will conduct the meetings. It has the latest motion picture equipment and an excellent film library.

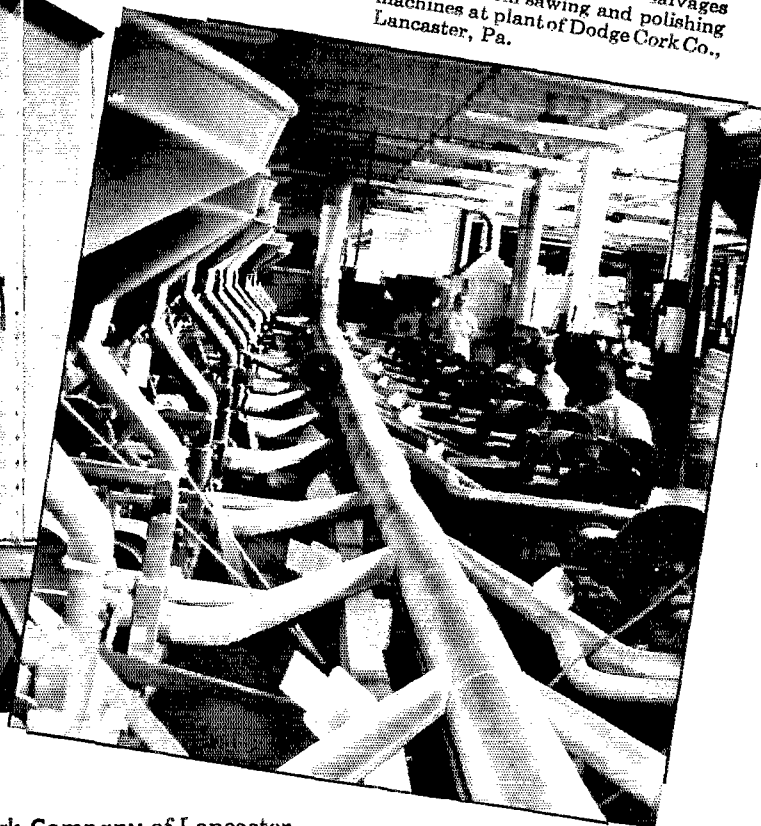
Conservation Bureau Changes Name

The name of the National Conservation Bureau has been changed and in the future will be known as the Accident Prevention Department of the Association of Casualty and Surety Companies. J. Dewey Dorsett, general manager of the Association, has announced. The change in name, authorized at a meeting of the executive committee, was made to clear up certain misunderstandings as to the purposes of the department.

Pangborn Dust Collector Salvages \$5000 Yearly For Dodge Cork Co.



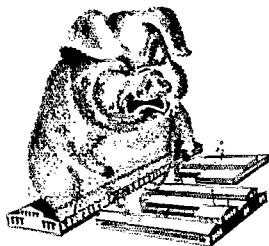
Pangborn CH Collector salvages cork dust from sawing and polishing machines at plant of Dodge Cork Co., Lancaster, Pa.



"...From 40 sawing and polishing machines the Pangborn collects over 99% of the dust produced ...dust which formerly was swept up and burned is now bagged by our Pangborn Collector—and sold at a profit."

Dodge Cork Company, of Lancaster, Pa., installed a Pangborn "CH" Dust Collector two years ago to collect waste cork residue resulting from grinding, sawing and polishing about two million corks daily. Three to four 100-pound bags of cork dust, worth \$140 a ton in resale, are salvaged every day. The Pangborn Collector actually salvages \$5000 a year for the company, has already "paid for itself twice over," claims the Dodge production manager. Maintenance costs are negligible.

A Pangborn "Dust Pocket Survey" of your plant may reveal similar opportunities to turn dust losses into profits . . . by removing costly dust entirely, by reclaiming it and putting it to profitable use. This survey, by experienced Pangborn engineers, is yours for the asking. Why not find out if Pangborn Dust Control can pay dividends for you? Write for FREE information to: Pangborn Corporation, 290 Pangborn Blvd., Hagerstown, Md.



PANGBORN STOPS THE DUST HOG
from stealing your profits

Pangborn

DUST CONTROL
TURNS DUST LOSSES INTO PROFITS

Green Cross Community News

Green Cross Campaigns

The Green Cross campaign for metropolitan New York, under joint sponsorship of the National Safety Council and the Greater New York Safety Council, was formally launched by Mayor William O'Dwyer January 26. Governor Dewey has endorsed the drive and assured full cooperation of the New York State Division of Safety.

Leading executives in varied fields of business and industry have accepted invitations from William A. Irvin and E. Roland Harriman to help obtain support. Mr. Irvin, chairman of the New York campaign, is a former president of the United States Steel Corporation and chairman of the NSC Board of Trustees. Mr. Harriman is also a Trustee.

The Seattle Chapter started work on its campaign in early January. The local committee expects to raise \$53,000. The Eastbay Chapter is seeking \$55,000 as its objective and work is under way. Larger sums are being sought generally to keep pace with the need for expanded programs and to meet rising costs of operation.

While advance contributions are already being sought in quite a number of communities, most campaigns are scheduled for May. Work is progressing in Los Angeles, San Francisco, Oakland, Jacksonville, Kansas City, St. Joseph, Cleveland, Buffalo, Springfield, Spokane, Long Beach, Pasadena, Hamilton, O., and other cities that have not as yet announced their 1948 drives.

Highly encouraging is the growing acceptance of the Green Cross as the official emblem of safety, and the splendid support accorded the Green Cross campaigns by press and radio everywhere.

Green Cross Progress

Jacksonville, Fla. and Long Beach, Calif. led all cities of more than 200,000 population in traffic death reductions last year. Jacksonville cut its fatalities 54%; Long Beach, 51%. In each of these Green Cross cities safety councils were organized during recent years. The Jacksonville Council's work, started by Halle Cohen, prominent Jacksonville merchant who

retired recently because of ill health, was carried on in cooperation with city officials and the Traffic Safety Commission, of which Mr. Cohen was a member. J. M. Chupp has been chosen as head of the Jacksonville Council and plans are under way to better the city's record during 1948. Long Beach also had fine support from press, radio and leading business interests. Other Chapter cities that reduced traffic fatalities in 1947 were: Kansas City, 35%; Oakland (Eastbay), 30%; San Francisco, 28%; Seattle, 23%; Los Angeles, 18% and Cleveland, 17%.

It can be Done!

The Kalamazoo Safety Council was organized last fall. Excellent progress has been made through a well-planned, widely publicized program. Accomplishments include an industrial frequency-severity survey that covers approximately 75 percent of the area's industrial employment, with excellent publicity; a "You and I" car inspection program, endorsed by the Mayor, in which billboards, posters, blotter stuffers, radio announcements, newspaper publicity and letters taken home by school children, were employed to publicize the project; participation in the "Operation Safety" project; the shooting of a color-film strip on bicycle safety; the organization of a Women's Division; launching a motor fleet program; getting industrial safety courses in the schools; and producing a 15 minute weekly, High school talent safety broadcast. James E. Lewis is the energetic manager of the Council.

"The Show Must Go On"

Two young actors were driving a truck loaded with scenery and theatrical props, needed for staging a production at St. Joseph, Mo. It was the evening of February 12, 1948. The street was icy and the truck was traveling much too fast for conditions on an unfamiliar roadway. One occupant lived in Chicago, the other in Long Island. They were rushing to reach the theater in time for the performance. The time was around 8:20, close to usual curtain time on the legitimate stage.

At a dangerous speed, the truck

failed to negotiate a sharp curve near the bottom of a steep hill. It crashed off the roadway and crashed into a tree with terrific impact.

It turned out to be the final "curtain" for both men. One was crushed to death instantly; the other lived three hours.

The tragedy also lowered the "curtain" on St. Joseph's splendid deathless day record—274 days without a traffic death up to the time of this double killing.

"Hey Bob, Be On the Beam!"

Such is the admonition blasted at Omaha pedestrians and traffic violators over a mobile public address system if their careless actions start them toward trouble. "This generally stops them short," says Paul R. (Bob) Stevens, manager of the Omaha Safety Council, which is sponsoring the traffic safety campaign.

The kick-off was a parade of 15 modern hearses, interspersed with wreckers pulling wrecked automobiles with large signs reading, THINK. Leading the procession was an old horse-drawn hearse carrying two white crosses, representing Omaha's two 1948 traffic fatalities. A sound car in the parade played an unmistakable dirge as the procession proceeded to the Court House lawn where the white crosses were erected.

A feature stunt was the unique sentence handed out by a Omaha traffic judge to a youthful violator who had narrowly averted tragedy when he ran through a red light. The court gave him a choice between paying a fine or "putting one foot in the grave"—the traffic graveyard on the Court House lawn.

New Way to Record Activities

The New Haven Safety Council is publishing experimentally its monthly newsletter, *The Crier*, in the local newspaper. It is run under its own masthead, in quarter-page size, the second Sunday of each month. The space is purchased by the Council in order to maintain control of the copy. "Because accidents affect the happiness and the welfare of the entire community, the New Haven Safety Council will issue its monthly newsletter in this new form," explained Richard J. Bennett, president. Favorable comments have been received; and it is hoped that in this way a

—To page 54

**WOULDN'T YOU LIKE
TO BE ABLE TO TELL
YOUR BOSS HOW TO...**

Reduce Accidents

Increase Production

Improve Quality

Reduce Training Time

and Labor Turnover

Cut Down Waste and Spoilage

Increase Workers' Earnings



THERE is no catch! That list of advantages, impressive and difficult of achievement as it appears, is the proved record in dozens of plants in which has been installed the Bausch & Lomb Industrial Vision Service. Based on more than eight years of intensive scientific research, the Industrial Vision Service classifies workers on their *visual skills*, determines visual standards for every job, and identifies those who are most likely to benefit from professional service for vision. The result is safer, more efficient operation of your plant. Wouldn't you like to be the one to get it all started in your company?



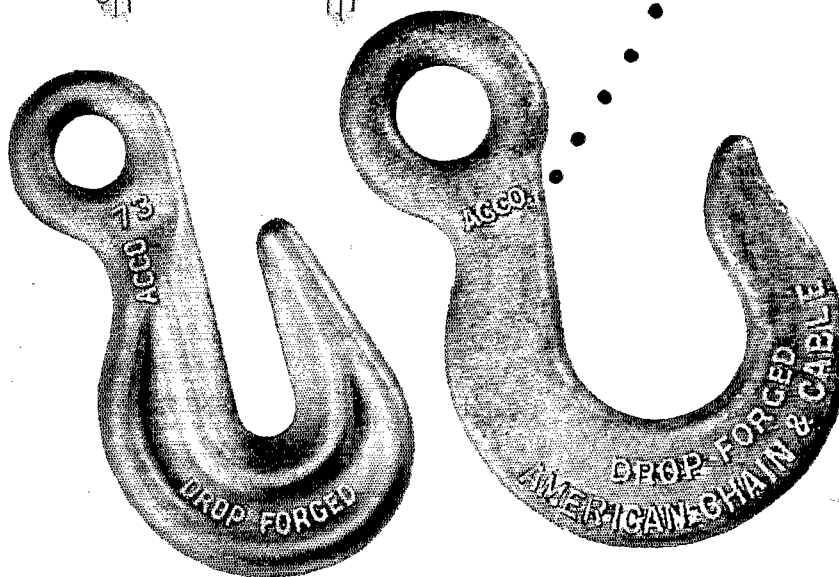
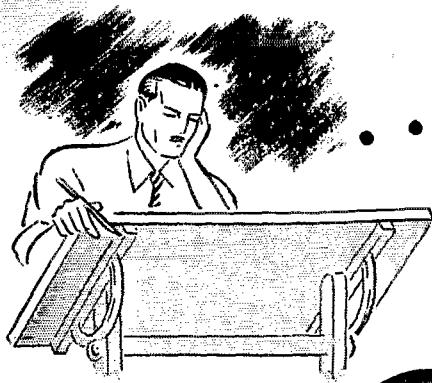
**IT'S ALL IN
THIS BOOKLET...
SEND FOR YOUR COPY**

BAUSCH & LOMB

OPTICAL COMPANY  ROCHESTER 2, N. Y.

Industrial Vision Department
Bausch & Lomb Optical Co.
681-Q St. Paul St., Rochester 2, N. Y.
Please send me a copy of "Vision in Industry" and details of the Bausch & Lomb Industrial Vision Service.

NAME.....
TITLE.....
COMPANY.....
STREET.....
CITY.....STATE.....



New, Improved ACCO Hooks

Designed from Years of Experience

These Acco Sling Hooks and Sling Grab Hooks are made of fine grain steel—drop forged—normalized—heat treated—tempered. Material around the eye is heavier, so as to give extra strength where it is needed.

Acco Sling Hooks are made for chain sizes from $\frac{3}{8}$ " to $1\frac{1}{2}$ "—Sling Grab Hooks from $\frac{3}{8}$ " to 1".

Like all products of AMERICAN CHAIN, these hooks are designed, made and inspected for maximum safety.

ACCO



York, Pa., Chicago, Denver, Detroit, Los Angeles, New York,
Philadelphia, Pittsburgh, Portland, San Francisco, Bridgeport, Conn.

**AMERICAN CHAIN DIVISION
AMERICAN CHAIN & CABLE**

In Business for Your Safety

Green Cross News

—From page 52

much broader community interest will be drawn to the Council's many projects, such as its hotel fire safety program, commercial vehicle drivers' rodeo and parade, monthly school safety conference meetings and the new "hazard eliminator" awards.

New York Cooperation

Through cooperation of the Board of Education, the Police Department, school children and their parents, with the Greater New York Safety Council in its recent Home Safety Inspection program, New York citizens will learn the basis for safer home living. The ten most common home hazards will be the subjects in a series of lesson outlines to be developed for use by teachers in public and parochial schools. The ten safety "traps" were taken from reports of 440,000 public school children in the recent survey. The Safety Department of the Police Department distributed a million inspection blanks to all public and Catholic elementary and High schools, for children to take home to their parents. Lists were also distributed to all public adult elementary classes. There were 562,681 reports filled in and returned.

A Governors' Clinic

A "Governors' Clinic on Accident Prevention," sponsored by the Idaho Chapter of NSC, was held at Sun Valley, January 17-18. The Clinic, first of its kind in the West, was attended by Governors C. A. Robins of Idaho, H. B. Maw of Utah and Vail Pittman of Nevada. Official representatives from eight other Western states also attended. Speakers included Ned H. Dearborn, President of NSC; Franklin M. Kreml, Director, NUTL, Evanston; and Earl F. Campbell, Director of NSC Field Organization. In calling attention to the recently announced saving of 1,500 lives in traffic during 1947, Mr. Dearborn urged the group to extend their interests into all other fields of accident prevention.

Promotion Pays

The Eastbay Chapter (Oakland, Calif.) has found that NSC material concerning babies or children has real appeal. During the Thanksgiving and Christmas holidays, the Chapter pro-

FIRE HAZARD SIGNS



CAUTION
TO PREVENT FIRE
KEEP ALL TRASH-OIL SOAKED WASTE
AND DISCARDED CLOTHING PICKED UP
AND PLACED IN RECEPTACLES
PLACED HERE FOR THIS PURPOSE

THINK
A FIRE TO-DAY
NO JOB
TO-MORROW

**FIRE
EXTINGUISHER
HERE**

**TO THE
FIRE ESCAPE**

CAUTION
KEEP ALL TRASH
PICKED UP AND
PLACED IN THIS
RECEPTACLE

NO SMOKING
ALLOWED IN THIS BUILDING
AT ANY TIME
CARRYING LIGHTED CIGARS
PIPES OR CIGARETTES
STRICTLY FORBIDDEN

DANGER
GAS
KEEP LIGHTED
CIGARS AND
CIGARETTES
AWAY

NO SMOKING

Many a worker stands helpless as flames destroy his job. And the worst of it is, the hand of Carelessness nearly always holds the torch.

Fires don't just start themselves . . . they are caused. And every fire is a small one at first.

STONEHOUSE SIGNS

FOR ACCIDENT PREVENTION

teach workers to mentally fight fire before it starts . . . by being careful. Many Stonehouse Fire Prevention signs are shown in our Catalog No. 8. It's Free on request.



Stonehouse
SIGNS, INC.
MANUFACTURERS

SIGNS SINCE 1863

842 LARIMER ST.

DENVER 4, COLO.

ACCIDENT PREVENTION SIGNS IN STANDARD COLORS AND DESIGNS

Two Ways to Prevent Slipping



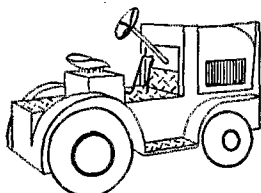
Your employees won't need football shoes for sure footing if your plant is equipped with Inland 4-Way Floor Plate.

Farsighted management relies on this modern skid-resistant flooring to protect workers from dangerous accidents caused by the number one industrial hazard . . . slipping. It knows, through experience, how Inland 4-Way Floor Plate increases profits by reducing lost man-hours and costly damage suits.

Inland 4-Way Floor Plate provides built-in safety wherever feet or equipment must go . . . floors, walkways, ramps, platforms, steps. Its sure-grip traction results from Inland's plant-proven 4-way safety lug pattern.

What's more, Inland 4-Way Floor Plate reduces maintenance problems. It won't burn, warp, crack, splinter, or absorb liquids. INLAND STEEL COMPANY, 38 South Dearborn Street, Chicago 3, Illinois. Sales Offices: Davenport, Detroit, Indianapolis, Kansas City, Milwaukee, New York, St. Louis, St. Paul.

**FOR YOUR
PRODUCTS, TOO**



Use...
INLAND 4-WAY FLOOR PLATE

Write for Booklet



moted the baby-sitter booklet, "You're in Charge." Demands for copies led to the promotion and distribution of other NSC pamphlets. In January the Chapter began pushing "Samm Sprocket" booklets for youthful cyclists and particularly those who received bicycles for Christmas. Oakland bicycle shops sponsored the purchase of the leaflets, which were distributed during the city's bicycle licensing program. For February, the Chapter concentrated on "Truly Yours," dealing with safety for children of pre-school age. In March, the popular baby safety leaflet, "Congratulations," was distributed. Other special promotions are under consideration.

A "Blunder Bird" is Born

A new safety cartoon character created for a large industrial plant in Philadelphia by one of its artists, has been christened "Blunder Bird," the winning entry in a "Cartoon Name" contest sponsored by the plant. Employees of the firm were asked to enter the contest by submitting descriptive names for this typical, accident-breeding character. Walter W. Matthews, managing director of the Philadelphia Safety Council, was one of four judges of the hundreds of entries. A \$100 savings bond was given to the woman who thought up "Blunder Bird."

Spokane Manager

David Kaye, former safety supervisor of the Permanente Metals Corporation, Trentwood Works, officially took over his duties as the new managing director of the Spokane Area Safety Council on February 2. His new office will be in the Hutton Building, Spokane, Wash. Dave has many friends in safety throughout the Northwest.

Program Essentials

—From page 33

mittee should take, what kind of safety posters should be used, what safety instruction cards should be issued, and what foremen should be instructed to watch in their supervisory activities.

Second to none in importance to the success of an accident prevention program is the point that every foreman and every supervisor must recognize that he is responsible for the

el. "You safety of the men and women work-
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Railroad Issues

Booklet for Motorists

thought up "Why Be in a Hurry for that
arp?"

That's what the New York Central
safety super-ailroad asks motorists in an illus-
Metals Cor- trated safety leaflet which will be dis-
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s new man- ubs. and similar organizations.
skane Area The leaflet notes that 72 per cent
ary 2. His all train-automobile crashes "hap-
nton Build-en where the automobile driver has
s has many clear view of the train, and in one-
ghout the hird of the cases, the motorist drives
ght into the side of the train!"

Giving tips on how to recognize
ghway signs by their shapes as well
by their wording, the Central
commends:

at kind oil. Heed the highway signs. They're there
used, what help you—protect you!

should be 2. Slow down for highway and railroad
should be crossings—so that you can always stop, if
their super- necessary. You may never get a second
ance.

3. At all railroad crossings, look and
ten. Before starting across, be certain
portance to the tracks are clear both ways!

t prevention Gambling with death is the poorest
every fore- gamble in this world—and the quickest
ay to get to the next world. Don't be in
must recog- hurry for that harp! Lose a second and
ble for the- have a life—your life!

DON'T TAKE a CHANCE...

be SAFE

WITH A Scott Air-Pak



● If there's any question about the presence of toxic gases *Be Safe*, always be sure a Scott Air-Pak is worn when entering or working in a doubtful area. Don't expose workers to needless risks.

The Scott Air-Pak is instantly ready to deliver fresh, cool AIR (not oxygen) and its crystal clear lens allow full vision for the work to be done. For cleaning or inspecting tanks, ships holds, utility tunnels, fire fighting, or rescue work, anywhere where breathing hazards exist, a Scott Air-Pak is a vital necessity. The three models, Back Pack, Sling Pack...or Extension Hose Assembly, eliminate respiratory hazards...and at the lowest operating cost of any breathing equipment.

BUREAU OF MINES APPROVAL No. 1308

ONLY THE SCOTT AIR-PAK HAS ALL 6 FEATURES

- 1 Can be used in any temperature from below zero to oven heat.
- 2 Only the Scott delivers fresh, cool, confidence-inspiring air.
- 3 Only the Scott has a gauge on the cylinder to prevent the inadvertent use of empty or partly empty cylinders.
- 4 Only the Scott has acid and corrosion proof straps and fittings.
- 5 Only the Scott has a battle-tested emergency proved regulator, and a mask permitting conversation.
- 6 Only the Scott has a gauge within the wearer's vision; custom-built, not a commercial gauge, to provide the maximum in utility and safety.

Write us for the name of your nearest Scott Distributor.
A demonstration without obligation
can be quickly arranged.

Established in 1932



FOR SAFETY—FOR SERVICE

SAFETY EQUIPMENT DIVISION

SCOTT AVIATION CORP.

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The Safety Library

Books, Pamphlets and Periodical Articles of Interest to Safety Men

BOOKS AND PAMPHLETS

Aviation Accident Law

Aviation Accident Law, by Charles S. Rhyne. Published by Columbia Law Book Co., 730 Jackson Place N. W., Washington 6, D. C. 315 p. Price \$7.50.

This is a reference book for attorneys who have to inquire into liabilities arising out of aviation accidents.

Aviation ground safety engineers may be interested in some of the court decisions for the support they may give in pressing accident prevention recommendations. For instance, cases establish in law the air carriers' legal duty to their passengers while embarking or departing at airports.

Along with airline insurance managers, safety engineers will add useful information to their background by reading the chapter on Workmen's Compensation and Aviation Accidents.

E. P. Marconi

Rehabilitation

Rehabilitation of the Physically Handicapped. By Henry H. Kessler, M.D., Ph.D. Published by the Columbia University Press, New York, 1947. 274 pages. \$3.50.

Rehabilitation of the handicapped has shown very slow progress since its introduction into this country in the early part of this century. Even in the instance of so simple a procedure as the fitting of an artificial limb, it is much more common to see a limb supplied and the patient left to his own devices than to see the patient completely trained in the efficient use of his device before his treatment is considered finished.

Complete rehabilitation even after traumatic injury and particularly after chronic or congenital disease is necessarily a slow, laborious and usually expensive process. It is equally inescapable that the cure cannot be considered complete until the injured or diseased part is returned as closely as possible to its maximum function—that is, until the rehabilitation process has been completed.

Dr. Kessler, who has spent many years in the field of rehabilitation at the New Jersey State Rehabilitation

Clinic and in the U. S. Naval Service, is peculiarly fitted to summarize the problem, the present facilities and practice of rehabilitation and the direction which future activities should take. He has done this job extremely well in this little book.

The book is not aimed primarily at industrial situations or industrial rehabilitation, although the problem of the injured industrial worker is treated along with the other present rehabilitation problems. The book will be of interest to people interested in industrial injuries and compensation for industrial injuries because of its very clear exposition of the philosophy of rehabilitation, the general directions it should take and the advantages to be gained from a good program.

F. A. Van Atta

Work Environment

The Industrial Environment and Its Control. By J. M. Dallavalle. Published by the Pitman Publishing Corp., New York, 1948. 225 + XIV pages. \$4.50.

According to the preface "this book is intended chiefly for engineers interested in controlling those factors of the industrial environment which affect the health and welfare of workers". In accordance with this stated purpose the descriptive part of the text has been kept brief and the treatment is very largely quantitative.

A useful feature for individuals not familiar with the subjects being handled is the inclusion of one or more practical examples of each concept to show the method of working out problems. Since it is scarcely possible that anyone will be familiar with all of the types of design re-

WANTED: ANNUAL REPORTS

Requests for copies of annual safety department reports have been received from members who are looking for new ideas in presenting the story of their activities and accomplishments to management. If you issue such a report, either printed or mimeographed, the National Safety Council Library would be glad to receive a copy.

quired in the control of the industrial environment for the protection of workmen, everyone will find use for these examples somewhere along the line.

About half of the text is concerned with various phases of industrial ventilation and dust collection. The remainder is concerned with a very good short summary of the problem of industrial hygiene and the present trends in the profession and with such environmental factors as temperature, humidity, illumination, radiant energy, noise, vibration, fatigue and air contamination.

Such items as discussion of sampling methods, evaluation of dermatitis producing materials and general methods of surveys are properly eliminated as not being within the scope of the work. A discussion of the collection and recovery of solvent vapors might have properly been included.

F. A. Van Atta

Conveyors

American Standard Safety Code Conveyors, Cableways and Related Equipment. 1947. Published by American Society of Mechanical Engineers, 29 West 39th Street, New York, N.Y. 53 p. Price 90c.

Fire Protection

The Fireman and Electrical Equipment. Prepared by Office of Vocational Education, Department of Public Instruction. 1948. 52 p. Available from Prof. Thomas Diamond, Room 4200, University High School, School of Education, University of Michigan, Ann Arbor. Price 30c. (Bulletin No. 280)

National Fire Codes V.I. Flammable Liquids, Gases, Chemicals and Explosives. Revised to Dec. 31, 1947. Published by National Fire Protection Association, 60 Batterymarch St., Boston 10, Mass. 1948. 608 p. Price \$4.00.

What Makes a Plant Fire Safe? Published by Associated Factory Mutual Fire Insurance Companies, 184 High St., Boston 10, Mass. 1947. 12 p. Free.

Foremen

Safety—As It Applies to Supervisors. Published by Marsh and McLennan, 164 W. Jackson Blvd., Chicago 4, 1947. 16 p. Free.

Health

Industrial Air Sampling and Analysis. By Leslie Silverman. Published by Industrial Hygiene Foundation, 4400 Fifth Ave., Pittsburgh 13, Pa. 1947. 72 p. Price \$1.50. (Chemistry and Toxicology Series, Bulletin No. 1).

Introduction to Industrial Medicine. By T. Lyle Hazlett. Second edition. Published by Industrial Medicine Publishing Co. Chicago. 1947. 260 p. Price \$3.00.

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April, 1944

For Safety's Sake Use . . .

DAYTON SAFETY LADDERS AND SHOES

"Listed by Underwriters' Laboratories, Inc."

DAYTON SAFETY LADDERS

Maintenance men everywhere rely on Dayton Safety Ladders for maximum safety and convenience. Daytons are constructed of tested airplane spruce and reinforced with rigid steel supports to give great strength and lightness of weight.

Handrails of steel guard the large roomy platform for added safety. Half of platform can be raised to form an extra step, when needed. These famous ladders can be set up instantly, are easy to carry and fold compactly for storing. Automatic locking feature insures safety while ladder is in use.

Sizes 3 feet to 16 feet in height with standard rubber safety shoes at no extra cost.

DAYTON "ROLL-ALONG" SAFETY LADDERS

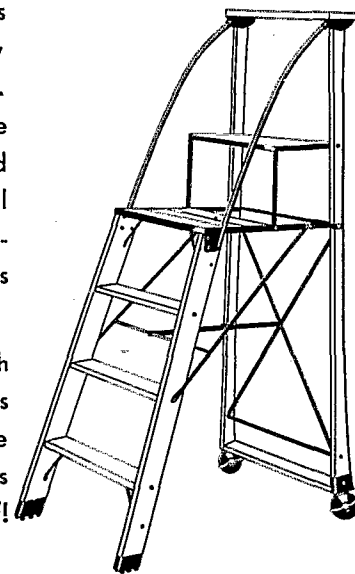
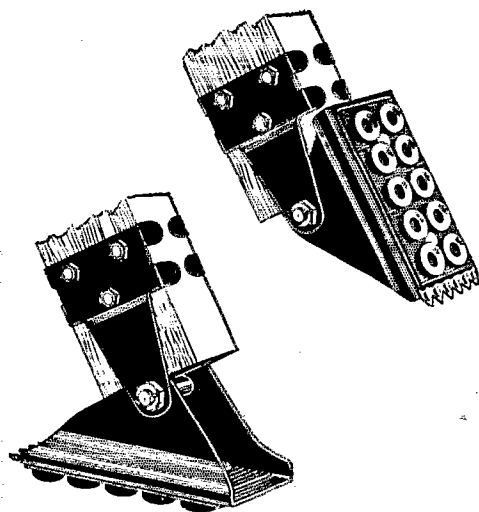
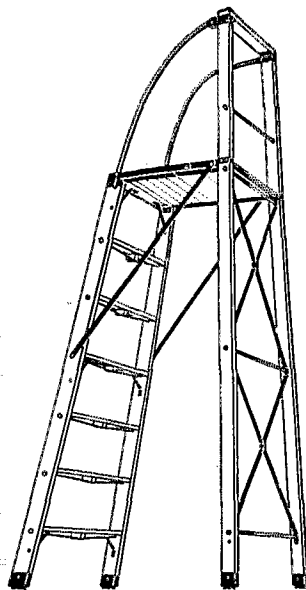
. . . The Dayton Roll-Along Safety Ladder with its rubber tired swivel casters can be speedily moved in any direction with practically no effort.

Safety shoes with renewable treads hold ladder permanently and safely in place while ladder is occupied.

Constructed of tested airplane spruce throughout and reinforced with steel braces for additional safety. Folds compactly for convenient storing. Available in sizes 3-ft., 4 1/2-ft. and 6-ft.

Elevating auxiliary platform which folds back in main platform adds height if desired. These ladders are being used in many of America's largest plants. See for yourself!

Write today for bulletin.



DAYTON SAFETY LADDER SHOES fit any standard ladder rails . . . easy to install

Install Dayton Safety Ladder Shoes on your present straight ladders—guarantee additional safety, prevent slipping.

Shoe instantly converted for either indoor or outdoor use.

Shoe or base is made of No. 16 gauge and the side plates are of No. 13 gauge steel. Suction grip treads are renewable. Lock nuts and spring washers insure proper adjustment.

Write Today for Prices and Complete Information

DAYTON-HARKER CO.

2237 GILBERT AVENUE

CINCINNATI 6, OHIO

Study of the Free Silica in Dusts Common to the Porcelain Enamel Industry. Published by Ferro Enamel Corp., Cleveland, Ohio. 1948. 22 p. Free. (Technical Bulletin No. 7).

Mines

Electrical Accidents, Bituminous Coal Mines. Published by the U.S. Bureau of Mines. 1947. 93 p. For Sale by the Superintendent of Documents, Washington, D.C. Price 30c. (Miners' Circular No. 59).

Mine Man-Trip and Ambulance Cars. Published by U.S. Bureau of Mines, Washington, D.C. 1948. 6 p. Free. (I.C. 7435).

Saws

Spreaders for Variety and Universal Saws. Published by National Association of Mu-

tual Casualty Companies, 919 N. Michigan, Chicago 11, Ill. 1948. 14 p. Single copy free. (Technical Guide for Accident Prevention No. 1).

MAGAZINE ARTICLES

Aeronautics

C.A.A. Reports Progress in Fire Prevention Work. By Harvey L. Hansberry. (In SAE Journal, Feb. 1948. p. 36).

Construction Industry

Operation H2O (Delaware Water Project) (In New York State Industrial Bulletin, Jan., 1948. p. 7-18).

Falls

Falls Rank Second in Industry's Fatal

Accidents. By D. C. Stewart. (In Edison Electric Institute Bulletin, Jan. 1948. p. 15).

Food Industries

Safety Recipes for Bakers. By H. Edgum Beaven. (In American Mutual Magazine of Loss Control, Jan. 1948. p. 16).

Handling Materials

Management and Materials Handling for Safety. By John D. Sheahan. (In Paper Mill News, Material Handling Number 1, Jan. 24. p. 32).

Materials Handling at Pacific Mills. (In Textile Industry, Feb. 1948. p. 116).

Health

Industrial and Occupational Environment and Health. By Ruth R. Puffer. (In Milbank Memorial Fund Quarterly, Jan. 1948. p. 22).

Hotels

Interest of Management Essential to Success of Good Safety Program. (In New York State Industrial Bulletin Feb. 1948. p. 40).

Safe at Sheraton. By Thomas B. Adams. (In American Mutual Magazine of Loss Control, Jan. 1948. p. 1).

Mines

Explosions Mar Safety Record. By Forrest T. Moyer. (In Coal Age, February, 1948. p. 85).

Paper Industry

Safety as We See It. By E. N. Barner. (In Pulp and Paper Magazine of Canada, Jan. 1948. p. 125).

Psychology

Psychological Factors in Accident Prevention. By Alfred J. Cardall. (In Personnel Journal, Feb. 1948. p. 288).

Safety Attitudes of Airlines Employees. By Dr. Walter A. Cutter. (In Air Transport Feb. 1948. p. 44).

Physically Handicapped

Work Performance of Physically Impaired Workers. (In Monthly Labor Review, Jan. 1948. p. 31).

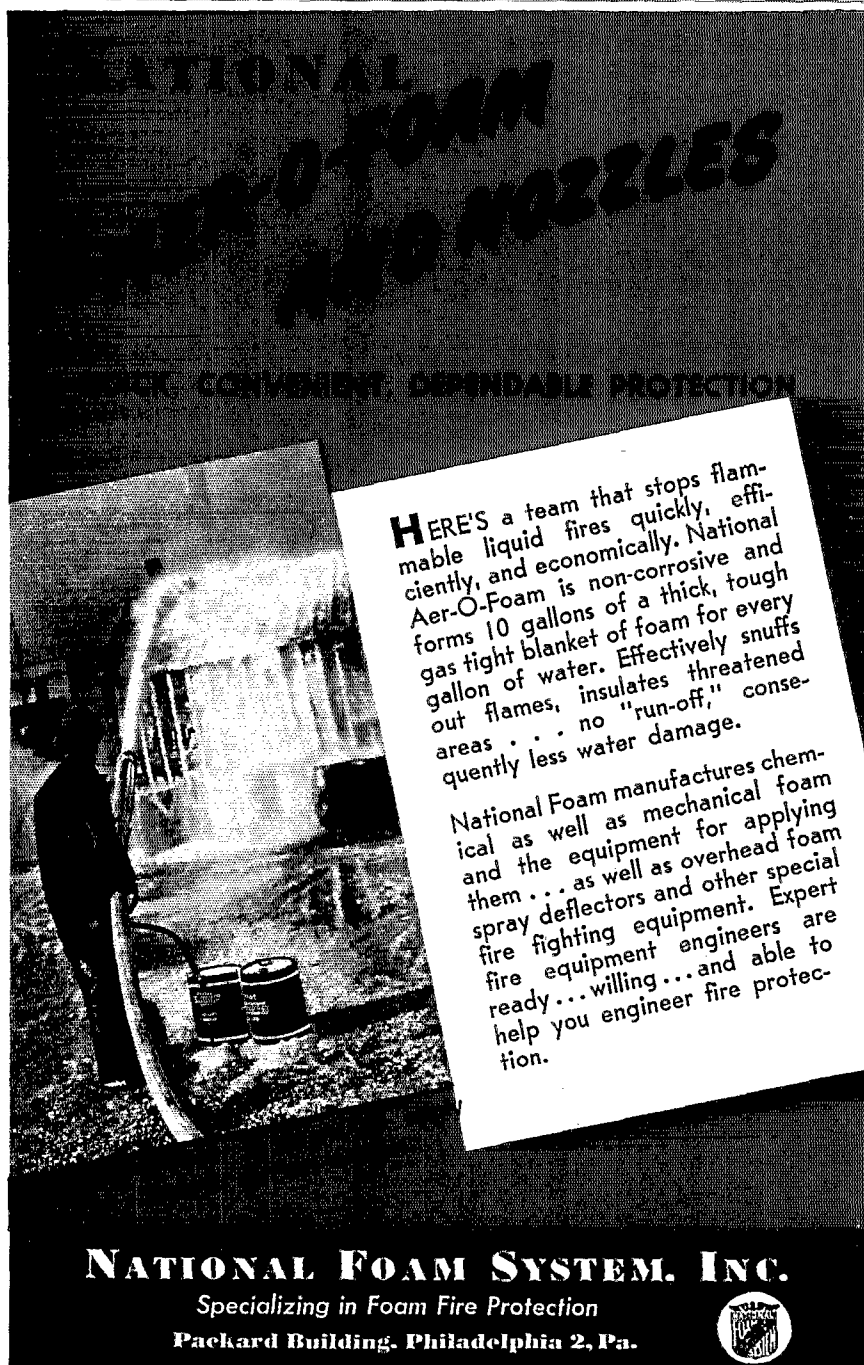
Textile Industry

Housekeeping Check List. (In Textile Industries, Feb. 1948. p. 112).

Warns of Perils in Abandoned Mines

An illustrated safety folder, entitled "Young Man, Beware!" is being distributed by the Arizona Small Mine Operators Association. This folder, according to Charles F. Willis, state secretary, was compiled in an effort to educate the young folks of the state concerning the dangers existing in old and abandoned mines, and to teach them what to do and what not to do.

The folder was prepared in an effort to prevent tragedies such as those which occurred a year ago this



NATIONAL AER-O-FOAM AND NOZZLES

EFFICIENT, CONVENIENT, DEPENDABLE PROTECTION

HERE'S a team that stops flammable liquid fires quickly, efficiently, and economically. National Aer-O-Foam is non-corrosive and forms 10 gallons of a thick, tough gas tight blanket of foam for every gallon of water. Effectively snuffs out flames, insulates threatened areas . . . no "run-off," consequently less water damage.

National Foam manufactures chemical as well as mechanical foam and the equipment for applying them . . . as well as overhead foam spray deflectors and other special fire fighting equipment. Expert fire equipment engineers are ready . . . willing . . . and able to help you engineer fire protection.

NATIONAL FOAM SYSTEM, INC.
Specializing in Foam Fire Protection
Packard Building, Philadelphia 2, Pa.

(In Edison's when three boys, in quest of an. 1948. Adventure, went down the shaft of an old mine near Peoria, Arizona. That night their lifeless bodies were found at the bottom of the shaft—just a few feet from safety. They had built a fire, possibly to smoke out bats, and the fire had consumed the oxygen—

Handling for they may have died from the poisonous gases given off by the flames. The text material for the folder is furnished by the Safety Division of the United States Bureau of Mines. It lists the common dangers encountered when exploring abandoned mines, caves and open pits. Illustrations are in cartoon form and were contributed by John Powers, an experienced cartoonist on the safety staff of Anaconda Copper Mining Company, Butte, Montana.

Environment. (In Mil- y. Jan. 1948) Among the common dangers listed are: rotten timbers and broken ladders; the lack of oxygen or the presence of deadly gases; water unfit for drinking or presenting the hazard of drowning; abandoned explosives; underground holes or shafts, either covered or uncovered; snakes, scorpions, and poisonous insects; and caving ground, both on and below mine surfaces. Each hazard listed is depicted in picture form.

ential to Sur- n. (In New a Feb. 1948) As B. Adams' ine of Loss

d. By Forrester, 1948.

N. Barnes. of Canada.

ASKED and ANSWERED

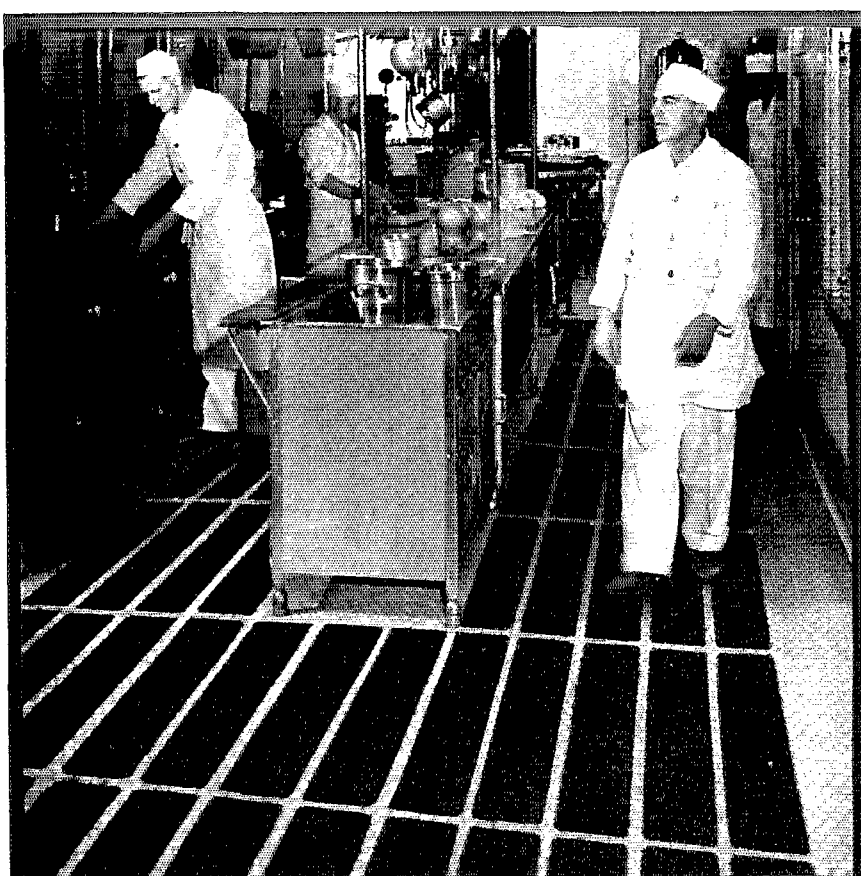
istance with problems of accident prevention and industrial health is offered by the National Safety Council. All inquiries answered by mail, a few topics of general interest being selected for publication.

Fitting Safety Shoes

QUESTION: Do you have literature that would help us in teaching our safety men how to fit safety shoes?

ANSWER: We do not have such literature, because we believe that correct shoe fitting is a highly specialized function and can be taught properly only by experts in the shoe fitting in and.

Only persons who have been trained properly should be assigned the job of fitting safety shoes. Such training should be available through the company that supplies your stock. You should arrange for employees to purchase safety shoes from a commercial store, you should make cer-



To Stop "Ground Loops" on Slippery Floors Apply "SAFETY-WALK" Non-Slip Surfacing

Kitchens in hotels, large restaurants, hospitals, and public institutions usually are floored with tile because tile is sanitary, durable and good looking. Unfortunately, it is also dangerously slippery when wet or greasy. "SAFETY-WALK" cleats applied over tile and terrazzo prevent slipping, regardless of grease and moisture.

In addition to reducing accidents caused by slippery floors "SAFETY-WALK" has the merit of being easily applied, long wearing, non-shattering, easy to clean and good looking. Comes in Red, Green, Silver and Natural (black).

"SAFETY-WALK" cleats applied in the manner shown provide sure footing regardless of moisture or grease. The prevention of injuries, broken dishes, lost time and spoiled food soon pays for the "SAFETY-WALK".

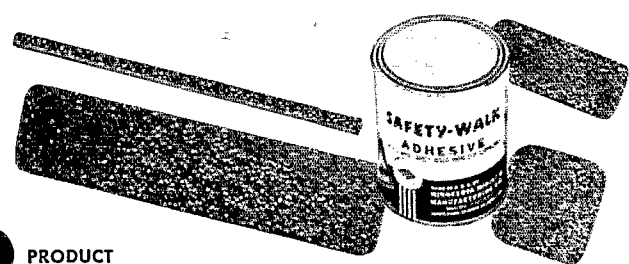
SAFETY-WALK

BRAND

WET OR DRY NON-SLIP SURFACING

REG. U.S. PAT. OFF. MINERAL COATED FABRIC

If there is a slip-hazardous spot in your establishment, find out what "SAFETY-WALK" can do to put an end to it. For quick action write or wire us today.



ANOTHER **3M** COMPANY PRODUCT

Made in U. S. A. by MINNESOTA MINING & MFG. CO. St. Paul & Minn.

CM

HERC-ALLOY

SLING CHAINS

You can see for yourself that they are safe.

● Just one of the big advantages of HERC-ALLOY Sling Chains is that you can determine their serviceability by a simple visual inspection.* Ordinary steel or iron chains, on the contrary, grow dangerously brittle with age... an insidious threat to the safety of men and materials. That's why more and more of the important companies are standardizing on HERC-ALLOY Sling Chains...because you can see for yourself that they're safe.

*Write for your copy of this new, informative booklet. No charge.



HERC-ALLOY FEATURES

- America's first alloy steel sling chain... first to bear a serial number.
- Every CM HERC-ALLOY Sling Chain is alloy steel throughout...links, rings, hooks. There is only one grade...the best.
- Every chain is individually tested and accompanied by a certificate of registration.
- Links are side welded for maximum strength by patented INSWELL electric method.
- HERC-ALLOY Chains should never be annealed.
- HERC-ALLOY Chains are lighter...stronger...easier to handle...outlast ordinary chains 4 to 5 times...cost less on the job.

HERC-ALLOY...the chain you can SEE is safe

COLUMBUS-McKINNON

CHAIN CORPORATION

(Affiliated with Chisholm-Moore Hoist Corporation)

GENERAL OFFICES AND FACTORIES: TONAWANDA, N. Y.
SALES OFFICES: New York • Chicago • Cleveland • San Francisco • Los Angeles

tain the store's employees have been trained adequately to fit shoes properly.

Shoes not properly fitted may contribute to the fatigue of the wearer. Since many workers wear their safety shoes at least half of their waking hours, it is highly important that they should be fitted properly when purchased.

Don't Ride Hoists!

QUESTION: What are the accepted safe speeds for a construction hoist on which men are transported?

ANSWER: There are no safe speeds for such operations, since men should not be transported on construction hoists.

The manual of Accident Prevention and Construction of the Associated General Contractors of America advises, "Post danger signs on elevators warning men that they should not ride on them. This applies likewise to superintendents and foremen, and engineers who allow this should be discharged."

Just a few weeks ago, several men were injured in the fall of a hoist on a near-by project.

Remember that a permanent elevator installation has many safety devices, which are not practical on a construction job. Material hoists should be limited to the hauling of material only.

Vision Requirements

QUESTION: What are the recommended vision requirements for operators of lift trucks?

ANSWER: The War Department's Technical Manual No. TM21-302, "Operator Selection and Training in Materials Handling Equipment," and the Caterpillar Tractor Company's "Industrial Vehicle Operators' Training Courses," consider such factors as visual acuity, side vision, depth perception, and color vision. The Caterpillar Tractor Company's course also covers the question of glare resistance. The applicant must be able to read a scale within seven seconds after looking at a bright light for a successive period of 10 seconds, 15 and 20 seconds.

The War Department Manual sets a minimum standard of 20/50, and specifies that wearing glasses is no obstacle to employment as an operator, provided the glasses bring vision within the requirements. The Cater

the Corporation President



WHO ALMOST SLEPT TOO LONG

M. Stanton* was having a nightmare. For months he'd been preoccupied with the production problems of Empire Gadgets, Inc. So preoccupied, he'd even admitted to himself that he was devoting far more thought to national problems than a leading citizen should. But the urgency of his immediate interests kept shoving these concerns into his subconscious mind. Now they were torturing his sleep.

"T. M., old boy," one spectre was saying, "how would you like a nice black depression to come along and swallow up your whole company?" And a green-eyed ogre leered, "While you're neglecting your enterprise system, we're moving in with another item!"

Stanton's body lurched. "No!" he thundered. Wakened, he scratched his head, murmuring, "Gad, that's a dream! H-m-m—wonder what sort of contribution I ought to be making..."

**Here's Something, Mr. President,
You Ought to Do Right Away!**

Check up on the status of the Payroll Savings Plan in your company. By making U. S. Savings Bonds Company available to your employees "on the installment plan," it benefits not only the employees but your business and the nation as well! Here's how:

(1) The Payroll Savings Plan builds financial security for each participant. The Bonds pay \$4 at maturity for every \$3 invested.

*one is fictitious—but it might be any corporation president.

(2) The experience of 19,000 companies operating the Payroll Savings Plan shows that it makes employees more contented in their jobs—cuts down absenteeism—even reduces accidents!

(3) The Plan helps to spread the national debt and thus helps secure your business future. How this works is clearly and briefly described in the free brochure shown below.

Why Executive Backing Is Vital

Employees still want the benefits of the Payroll Savings Plan. In fact, they need the P. S. P., because banks don't sell Bonds on a partial-payment plan—which is the way most workers prefer to buy them. But war-time emotional appeals are gone. Human nature being what it is, the success of the Plan in your company is liable to dwindle unless a responsible executive keeps promoting it.

So—today—check up on the status of the Payroll Savings Plan in your company. Act on your responsibility to see that it is vigorously maintained.

The State Director will gladly help.

Be sure to read this! "The National Debt and You," a 12-page brochure, brings you the views of W. Randolph Burgess, Vice Chairman of the Board of The National City Bank of New York—and of Clarence Francis, Chairman of the Board, General Foods Corporation. Request your copy from the Treasury Department's State Director, Savings Bonds Division.



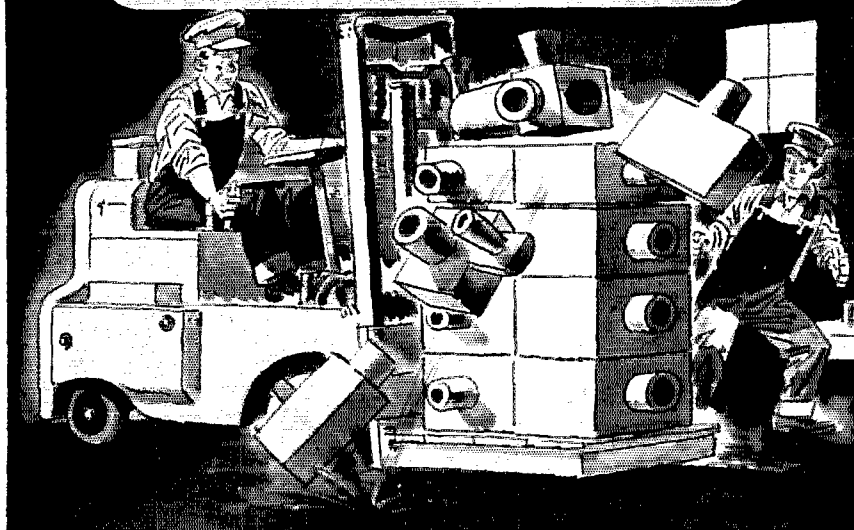
The Treasury Department acknowledges with appreciation the publication of this message by

NATIONAL SAFETY COUNCIL

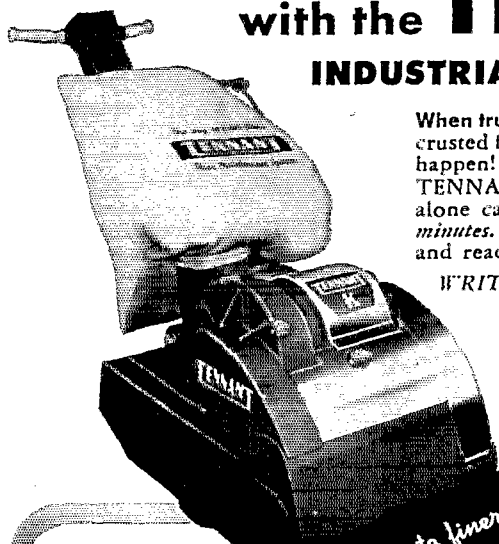


This is an official U. S. Treasury advertisement prepared under the auspices of the Treasury Department and The Advertising Council.

Eliminate this hazard!



**Get clean, smooth floors in record time
with the TENNANT
INDUSTRIAL FLOOR MACHINE**



When trucks lurch and bump over grime-incrusted floors, costly accidents are bound to happen! But with the powerful, heavy-duty TENNANT FLOOR MACHINE one man alone can smoothly remove all soilage in minutes. Keeps floors clean, smooth, safe and ready for traffic.

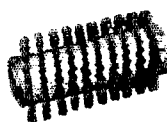
*WRITE TODAY for performance data,
photos and Bulletin 81.5.*

G. H. TENNANT COMPANY
2550 Second Street North
Minneapolis 11, Minnesota

The way to finer floors
TENNANT
Floor Maintenance System



16" REVO-TOOL



16" WIRE BRUSH

FOR HEAVY SOILAGE Tennant 16" REVO-Tool accessory has 336 steel cutters. Revolves at 1760 RPM to cut grime loose with smooth hammer-mill action. Gets results never possible before.

FOR AVERAGE SOILAGE Tennant 16" Steel Wire Brush attachment smoothly, quickly removes ordinary soilage from factory floors. Picks up dirt at same time. Comes in 3 standard gauges.

*Check These
Machine Features*

- **REDUCES HAZARDS** by keeping floors clean, smooth and dry.
- **ELIMINATES CHEMICALS** or need for soap or water.
- **CLEANS IN 1 OPERATION** by cutting grime loose, smoothing surface and picking up soilage.
- **IS SELF PROPELLING** to provide rapid, easy, one-man operation.
- **CUTS CLEANING COSTS** and requires far less labor.
- **DOESN'T INTERFERE** with plant operation; can be operated at any time.

pillar Company stipulates that vision less than 20/30 will constitute failure.

The War Department Manual specifies a minimum of 75 degrees of side vision. (bilaterally 150 degrees total range). The Caterpillar requirement in this matter is less strict.

Depth perception, in the case of the War Department Manual, is tested by requiring the operator to align two vertical rods to within one inch of each other. A similar Caterpillar test is made by means of special equipment.

Color-blindness need not be a great handicap to an operator, providing he is aware of this defect and knows how red, green, and other common colors look to him.

COMING EVENTS
In the Field of Safety

April 7-10, Charleston, W. Va.

West Virginia Annual Statewide Safety Conference (Daniel Boone Hotel, Shrine Mosque, Ruffner Hotel). W. C. Easley, managing director West Virginia Safety and Health Council, 316 Masonic Building, Charleston, W. Va.

Apr. 13-14, Buffalo, N. Y.

Annual Western New York Safety Conference. (Hotel Niagara). Robert Abbey, Director of Public Relations, Western New York Safety Conference, Inc., 271 Delaware Ave., Buffalo 2, N.Y.

Apr. 13-15, Columbus, O.

All-Ohio Safety Congress and Exhibit. (Neil House). James H. Fluker, superintendent, Division of Safety and Hygiene, Industrial Commission of Ohio, Columbus, Ohio.

Apr. 13-16, New York

Eighteenth Annual Greater New York Safety Council. (Pennsylvania Hotel). Paul F. Stricker, executive vice-president, Greater New York Safety Council 60 East 42nd St., New York 17.

Apr. 19-20, Toronto, Ont.

Annual Convention, Industrial Accident Prevention Associations, Inc. (Royal York Hotel). R. B. Morley, general manager, Industrial Accident Prevention Associations, 600 Bay Street, Toronto 2, Ont.

Apr. 22-23, Boston

Twenty-seventh Annual Massachusetts Safety Conference. Edgar F. Copell, president, Massachusetts Safety Council, 31 State St., Boston 9, Mass.

May 4-6, Chicago

Twenty-sixth Annual Midwest Safety Conference and Exhibit. (Hotel Sherman).

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C. Easley,
ginia Safety
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Safety Com-
bert Abbey,
Western New
., 271 Dela-

June 16-18, Los Angeles
Tenth Annual Western Safety Confer-
ence. (Hollywood Roosevelt Hotel). Jim
ker, superin-
Bishop & Associates, 1226 Wilshire
and Hygiene
Blvd., Los Angeles 14, Calif.
o, Columbus

June 17-18, Duluth, Minn.
Twenty-fourth Annual Conference, Lake
Superior Mines Safety Council. (Hotel
Duluth). Frank E. Cash, supervising en-
gineer, U. S. Bureau of Mines, 18 Federal
Bldg., Duluth 2, Minn.

Sept. 16-17, Poland Springs, Me.
Maine State Safety Conference. Arthur
F. Minchin, State Department of Labor
and Industry, Augusta, Me.

Sept. 21-23, Cleveland
Tenth Annual Ohio State Safety Confer-
ence. (Hotel Statler). Carl L. Smith,
Greater Cleveland Safety Council, Suite
508, 2073 East Ninth Street, Cleveland,
Ohio.

Oct. 18-22, Chicago
Thirty-sixth National Safety Congress
and Exposition. (Stevens Hotel). R. L.
Forney, general secretary, National Safety
Council, 20 North Wacker Drive, Chicago

Massachusetts
Copell, pres-
Council, 31

West Safety
el Sherman)

Joseph F. Stech, manager, Greater Chicago
Safety Council, 10 North Clark St., Chi-
cago 2.

May 6-8, Raleigh, N. C.

Eighteenth Annual North Carolina State-
wide Safety Conference. (Sir Walter Ho-
tel). H. S. Baucom, safety director, North
Carolina Industrial Commission, Raleigh,
N.C.

May 12, Bethlehem, Pa.

Twenty-first Annual Eastern Pennsylv-
ania Safety Conference. (Hotel Bethle-
hem). Harry C. Woods, secretary and
treasurer, Lehigh Valley Safety Council,
602 East Third Street, Bethlehem, Pa.

May 17-20, Detroit, Mich.

Eighteenth Annual Michigan Safety Con-
ference. (Book-Cadillac Hotel). Frank
Morrison, Corporate Service, Inc., 409
Griswold St., Detroit 26, Mich.

May 18-20, Philadelphia

Fourteenth Annual Philadelphia Region-
al Safety Conference. (Bellevue-Stratford
Hotel). Walter W. Matthews, managing
director, Philadelphia Safety Council, N.
E. Corner 17th and Sansome Streets, Phila-
delphia 3, Pa.

May 20-22, Norfolk, Va.

Fourteenth Annual Virginia Statewide
Safety Conference. (Monticello Hotel).
William M. Meyers, executive secretary,
Richmond Safety Council, 49 Allison Bldg.,
Richmond 19, Va.

May 24-25, Baltimore

Statewide Safety-Health Conference and
Exhibit. (Lord Baltimore Hotel). Joseph
A. Haller, safety director, State Industrial
Commission, Equitable Bldg., Baltimore 2,
Md.

*Send for this booklet **

... the safety needs of the employee are adequately
provided for — and his comfort as well — in this
complete line of protective products; aprons, arm
protectors, blankets, coats, gloves, hand pads, leg-
gings, leg-safes, mittens, overshoes, pants, sleeves and
spats ... Apparel produced with the dominant idea:

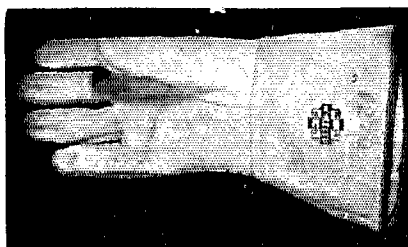


DESIGNED TO FIT THE MAN AS WELL AS THE NEED

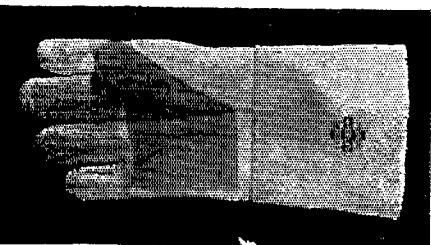


OFF IN A FLASH. No tricky gadgets of any
kind. Just grab side stay — any place — top,
bottom or middle and Leg-Safe flies off. A
real Safety feature found only in Wheeler Leg-
Safes.

777—Chrome, Chrome Flare



270 — Glove, General Utility. Leather Unlined
Gauntlet



807 — Underwriters Grade Asbestos Gauntlet
Glove. A roomy, comfortable fitting glove;
lined; leather reinforced on palm and thumb.
4807 — Same as above fully reinforced palm
and thumb.



1206 Und. Grade Asbestos Coat, 44"
1306 Lt. Wt. Und. Grade Asbestos Coat, 44"
1207 Und. Grade Asbestos Coat, 50"
1307 Lt. Wt. Und. Grade Asbestos Coat, 50"
12997 Und. Grade Asbestos Helmet
773 Und. Grade Asbestos Leg-Safes

WHEELER
PROTECTIVE APPAREL, INC.

224 West Huron Street, Chicago 10, Illinois

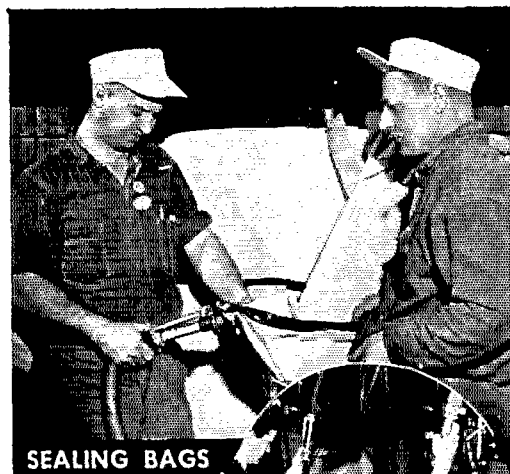


HOW TO SPEED PRODUCTION *with Safety* and SPENCER VACUUM

Any production man with imagination can apply Spencer Vacuum to improve or increase production, in a new way.

Four examples are shown on this page. Air is removed from paper bags before sealing. Bench operators pull dust out of instruments and parts instead of blowing it all over the plant. An engine manufacturer recovers babbitt on the production line, and enamel dust is removed from stencils.

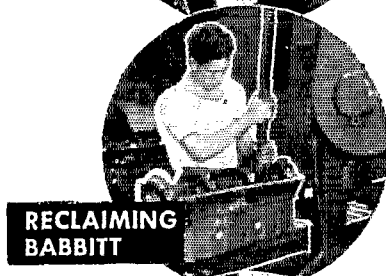
The same Spencer Vacuum machine, portable or stationary, cleans floors, walls, ceilings and machinery better, faster and at less cost.



SEALING BAGS



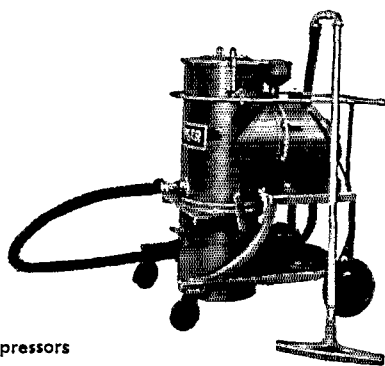
BENCH CLEANING



RECLAIMING
BABBITT



CLEANING
ENAMEL
STENCILS



1 1/2 H.P. PORTABLE

324-B

SPENCER VACUUM HARTFORD CLEANING

THE SPENCER TURBINE COMPANY, HARTFORD 6, CONN.

THE HONOR ROLL

Records of operation exceeding 500,000 man-hours, or one year, regardless of exposure, without a disabling (lost-time) injury are invited for this department.

Aluminum Co. of America

Refining Division, Mobile, Ala.—September 8, 1947, to January 31, 1948; 733 employees; 603,315 man-hours, continuing.

Canadian Industries Limited

Brownsburg Ammunition Works—1,476,000 man-hours since May 28, 1947, continuing. A previous record of 3,543,950 man-hours was established between April 11, 1943, and February 22, 1944.

Davison Chemical Corp.

Curtis Bay Works—1237 employees; 1,000,385 man-hours as of February 2, continuing.

Pittsburgh Plate Glass Co.

Columbia Cement Div., Zanesville, O.—427 days, 812,361 1/2 man-hours as of January 6. The plant has won the Portland Cement Association trophy for perfect records in 1931, 1935 and 1947.

Continental Can Co.

Plant No. 8, Jersey City, N. J.—September 22, 1947, to February 10, 1948; 1038 employees; 858,311.

Pullman-Standard Car Mfg. Co.

Pullman Press, Chicago—September 1, 1925, to January 1, 1948, continuing; 70 employees; 2,965,827 man-hours. The plant is a general printing and bookbinding plant.

Shell Oil Co.

Wood River, Ill., Refinery—3800 employees; 3,476,721 man-hours. During the period of this record, the plant processed more than 16,000,000 barrels of oil.

Standard Oil Co.

Litho Can Factory, Cleveland, O.—2 years; 529,273 man-hours as of January 10, continuing.

Sylvania Electric Products, Inc.

Kew Gardens Laboratory, New York—342 employees; 706,980 man-hours as of February 11, continuing.

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Mobile, Ala.—
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Car Mfg. Co.

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Refinery—3800
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Cleveland, O.—
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706,980 man-
11, continuing.

United States Rubber Co.

Winnboro, S. C., Mills—Novem-
ber 27, 1947, to January 20, 1948,
1,013,384 man-hours, continuing.

Wagner Electric Corp.

St. Louis, Mo.—3,277,790 man-
hours as of January 5.

Youngstown Sheet & Tube Co.

Metallurgical Dept., Youngstown,
O.—Nine years, two months; 2,000,-
000 man-hours.

Western Electric Co.

Haverhill Shops, Haverhill, Mass.
—4,832,000 man-hours as of Febru-
ary 17. On this date the shops passed
the previous record of 4,831,816 man-
hours established in 1946.

Electric Tools

—From page 21

the saw blade is running. I have
known of a number of instances where
operators have done this and have
lost several fingers.

One thing that should always be
observed in making any adjustments
on a portable electric tool is to be
sure that the switch is in the open or
off position and the plug removed
from the receptacle. This should be
number one on any list of instructions
to operators using portable electric
tools.

The National Safety Council's Safe
Practices Pamphlet No. 76, "Portable
Electric Hand Tools," covers many
important points on the safe opera-
tion of these machines.

Calendar Contest Winners For February, 1948

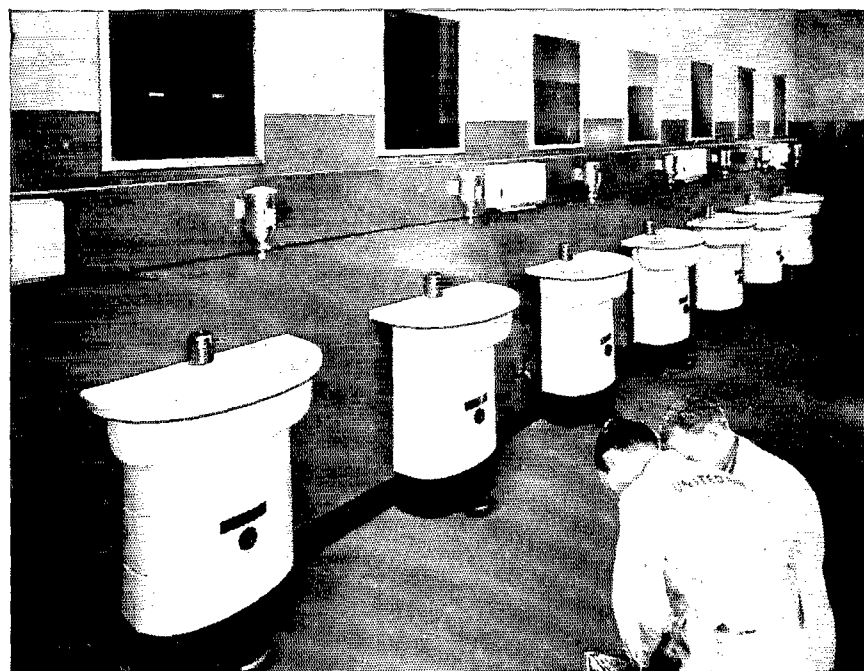
First Prize: Wallace Keister, Massillon,
Ohio. *Breaking records lose their glory; if
you're not there to tell the story.*

Second Prize: Dorothy Mason, Los An-
geles, Calif. *Slippery roads are bad enough
without all that fast-driving stuff!*

Third Prize: John E. Rush, Lynchburg,
Va. *With highway markers you are pro-
tected, read and follow as directed.*

And twelve \$5.00 prizes to:

Roger D. Bacon, Melrose, Mass.
William F. McCullough, Sewickley, Pa.
Ann Gebhart, New Castle, Del.
Gertrude Lu Jorgensen, Seattle, Wash.
George E. Murray, Lead, S. D.
Mrs. James Hartley, Aberdeen, S. D.
Mrs. Imogne Wilson, Dallas, Texas.
Sandra G. Catania, Glendale, N. Y.
Herbert K. Croll, Niagara Falls, N. Y.
Mrs. Frederick J. Harnois, Windsor, Vt.
Mrs. Clara Bean, Orange, Texas.
John Stanfield, East Point, Ga.



UNITED AIR LINES
Maintenance Base—San Francisco
MISS NO BETS

7 BRADLEY DUOS

Do the Work of 14
Conventional Wash Basins

Maintenance supervisors, whether in transportation activities, industrial plants, institutions or public buildings accept the Bradley DUO as "TOPS" for sanitation and savings. There are no faucets—hands touch nothing but the clean spray of water—foot-control operation eliminates chance for skin infections; a touch of the foot turns spray "on" and removal automatically shuts it "off".

EACH BRADLEY DUO-WASHFOUNTAIN ACCOMMODATES TWO PERSONS SIMULTANEOUSLY

Since ONE DUO takes the place of TWO single-person wash basins worthwhile economies are realized in space saved, piping connections eliminated, janitor work minimized and reduced water consumption. The bowls of DUO-Washfountains are finished all-over in white acid-resisting vitreous enamel. They are nationally distributed through plumbing wholesalers. BRADLEY WASHFOUNTAIN CO., 2237 W. Michigan Street, Milwaukee 1, Wisconsin.

A NEW CATALOG IN FOUR COLORS

A big new 24-page catalog colorfully illustrating the complete Bradley line is yours for the asking. It is a handy reference guide for sanitary, dependable, modern wash fixtures.

BRADLEY
Duo Washfountains

WRITE
FOR
CATALOG
4701
NOW



The Case of the Foresighted Foreman



A few pounds of prevention are worth a lot of good intentions. And a few pounds of Wyandotte Zorball, the all-purpose floor absorbent, may very well prevent a dangerous fire or slipping accident.

Zorball absorbs oil, water, acids, paints and other liquids quickly, completely, economically. Its granular texture provides an immediate anti-skid surface underfoot. And, because it is nonflammable, Zorball reduces the hazard of fires resulting from the unavoidable presence of oily waste matter. It will not readily support combustion, even when completely saturated with oil.

Extensive tests show that Zorball has no tendency whatever to cake. This eliminates the forming of "mud" to be tracked from one part of the plant to another.

Furthermore, Zorball is harmless to fabrics, metals, rubber and to the skin of those who handle it.

Your Wyandotte Representative will gladly demonstrate the economies and other benefits of Wyandotte Zorball at your convenience. He's only a telephone call away.



Trouble afoot? Why not try **WYANDOTTE ZORBALL**

WYANDOTTE CHEMICALS CORPORATION
Wyandotte, Michigan • Service Representatives in 88 Cities



Personals

With Conservation Bureau

NORMAN W. ANDREWS, JR., former safety director for the Republic Aviation Corporation, has been appointed to the staff of the National Conservation Bureau, accident prevention division of the Association of Casualty and Surety Companies, it is announced by General Manager J. Dewey Dorsett. Mr. Andrews will serve as a research engineer in the industrial safety services of the Bureau.

Prior to his position as safety director for the Republic Corporation, Mr. Andrews was safety director for E. R. Squibb & Sons, pharmaceutical manufacturers. He has also been a safety engineer for a large New York insurance company and assistant to the chief engineer of the New York Water Service Corporation in Brooklyn.

Educated in the public schools of Jamaica, N. Y., he attended Lafayette College at Easton, Pa., graduating with a degree in mechanical engineering.

Mr. Andrews is a member of the American Society of Safety Engineers, Safety Executives Club and Sigma Chi fraternity. He is a member of the executive committee of the East Coast War Production Council, the Special Activities Committee of the ASSE, the program committee of the Greater New York Safety Council convention, and the Aircraft Manufacturing Section of the National Safety Council.

He has been a frequent speaker at safety conventions and contributor to safety and industrial publications.

Goodyear Medical Head

Appointment of **DR. L. C. HATCH** as medical director of The Goodyear Tire & Rubber Company, has been announced by E. J. Thomas, Goodyear president.

Dr. Hatch, who came to Akron in 1942 to direct the hospitals at Goodyear Aircraft plants, has been assistant medical director of the parent company's Akron plants since November, 1946.

In his new position, Dr. Hatch has direct charge of Akron hospitals and staff and will also be responsible for direction of medical policies for all Goodyear operations.

Dr. Hatch entered the Goodyear organization after serving 10 years as chief medical officer of the University of Pennsylvania hospital at Philadelphia.

A graduate of Jefferson Medical College, Philadelphia, he served two years' internship at the Philadelphia General hospital and in his final year of internship was named chief resident physician. In 1930 he became chief resident physician of the University of Pennsylvania hospital, and was named chief medical officer two years later.

He received his grade and high school education at Franklin, Idaho, where he was born October 11, 1896, and obtained his pre-medical education at Utah Agricultural College, Logan, Utah.

He holds memberships in The College of Physicians of Philadelphia, American Association of Industrial Physicians and Surgeons, American Medical Association, Pennsylvania and Ohio medical societies and the Summit County Medical Society.

Staley Safety Director

D. LOVELL BAFFORD has been appointed director of safety for the A. E. Staley Manufacturing Company, Decatur, Ill. Mr. Bafford has been with the company since 1933, when he started as a plant messenger. He worked in various parts of the Staley plant while taking graduate studies at James Millikin University. He was in the Navy for three years during the war and returned to the Staley Company after his discharge.

A. C. Carruthers Retires

Announcement is made by Alfred M. Best Company, Inc., publishers of *Safety Engineering*, that ARTHUR C. CARRUTHERS, one of the founders of the professional safety movement in this country, is retiring as editor. He is succeeded by HARRY ARMAND who has been managing editor for several years. Mr. Carruthers will continue to serve the magazine as consulting editor.

Sperry Safety Director

CARL F. CARLSON has been appointed safety engineer for the Sperry Gyroscope Company at Great Neck, N. Y. The appointment was announced by E. E. DaParma, Personnel Manager.

Mr. Carlsin, who is one of three

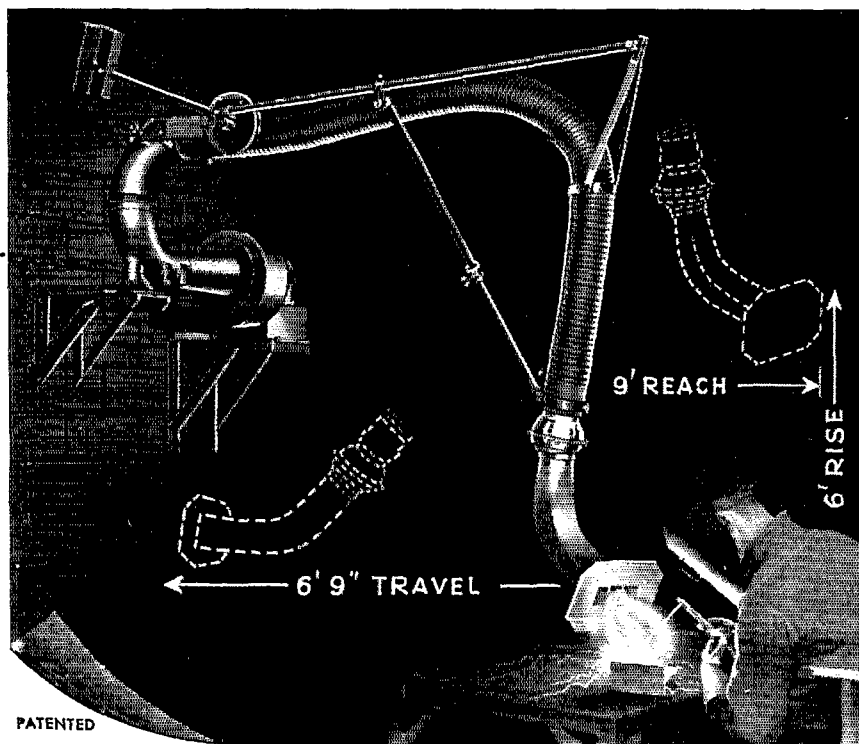
National Safety News, April, 1948

"I WORK IN CLEAN FUME-FREE AIR
—thanks to our
**RUEMELIN
FUME COLLECTOR**"



Welding shops equipped with Ruemelin Fume Collectors are assured of a clean shop atmosphere. Noxious fumes, heat and smoke are eliminated at their source, thus improving working conditions, lessening fatigue and paving the way for increased plant production.

The Ruemelin Fume Collector hood can be instantly placed where needed anywhere in the booth welding area. No tedious adjustments necessary. Just pull the inlet hood to the welding position and you are ready to go. Approved by state industrial commissions and by compensation insurance companies. Simple to install. Thousands in service. Many users send in repeat orders. Write for bulletin 37-C today.

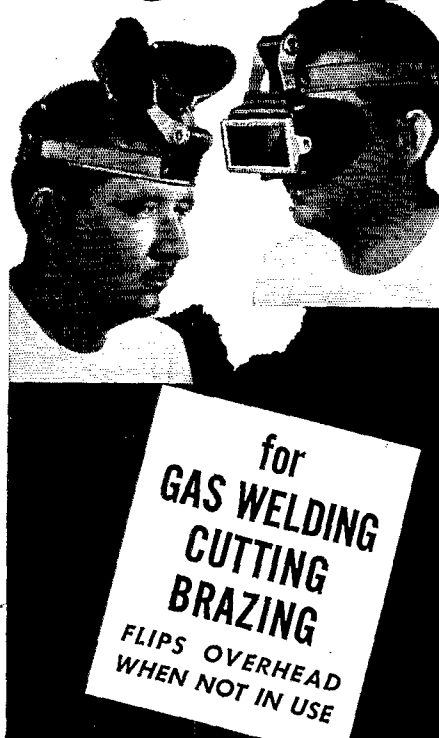


Standard Model D-5310 with hood reaching out 9 feet from wall. Also available in Long Reach Model D-5342 with hood reaching out 15 feet from wall.

RUEMELIN MFG. CO.

3885 NORTH PALMER STREET • MILWAUKEE 12, WISCONSIN, U. S. A.
MANUFACTURERS AND ENGINEERS • SAND BLAST AND DUST
COLLECTING EQUIPMENT • WELDING FUME COLLECTORS

The New McDONALD I-GARD



- ✓ FULL EYE PROTECTION
- ✓ USES STANDARD WELDING GLASS AND COVER LENS
- ✓ IDEAL WITH CLEAR GLASS FOR CHIPPING AND GRINDING
- ✓ LEATHER HEADBAND HOLDS SECURELY
- ✓ INSTANTLY ADJUSTABLE FITS OVER SPECTACLES

WRITE FOR DETAILS AND PRICES

B. F. McDONALD CO.

Manufacturers & Distributors
of Industrial Safety
Equipment



5112 South Hoover Street
Los Angeles 37, California
Other Offices in San Francisco & Houston

35-year Sperry veterans, has been a foreman in various company departments for many years and brings to his new safety post familiarity with shop work and a keen interest in industrial safety programs.

He is a member of the Metropolitan Chapter, American Society of Safety Engineers, and as a vice-president of Kings County, New York, Foremen's Club has helped organize industrial safety clinics in this area.

Named Safety Director

John J. Buscovitch has been appointed safety director for South San Francisco plant of Western Pipe and Steel Company, succeeding K. J. Marten resigned. Mr. Buscovitch has been in safety work at the plant for the past six years.

Award Safety Trophies To Goodyear Plants

The Slusser trophy for the best 1947 safety record among worldwide plants of The Goodyear Tire & Rubber Company has been awarded the Torrance, Calif., synthetic rubber manufacturing plant, it is announced by J. T. Kidney, safety director.

Three-hundred and seven employees of the plant worked a total of 534,000 man-hours during last year without a disabling injury.

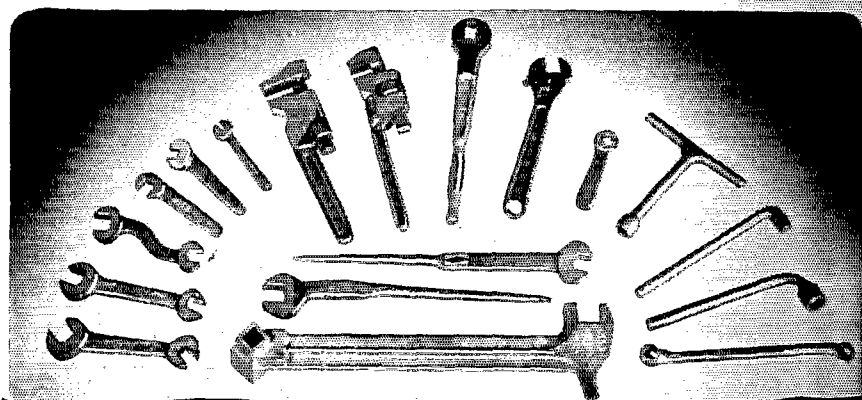
The trophy is given each year to the plant with the best safety record based on frequency of accidents times severity of injury.

Second best record for the worldwide Goodyear organization was the synthetic rubber manufacturing plant at Houston, Tex. The accident in that plant accounted for the total 5 days lost time during the year. The 379 employees in this plant worked 765,000 man-hours in 1947.

Winner of the 1946 trophy placed third last year with five accidents and 245 lost time days. This plant, at St. Hyacinthe, Quebec, Canada, employs 790 workmen who piled up an impressive two million man-hours worked in 1947.

Records of the first three place winners for 1947 are better than the first three place winners for 1946.

A polite man is one who listens with interest to things he knows all about, when they are told him by a person who knows nothing about them.



Tighten up your safety rules

... be sure your men use Ampco Safety Tools near hazardous, explosive fumes, gasses, or dust

A safety program that works is one that works *all the time*. One broken rule ... one careless tool ... one small spark in the wrong spot can undo all the good your safety program has accomplished in years.

That's one danger you can offset by this hard and fast rule: *Always use Ampco Safety Tools where a spark can spell immediate disaster!*

You can find a tool that is safe for every job—from the 500 standard types and styles shown in Ampco's new 28-page catalog. Send for your free copy today. Write *Ampco Metal, Inc., Dept. NS-4, Milwaukee 4, Wis.*



In Canada, contact Safety Supply Company, Toronto

S-36

PROTECT AND MAKE FLOORS SLIPPROOF
with

SKIDPROOF

SAFETY-TESTED FLOOR FINISH

Solve Your
INDUSTRIAL
Housekeeping Problems!

Thousands of companies everywhere are using Con-Sol Products for floor maintenance, safety, health and insect control and for easier, inexpensive cleaning.

Con-Sol is a single source for all your industrial housekeeping requirements. You can always rely on Con-Sol technicians to counsel and assist your maintenance department on every safety, health and cleaning problem. Write freely without obligation.

Ask for Special Maintenance Chart on your company letterhead.



SKIDPROOF has been tested
and approved by Underwriters Laboratories.



For a hard, durable finish that stands up under the toughest kind of wear — that cuts down maintenance time because it is easy to clean, easy to apply — specify SKIDPROOF, odorless, quick-drying, safe.

SKIDPROOF won't crack — won't discolor nor attack wood, asphalt tile, terrazzo, linoleum or rubber. One gallon covers 2,000 square feet — and because it wears so long, it's very economical. Specify SKIDPROOF for beautiful, slipproof, wearproof floors.

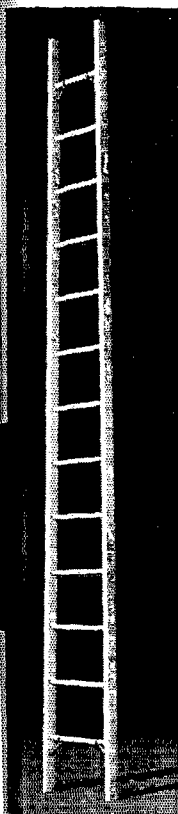
**Put Your Men at the Right Working Height —
SAFELY!**

GOLD MEDAL
LADDERS

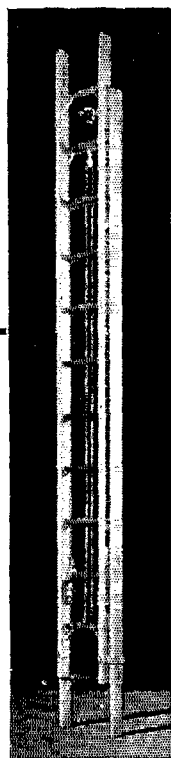
When your men have confidence in their equipment, they do better work — *at a higher rate of production*. Gold Medal Ladders eliminate costly accident hazards. Engineered safety features give maximum protection. Insist on "Gold Medal"! Write today for full information.

Manufacturers of

Tubelox Tubular Steel Scaffolding • Gold Medal Suspended Masons' Scaffolds • Gold Medal, Jr. Swinging Scaffolds • Gold Medal Steel Sidewalk Protection Canopies • Trouble-Saver Sectional Steel Scaffolding • Trouble-Saver Adjustable Steel Trestles • Trouble-Saver Steel Scaffold Brackets • Single, Extension and Platform Ladders



GOLD MEDAL SINGLE LADDER
with braces and tie
rods. Sizes: 8' to 24'.



Above at right: GOLD MEDAL SAFETY PLATFORM LADDERS provide a safe working platform. Added features include: patented spreaders and extra strength. *Above at left:* GOLD MEDAL SAFETY EXTENSION LADDERS. Outstanding in safety — with automatic safety locks, double guide irons, etc. Sizes 20' to 52'.



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Cheap insurance against shock, burns, infection, compensation costs, etc., when pulling or replacing fuses or handling live electrical parts.



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No projecting parts to cut or snag. Effortless handling reduces operator fatigue. Easily installed for remote control, leaving workers hands out of danger.



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Leak - proof, spill - proof, AUTOMATIC. Cut fire and accident hazards — danger of hand oiling . . . Oil supply is always visible.



WRITE FOR
SAFETY CATALOG

TRICO FUSE MFG. CO. Milwaukee Wis.
in Canada IRVING SMITH LIMITED Montreal

Power Shovels

—From page 40

Warning signs may be placed if clearance between the equipment and the bank or car is too narrow to permit a man to pass safely. (See Figure 4.)

43. Employees who fail to notify the operator and attempt to get on or off equipment while it is in operation incur frequent and in some cases serious injuries. Accident experience justifies a strict rule that only authorized workmen should be allowed on shovels.

44. Operators, oilers, and other workmen sustain numerous injuries when they jump from the shovel to the ground (see Figure 3), fail to use a handhold or steps, and do not keep running boards clear of ice and snow, grease, and other substances causing slippery conditions. The safe practice is to look for round pebbles, holes, ice, and similar unsafe conditions before stepping on or off.

45. Slips and falls happen on other types of equipment also unless house-keeping is neat and orderly. House-keeping is primarily the responsibility of the operator.

46. Extreme care is essential when machinery is being operated near power lines. Each year operators and other workers are killed because of failure to keep the boom at least ten feet from electric lines.

47. Hoisting work, such as moving of track, requires the following important precautions:

- Standard crane signals should be used.
- No load should be lifted without a signal and until all workers are in the clear.
- A signal to raise should not be given until the hooks or chains are properly secured.
- If the hooker is not clearly visible to the operator, an intermediate signalman should be posted.
- To fasten a hook to a bucket, the hook should be grasped at the top.
- Loads should be lifted vertically so that they will not swing.

Summary

48. Since power shovels, draglines, and similar equipment are frequently involved in minor and major accidents, their condition and use should receive special attention in a safety program. (See Figure 5.) Inasmuch as many of these accidents also result in damage to equipment and loss

of production, increased efficiency may be expected from effective safety measures.

49. These measures should include:

- A systematic inspection procedure for checking new equipment, inspecting cables, brakes, and other parts regularly, examining and testing the ground system periodically, and observing the bank and face constantly.
- Good maintenance.
- A program to familiarize repairmen with the hazards of the equipment, such as the danger of making repairs when parts are in motion and of handling heavy parts.
- The use of personal protective equipment, especially safety shoes and goggles by repairmen.
- Training of operators not to overload, to load properly, to warn workers to keep clear of the shovel, to get on and off carefully, and to follow similar safe practices.

ACKNOWLEDGMENT

This data sheet was prepared by C. C. Grieve, safety engineer, National Safety Council. Grateful acknowledgment is made to members of the Construction, Cement and Quarry, and Mining Sections and to other qualified individuals who reviewed the draft and sent suggestions. The data sheet has been reviewed by the Safe Practices Conference Committee and approved by the Industrial Conference of the National Safety Council.

"Calling All Hands" FOR

PREVENTO Protection!

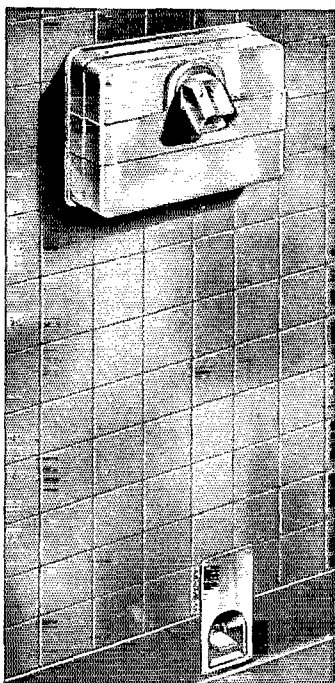
- Chemical irritants in cutting oils are an ever-present threat to sensitive hands. To help eliminate the hazard of skin irritations which may lead to dermatitis, hands need a protective coating—applied before working periods so that it affords full protection between hand washings.
- PREVENTO provides such a coating. Different types are available for different cutting preparations and shop conditions.
- PREVENTO is convenient to use . . . spreads quickly . . . gives hours of dependable protection . . . has a refreshing odor . . . vanishes upon washing. Here's low-cost insurance against slowdowns and lost working hours resulting from painful skin irritations.

- Write for folder "How Long Can They Take It?" and see your DOLGE SERVICE MAN for our cutting oils analysis service.

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THE C. B. DOLGE CO.
WESTPORT, CONNECTICUT

SPICK AND SPAN WASHROOMS



No. 7 "SR-W" Model Sani-Dri
(Semi-Recessed)

Assured by Sani-Dri

**ELECTRIC HAND and
FACE DRIERS**

ELECTRIC HAND DRIERS

INSURES

Attractive, Clean
Washrooms
Continuous
Automatic
Drying Service
Complete
Sanitary Service
Thorough Drying

REMOVES

Soiled Litter
Empty Cabinets
Laundry Expense
Fire Hazard
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Easy, Inexpensive to Install

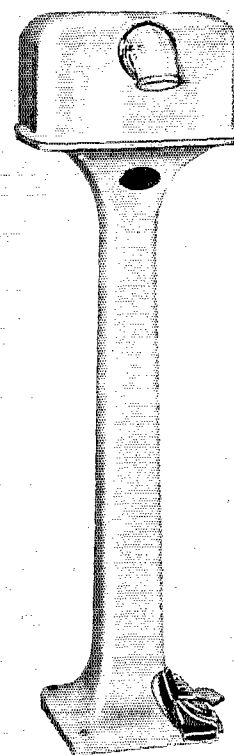
This modern, automatic, electrical service operates at a cost of but 15% (or less) of old style drying methods.

Brochure 1082 - - -

Sani-Dri Hand and Face Driers

Brochure 1093 - - -

Chairs and Tables for Cafeterias



No. 5-SF Pedestal Model Hand Drier

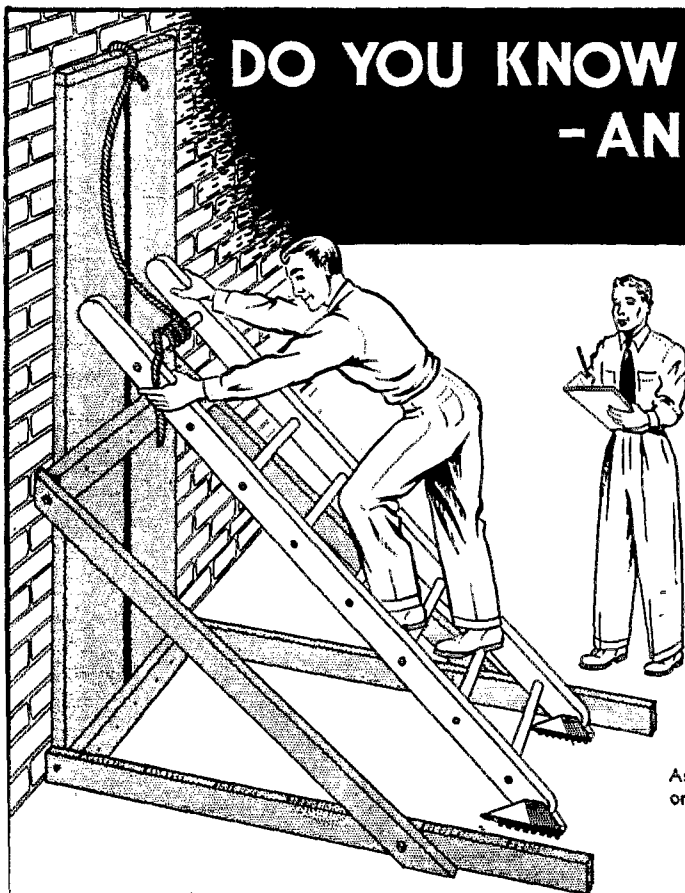
THE CHICAGO HARDWARE FOUNDRY COMPANY

448 SAFETY STREET

IRON, BRASS AND ALUMINUM CASTINGS FOR THE INDUSTRY

NORTH CHICAGO, ILLINOIS

DO YOU KNOW THE FACTS OF LIFE - AND DEATH - ABOUT LADDER SHOES?



THIS simple testing device will help you learn them
— readily and safely.

Upon request, we will send you drawings and full instructions for making this cheap and convenient testing device.

It will enable you to make comparative tests of different ladder shoes and ladders without shoes, quickly and safely, in your own plant, under your own conditions.

We'll also gladly lend you a pair of SAFE-HI Ladder Shoes for the tests, without obligation.

Test and learn the facts and you'll insist on SAFE-HI on all your ladders.

Ask your safety dealer
or write us.

Safe-Hi
PRODUCTS

Rose Manufacturing Co.
1731 Arapahoe St. Denver 2, Colo.

Open House

—From page 24

course, we put up warning signs at all dangerous intersections, and even put in one mirror at a blind corner.

There wasn't time to do a lot about guarding, so I went over the scenario written for the skeleton crews, checked it against the machines actually installed, and wrote a detailed memo to the publicity man telling him which machines to use in his show, and which to mask off with display boards, dimmed lights, or other concealment devices. I sent

a copy of that memo to Jackson with detailed reasons why Machine A should be used, and Machine B should be concealed. I hope it contributes to his general safety education, and makes it easier to get something done later.

I even got away with a hurry up job by specialists from one of the paint companies in functional painting. Some of the machines, the machine shop boys tell me, look like painted ladies (only they didn't say "ladies"), but they give the operators the protection that comes from

heightened depth perception. And the painting of signs in different colors—green for safety equipment, red for danger, etc.—has brought joy to the publicity guys.

Along the way, I stretched my budget for new bulletin boards and a lush display of new and dramatic safety posters.

And Susie, seeing what I was getting away with, called Max, our equipment salesman, and ordered a new and shiny sterilizer, some new wall cabinets, because, as she said, "The painters have made the first aid room so pretty, the old stuff looks shabby."

Finally, I worked out with the foremen a careful schedule of classes for the skeleton crews, and we drilled them in safe practices, double checked their personal protective equipment, bought goggles, bullied them into buying safety shoes, saw that their fancy (company bought) coveralls were the right type and right fit (incidentally sending several coveralls out to the tailor to get long sleeves cut off because they were to be used by machine operators).

Some of the workers kidded us, but we threatened the kidders with loss of their parts in the show, and that brought them in line. For these boys and girls, for all their outspoken cynicism and amusement at the "stunt," as they called it, were really pleased to have a chance to show off to their kids and to their friends.

Finally, when we had done everything else, we sat down with the plant protection force, augmented by city police and some temporarily-hired private patrolmen, to work out the methods of handling the crowd, keeping it out of danger, and preparing for any emergency.

The show went off last weekend. We put 15,000 people through the plant in two eight-hour open house sessions. Nobody got hurt, and the publicity play was impressive. I guess it was a success.

But this morning, while the foremen were wrestling to get their crews back to normal, and the janitors are still sweeping up candy wrappers and peanut shells, I'm wondering whether I exploited the publicity men or they exploited me.

PERSPIRATION

Production slow-downs, inferior workmanship and time lost accidents are often caused by perspiration. Excessive sweating saps vital body salts, causes heat fatigue, cuts worker efficiency and cuts your profits.

OR



PROFITS



FAIRWAY SALT TABLETS

taken frequently replace lost body salts, reduce heat fatigue and sharpen reflexes. Fairway Tablets, the inexpensive way to beat heat, are available 100% pure salt, 70% salt, 30% dextrose for energy and 100% salt enteric coated to retard dissolving.

SALT DISPENSERS

at every drinking fountain and spotted conspicuously about your plant remind workers to take salt. Fairway Dispensers keep salt clean. Encourage your help to take salt regularly by making it attractive and available in Fairway Dispensers.

Write for Bulletin No. 124

STANDARD SAFETY EQUIPMENT COMPANY

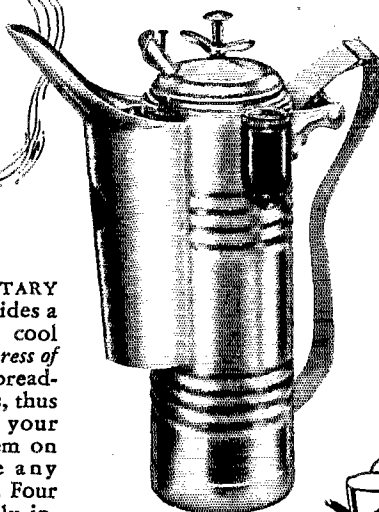
232 West Ontario Street, Chicago 10, Illinois

NEWARK - - CLEVELAND - - LOS ANGELES

ON ANY JOB...ANYWHERE



DOBBINS PORTABLE, SANITARY DRINKING FOUNTAIN provides a constant supply of pure, cool drinking water... *at the press of a button*. Banishes germ-spreading cups, dippers and pails, thus protecting the health of your workmen and keeping them on the job. Operates like any bubbler drinking fountain. Four gallon capacity tank is fully insulated... air pressure for instant flow of water is furnished with a few strokes of the pump.



INNER CONTAINER
OF STAINLESS STEEL



The Dobbins Portable is the ideal drinking fountain for CONSTRUCTION WORKERS... ROAD AND BRIDGE GANGS... MAINTENANCE CREWS... OIL FIELD WORKERS... STEVEDORES... MINERS, Etc.

Send for Free Folder

Or order from price list below. Distributors are invited to ask about open territories.

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DEPT. 427
ELKHART, INDIANA

FOUNTAIN AND ACCESSORIES AVAILABLE FOR IMMEDIATE DELIVERY

No. 18—Dobbins Superbilt Portable Drinking Fountain less all accessories... Only \$17.60
Salt Tablet Dispenser, 500 tablets capacity, extra..... 2.75
Adjustable, Waterproof Carrying Strap, extra 1.15

Spill Cup, to catch overflow when used indoors..... 3.50
Mounting Bracket holds fountain to wall or floor of buildings, trucks, tractors, locomotives, etc..... 4.50

All Prices F.O.B. Elkhart, Indiana

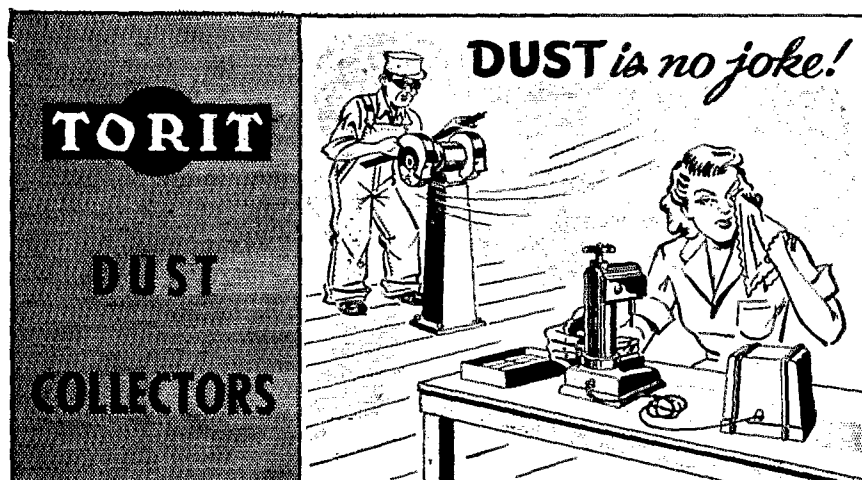


Stop!
and
It Did!

The steel toe in this pair of well worn Safety First Shoes withstood the pressure of a 3000 pound lift, saving the wearer from a crippling injury. Accidents make no appointments. Be wearing this toe protection.

SAFETY FIRST SHOE COMPANY
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● Write for In-Stock catalog listing our Union Made product. ●



Trap abrasive dust at its source, protect valuable machinery, precision workmanship

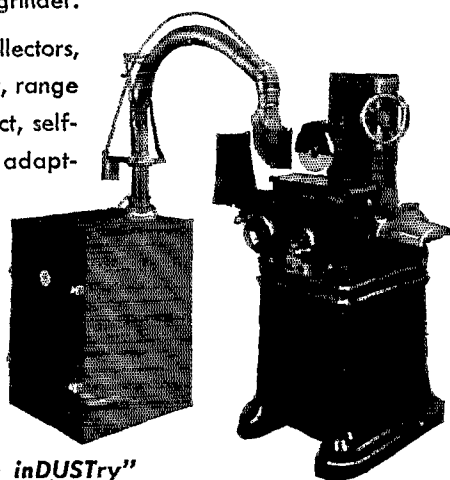
In every branch of industry, on all types of equipment, wherever dust is a problem, some 15,000 Torit Dust Collectors are trapping dust at its source and recirculating the cleaned air. Typical of these installations is the one shown below, where a Torit Dust Collector is attached to a surface grinder.

Stock models of Torit Dust Collectors, available for immediate delivery, range in size from $\frac{1}{3}$ to 5 HP. Compact, self-contained and portable, they are adaptable to all production layouts and all types of machines. For details and latest Torit catalog write:

TORIT MFG. CO.

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"TORIT takes the DUST from inDUSTry"



**SELL
SAFETY—**
DIRECT TO YOUR WORKERS
WHERE ACCIDENTS OCCUR

EVERY EMPLOYEE A
SAFETY MAN



YOUR SAFETY NEWS (published monthly) acquaints employees with all the causes and effects of accidents, in a way they like and understand SAFETY instead of it being forced upon them. — NEVER SO MUCH ACCIDENT PREVENTION AND RESULTS FOR SO LITTLE MONEY.—Full of Humor, Cartoons, Short Snappy Stories and Slogans. Colorful and Interesting. Eagerly read by the entire Family.

— ALL THE SAFETY EMPLOYEES
WILL READ AND RETAIN —

★ Write for samples and full details—★

FRANK O. SHOEMAKER, Publisher
6911 South Chicago Avenue, Chicago 37, Ill.

I've gotten a lot of housecleaning done. I've given the boys better work environment. And I've pounded on safe practices to a large, but still a minority, audience of our employees. Everything I've done has been out of the book, and should be good. But everything can be lost, if the foreman, the workers, and Jackson himself, say "Well, that's over," and go back to old methods and practices. I've got to figure out a way to hold the gains we've made.

April 15, 1948.

I'm beginning to wonder if I've misjudged Jackson. He's been surly, bad tempered, unreasonable, impossible to please. But he keeps doing just what I want him to do. The first couple of times I thought it was a case of doing the right thing for the wrong reasons. Now I wonder.

For yesterday, the second work day after the open house, he went on the P.A. system with a five minute talk. He said, in effect, "You've had your fun. We've all had fun. But this plant looks like something today, and I want it kept that way. It looks like something, not only because of the paint and scrubbing, but because more of you are wearing protective equipment, because stock is better arranged, because machinery is in better shape. But we had to hide some machinery, and we had to hide some of you employees who didn't want to work right. Next year we're going to have another open house, and we won't hide anything. I'm telling you foremen now, we won't cover up the shortcomings of your departments again. And I'm telling you employees that we won't hide those of you who are slow workmen, or sloppy ones, or ones who won't observe safety rules. If we can't put you all on display next year, we don't want you around!"

And in the office mail, an hour after that talk, all foremen and department heads, including me, received the following memorandum from Jackson:

"Submit to me by April 19, a report on your activities in preparation for open house, and their implications for future standard operating procedure."

Maybe my pet devil is turning saint, after all.

OBITUARY

HERMAN A. DAAKE

HERMAN A. DAAKE, supervisor of safety for the Erie Railroad, died March 8, at Cincinnati, Ohio. While attending a regional meeting of the Safety Section of the Association of



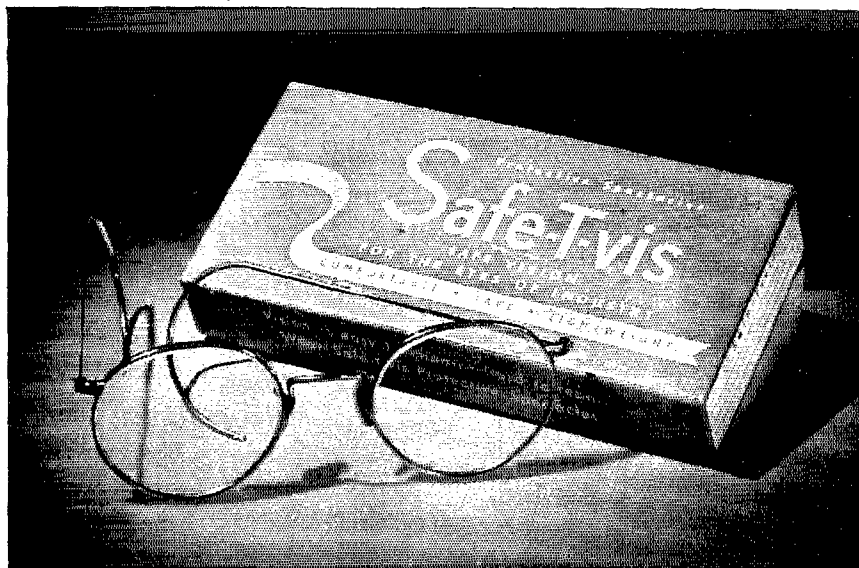
American Railroads he suffered a heart attack on March 2 and had since been confined to a hospital there. He was 59 years old. Surviving are three brothers. His wife died in May, 1947.

Mr. Daake was a past general chairman of the Railroad Section, NSC, and at the time of his death was chairman of the Section's Highway-Railroad Crossing Committee. He also served in many other capacities with both the Railroad Section and the AAR.

In 1913 he entered the service of the Erie at Marion, Ohio, as a telephone maintainer. In 1929-30 he was given leave of absence by the railroad to conduct a safety campaign for Station WLS, Chicago, and later made a tour of some of the larger schools giving safety talks. He founded the Safety Legion for children and wrote several booklets illustrated with his own cartoons. Throughout his life, no phase of safety was closer to his heart than his work with the children.

OSCAR M. NANFELDT

OSCAR M. NANFELDT, manager of the Accident Prevention Department, Employers Mutual Casualty Com-



A Spectacle in Safety!

New Plastic Lenses Combine Lightness and Comfort with Durability and Protection

Safe-T-vis, a product of The Univis Lens Company, is made from a brand new allyl casting resin and is a brand new kind of eye protection.

It's Light! Two Safe-T-vis lenses weigh approximately what one case hardened glass lens weighs. This lightness, and the resulting comfort of Safe-T-vis goggles, means that workers wear them for 8-hour protection on the job.

It's Durable! The use of allyl casting resin permits much greater surface hardness. Surface scratch-

ing and abrasion is now a negligible factor while length of service multiples.

It's Resistant! Closely supervised field tests show Safe-T-vis' superiority in chief causes of industrial eye injury. In impact tests, it withstood the drop of a 7/8" steel ball from 200 inches. *Your own tests* will be convincing evidence.

Write for booklet containing details on the lenses that permit utilization of all of the good features of plastic...with none of the bad.

Safe-T-vis

8-hour Protection
8-hour Comfort

Lightweight Protective Spectacles

A product of THE UNIVIS LENS COMPANY, Dayton 1, Ohio

FIRE HOSE DRYING



MADE EASY WITH CIRCUL-AIR

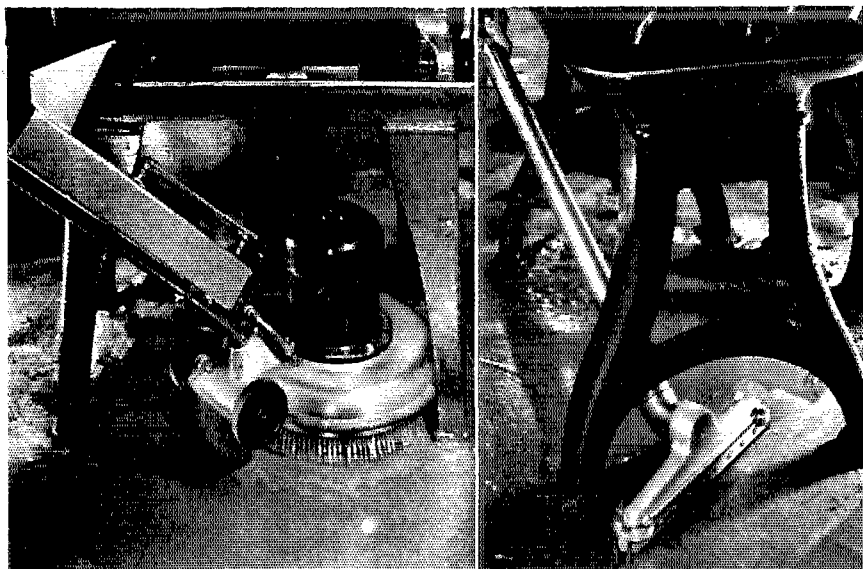
The Air Conditioning Hose Dryer

Saves time — saves space — eliminates man hours — keeps all hose in service — hose dries in a few hours. Makes good hose last longer — prevents mildew and rot.

USED BY MOST OF AMERICA'S
LARGEST INDUSTRIES

**Free
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THE CIRCUL-AIR CORPORATION
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Clean out the DANGER SPOTS with HILD System Shower-Feed Scrubbing and Vacuum Drying.



WRITE FOR
FREE
CIRCULAR

HILD Equipment goes right up to and under machines where grease drippings and cutting oil condensation make the floor dangerously slippery. Shower-feed scrubbing with the powerful HILD Floor Machine quickly loosens and dissolves the slippery, greasy dirt. HILD System Vacuum Drying picks up the dirt and scrubbing solution instantly and completely. Floors are left clean, dry and slip-safe . . . without rinsing or mopping. So speedy is the HILD System that floors can be scrubbed during working hours without interrupting machine operation for more than 90 seconds. Get complete information!

HILD FLOOR MACHINE CO.

1313 W. Randolph St., Dept. NS-4, Chicago 1, Ill.

SAME MACHINE DRY CLEANS
WAXES • POLISHES • BUFFS
SANDS • GRINDS • STEEL-WOOLS
FLOORS OF ALL KINDS

Use the same HILD Floor Machine with a series of easily interchangeable attachments to put office floors in tip-top condition . . . and keep them sparkling clean and bright.

MAINTENANCE MEN ARE HARD TO GET

Keep them alive. Use

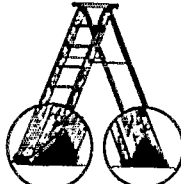
JOHNSON'S RUBBER LADDER SHOES FOR SAFETY



Top shoes prevent side slipping



Extension ladder shoes



Step ladder shoes are noiseless



For crutches and canes

Order from your dealer or
JOHNSON LADDER SHOE CO., EAU CLAIRE, WIS.
SAVING LIFE IS OUR LIFE

pany, Des Moines, Iowa, died suddenly March 13. Apparently in good health, he was stricken with a heart attack during a conference and school at the company's home office.

Mr. Nanfeldt was born in Wallingford, Conn., November 6, 1902. He was graduated from Connecticut State College in 1926 with the degree of B.S. in Chemistry and Bacteriology. For many years he had been engaged in accident prevention and supervisory work with casualty insurance companies — with the Travelers Insurance Company in New Jersey, the Fidelity Casualty Insurance Company of New York; Zurich General Accident & Liability Company, Chicago, and since 1941 with Employers Mutual Casualty Company, Des Moines.

Mr. Nanfeldt was a member of the American Society of Safety Engineers and chairman of the Small Plant Committee of the NSC Industrial Conference. He was a speaker at several recent National Safety Congresses and many regional conferences.

Surviving Mr. Nanfeldt are his widow, a son and a daughter.

FRANCIS J. MULLEN

FRANCIS J. MULLEN, editor of *Safety Review*, published by the Safety Branch, Office of Industrial Relations, Navy Department, died suddenly December 22 at his home in Alexandria, Va. He was 59 years old.

Dr. Mullen, a native of Somerville, Mass., spent the later years of his life in the vicinity of Washington. He received Master of Arts degrees from Holy Cross College and Catholic University and in 1926 he received the degree of Doctor of Philosophy in Latin and Greek from the University and in 1929 joined its faculty as instructor in those languages.

In May, 1933, he was appointed dean of Columbus University's Junior College. When that coeducational night school was discontinued in 1942, he became associated with the Office of Civilian Defense. For the past four years he had been with the Navy's Safety Branch.

Keown Honored by ASSE On Retirement

After more than thirty years of active service in safety engineering work, Robert McArdle Keown, past

general chairman of the American Society of Safety Engineers, retired from the position of chief engineer. Safety and Sanitation Department, Industrial Commission of Wisconsin. At a testimonial dinner held in his honor at the Schroeder Hotel, Milwaukee, he was presented with an honorary life membership in the ASSE by George Burns, manager, Service Department, National Safety Council. Other gifts included an out-board motor, camera and accessories, projector and screen.

Mr. Keown was born October 27, 1879, and was graduated from the University of New Hampshire in Mechanical Engineering, 1901. For two years after graduation he was draftsman for the Kidder Press Company at Dover, N. H. From 1903 to 1905 he was instructor in mechanical drawing and machine design at the University of Pennsylvania, and from 1905 to 1918 he was on the faculty of the University of Wisconsin, becoming associate professor. In 1918 he became chief engineer for the Safety and Sanitation Department of the Industrial Commission.

Mr. Keown was general chairman of the ASSE, 1927-28 and has served on numerous committees for the advancement of safety engineering. He has been a member of the Advisory Committee on Hazardous Occupations for Minors, U. S. Department of Labor; and several code committees of the ASA.

In tribute to Mr. Keown's services, J. I. Banash, past president of the NSC, said in part:

"This is a good chance to say a few words about a modest man's work that has pervaded the rest of the country. What Sidney Williams calls his 'transparent honesty and good will' have gone far beyond the borders of Wisconsin.

"Bob is widely and most favorably known for his cooperative efforts for the development of national codes. His knowledge, tempered by experience, has helped to make many of our standards workable as well as fair and technically correct. The state has contributed his services for the national welfare whenever needed.

"He came into the picture in 1918, six years after the Workmen's Compensation Act went into operation

PROTECT THEIR HANDS AGAINST OIL AND GRIME

Prevent Time Loss

Supply workers with Du Pont PRO-TEK, the hand cream that acts like an invisible work glove. Rubbed on the hands and arms before starting work, it guards the skin against paint, grime, insoluble cutting oils, etc. Easily washed off with water when the job is done . . . it takes all the grime with it.

Ask your jobber. Or write E. I. du Pont de Nemours & Co. (Inc.), Wilmington 98, Delaware.



REG. U. S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING
... THROUGH CHEMISTRY

PRO-TEK

REG. U. S. PAT. OFF.
HAND PROTECTIVE CREAM



SKYCO
NO-GLARE
a liquid, may
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A Sun Shade for Your Plant

SKYCO NO-GLARE acts like a sun shade over your plant because it keeps out glare, admits 94 per cent of the natural light and reduces inside summer temperatures approximately 15 per cent. SKYCO NO-GLARE is light blue and may be brushed or sprayed. It is easily removed when necessary, and very economical . . . single gallons \$3.50, 5 gallon pail \$3.25 per gallon, f.o.b. Cleveland. Orders shipped the same day received. Order a trial supply today.

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Wisconsin. This was, I think, the first act that really stuck and worked. His able administration coupled with his technical ability showed that a comprehensive act, including both factory safety and hygiene, can be administered with a degree of insight and understanding far beyond the strictly legalistic viewpoint which is still found in many states.

"This work in Wisconsin proved to all who would see the truth that a comprehensive law can and has been administered to reduce accidents, to lower insurance costs and

to keep all interests working together with a minimum of friction and a maximum of benefit."

Speed Most Important In Resuscitation

Two scientists of the medical branch of the University of Texas who have made extensive tests of the various standard methods of artificial respiration told the Federation of American Societies for Experimental Biology today that speed in using whatever method is

available can be more important to survival of the victim than the choice of exactly the most effective method.

Doctors Marshall Brucer and Howard G. Swann discovered that "deliberate insufflation" of the lungs, or simply blowing them up fully, is a somewhat more effective technique than the artificial respiration usually applied manually by Boy Scouts and life guards, but it has only about a one-minute advantage.

Often a delay of a few seconds is fatal, they stated. However, since some of the most efficient methods of restoring breathing were found to be impractical unless trained physicians and special equipment were immediately available, they recommended that the method available which can be administered with the least delay should be used.

To investigate resuscitation in cases of electric shock, drowning, carbon monoxide poisoning, choking, and hemorrhage, the doctors tried various methods on dogs in the laboratory. They found that sometimes efficient heart action and

"WHY TAKE A RISK?"



HEAD SAFETY OF YOUR PEOPLE IS OUR MUTUAL OBLIGATION

* * *

Paramount Safety Helmets Will Guard Against Injury May Save a Life

C-80 Helmets — D-80 Caps

Our Plastic Safety helmets and caps are light in weight . . . comfortable, waterproof, and resistant to 3000 volts electricity . . . adjustable to all head sizes and shapes 6 1/2 to 8 . . . allow adequate clearance space all around, between head and helmetcrown to cushion and absorb blow . . .

These safety helmets and caps with genuine leather suspension sustain 80 foot pounds under ball impact test . . . Made of finest materials and best workmanship.

Miner's Lamp Bracket

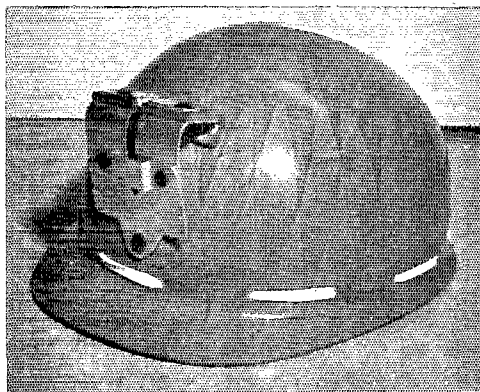
Adaptable to all types of miner's lamps . . . furnished installed on either helmet or cap . . . nonconductor of electricity.

Winter Lining

Two piece lining, flannelette facing . . . sanforized, warm, skull cap with detachable ear laps . . . fits any size head.

We have produced millions of M1 Army helmet liners . . . the famous Cairns-Paramount Firemen's helmet . . . the Army, Navy and Civilian Air Corps crash helmet for jet pilots and other air corps personnel . . . the Army Quartermaster Tank Corps helmet.

All these articles are produced under one or more of these patents, No. 2-420-522-No. 2-423-076, others pending.



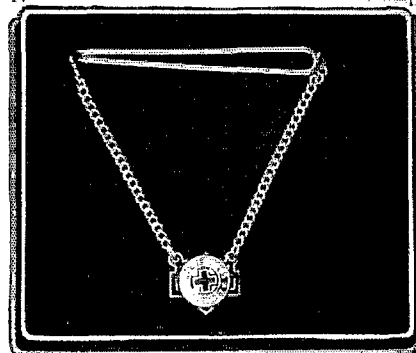
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WILLIAMS JEWELRY & MFG. CO.
 10 S. Wabash Ave. Silversmiths Bldg.
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even breathing could be restored, but if delay had been long enough, the functional activity of the brain could not be restored and the victims were revived only to "a vegetable-like" existence.

Occasional Solvent Users Need Protection

Most occupational accidents involving solvents occur in the small plant or shop where there is no safety organization to supervise the handling of chemicals, says Safety Research Institute. Solvents are commonly used for cleaning, thinning, degreasing, spot removing, etc. Although they are marketed under a variety of trade names, the most commonly used solvents consist of benzol, benzine, acetone, carbon tetrachloride, trichlorethylene or perchlorethylene. Careless handling of even small amounts of these materials may lead to fire, illness, or both.

Since it is probably the proprietor, manager, or foreman in the small plant who must play the role of

"safety director," it is up to him to read carefully the labels on all drums of chemicals received in the plant, and to be certain that the precautions recommended by the manufacturer are observed. If drums of solvents bear trade names which do not reveal their composition, this information can generally be obtained from the manufacturer or distributor.

Solvents are volatile liquids. With the exception of the chlorinated solvents (such as carbon tetrachloride) the vapors are flammable. Moreover, when air containing a large amount of solvent vapor is inhaled, illness is likely to result. If the concentra-

tion of solvent vapor in the air breathed is large enough, it is likely to cause unconsciousness and even death if the individual is allowed to remain in the atmosphere long enough. Lower concentrations of solvent vapor can give rise to headache, dizziness, stomach upset, and various disturbances of the liver, kidneys, or other organs of the body. In addition, long or repeated contact of the skin with solvents can cause irritation and dermatitis.

Solvents can be, and are, used with complete safety, even in large volume, provided the proper handling methods are employed. This is usual-

PROTECTION

Against
"WETWORK HAZARDS"
with



Corliss
All-Purpose
Raincoat

• For jobs involving exposure to dampness, wet weather, and corrosive acids and alkalis, for safety-sake equip employees with Rainfair-Vulcanized Work Clothing. Rugged, flexible, longer wearing...they're made to take punishment. There's a Rainfair garment to offer protection against acid, oil, alkali and water. Look for the "Rainfair-Vulcanized" label... a symbol of quality, dependability.

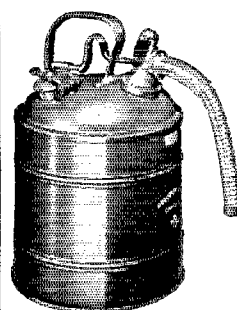
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SAFETY WORK CLOTHING

IMMEDIATE DELIVERY... Equipment for STORING AND HANDLING FLAMMABLE LIQUIDS

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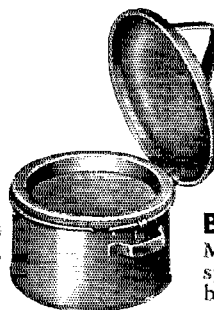
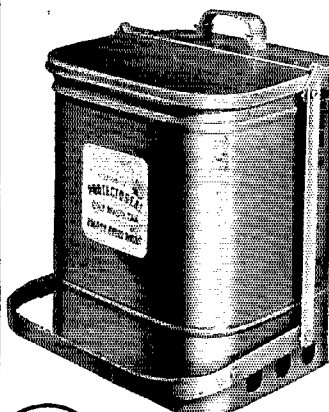
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BENCH CAN

Minimizes waste and speeds cleaning and swabbing operations. Spring mounted perforated dasher serves as fire baffle. F.M. approved.

OILY WASTE CAN

Developed to meet service requirements vitally important to plant safety and efficiency. A completely new design approved both by U.L. and F.M.

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THE PROTECTOSEAL COMPANY

1928 SOUTH WESTERN AVENUE, CHICAGO 8, ILLINOIS

ly the case in large plants, where continuous solvent processes are carried out with no difficulty. It is not so often recognized, however, that small uses of solvents, such as wiping of lenses, or occasional uses, such as cleaning motor parts, also constitute solvent "operations" which require attention to safety.

For example, there was a recent case of occupational illness which occurred when a laborer was assigned to remove the grease from the

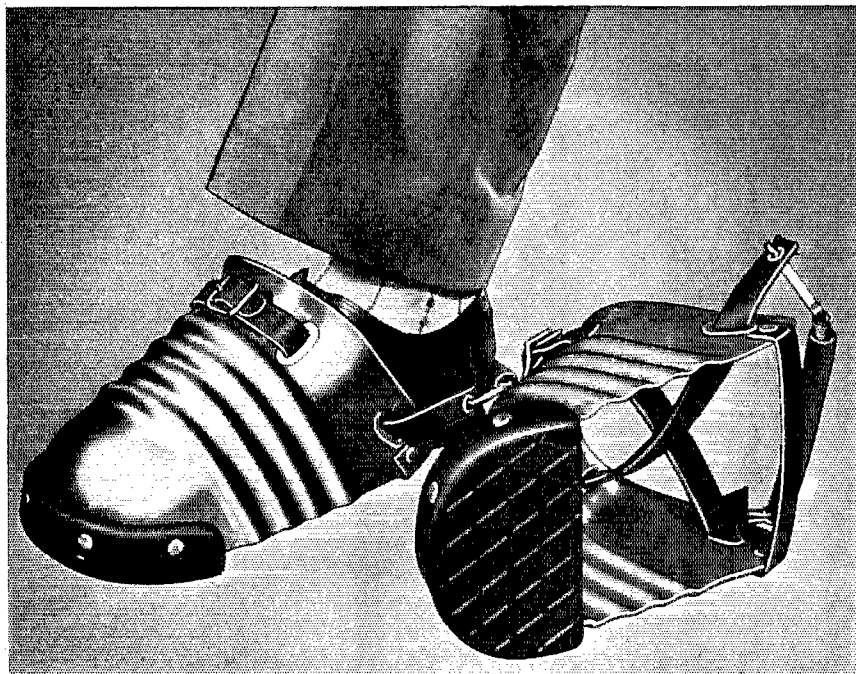
gears of a mill prior to its dismantling. Since this was a "one time" job, the degreasing solvent was used in open buckets, with little attention to safety. In another instance, a man was employed to dip small metal parts in a 3-gallon vessel of solvent and then spread them out on an adjacent bench to dry. Only small amounts of solvent were involved, but this careless procedure led to a fairly severe case of solvent illness.

The small solvent user can protect his plant and his workers by making sure that every procedure employing solvents, whether for a brief or extended period of time, is arranged so that workers do not inhale solvent vapors. In some instances, this may require the installation of special process equipment; in others proper ventilation will provide the necessary safeguard. Also, operations should be set up so that skin contact with the solvent is avoided. The local industrial hygiene agency can help those who are in doubt as to the safety of their solvent operations.

Eric weather is something which we do not believe could be any worse if it were placed under government control.—*The Hammermill Bond.*

What has Eric got that Chicago hasn't?

The quickest way to wipe out a friendship is to sponge on it.



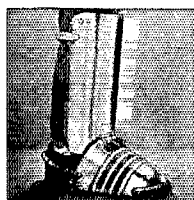
THIS IS THE NEW ANTI-SKID TOE CLIP

"SANKEY" Foot Guards are now available with a rubber anti-skid toe clip $\frac{3}{4}$ -inch longer than formerly used. "SANKEY" FOOT GUARDS consist essentially of a metal shield to be worn over the shoe whenever the foot is in danger of being either crushed or cut. The metal shield is designed to furnish a maximum amount of protection to the entire front of the foot—not merely the toes alone, but also to the instep against hazards from falling, rolling or flying objects, or from accidental tool blows. Write for literature or a trial pair.

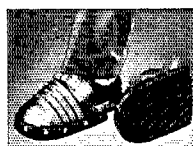
ELLWOOD SAFETY APPLIANCE COMPANY

219 SIXTH STREET

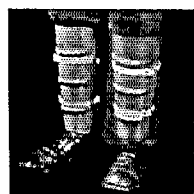
ELLWOOD CITY, PENNA.



Combination
Foot-Shin Guard



New Anti-Skid
Full Sole



Fibre Shin Guard

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To destroy offensive smells in toilets, lavatories, locker rooms and refuse areas, use effective OAKITE DI-SANITE.

A sure, swift, deodorizer, OAKITE DI-SANITE not only destroys bad smells without camouflage, but also cleans surfaces. Merely swab, spray, brush, mop or wash surfaces with recommended solution. Then let surfaces dry without rinsing. That's all you do for sure, safe, two-way sanitizing action with OAKITE DI-SANITE.

Write for details about this and other Oakite cleaners sure to put your cleaning program on a time-saving basis. No obligation.

OAKITE PRODUCTS, INC.
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Technical Representatives in Principal Cities of U. S. & Canada

OAKITE
REG. U. S. PAT. OFF.

Specialized Industrial Cleaning
MATERIALS • METHODS • SERVICE

"One Second from Eternity!"

Shaken emotionally by the close brush with death encountered by "a youth and his girl" racing in their automobile to beat his train to a crossing, a fireman of the Union Pacific Railroad directed this plea to the car occupants through an open letter published in the *Omaha World-Herald* on December 23:

I don't know who you are, it's true, but I do know you were scared to death Sunday evening near 9 o'clock when you drove your car across directly in front of a speeding passenger train. It was so close that I, in the cab, could see the young girl (your sweetheart, I presume) throw her hands up in front of her face and cringe up against you in stark horror.

If I were that young girl, I'd pull away from you, fast. You don't have good sense, son. You probably say you love her. I wonder. Those we love we try to protect. But not you.

Wouldn't that have been a nice Christmas present to hand your mother—a broken and battered body. And how do

you think that we in the cab of that engine would feel. We are human beings, too. We have young ones waiting home for us to return. We, too, could have been killed.

You and your girl were one second from eternity Sunday, son.

I hope you read this and know it means you, and that your girl will, too. Next time you go driving around, stop and look. We don't want to hit you, but we are helpless, as we cannot swerve away from our given rail.

If I were you, son, and you, too, sis, I'd thank God for that split second He

granted you Sunday evening.

I said a prayer for all when I realized you were going across. Perhaps that's what saved us all.

Now think it over, both of you. And I'll bet you are both still shaking in your shoes.

And please, for God's sake, don't try it again.

The writer did not sign his letter, and it was not until January 5 that his identity became known. A neighbor, learning that he was the author.

How- HEARING DEFECTS

Smash Machines!

What is the first warning you have that something is wrong with a machine?

● It's that high-pitched, barely audible sound that instantly lifts the operator's hand to strike the shut-off lever. His promptness in hearing that first signal may save a smashed machine. His keen hearing may mean the difference between a minor adjustment and a costly

overhaul job.

Many operators cannot hear high-pitched sounds. With increased age, their hearing gradually becomes more impaired. Periodic hearing tests with a modern **ADC** Audiometer will identify them for corrective care and give you these benefits.

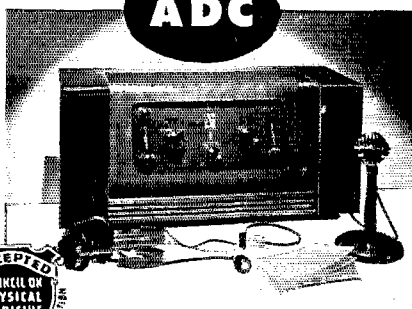
- ★ Lower machine maintenance.
- ★ Reduced accidents.

- ★ Boosted efficiency and morale.
- ★ Prevented damage suits.

ADC Audiometer

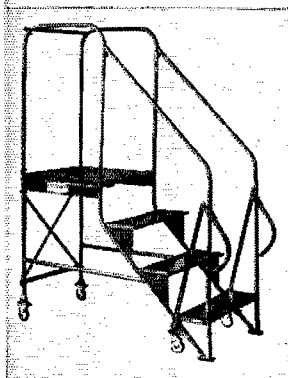
Easy to use for rapid check-ups, the **ADC** Audiometer is a precision hearing test instrument. The **ADC** gives you a dependable hearing record of each employee from the first day.

WRITE TODAY
for latest ADC
Bulletin D-100.



Audio Development Co.

2833-13th Avenue So., Minneapolis, Minn.



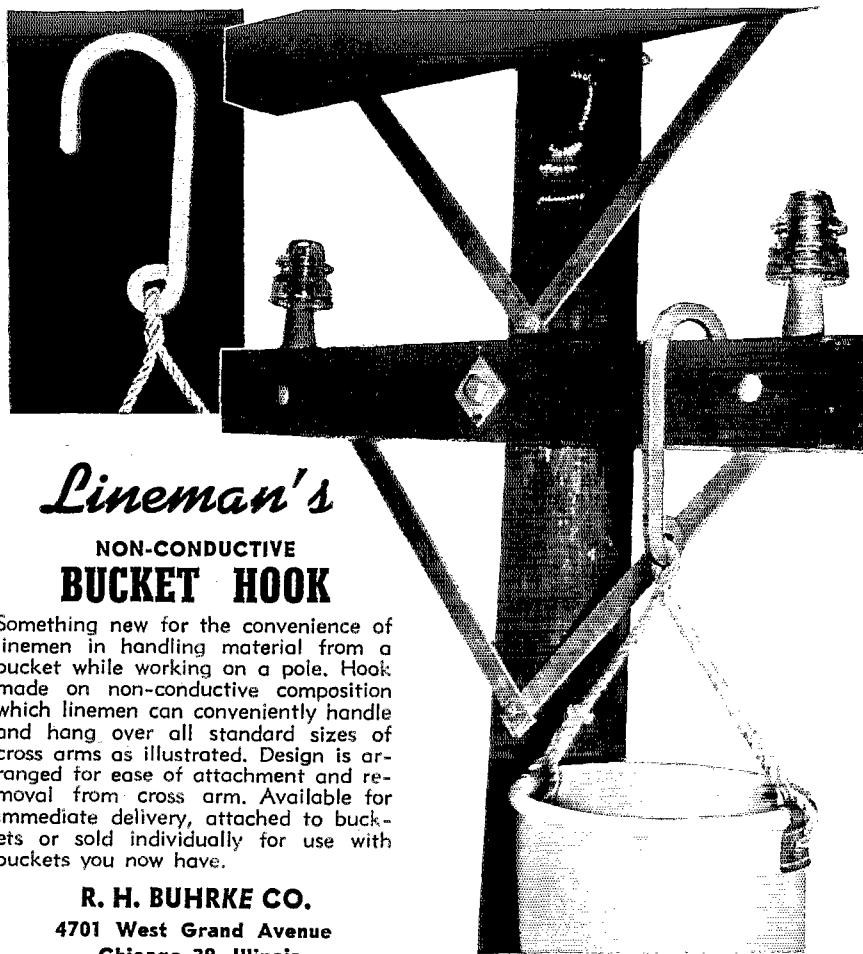
Handy-Jack STAIR STAND

is the answer to climbing problems, speeds up work, reduces costs, and work is more efficient with no fear of falling or strain. Stand is ideal for cleaning, servicing, reaching, and handling stock in and out of bins and shelving.

Features include strength, light weight, ample platform space, waist high guard rail, stability, plus HANDY-JACKS for a rigid stand. Built of steel tubing and selected wood, painted with two coats machinery enamel, with neoprene wheels, it is available in various models. Write for further information.

*Patents applied for

R. W. FIEROH CO., INC.
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Lineman's
NON-CONDUCTIVE
BUCKET HOOK

Something new for the convenience of linemen in handling material from a bucket while working on a pole. Hook made on non-conductive composition which linemen can conveniently handle and hang over all standard sizes of cross arms as illustrated. Design is arranged for ease of attachment and removal from cross arm. Available for immediate delivery, attached to buckets or sold individually for use with buckets you now have.

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HOFFMAN
VACUUM CLEANING EQUIPMENT

You wipe out dangerous "derelict dust" completely with Hoffman Vacuum Cleaning equipment. Workers' health is protected—fire and explosion hazards due to dust are routed—plant safety is increased. Hoffman portable units or stationary systems clean overhead areas, walls, machinery and floors during plant operation . . . frequently they may be used directly on production.

WRITE FOR LITERATURE AND A FREE SURVEY

U.S. HOFFMAN MACHINERY CORPORATION
 AIR APPLIANCE DIVISION, 111 FOURTH AVE., NEW YORK

wrote to the Omaha newspaper telling of her discovery.

The next day the fireman, fearing reprimand from the railroad, took the day off, donned a white shirt and went to face the music in the office of the railroad's safety engineer. It was sweet music, for the road's executive had been probing frantically to learn the name of the writer of such a moving plea for safety.

The fireman was Chester E. Beltz of Council Bluffs, Iowa. He is a 38-year-old father of a boy and a girl. After being "unveiled," he declared: "If it [the letter] saves one life . . . I'm glad."

The day that he took off to explain to Union Pacific officials his reason for writing the now-famous letter became one of great festivities in his honor at the direction of his employer. And he had that day off—with pay, *Railroad Data* reports.

Plant Health Programs Pay Dividends

Pointing out that more than nine out of ten companies with health programs have experienced a decline in absenteeism, accident rates and illness since instituting their programs, the Labor Relations Institute, New York, has prepared a 25-point checklist of health program essentials for the guidance of its members. Some of the questions follow:

1. Have you established a plant dispensary equipped to give employees physical examinations and emergency care?
2. Do foremen send all plant sickness and accident cases to the dispensary, no matter how slight?
3. Is your safety equipment inspected regularly?
4. Does your plant have a program for housekeeping to help maintain safe, healthful working conditions?
5. Do your employee publication and bulletin boards feature articles on prevention of occupational diseases and other health topics?
6. Is accident prevention stressed through supervisory meetings, plant posters and executive letters to employees?
7. Do you cooperate with community accident and disease prevention campaigns?
8. Are checks made on "accident prone" workers so they can be transferred to safer jobs?

"Rising prices have affected health programs as well as other aspects of the industrial scene," the Institute

TURN ON THE LIGHTS

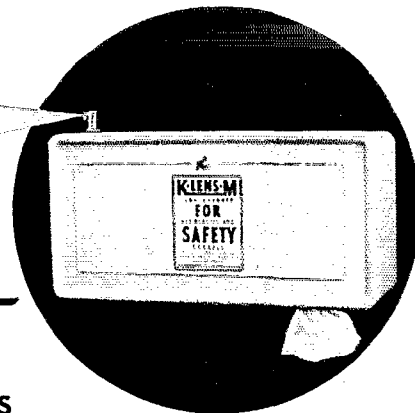
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**LENS CLEANER and
DISPENSER CABINETS**

Are the right answer to your goggle cleaning problems. K-LENS-M Lens Cleaner REALLY CLEANS Eyeglasses, Safety Goggles and Face Shields. Put K-LENS-M to work for you and help your employees to produce more and better work.

Always insist on Genuine K-LENS-M, the **NON-INFLAMMABLE, DISTINCTLY DIFFERENT** Lens Cleaner. K-LENS-M Cleans Better, Faster, Easier and Leaves No Film.

Write—The **WILKINS CO.**, Cortland, N. Y., for prices and new circular with complete information about K-LENS-M Dispenser Cabinets and



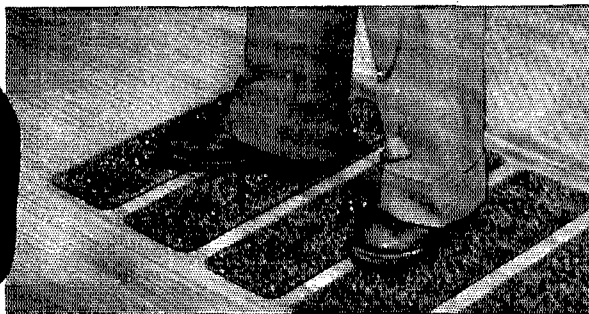
K-LENS-M

REGISTERED PAT. OFF.

"Visit our booth at the Greater New York Safety Conference. Booth No. 51."

4

**REASONS
WHY**



**... FOOTHOLD SAFETY TREAD
IS AN IDEAL NON-SLIP**

1 Friction Grip

... sandpaper-rough surface.

2 Easy Application

... no tear-up—no tie-up.

3 Immediate Use

... no curing period necessary.

4 Low Cost

... thrifty, "pin-point" installation.

Here are the four big reasons why safety men throughout industry insist on Foothold Safety Tread for the prevention of slip and fall accidents. The unbeatable combination of these quality features insures safe footing that pays double . . . cuts accident losses . . . speeds footwork. See for yourself why Foothold Safety Tread is the ideal non-slip. Let us install a gratis sample cleat at some hazard area in your plant.

reports. However, recent figures show that a program can be established for less than \$15 per worker per year—only a moderate increase over the pre-war cost of \$12.36. The \$15 figure includes the cost of amortizing the initial investment over a ten-year period. This investment ranges from \$550 to \$3,500 for the average small plant, depending upon the number and size of the rooms used, the amount of equipment purchased and the salaries paid to plant health personnel. In most cases, the total cost to the company for the entire installation was less than the expense formerly borne by the same firm for industrial accidents alone.

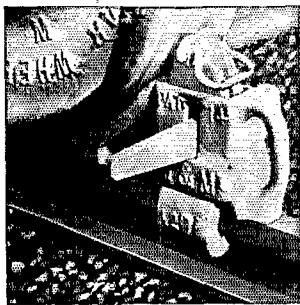
"As compared with this small outlay, consider the results. One manufacturer with 225 employees, after one year's experience with a health program, reports absenteeism reduced almost 85 percent, accidents down 90 percent, labor turnover reduced to a minimum, and a 25 percent saving in workmen's compensation rates. In one year, total net savings to this employer amounted to almost \$10,000."

Wherever possible, the small em-



BEHR-MANNING · TROY, N. Y.
(DIVISION OF NORTON COMPANY)

The Safe Way!



IPCO MINE AND MILL RAIL CLAMPS

Used for car stops, on loading platforms, temporary sidings, railroad ferries, under tipples, for cars on grades and traveling cranes.

Light in weight. Easy to handle. Applied or removed in a minimum of time. Guaranteed against breakage.

Used and recommended by leading steel companies, manufacturing plants, mines, grain elevators, cement plants and quarries.



Write for Bulletin K-48

Safety Equipment for all Industries

INDUSTRIAL PRODUCTS COMPANY

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Stanzails Grip Under Oil

No Slippery Fingers

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Safe Hands...

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Hard to believe but true — *amazing new positive-grip finish on Stanzoils holds wet slippery objects as if dry...* new confidence and speed for workers! Unbeatable hand protection from Pioneer-processed DuPont neoprene assuring long life (and low cost per hour) in oils, acids, caustics. Black, white; standard styles, sizes. Avoid injury claims, get more production—in-
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Synthetic Rubber Division

The Pioneer Rubber Company
289 Tiffin Road Willard, Ohio, U. S. A.
Los Angeles



OVER 30 Years OF QUALITY GLOVE MAKING

players in each area should combine to set up a centrally-located dispensary, the Institute recommends. This reduces the expense for each company, and usually makes it possible to engage full time services of a qualified physician and an industrial nurse, as well as the establishment of a well-equipped medical center for employees.

Employers should also take full advantage of local community services provided by city or county health departments. Many of these departments provide free preventive medicine tests for employees and their children.

The President's Medal

Awards made by the National Safety Council for resuscitation by the Prone Pressure Method

ERNEST BROX, blast furnace stove tender, Republic Steel Corp., Canton, Ohio—*asphyxiation*.

F. J. HOVENAIR, line foreman, Accomac-Northampton Electric Cooperative, Parksley, Va.—*electric shock*.

SAM J. PETERSON, launch operator, War Department Corps of Engineers, Milan, Ill.—*drowning*.

FRED CLORCH, inspector, A. B. Dick Company, Franklin Park, Ill., and MRS. OPAL JENIK, Chicago registered nurse—*electric shock*.

M. T. MILLER, welder, and J. W. ANDERSON, foreman, Shell Pipe Line Corporation, McCamey, Texas—*asphyxiation*.

DONALD F. GUNN, lineman, Northwestern Bell Telephone Company, Grand Island, Neb.—*electric shock*.

ODAS H. MEFFORD, pumper, Gulf Oil Corp., Healdton, Okla.—*asphyxiation*.

LEWIS L. FUNK, lineman, Public Service Company of Indiana, Attica, Ind.—*electric shock*.

WILLIAM E. NAGLE, ground man, Public Service Company of Indiana, Lapel, Ind.—*electric shock*.

HAROLD GEORGE KORTE, farmer, Lebanon, Ill.—*electric shock*.

WILLIAM E. ATKINSON, lineman, The Washington Water Power Company, Kellogg, Idaho—*electric shock*.

ALDAN H. HUFFMAN, gasoline plant operator, The Texas Company, Elcetra, Texas—*drowning*.

The Reader's Point of View

Comments on topics of current interest are always welcome. They need not agree with the opinions of the editors.

Tank Trucks for Fire Fighting

Teaneck, N. J. — Regarding the article "Biggest Fire-Fighting Idea in Fifty Years," by Paul W. Kearney, in the February NATIONAL SAFETY NEWS, I thought that you would like to know that the United States Army has adopted a similar plan of using tank trucks in areas where hydrant systems have not been available.

While stationed with the Seventh Infantry Division Fire Department, in Seoul, Korea, we received a shipment of Japanese-constructed 640-gal. tank trucks with pump attached. The 640-gal. tank provided adequate water, for small fires, and they were made simply by putting a tank on a G.I. 2½ ton truck body, and mounting the necessary foam equipment, along with hose, extinguishers, and other apparatus.

The "Stateside" apparatus we had were, of course, useful when we had water supplies to pump from, but the 640's came in mighty handy when these supplies were unavailable. In fact, the novel idea contributed greatly to saving many buildings in the American Occupation area in South Korea.

HENRY G. FRANK, JR.

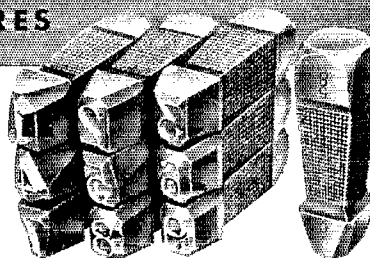
Dry Cleaning Not Advised For Electric Blankets

All electric bed coverings listed by Underwriters' Laboratories are distinctively marked, "Do Not Dry Clean."

In investigating electric blankets, the Laboratories have followed the practice of laundering them according to the booklet provided with each bed covering by the manufacturer.

The possibility of dry cleaning electric blankets has also been considered. Liquids used in commercial dry cleaning are (1) Cleaners' naphtha, (2) Stoddard solvent, (3) "140 F" solvent, (4) Perchlorethylene,

For Maximum Safety in Stamping—
"SAFETY" Wedge Grip
STEEL LETTERS
AND FIGURES



PERFECT balance . . . Knurled sides not only assure *positive* grip with "Wedge Grip" to give clearer, deeper impressions—but also lessen severity of extra heavy stamping. Characters available from 1/16" to 1".

- No mushroom ● No spall
- 25% to 50% more service
- More Safety!
- Pat. No. 2,089,794



Write for Bulletin J-547

M.E. CUNNINGHAM CO.
SAFETY STEEL STAMPS
200 E. Carson Street
Pittsburgh 19, Pa.



"STAIRWAY TO SAFETY"

is a good description for an
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UP-RIGHT SCAFFOLD

"Weighs Less Than the User"

PORTABLE
ADJUSTABLE

No Loose Parts
Each Section Folds Flat

WRITE for descriptive
circular

UP-RIGHT SCAFFOLDS

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Offices in All Principal Cities

STANDARD GLOVES-

a glove for EVERY job!



Yes, you're sure to find just the glove you need for your employees' safety in STANDARD'S complete line. There are gloves for every purpose,—canvas, hot mill, leather palm, all-leather, rubber, rubber-coated, welders' and asbestos gloves for men or women. Also a complete line of Jo-Mac Terrycloth gloves. Have one of our glove specialists analyze your needs and save you money.

You supply the job — We'll supply the glove!

STANDARD GLOVE Co.

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● Whatever the size of your plant, Gerson-Stewart's practical plan of Systematized Sanitation will effect important savings. Its success has been due to after-sales satisfaction and service. Your Gerson-Stewart Sanitation Specialist makes periodic inspections to see that you continue to receive full value from your plant housekeeping program. Systematized Sanitation has been successfully used by hundreds of leading concerns for more than 30 years. Write today for complete information.



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(5) Carbon tetrachloride. The first three are petroleum solvents and do not affect the thermoplastic-insulated heating element; the remaining two tend to stiffen the insulation due to their solvent action on the plasticizer.

In view of the injurious effect of dry cleaning with these liquids, Underwriters' Laboratories has not recognized the dry cleaning of electric blankets.

Compensation Publicity

The United Mine Workers sent a check for \$1,000 to each family of the victims of the disaster at Centralia, Ill. Pictures of John L. Lewis signing these checks have appeared in the papers.

Not so well known is what Monsanto Chemical Company did for the victims of the disaster at Texas City, Texas.

This explosion was in no wise the fault of Monsanto. The ship that exploded in the harbor was not owned by Monsanto, nor was it loaded with chemicals made or used by Monsanto. But what Monsanto did "beyond the call of duty" is worthy of record.

More than 200 men and women were lost at the Monsanto plant. Under the company's group insurance plan, the beneficiary of each of the victims will receive from \$6,000 to \$8,000 in insurance. In addition, each beneficiary will receive \$20 a week for seven years, or \$7,200 more. Monsanto paid another \$1,000 immediately. Cash benefits to each family of those killed will, therefore, total from \$15,200 to \$17,200.

In addition, Monsanto will pay all hospital costs not covered by the Blue Cross Plan. It will pay full base wages to all injured persons until they return to work. It will pay transportation costs to move widows and children to their former homes. It will relieve them from all loss on contracts for the purchase of their homes in Texas City. It guarantees jobs for those who will be able to return to work, and further protection to those rendered unable to work again by total disability.—Coshocton (Ohio) Tribune (as quoted in The Employment Counselor January, 1948.)

Chosen for National Foundry Award

PETER E. RENTSCHLER, president of the Hamilton Foundry and Machine Company, Hamilton, Ohio, and a former president of the Hamilton Safety Council, will be honored by the American Foundrymen's Association at the 1948 Foundry Congress in Philadelphia, May 3-7. For his personal contributions to the castings industry he will receive the Peter L. Simpson gold medal.

In naming him for the award, the board cited: "his outstanding work in promoting better housekeeping and safety practices in the foundry and the inspiration he has given the industry in the field of public relations."

A GOOD BUY

On a recent safety inspection tour with A foreman who just couldn't see How small unsafe conditions could Be of real importance, (he called Them trifles), I was telling him I Always tried to get the foreman to Look at his shop or section through My eyes. He said I reminded him Of his wife. It seems they were Riding into town right after a Light snowfall when his wife, who Paints, asked, "What color is that Snow to you?" He said white, of Course. But she said she saw lots Of colors—pinks, yellows, greens, Etc. Then he called my attention To a calendar with snow in the Picture. And sure enough there They were—pinks, yellows and greens.

I was away ahead of him in his Comparison, so I just listened To him sell himself, which was Easier than for me to sell him. He did a good job of it, too, and Now, like his wife, the painter Who sees colors in snow. He now sees other angles in his Shop and the unsafe conditions That he can change to improve His production and keep more People on the job and accident Free.

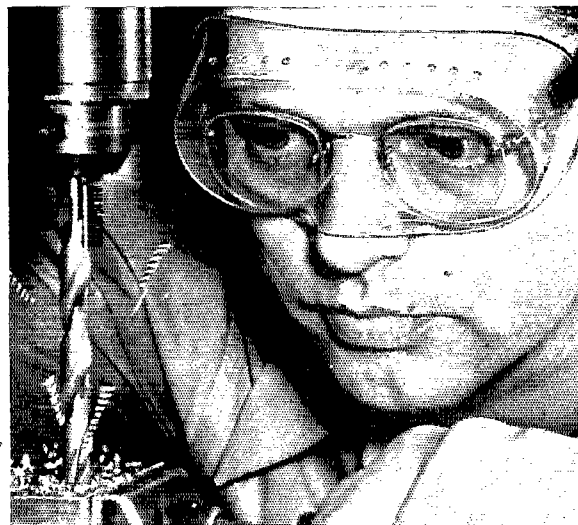
—M. Spilane

Born to Trouble

A new father was looking over the babies through the big plate glass window in the infant ward. Every baby there, it seemed, was crying.

"What's the matter in there?" he asked the nurse.

"If you were only a few days old out of a job and owed the government \$2,050, you'd be bawling too," the nurse replied.



THE

SAF-I-SHIELD

THE ALL PURPOSE SAFETY GOGGLE

A safety goggle that fills all requirements. Made of the new improved "Optilite" plastic and molded in one piece in optically ground and polished molds. Clear, optically correct vision and freedom from distortion is assured. Has unbelievable strength

and ability to resist piercing and impact. The SAF-I-SHIELD fits everyone including those who wear prescription glasses. You need only purchase one size and one model to protect the eyes of all your employees. Write for literature and low prices.

Also manufacturers of "Tuffy" Aprons "PEP-UP" Salt Tablets and SAF-CO-METER Carbon Monoxide Indicator.

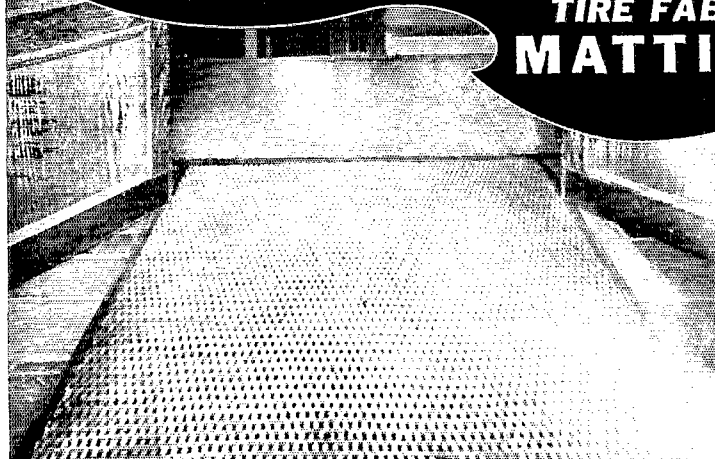
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around machinery, on wet floors and ramps, and in wash rooms. Long wearing. Beveled nosing on all sides. $\frac{5}{8}$ " thick, up to 6' wide, any length.

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For prices and folder "A Mat for Every Purpose" write

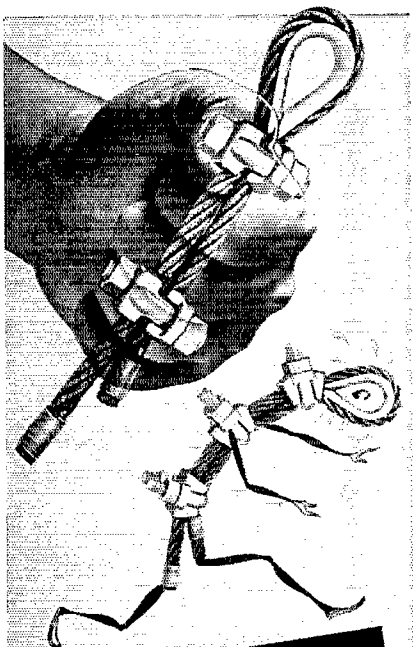
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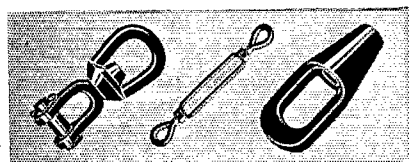
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THE MOST COMPLETE LINE OF DROP-FORGED WIRE ROPE AND CHAIN FITTINGS



How to Identify Magnesium

Frequently occasion arises for identifying magnesium used as thin sheets, strips or wire in the assembly of products being investigated. This simple flame test has been found useful. Underwriters' Laboratories reports:

Magnesium ignites readily and burns with a brilliant flame; aluminum melts but does not ignite under these test conditions: Small fragments or shaving made from the sample are held by forceps in small flame, such as that of a match. If necessary, results of this rough method may be confirmed by a relatively simple chemical procedure.

Describe Safety Measures In Retail Stores

Safety for employees of retail stores is the topic of a new pocket-size booklet published by the National Conservation Bureau. accident prevention division of the Association of Casualty and Surety Companies. The booklet, "Your Guide to Safety in Mercantile Establishments," is one of a series issued by the Bureau and made available to the public through member companies of the Association.

Aside from safety instructions of a general nature, the new booklet points out accident prevention measures for each department of a store. As is in the other booklets of the series, it includes tips for off-the-job safety.

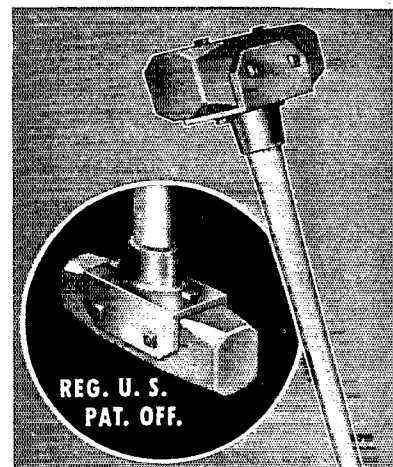
Something Different in Goggle Pictures

Pictures of shattered goggles that have saved eyes are used frequently in the promotion of eye protection. An unusually effective example was used on the back cover of the January-February issue of *Eastern Gas and Fuel Associate*. The employee, wearing a pair of goggles with the left lens smashed, is looking intently at a glass eye. In the background is a poster of a blind man with a tin cup.

In a red panel at the top of the page is the heading "Not for him!" Another panel at the bottom of the page tells the details of the near injury.

PHILOSOPHY—The system of being unhappy intelligently.

Save TIME
TEMPERS
TROUBLE!



METALOCKED WOOD MAUL

Time lost on the job caused by broken mallets doesn't improve anyone's temper, especially where there's danger of workers being injured by flying head.

With the Metalocked Wood Maul, such danger is reduced to a minimum. The head and handle are held rigidly in position and strongly reinforced at their joint with a lightweight, aluminum alloy eye.

Made from hard wood, the Metalocked Wood Maul is a perfectly balanced tool. Handle is egg-shaped to prevent turning in the hands. Heads are replaceable.

Made in Three Sizes for Many Uses

Model A—36" long; head 1 1/2" x 2 3/4"; weight 6 1/2 lbs.

Model B—18" long; head 7" x 1 1/4"; weight 1 3/4 lbs.

Model C—17 1/2" long; head 6 1/2" x 1 1/4"; weight 1 1/2 lbs.

Model A is ideal for striking hopper car doors to shake down material or for striking heavy equipment when necessary.

Models B and C are designed for use in machine shops, garages, foundries and sheet metal shops for striking machinery or metal where steel mallets would cause damage. Used for removing dents in automobile bodies and fenders, machinery casings and sheet metal.

ORDER NOW!

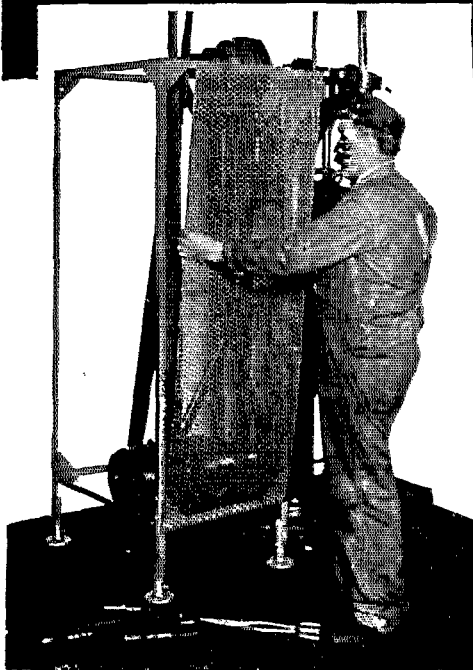
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National Safety News, April, 1941

Make Your Own SAFETY GUARDS



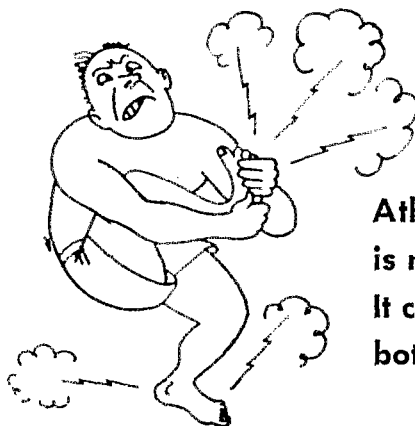
Make accidents impossible in your plant with Safety Guards that you assemble yourself. H & K Safety Guards are strong—safe—inexpensive! They are rigidly constructed of precision-formed accessories, adaptable to every machine and production requirement . . . you plan and build any size and shape safety guard and assure highest visibility. H & K Safety Guard components are economical, because you buy the parts ready to put together. Consult H & K NOW on all your safety guard problems.

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**Athlete's Foot
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It costs your plant
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No mess, no splash, no waste. Costs only 1c per man per week. And the men like it!

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son's ability to meet the visual standard is used to predict his probable future accident experience. This procedure is justified by the evidence disclosed in the experiment. Generally the employees with "no accident" records had higher visual performance than did those with frequent accidents.

As an example of how effectively vision tests can spot accident-prone workers, let us refer back again to the groups in the present experiment. There were 38 persons whose vision met safety requirements in every respect. Of these employees 79 per cent were accident free. On the other hand, of 46 employees with inadequate vision, only 26 per cent had "no accident" records. Actually, among the employees with inadequate vision there were 3 times as many high frequency accident cases!

Using The Standard

After establishing the minimum visual safety standard, the next step was to apply it to our plant safety program. This was accomplished as follows:

1. All present employees who were below this standard on the Ortho-Rater tests, were personally interviewed and referred to a professional eye man of their own choice for further examination, and eye care if needed. Reaction of employees to this service was very favorable, especially on the part of those who had not before realized the need for eye care.
2. The standard was incorporated into the regular employment procedure as a minimum safety requirement for employment.

Accident Costs Reduced

Safety experience at Bausch & Lomb since starting this vision program in 1943, demonstrates the value of such a program in reducing accident costs. In 1944, disabling injury frequency decreased by 28.3 per cent. This is a very considerable drop. Although certain other changes⁹ in safety procedures were made at this time, the Safety Department attributes a large share of this decrease in accident frequency to the effects of the vision program. Probably too, the increased emphasis on safety stimulated by the vision program, effected a reduction in accidents from other causes also. From 1944 to 1947 the frequency of disabling injuries has continued to drop.

From the economic standpoint, direct savings in compensation cost

Art for Speakers Who Can't Draw

Speakers who need a diagram to put across a point but do not have any artistic ability might try Nathan Feigenblatt's idea. Mr. Feigenblatt, an industrial safety consultant of Brooklyn, admits he is not an artist. When he needed a diagram to illustrate a point in his lecture, he followed this procedure. Prior to the talk, he took a suitable drawing and placed a blank sheet of paper under it. Then he outlined the picture with pinholes. These holes on the blank sheet of paper can not be seen by the audience, but by following the outline of the holes with a crayon Mr. Feigenblatt was able to reproduce the picture for his audience.

The value of such a diagram is that it allows these who can't draw—to draw. But best of all, this method focuses the audience's interest on that part of the picture which is then being drawn.

Sorenson Heads Chicago Council

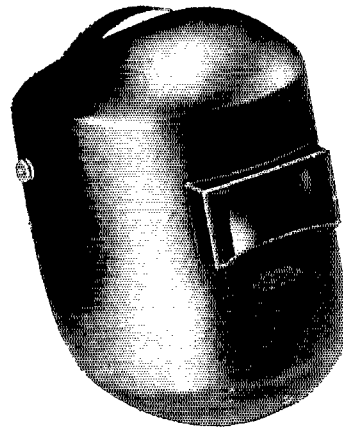
LESLIE J. SORENSON, Chairman of the Chicago Street Traffic Commission, and City Traffic Engineer, is the new president of the Greater Chicago Safety Council having been formally elected at the Annual Dinner and Election of Officers held Wednesday night, March 24, the Gold Room of the Congress Hotel. He succeeds Paul Van Cleef, secretary of Van Cleef Brothers.

J. J. Cavanagh, vice-president and general manager, Chicago Motor Club, succeeds Mr. Sorenson as vice-president for Public Safety. Other officers reelected include: Harold F. Wood, vice-president; Wyman Gordon Company, administrative vice-president; David Leviner, vice-president and works manager, Hawthorne Works, Western Electric Company, vice-president for industrial safety; Prof. J. J. Ahern, director, Safety Department, Illinois Institute of Technology, vice-president for safety education; E. S. Beaumont, safety director, Peoples Gas Light & Coke Company, vice-president for program and membership; and Joseph F. Stech, secretary and treasurer.

Newly elected members of the Board of Directors of the Council are: L. L. Armstrong, superintendent, Chicago Plant, Swift and Com-

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Here's practical, fine quality protection at a price you can afford.

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Model 1250 shown here, is available with quick-change metal coverplate, lense holder.

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Famous "Nod & Shake" Type

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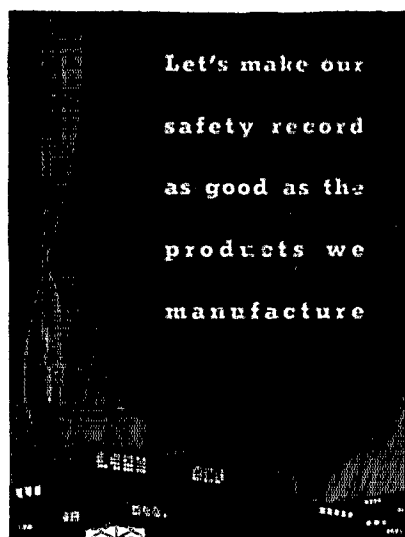
17 x 23	Assorted
1-9	\$.12 ea.
10-99	.11 ea.
100-999	.09 ea.
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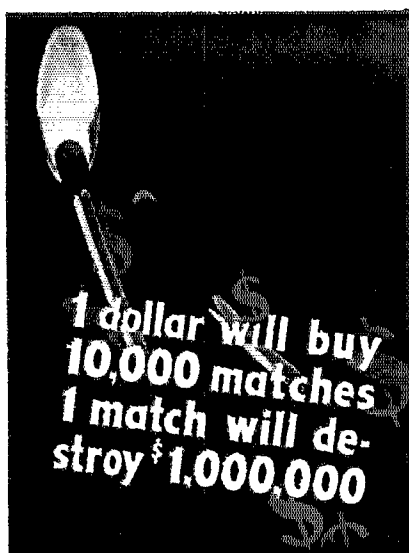
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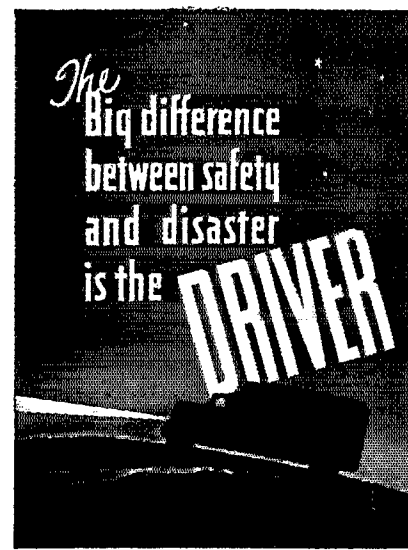
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The advantage of MANUAL methods:

1. Speed. Any trained person present can begin at once. Time saved may mean a life, so do not delay. A person who is in a position to give artificial respiration safely should under no circumstances wait for a mechanical device.

The advantage of MECHANICAL resuscitators:

1. Modern resuscitators by inflating, as well as deflating, the lungs give more complete ventilation than manual methods can attain in any case. They are effective even in advanced asphyxia where lungs have partially collapsed.

2. Oxygen is brought to the victim's lungs by the same device that produces the artificial respiration.

3. Resuscitators can be used readily in cases where manual methods would not be recommended—cases involving broken ribs, broken backs, severe burns, pregnancy, etc.

4. Accessibility. A person pinned under a machine or debris, a man up a pole or down a sewer-hole, etc., can be reached by a resuscitator mechanism on an extension hose. Stretcher cases can be treated while being carried.

5. If a non-breathing person's throat is clogged with saliva or other fluids (as often happens) the resuscitator signals by a rapid clicking noise. It is then necessary to suck out the obstructing material, and an aspirator is provided to do this. The dangers of forcing foreign substances into the lungs or of struggling in vain to get air through are reduced.

6. Resuscitators are set at pressures found by medical experimentation and years of use to be safe (even for babies) as well as effective.

EMERSON RESUSCITATORS

are simple to operate. They are for use only by professional or other adequately trained personnel and not intended to replace manually-applied resuscitation but to supplement it. Every policeman, fireman, and responsible factory worker should know what a resuscitator can do to save lives and how to operate it.

For further information write:

J. H. EMERSON CO.

22 Cottage Park Ave., Cambridge 40, Mass.
National Safety News, April, 1948

Poor Vision

—From page 27

between the groups of particular significance⁷ were in:

1. Near acuity (ability to distinguish detail at 13 inches.)
2. Near vertical phoria (position of the eyes with respect to each other, or postural balance.)
3. Color perception.

This is interesting, because in a similar study in the metals fabrication industry, differences of particular significance were found in *far acuity* and *depth perception*. Thus, probably due to differences in jobs and job hazards, the visual skills which are characteristic of the average "high accident frequency" employee in these two industries are not the same.

For the heavy industry the distance visual skills are highly related to safety whereas for this particular light industry, the near visual skills are most important. This is reasonable. In the optical industry, for instance, most jobs are performed at a relatively close working distance, and near visual skills are constantly employed. In the metals fabrication industry, working distances are comparatively much greater, and good distance vision is in greater demand.

Since the visual patterns related to safety vary greatly from industry to industry, every plant should establish its own minimum safety standards to meet its own particular needs.

After determining by this experiment *which* visual skills were most highly related to safety in our own plant, a further analysis⁸ was made to determine approximately *how much* of each one of these skills an individual should have for safety. The pattern of visual skills developed by this process is now in use as a visual safety standard. Employees and applicants whose visual performance measures up to the requirements of this standard are considered good safety risks, while those below standard are considered poor risks.

Thus, within certain limits, a per-

⁷ Critical ratios were above the 99% level of significance. See J. P. Guilford, "Psychometric Methods", Pages 548-49. McGraw Hill.

⁸ "Determining Visual Standards for Industrial Jobs by Statistical Methods", J. Tiffin, and S. E. Wirt, Transactions, American Academy of Ophthalmology and Otolaryngology, Nov.—Dec., 1945.



FASTER—SAFER— ELIMINATES SPLICING

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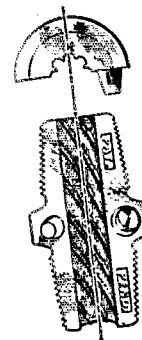
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Safe-Line double spiral splines fit each wire and strand, providing a powerful grip, without cutting action to the rope. Replacement guarantee on clamp against breakage and fracture.

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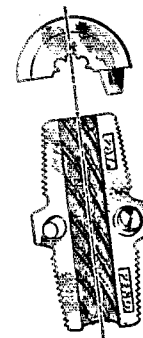
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CLEANERS AND PROCESSORS OF LEATHER, COTTON AND RUBBER GOODS

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1412-26 CORNELL AVENUE • INDIANAPOLIS 2, INDIANA

THE FIRE THIEF!

Your plant may have a top-notch fire control setup, but unless you educate your workers in fire prevention — the job is only half done.

The Fire Thief—a new sound slide film—is aimed right at the heart of this great industrial menace. This film, stressing fire sources and plant house-keeping, has the punch and finesse that demands attention—gets results. Schedule The Fire Thief for your next training meeting. Order today.



This 20 minute 35 mm filmstrip complete with 33 1/3 RPM recording, instructor's manual, and group discussion outline . . . only \$16.50 to members, non-member price \$25.00. Rental rate (members only)—\$5 per week.

NATIONAL SAFETY COUNCIL
20 NORTH WACKER DRIVE CHICAGO 6, ILLINOIS

the foundation stones of progress in industrial safety was almost entirely lacking in the Manhattan District due to necessary wartime security regulations. We found instances where a particular problem had been successfully dealt with in one location but the solution was quite unknown to others wrestling with the same problem on another project or even in a different part of the same project. The habits thus engendered during the war are still a serious handicap.

Some of the same problems are found in the management of the three AEC communities, Oak Ridge, Richland and Los Alamos. Under the Manhattan District, the control of housing, recreation, and all features of community life was just as close as in the plants. This regimentation brought excellent traffic safety records—but the men and women who now feel themselves permanent residents of these cities expect a system of municipal administration more nearly approaching that of a normal American community.

To establish and administer a safety program to meet these complex problems is no easy task. Our confidential report submitted to the Commission in December, including supplementary reports by individual members of the Board, points out a number of hazardous conditions and practices observed in the course of our brief survey. Many of these have already been corrected. More important, however, the report sets forth the general principles which the Board considered essential to an effective program.

No report is worth the paper it is written on, unless it leads to concrete results. The reception given us by all concerned leads us to believe that the Commission, its staff and its contractors are determined to maintain and even improve the excellent record already made.

The man who goes to work on a holiday either hasn't much of a job or owns the company.

It can be very annoying to discover you're wrong about something. It can also be a great relief.

One swallow may not mean a summer, but it can lead to a fall.—*The Houghton Line*

BEFORE *DON'T THROW THEM AWAY*



AFTER



GLOVES COST YOU MONEY

WE CLEAN, STERILIZE, RE-SHAPE, SORT, PAIR AND PACK IN BUNDLES OF 10 PAIRS. WE FURNISH LOCK-TOP, STEEL CONTAINERS FOR COLLECTION AND SHIPPING

USE THEM OVER AND OVER AGAIN

We are saving thousands and thousands of dollars a year for nationally known companies by reclaiming work gloves of all types; leather, cotton, asbestos, etc. IT COSTS NOTHING TO FIND OUT. TRIAL ORDER FREE!

FREIGHT PAID WITHIN 300 MI.

CLEANERS AND PROCESSORS OF LEATHER, COTTON AND RUBBER GOODS

Wash-Rite Company

1412-26 CORNELL AVENUE • INDIANAPOLIS 2, INDIANA

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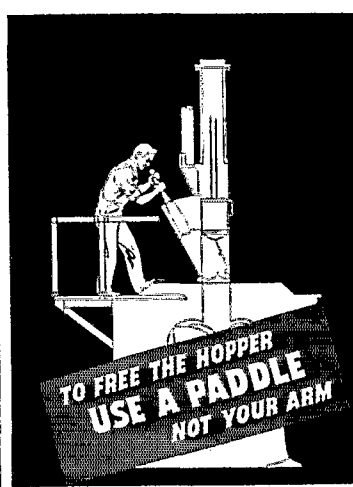
One swallow may not mean a summer, but it can lead to a fall.—*The Houghton Line*

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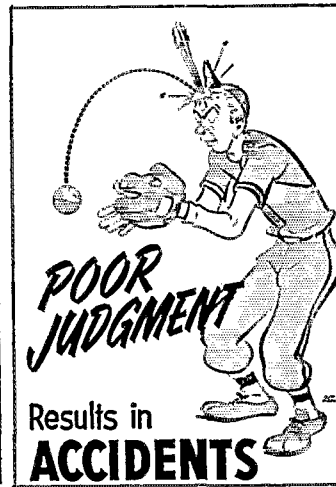
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NATIONAL SAFETY COUNCIL
8422 8 1/2x11 1/2



NATIONAL SAFETY COUNCIL
84250 8 1/2x11 1/2



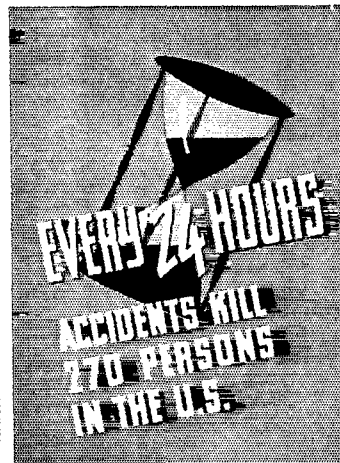
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NATIONAL SAFETY COUNCIL
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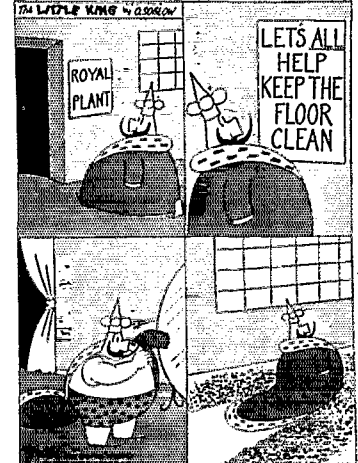
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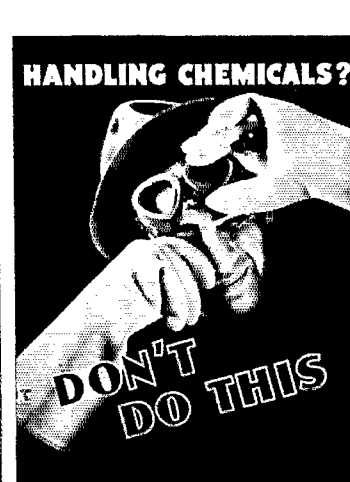
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NATIONAL SAFETY COUNCIL
8423B 17x23



NATIONAL SAFETY COUNCIL
8420 8 1/2x11 1/2



NATIONAL SAFETY COUNCIL
7450 8 1/2x11 1/2



NATIONAL SAFETY COUNCIL
8283 8 1/2x11 1/2



NATIONAL SAFETY COUNCIL
8200B 17x23

Available April 1948 to September 1948 inclusive.

POSTERS BELOW ARE PRINTED IN TWO COLORS

[Available only in sizes indicated]

**Take these precautions with
PORTABLE ELECTRIC SAWS**

Before using a portable power saw, check condition of saw, particularly the guard wire, and be sure to remove ground blade.

When starting saw only thrust in when the motor has started and the blade is clear of the work.

The lower movable guard should swing freely. It should return to guard position when the blade is not in use.

When moving lower blade, be sure to stop to lock blade moving, and the blade will not be available for holding work in place.

Back blade should always be used to guide and control portable power saw. It is dangerous to operate a saw with one hand while trying to hold work with the other hand.

NATIONAL SAFETY COUNCIL
W.C. 18 17x23

Clean up for SAFETY

Falls Cause One Out of Five SHIPYARD ACCIDENTS

NATIONAL SAFETY COUNCIL
★7533 8 1/2x11 1/2

A split-handle hammer
Or mushroomed chisel
Makes working a danger
As well as a fizzle!

NATIONAL SAFETY COUNCIL
7516 8 1/2x11 1/2

HE NEEDS THE VALUE OF YOUR
Experience

TEACH HIM SAFETY, TOO

NATIONAL SAFETY COUNCIL
7270 8 1/2x11 1/2

WHATSAMATTER—
CAN'TCHA READ?

WEAR SAFETY GOGGLES

NOT NOW!

NATIONAL SAFETY COUNCIL
7766 8 1/2x11 1/2

HE DOESN'T
NEED HELP

You do

NATIONAL SAFETY COUNCIL
7813B 17x23

**REPORT
all
DEFECTIVE
ELECTRICAL
EQUIPMENT**

NATIONAL SAFETY COUNCIL
7420 8 1/2x11 1/2

STAY SAFE
OFF
THE JOB
TOO!

NATIONAL SAFETY COUNCIL
8175 8 1/2x11 1/2

**DAYDREAMING
may end in a NIGHTMARE**

NATIONAL SAFETY COUNCIL
8158 8 1/2x11 1/2

**NOT GOOD
IF
DETACHED**

NOT GOOD IF DETACHED

**DANGER
KEEP THIS GUARD
IN PLACE**

NATIONAL SAFETY COUNCIL
8166 8 1/2x11 1/2

RINGS OR FINGERS?

Remove the ring—protect the finger!

NATIONAL SAFETY COUNCIL
8418 8 1/2x11 1/2

SAFETY SLIM SAYS

A safety habit is your best bodyguard.

FAMOUS LAST WORD:

FOR PETE'S
SAKE... STAY
SAFE

SAFETY SAYINGS:

The experienced man is never without a safety habit.

NATIONAL SAFETY COUNCIL
7808 8 1/2x11 1/2

Available April 1948 to September 1948 inclusive.

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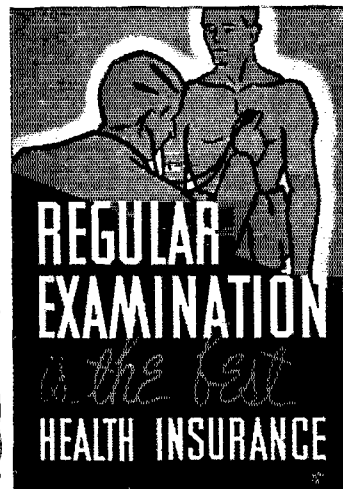
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NATIONAL SAFETY COUNCIL
6066 8½x11½



NATIONAL SAFETY COUNCIL
7906 8½x11½



NATIONAL SAFETY COUNCIL
6196B 17x23

SANITATION AND HYGIENE

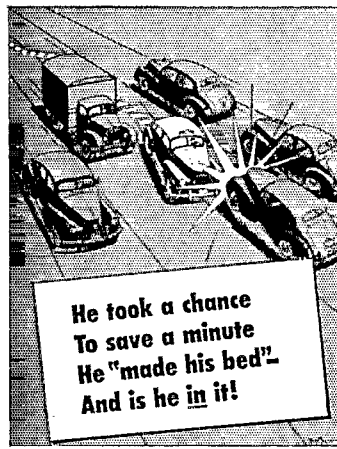


1. At the drinking fountain, drink from the water stream only; do not touch lips to any part of the nozzle or stand.
2. Spitting on walls or floors is a filthy habit and likely to spread germs about the working area.
3. Before eating and before going home, wash hands, arms and face with soap and warm water. A daily bath is an important health measure.
4. Do not eat in the wash room or toilet rooms.
5. Help keep the locker rooms, wash and toilet rooms, and other service equipment clean and sanitary.
6. Put all refuse in the containers provided.
7. Change work clothing at frequent intervals. Soiled clothing should be cleaned or laundered frequently as a health measure.

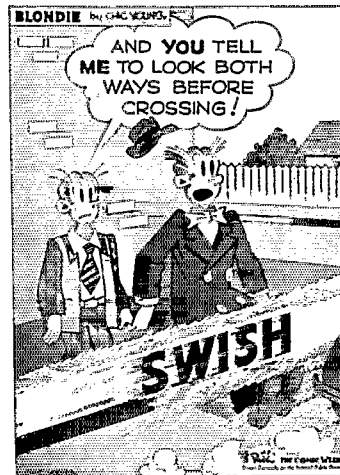
NATIONAL SAFETY COUNCIL
8419 8½x11½



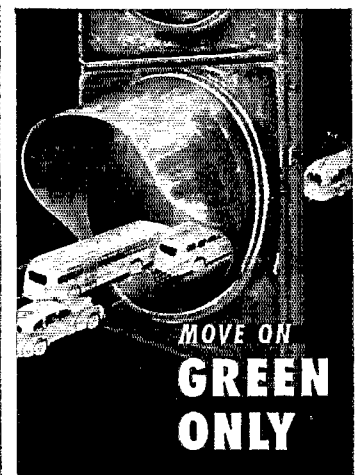
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6778 8½x11½



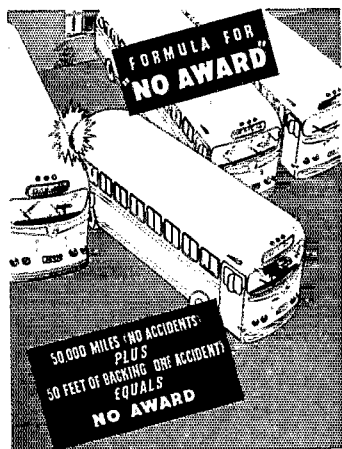
NATIONAL SAFETY COUNCIL
8430 8½x11½



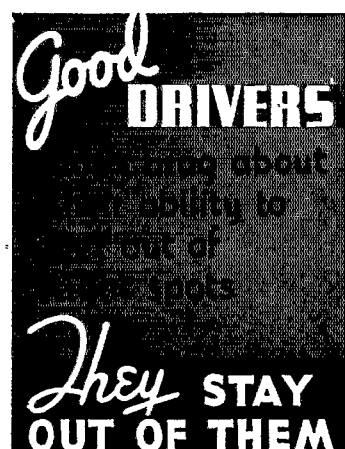
NATIONAL SAFETY COUNCIL
8435BX 17x23



NATIONAL SAFETY COUNCIL
8179B 17x23



NATIONAL SAFETY COUNCIL
8429 8½x11½

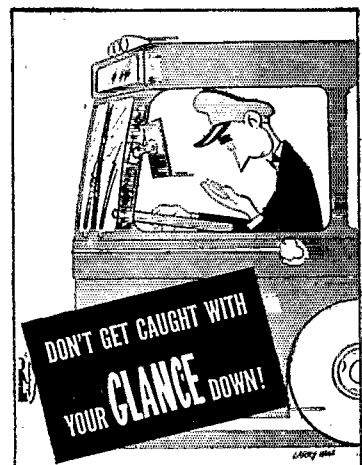


NATIONAL SAFETY COUNCIL
5884 8½x11½

PARK TO STAY PARKED



NATIONAL SAFETY COUNCIL
7961B 17x23



NATIONAL SAFETY COUNCIL
8165 8½x11½

Available April 1948 to September 1948 inclusive.



when you **SPRINKLE**

QUIK-SIL *The Modern*
OIL AND GREASE ABSORBENT

and
AQUA-LIC *The Modern*
SOLUBLE OIL ABSORBENT

Now . . . you can make all type plant floors "bone dry" safe for workers when you apply dependable **QUIK-SIL** and **AQUA-LIC**. The former soaks up oil and grease and the latter soaks up water and soluble oils. The result is insurance protection against costly slipping accidents that rob you of production. Even protects against power trucking "skids". Lengthens belting life, and shoe soles and heels wear longer.



QUIK-SIL
Approved by
Underwriters
Laboratories
Inc., sponsored
by National
Board of Fire
Underwriters.

**FREE TEST
SAMPLES**

Prove the oil and grease drying action of **QUIK-SIL** and the water and soluble oil-drying action of **AQUA-LIC**—by actual test. With either or both products you'll note that floor surfaces are easier to clean. Write Today!

TROJAN PRODUCTS DEPARTMENT

The Diversay Corporation
53 W. Jackson Blvd., Dept. N-4, Chicago 4, Illinois

Industrial Health

—From page 44

also be a significant destruction of red blood cells in severe burns.

Loss of body fluids into the burned tissue and from the burned surface in the form of weeping and exudation is one of the outstanding peculiarities of thermal burns. This fluid loss begins immediately and increases rapidly for several hours after which it gradually diminishes.

The loss of fluid results in shock which is one of the dangerous complications of severe burns and accounts for about two-thirds of the deaths. Profound shock may be established in the severely burned individual within an hour.

Relief of pain and treatment of shock are the immediate steps in the treatment of a severe burn. The most satisfactory method for treatment of such shock is the replenishment of the blood volume by transfusion of whole blood and plasma.

Local treatment of the wound is important and should be undertaken as soon as possible but not until it can be carried out under thoroughly aseptic conditions.

Ethylene Imine

The Acute Toxicity of Ethylene Imine to Small Animals by Charles P. Carpenter, Henry F. Smyth, Jr. and C. Boyd Shaffer. *The Journal of Industrial Hygiene and Toxicology* 30:2-6 (January, 1948).

The toxicity of the compound was measured experimentally upon rats and guinea pigs.

Extreme respiratory difficulty was evident at all concentrations above 10 p.p.m. although it was not apparent in less than three hours at 25 p.p.m. Irritation of the eyes and nose was noted at 100 p.p.m. after an hour and not at all at lower concentrations.

The deaths were usually delayed, half occurring by the end of the third day after exposure and 9% later than the 10th day after exposure.

Death of these animals was due to lung congestion and to damage to the kidneys.

Exposure of a group of eight humans showed that the least concentration which they could detect by odor, upon entering a room was 2 p.p.m. while they could detect 1 p.p.m. of ammonia by odor. Nose and eye irritation did not become evident until

(ADVERTISEMENT)

Attention:

SAFETY DIRECTORS

How many pairs of Industrial Safety Lenses must be replaced in your shop each year because of emery pitting and welding splatter—and at what cost?

The necessity of costly lens replacements can now be reduced by TUF-COTE, a method of coating Safety Lenses which makes their surface impervious to pits.

This operation has been used for over a year now by many large automotive companies with astonishing results. One company (whose name we shall be glad to supply on request) purchased 100 pairs of TUF-COTE lenses in January of 1947 for use in a department where it had been necessary to replace the lenses of twenty welders every two days. In January of 1948 the results indicated that this department's lens replacements, through TUF-COTE, had dropped to only 60 odd pairs for the entire year, a saving of \$1,750.00.

Tests run in five other large automotive plants showed a replacement rating of about seven regular lenses to one TUF-COTE.

TUF-COTE is a patented application of a crystal clear solution applied to the outside surface of Industrial Lenses of any prescription and any type, including welders' cover plates. It was perfected by opticians and meets rigid optical requirements.

The WALLACE OPTICAL COMPANY INC. of 12334 East Jefferson Avenue, Detroit, Michigan, manufacturers of TUF-COTE, offer you prompt service on both plano and prescription ground TUF-COTE Industrial Safety Lenses.

LISTEN!
 You need me to do a safe, efficient, economical job of removing extra heavy incrustations of dirt, grime, grease, oil, etc.

Lightfoot
 INTEGRATED SOAP
SKIN CLEANSER
COMMODORE
 COARSE GRIND FOR
 EXTRA
 HEAVY DUTY

IT'S INTEGRATED!
 Scrubber and soap welded to form a single, integrated, indivisible unit... each particle a complete cleanser in itself.

...and for general plant use, I'm the most popular soap made. Your women workers will love me also!

Lightfoot
 INTEGRATED SOAP
SKIN CLEANSER
TREET
 FINE GRIND FOR
 HEAVY DUTY

As makers of fine quality soaps for over forty years, we present this exclusive Lightfoot process as a major advance in cleansing safety, efficiency and economy.

LET US PROVE IT!
Send for FREE TRIAL SAMPLE TODAY!

LIGHTFOOT SCHULTZ COMPANY
663 FIFTH AVE., NEW YORK 18, N. Y.

Please send us FREE trial sample of:

COMMODORE—a coarse grind soap for extra heavy duty... ☐

TREET—a fine grind soap for heavy duty..... ☐

Firm.....

Individual.....

Address.....

City..... State.....

THERE IS A LIGHTFOOT CLEANSER AND SKIN CONDITIONER FOR EVERY INDUSTRIAL APPLICATION

the concentration was about 100 p.p.m.

One exposure of guinea pigs to a high concentration of vapors on their bodies indicated that the penetration of vapor through the skin is not a great hazard.

Several gas mask canisters were tested for their suitability for protection against ethylene imine vapors. The most satisfactory was a silica gel canister which passed 5 p.p.m. after passage of 32 litres per minute of an air sample containing 6,000 p.p.m. for 190 minutes and an all-service canister which passed 5 p.p.m. in 250 minutes under the same conditions.

The undiluted imine or its solutions in water readily penetrated the skin of rabbits and guinea pigs producing necrosis of the skin and death from poisoning.

A very small amount of the imine in the eye will cause serious corneal necrosis and healing with a permanent corneal scar unless the eye is treated.

Two workmen in the laboratory developed skin sensitization to the compound and one case of severe dermatitis has been seen during the small scale production of it.

Some comparative work was done on ethylene diamine, propylene imine and triethyl amine all of which were found to be much less toxic.

ACF Trophy Won by Wilmington Plant

The Wilmington plant of the American Car and Foundry Company has won the ACF Safety Trophy for 1947, according to an announcement by C. J. Hardy, Jr., president. The award makes the Delaware establishment a fourth-time winner in Group II, which includes the smaller of ACF's ten branches. ACF Berwick was in the lead in Group I.

At the presentation dinner held at the Hotel DuPont, Mr. Hardy pointed out that with an average of 274 employees throughout the year, they were able to work 11 months without a lost-time injury and for all of 1947 with a rate of only 3.74 accidents per million man-hours worked.

"That accidents can be prevented is now an established fact." Mr. Hardy told the plant management, the safety committee and members of Local 40, I.U.M.S.W.A. present.

For Safety's Sake

PAINT FOR Sight Perfection

WITH Glidden SPRAY-DAY-LITE OR BRUSH-DAY-LITE

Sight Perfection—the perfection of seeing conditions by the scientific use of white and colors—has raised safety standards by increasing lighting efficiency in plants as much as 102%! Following a Glidden *Sight Perfection* painting plan designed especially for your plant, you can use Glidden SPRAY-DAY-LITE (or BRUSH-DAY-LITE) on walls and E-Z-C and Vismatic Colors on equipment and machinery to achieve similar results. And with lighting efficiency up—your light costs will go down. For 18 years, since establishing the paint industry's first laboratory devoted exclusively to research on functional color, Glidden has been developing this service which is now offered to you free. Start things moving by returning the coupon below today!

QUALITY Glidden PRODUCTS

THE GLIDDEN COMPANY, Dept. KK-4
 11001 Madison Ave., Cleveland 2, Ohio

☐ Please send literature to indicate the practical and thorough nature of the Sight Perfection painting program you will design especially for us.

☐ You may have your representative call and demonstrate SPRAY-DAY-LITE in our premises without obligation on our part.

NAME..... TITLE.....

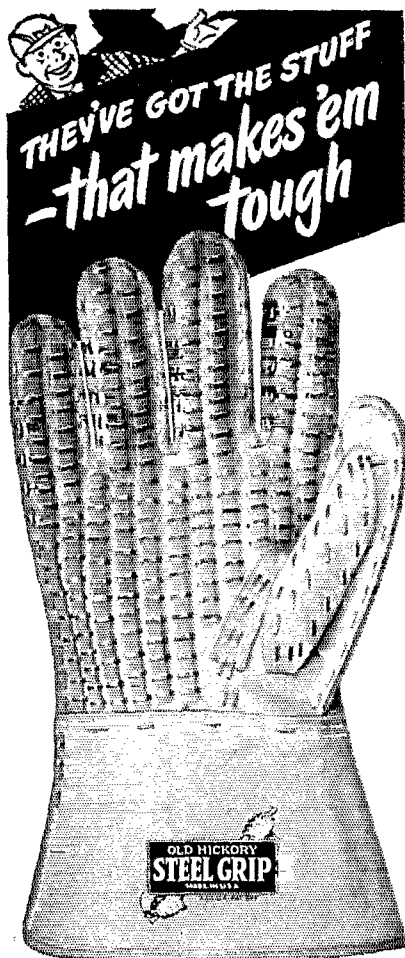
COMPANY.....

ADDRESS.....

CITY, ZONE, STATE.....

Glidden

Pacemaker in Paints



SAFEGUARD NO. 644

Safety gloves have to be built "tough" for handling rough, jagged castings or heavy gauge sheets, or for working on a sand blast job all day long. So take a look at Steel-Grip No. 644 gloves. They've got the stuff that makes 'em tough.

To lay the foundation, Steel-Grip uses the nation's topgrade chrome tanned cowhide... it's just the right weight to make 'em tops in wear as well as comfort.

Then Steel-Grip lays quarter-inch strips of rugged, tough leather an eighth of an inch apart, from finger tips to heel of palm, and clinches 'em down with hundreds of steel ribbons. This ribbed steel and leather reinforcement wears "like steel".

Thumbs have steel studded patches of leather. The thumb crotch seam is overlaid with leather. The entire glove is stitched, not with cotton thread that rots or burns out, but steel sewed to stay sewed.

And back of all this tough, rugged construction is Steel-Grip's 38 years of experience and know-how. No. 644 gloves have the stuff that makes 'em tough, that makes 'em wear, that makes 'em the most economical glove on the market. (For short glove style—specify No. 604.)

Write for Catalog. We are designers and manufacturers of a complete line of safety clothing. What are your requirements?

Industrial
GLOVES COMPANY

Main Factory: 1700 Garfield Blvd., DANVILLE, ILLINOIS
(In Canada: SAFETY SUPPLY CO., Toronto)

Tramp Iron

—From page 30

2. Does the proposed location of the magnetic separator assure the removal of tramp iron before it can become a fire hazard?
3. At what point in the conveyor system will the equipment be most accessible for convenient cleaning?
4. Are there any special limitations which render it impractical to locate the magnetic equipment where it is best suited to meet the requirement? If so, does the performance of the magnets at that point justify the cost of making the change? If not, are there other locations where the separators may be effectively employed.

The majority of elevator superintendents prefer to place their magnetic equipment at the discharge of the conveyor belt leading to the bucket elevator. Four methods of accomplishing this are shown in accompanying diagrams.

The Co-operative Grange League Federation at Buffalo has issued a performance report confirming the effectiveness of the gravity flow principle.

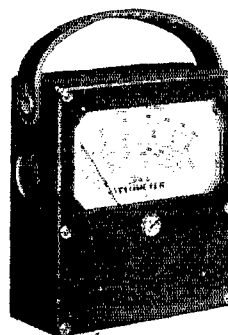
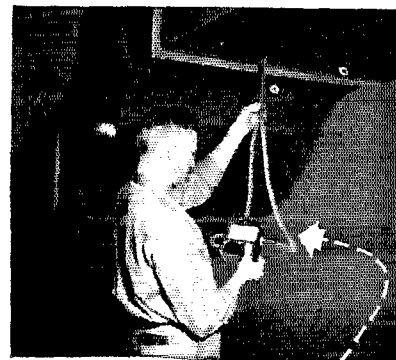
In summarizing, it has now been proved beyond any doubt that the use of permanent magnetic equipment in terminal elevators assures complete and constant protection against a serious tramp iron hazard. Correctly designed and installed, these separators assist in the elimination of costly fires and explosions.

Conveyor Code Announced by ASA

The first nationally acceptable safety provisions for the construction and operation of mechanical conveyors and conveying equipment have just been made available, according to an announcement by Vice-Admiral George F. Hussey, Jr. USN (Retired), secretary of the American Standards Association.

The experience of a wide variety of national groups concerned with the manufacture and use of conveying equipment and with the safety of workers in plants using this equipment was called upon in preparing the recommendations. These groups were represented on the ASA committee which worked under the leadership of the National Bureau of Casualty and Surety Underwriters and the American Society of Mechanical Engineers.

Safety provisions for all types of



THE ALNOR VELOMETER. One of six standard types delivered complete with standard jets—in handy carrying case. Special jets available for the widest variety of metering problems.

instant direct reading
of Air Velocities—Anywhere!

THE ALNOR
Velometer!

As current advancements in industrial hygiene call for ever closer control of air movements—in plant, mine and mill—more and more inspectors, maintenance men and superintendents have turned to the Alnor Velometer for checking air flow conditions. The Velometer is the only instantaneous direct-reading air velocity meter—accurate in all ranges, from high to low—compact, portable, easy to understand and use. A true precision Alnor instrument, the Velometer is built for hard industrial usage. For your air measurement needs, try a Velometer—you'll be glad you did. The coupon below will bring details and prices.

—Please use this coupon!—

Illinois Testing Laboratories, Inc., Rm. 528
420 North La Salle Street, Chicago 10, Illinois
☐ Send me Bulletin 2448-G.
☐ Have an Alnor Representative call.

Name

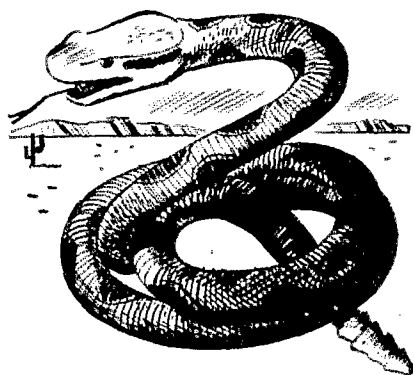
Company name

Address.....City.....State.....

Alnor

PRECISION INSTRUMENTS
FOR EVERY INDUSTRY

How to avoid Snake Bite

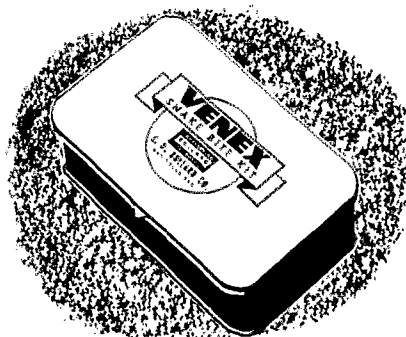


1. Wear high-topped shoes, boots or heavy leggings.
2. Be extremely careful about putting hands in places where they might be bitten. Be especially careful in climbing cliffs or ledges or picking berries where hands are often put in invisible places.

3. Keep alert

BUT...

In spite of all precautions, people do get bitten. Immediate treatment is essential. All out-of-door workers should carry VENEX SNAKE BITE KITS. They are little larger than a pack of cigarettes, yet contain all equipment necessary to administer the medically-approved extractive method of treatment for snake bite.



A post card gets you as many copies as you wish of Bullard's free booklet, "Friend or Foe; It Pays to Know." It's a quick, easy guide to recognizing poisonous snakes. Ideal as pay envelope stuffer.

**E. D. BULLARD
COMPANY**

275 EIGHTH ST., SAN FRANCISCO 3, CALIF.
LOS ANGELES EL PASO

EVERYTHING
BULLARD
IN SAFETY

50TH ANNIVERSARY

conveyors are included in the new standard. Special provisions for safe operation are given for each type. The safety of the worker or operator is given first consideration, but the efficient use of the conveyor has also been kept in mind in selecting guards and other safety devices.

The use of mechanical conveyors, which today is a 125 million dollar business, has within the past 60 years reduced accident hazards resulting from the manual handling of material, but at the same time has introduced other risks associated with the operation of mechanical equipment. The new standard will affect the safety of workers using conveyors in such widely diversified industries as coal mining, fish packing, and ice cream manufacture.

In 1946 because of the use of mechanical conveying equipment, the mining of coal averaged slightly more than 6 tons per man-day as compared with 2 1/2 tons for a longer day in 1890 when all coal was hand mined. The recent growth of the use of conveying equipment is indicated in the fact that in 1925 about 1.2 per cent of the soft coal was mechanically loaded by conveyors, while in 1945, 56.0 per cent was untouched by human hands.

Have You Produced A Safety Film?

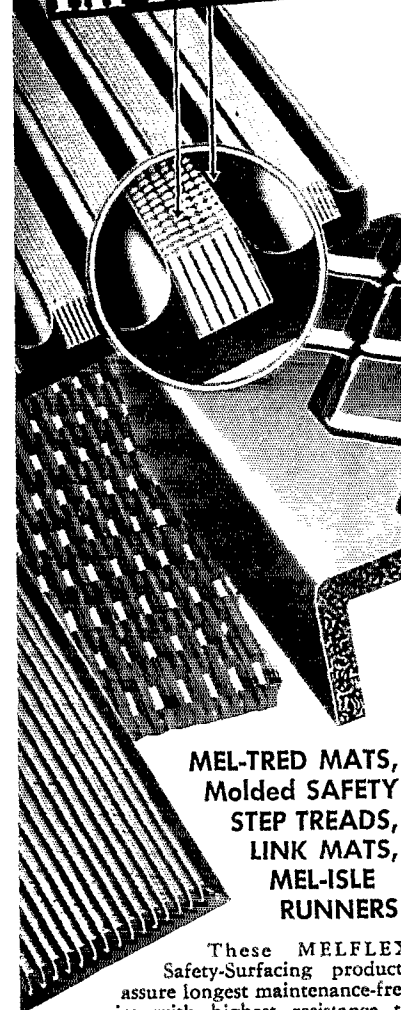
The 1948-49 edition of the National Directory of Safety Films is being compiled and will be released to all National Safety Council members in the near future.

The Council wishes to make this listing as complete as possible and would like to hear from members who have produced safety films which will be available to others.

Information to be included with the listing should include whether it is motion picture or film strip, title, release date, size (16 mm. or 35 mm.), silent or sound, black and white or color, running time, terms of rental or loan, or if it can be purchased. A brief description of the subject and the type of group to whom it is applicable should be included.

Information on such films will be gratefully received by the Membership Service Bureau, National Safety Council. For listing, it should be received by May 1.

**SAFE FLOORS
PAY DIVIDENDS!**



**MEL-TRED MATS,
Molded SAFETY
STEP TREADS,
LINK MATS,
MEL-ISLE
RUNNERS**

These MELFLEX Safety-Surfacing products assure longest maintenance-free service with highest resistance to slipping in either outside or inside installations. MEL-TRED Mats with tire cords "on end" embedded in tough "tire tread rubber" compound will give positive slip-proof service for longest life where traffic is heaviest.

SAFETY-SURFACING PRODUCTS for Every Requirement

Molded SAFETY Step Treads, All-Service Link Mats and Mel-Isle Runners, made of special "Frictioned Rubber" compound for highest slip-resistance, wet or dry, meet every requirement for providing SAFE walking, standing and stepping surfaces. . . MELFLEX has meant SAFETY in Transportation, in Industry, in business buildings for over a decade.

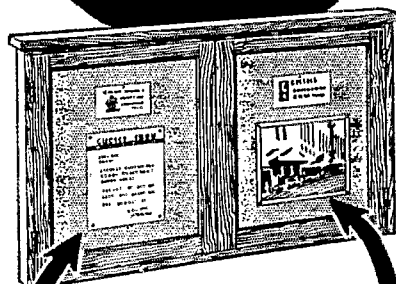


Write for Direct-Fac-
tory prices on any
floor or step
covering need.

MELFLEX PRODUCTS CO., Inc.

L. E. Warford, Pres.
410 S. BROADWAY . . . AKRON 8, O.
In Canada: P. O. Box 411, Ft. William, Ont.

KEEP WORKERS INFORMED WITH DAV-SON BULLETIN BOARDS



- GETS QUICK ATTENTION
- GIVES NEEDED PRESTIGE
- NO CLUTTERED WALLS

CORK BACKED
for
QUICK POSTING

EACH BOARD A CENTRAL NEWS HEADQUARTERS



Get one board for each plant and office sector. Convey news, letters, bulletins—QUICKLY—to ALL employees. Hang safety and morale posters... news of contest, drives, benefits and social doings.

BUILT FOR HARD USAGE

Sturdy walnut finished frames. Real cork posting surface—mounted on 3-ply veneer. Seasoned, straight hanging doors. Finished hardware and locks. Quality at low cost.

- SINGLE OR DOUBLE UNITS
- GLASS DOORS OR PLAIN
- STOCK OR SPECIAL SIZES

A.C. DAVENPORT & SON INC.
311 N. DESPLAINES ST.
CHICAGO 6, ILLINOIS

SEND FOR CIRCULAR

Wins Award for Safe Foremanship

In recognition of his outstanding safety record as an employee of the American Zinc Company of Illinois plant at Fairmont City, William A.



Recklein, left, was presented with a gold watch by Howard I. Young, company president and a former chairman of the Mining Section, NSC. The plant's pottery department, averaging 18 employees under Recklein's foremanship, has completed 19 years without a disabling injury. An employee of the company for 31 years, Recklein, who lives at Caseyville, Ill., recently was promoted from pottery foreman to general yard foreman. The presentation followed a resolution by the board of directors and took place in the St. Louis office of American Zinc, Lead and Smelting Company, of which the Illinois firm is a subsidiary.

Two Workers Honored for 40 Years' Safe Service

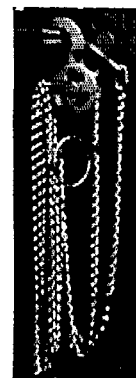
As a reward for forty years of continuous active service with Beech-Nut Packing Company, at Canajoharie, N.Y., Miss Ruth Schaffer and Ferdinand Priess recently received "Forty Year Pins." The pins are of gold and on the face bear the Beech-Nut "Burr" with the words "Forty Years".

During their long service, neither employee has lost any time due to accidents — two outstanding safety records because each has worked more than 80,000 man-hours.

Mr. Priess has spent his entire forty years in the Peanut Butter Department and Miss Schaffer has worked in the Peanut Butter and Gum Departments.

WORLD'S EASIEST WAY TO OPEN ANY BOX CAR DOOR

MONARCH ONE MAN CAR DOOR OPENER



One man can open the most binding balky box car door with the Monarch Car Door Opener. Get greater safety... speed loading and unloading schedules... order an ample supply to fill your needs today!

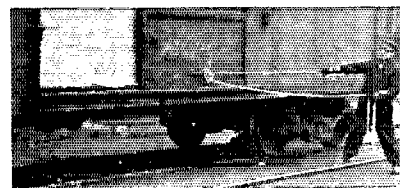
- No strained muscles. No slips or falls. No broken arms, legs or mashed fingers. No fatalities. No time wasted. No "gangs" needed. No time loss.

Write for free descriptive literature.

ONLY \$22.50 EACH
F.O.B. Bowerston

THE NOLAN COMPANY

Formerly the Mining Safety Device Co.
Dept. NS-4, Bowerston, O.



Stop LOSSES DUE TO DUST



DRACCO ENGINEERS
have had more than
30 years experience in
DUST CONTROL

Write us about
Your Dust Problems

DRACCO CORPORATION

4043 E. 116th Street • Cleveland 5, Ohio

RICH BURN OIL

"A Product by Rich"

Each year the number of deaths from burns is well into the thousands. This figure must be multiplied many times to cover the vast number of patients seeking aid from burns from various causes.

RICH BURN OIL is an effective local application for burns, scalds and sunburn, its ingredients compounded to provide instant cooling relief of burning pain, protection against air and infection, and restoration of normal tissue.

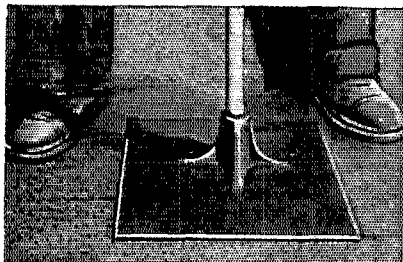
The objectives of local treatment are to secure in as short a period as possible:

- 1) Relief from pain
- 2) Protection from infection
- 3) Restoration of normal tissue

RICH BURN OIL is a soothing, non-toxic, protective and reparative application for burns, scalds and sunburn. It will relieve pain instantly when applied to boils and carbuncles.

Write for further information.

RICH LABORATORIES
Lebanon, Pa.



NEW PLASTIC FLOOR PATCH Sets Instantly!

No longer is it necessary to close off an area of concrete floor while waiting for newly installed patches to set. Flexrock offers a new plastic repair material which is ready for traffic almost the moment it's put down. Simply shovel INSTANT-USE into the hole or rut—tamp—and your floor is restored to solid smoothness—back in service without delay. Tough INSTANT-USE bonds tight to old concrete, makes long-lasting heavy duty patch. Withstands extreme loads. Immediate shipment.



Request Descriptive
Folder and Details
of
**FREE TRIAL
OFFER**



INSTANT-USE

FLEXROCK CO.
3635 Filbert St., Philadelphia 4, Pa.
Canadian Off.: 21 King St., E., Toronto, Ont.
Please send me complete INSTANT-USE
information, details of TRIAL ORDER
PLAN—no obligation.

Name.....
Company.....
Address.....

Tools for Your Safety Program

—From page 108

tion Packet Folders containing precautionary measures to follow in various operations are now in stock.

The folders contain Safe Practices Pamphlets, Construction Detail Sheets (working drawings), Safety Instruction Cards, posters, and other technical and training aids helpful to supervisory personnel.

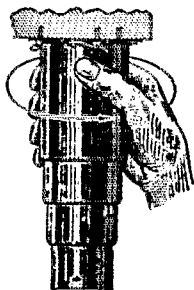
Among the subjects covered by the folders are first aid, ladders, scaffolds, clearing, demolition, fiber rope and wire rope, excavation, chains and hoisting apparatus, concreting, welding, construction equipment, steel erection, highway construction and electric line construction.

Member prices: 1 to 9 packets, \$1.65 each; 10 to 99, \$1.35 each; 100 to 999, \$1.25 each; 1000 or more, \$1.20 each.

Farm Check List

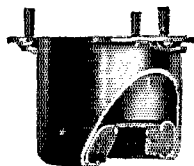
"Make Your Farm Safe." the comprehensive check list of farm and farm home hazards, has been revised to show the most recent farm accident information. Prices on request.

Guide Pin Covers



An effective guard against injury to the operator, die or press on operations where bushings leave the guide pins.

Protect pins and bushings from chips and dirt when entire pin and bushing is covered.



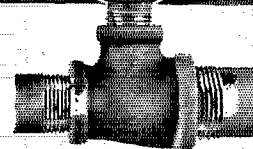
Top units with Felt Oiler Rings provide POSITIVE lubrication.

Write for Details

WIESMAN MFG. CO.

31 So. St. Clair St., Dayton 2, Ohio

IT'S TOO LATE AFTER THE FIRE ENGINES COME



BLAW-KNOX AUTOMATIC SPRINKLERS AND FOG NOZZLES

... attack the fire *instantly* both at the top and at the base.

They spread a smothering cloud of fog over the fire at the same time driving through to the base of the fire with a finely divided spray for maximum cooling and quenching effect.

The spray pattern is maintained even with reduced pressures in emergencies. Clear passages in the nozzle prevent clogging.

Listed by Underwriters' Laboratories, Inc.
Approved by Factory Mutual Laboratories



Also—

Blaw-Knox offers Standard Wet and Dry Pipe Systems, as well as Thermally Controlled Deluge Systems.

Write for Bulletin No. 2207

BLAW-KNOX SPRINKLER DIVISION

OF BLAW-KNOX CONSTRUCTION COMPANY

829 Beaver Ave., N. S.
Pittsburgh 12, Penna.



Spring Cleaning

In the home or in the plant, spring means cleaning up. To help the safety man conduct a successful plant housekeeping campaign, the National Safety Council has prepared Industrial Safety Training Package Program No. 1, containing a time table, sample management letters to start the ball rolling and to sum up accomplishments, a plant inspection check list, suggestions on how to use various technical and program materials, and samples of the materials themselves.

The aim of this type of campaign is to focus attention on the special problem of housekeeping in order to strengthen and stimulate the program already operating in the plant. Recognized Council services and materials (Safe Practices Pamphlets, Safety Instruction Cards, films, posters, etc.) are used, and tested procedures are recommended.

The package includes an order form on which quantity prices for materials are listed. Assistance in solving special problems not covered by the campaign materials can be obtained from the Industrial Department of the Council.

A sample package will be sent upon request.

Accident Facts

The condensed edition of *Accident Facts*, listing outstanding facts about the national accident situation in 1947, has recently been published. The complete edition of *Accident Facts* will be issued in July or August.

Single copies of the one-sheet condensed edition will be sent free, upon receipt of a stamped, self-addressed envelope. For quantity prices, write Council headquarters.

Data Sheets

Safety engineers, supervisors and foremen, insurance companies, trade associations, and similar groups find that an up-to-date file of Industrial Data Sheets provides a ready source

of reference on specific accident prevention subjects.

Data sheets, which cover many hazardous chemicals, machines, and processes, after publication in the *NATIONAL SAFETY NEWS* are reprinted and kept in stock at Council headquarters. Copies are available each month from two to three weeks after the *NEWS* is issued.

Member prices: 1 to 9 copies, 15 cents each; 10 to 99, 10 cents each; 100 to 999, 6 cents each; 1000 or more, 5 cents each.

Administrative Units

NSC member companies with diversified and scattered operations are extensively using the Administrative Unit Plan for servicing their branch plants.

Under this plan a company which, for example, manufactures chemicals, runs a railroad, and operates a coal mine can be assured that its safety personnel at each location receive the NSC materials and services pertinent to their specific operations.

Such a company is registered as a member in all the appropriate NSC industrial sections so that its safety men at the various plants can work with others in the same industries. Small plants of a large corporation can thus receive full benefit from their parent company's membership.

For further information about the Administrative Unit Plan, write the Membership Department at Council headquarters.

New Award Pin

A new emblem for recognition of safe driving records is now available to members of the Commercial Vehicle Section for the men who have completed one year of driving without a preventable accident.

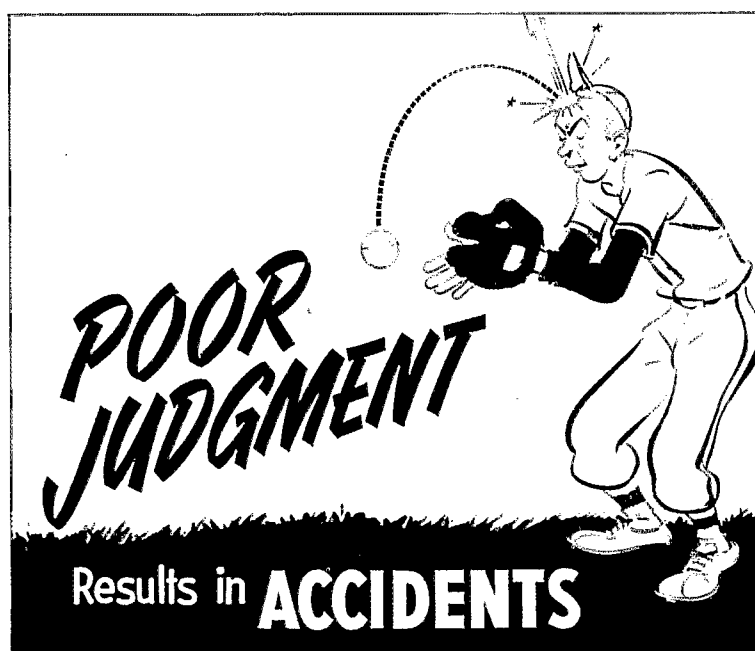
The emblem, which is gold-plated on a blue enameled background, is stocked in three sizes—for cap, lapel, and key chain.

Industrial members with fleets of vehicles are reminded that they can secure membership in the Commercial Vehicle Section at reduced rates. For information, write the Membership Department.

Construction Packet Folders

Prepared for construction companies and for maintenance departments in industrial organizations, Construc-

—To page 107

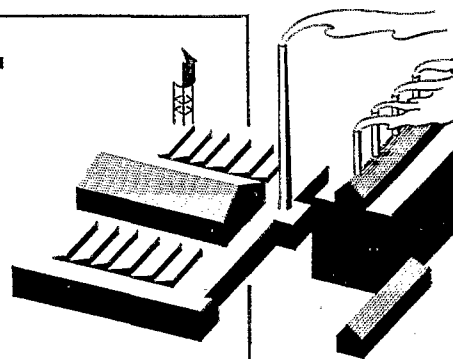


JUMBO POSTER for MAY 1948

Jumbo posters, 9' 11" by 11' 8" in size, designed for outdoor use, are issued monthly. They are available to members for \$33 per annual subscription.

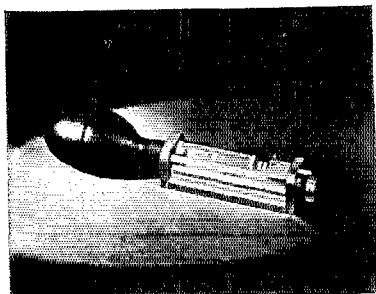
NEW SAFETY EQUIPMENT *for Industry*

Manufacturers are invited to send in announcements of new products, or improved special features. Only items which can be considered as "news" to our readers will be published.



New M.S.A. Product

Among the new safety products recently announced by Mine Safety Appliances Co., Braddock, Thomas & Meade Sts., Pittsburgh 8, Pa., is the carbon monoxide tester. This instrument, utilizing indicator tubes developed by the National Bureau of Standards, is designed to determine the presence of carbon monoxide concentrations in air, and employs the most advanced colorimetric method of CO detection.



Simple in operation and requiring no special training to use, the tester is capable of indicating the presence of carbon monoxide from 0.001 to 0.10 per cent by volume in air. The nucleus of the instrument is a detector tube containing a yellow silica gel, impregnated with a complex silico-molybdate compound and catalyzed by means of palladium sulfate. In use, the sealed ends of the tube are broken in the convenient tube-breaker and the tube inserted into the instrument tube-holder. A sample of the air is aspirated through the tube by squeezing the bulb of the instrument.

Another new product is the M.S.A. Carbon Monoxide and Fire Detector which detects fire in the baggage and cargo compartments of transport aircraft. The instrument was approved under the specifications referenced in the CAA Technical Standard Order TSO-C1 which establishes the performance requirements for this type of instrument. The new CAA ruling requires that all smoke detectors installed in transport aircraft after March 22, 1948, either as original or replacement equipment, conform to these specifications.

The detector draws samples of air from the various baggage and cargo compartments, analyzes them for carbon monoxide content and gives warning of the location of dangerous concentrations by a system of lights on the instrument board in the pilot's compartment. In the preparation of S.A.E. Specification AS-400, under which the instrument was tested, attention was given to

the elimination of false alarms caused by voltage variations, dust, and atmospheric conditions. The detecting and locating of fire through the detection of carbon monoxide in the air eliminates these conditions, as the gas can be produced only by combustion.

The M.S.A. Airline Heater is another war-time development. Cold air fed into the facepieces of air-supplied respirators has been a source of discomfort to wearers who must work out of doors or in refrigerated enclosures. During the war, with the increase of all-weather operations in the nation's shipyards, the Mine Safety Appliances Co. was called upon by armed forces to develop a device to heat the air supplied to outside workers using air supplied respiratory equipment. The result was the airline heater, weighing only 4 pounds, which provides a supply of comfortably warm, thermostat-controlled, air even in temperatures of 30 degrees below zero.

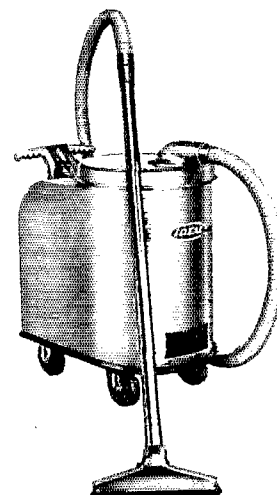


Basically the unit consists of an electric heater, heat exchanger and thermostat, enclosed in a rubber covered cylinder, 11 inches long and with an outside diameter of 2 1/2 inches. It is worn clipped to the rear of the user's belt. This position combined with its small size, and light weight allows it to be worn without hampering the worker's movements.

Vacuum Cleaner

A new, all-purpose, industrial "Tank Type" cleaner for general vacuum cleaning, dust collecting and water pick-up is announced by Ideal Industries, Inc., 4135 Park Ave., Sycamore, Ill.

Modern design, rugged construction, easy operation and power to spare are all combined in this new cleaner. Air filters are enclosed. Unique filtering system is entirely self-contained. Incoming air is whirled around inside the tank and heavy particles are deposited there. The air then passes through a cloth bag filter where the dust

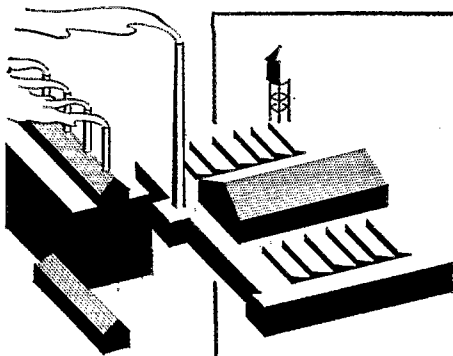


is removed. Collected dirt is easily emptied from the cleaner by simply raising the vacuum sealed lid and then lifting out the 9 gallon tank and dust bag. The cleaner moves easily over rough or smooth surfaces on its four large 5 inch diameter wheels. It has a low center of gravity with the motor unit mounted in the bottom, making it difficult to upset. Swivel wheels in front permit the unit to follow the hose with ease. Small width clearance permits the cleaner to move down narrow aisles, between desks and machinery.

A 1-1/3 H.P. continuous duty motor provides power. Construction is of 16 gauge steel. A 30 foot primary cord provides 2700 sq. ft. of coverage from the outlet.

Lens Coating

The Wallace Optical Co., Inc., 12334 E. Jefferson Ave., Detroit, Mich., announces that it has perfected a method of coating industrial safety lenses, called Tuf-Cote, which makes the surface of the lens im-



NEW SAFETY EQUIPMENT *for Industry*

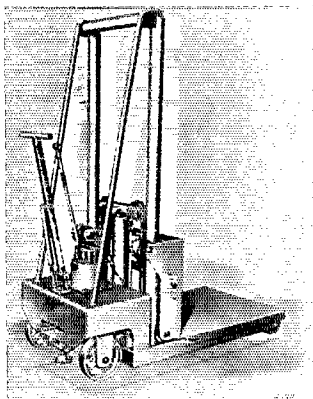
Further information on these new products and equipment may be obtained by writing direct to the manufacturer. It will help in identifying the product to mention this announcement.

pervious to welding splatter and emery pitting.

Tuf-Cote is a patented application of a crystal clear solution applied to the outside surface of lenses of any prescription and any type, including welders' cover plates. It was perfected by opticians and meets rigid optical requirements. Industrial safety lenses, plano or prescription ground, can be sent to the Wallace Optical Co. for coating, or glasses can be ordered directly from them.

Hydraulic High Lift Truck

A new 3,000 lb. capacity high lift truck with four-wheel suspension, auto steer and towing eye is announced by Lyon-Raymond Corp., 4285 Madison St., Green, N. Y.



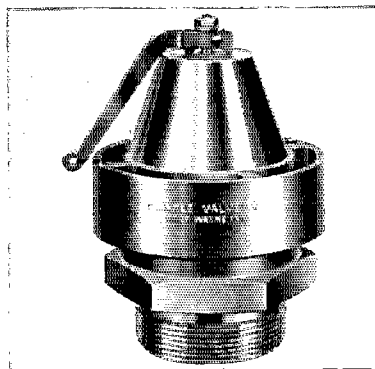
It is a mobile, easily operated truck that lifts, elevates and transports capacity loads; supports heavy overhanging work; serves as a feeding table for heavy, tough operations; simplifies and eases the handling and positioning of dies and other tools and fixtures and is versatile in tiering skid loads and stacking a wide range of materials and containers.

The fork type tubular frame combines structural strength with light weight. It provides a 30 inch by 36 inch load platform, which is supported by concave rollers fitted to the tubular uprights. A floor lock brake is included as standard equipment. Power is furnished by a two-speed hydraulic hand pump which is mounted on the truck frame for convenient operation.

The platform has a range of elevation from 6 inches lowered height to 54 inches elevated height. The overall height of the uprights is 83 inches. The truck is equipped with two 10 inch diameter by 2 inch face semi-steel front wheels and two 5 inch diameter by 3 inch face semi-steel rear wheels, all equipped with roller bearings.

Boiler Safety Valve

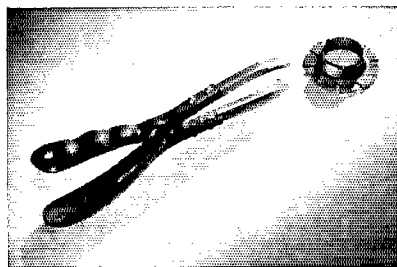
Kunkle Valve Co., Fort Wayne, Ind., announce a new steam and hot water boiler safety valve known as Fig. 34. The valve in 7 sizes from $\frac{3}{4}$ inch to 3 inches, features all-cast construction with top guided,



flat seating disc. Try lever is so arranged that weight loading cannot prevent valve from opening. Normally set at 10 or 15 p.s.i., Fig. 34 can be set at pressures up to 45 p.s.i. Capacities in steam/HR discharge range from 257 lbs. for $\frac{3}{4}$ inch size to 4168 lbs. for 3 inch size. Valve meets ASME Code, Case 1026 specifications and is NB Certified.

Safety Plier

The Safe-Play Co., 2921 N. Cicero Ave., Chicago 41, has developed a new safety plier for feeding power presses. The tool weighs less than 5 ounces and holds small parts securely by pressure from a spring in the handle. The operator grips the handle to open the jaws.

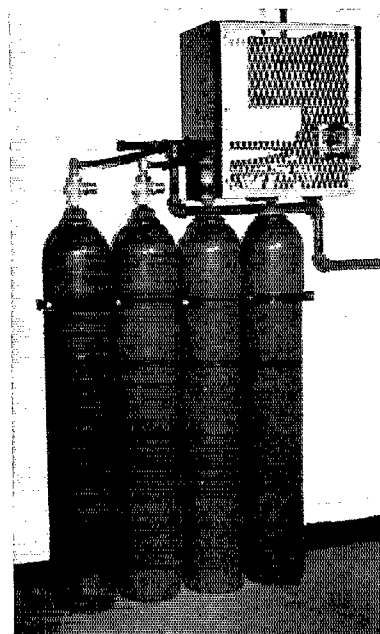


The jaws are straight aluminum alloy bars which are shaped cold in the user's plant to fit the small part to be handled. These jaws will not damage the dies and are replaceable if smashed or if a different shape is desired. The model shown has flat jaws, but they can be machined to a

pin point or to suit individual requirements.

Fire Extinguishing System

American-LaFrance-Foamite Corp., Elmira, N. Y., announces a new carbon dioxide fire extinguishing system for protecting Class "B" and "C" risks requiring localized or total flooding, and for rotating electrical units requiring a sustained discharge of carbon dioxide.



This new system, according to the manufacturers, automatically shuts off power units, closes windows and doors when fire strikes, after first sounding an alarm to permit employees' exit from the fire area. Then the system discharges carbon dioxide. It is a flexible unit, readily adaptable to all needs a fire risk requires. It can be easily installed and serviced. Additional cylinders can be quickly added should a risk be increased later to require added protection.

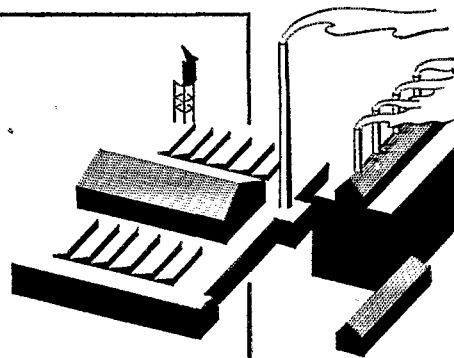
First Aid Kits

Three special first aid kits, for emergency treatment of burns, have been developed by the Medical Supply Co., 75 W. Van Buren St., Chicago 5. Each kit is packed with an assortment of specially selected first aid units. These include bandages, antiseptics, inhalants for shock, Foille emulsion for application to the burned area and other necessary items.

The burn spray kit includes a spray gun and five 4-oz. bottles of Foille emulsion.

NEW SAFETY EQUIPMENT for Industry

Manufacturers are invited to send in announcements of new products, or improved special features. Only items which can be considered as "news" to our readers will be published.

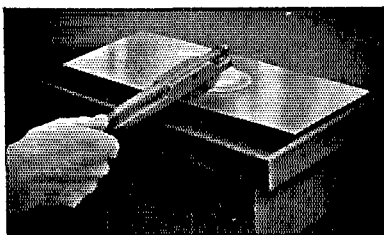


Application by spray is quick and gentle.

There are two fire department kits. One contains 36 specially selected first aid dressing units, the other 24. All three kits are in carrying cases of 20-gauge steel with electrically welded corners. They are moisture proof and dustproof.

Vacuum Lifter

Industrial Products Co., 2850 N. Fourth St., Philadelphia 33, Pa., announces a new vacuum lifter designed for lifting, feeding and positioning sheets of metal and other materials in stamping machines and die-presses. Its use reduces the danger to



operator while positioning blanks in forming presses as it can be used to accurately set to gauges or stops without inserting hands or fingers within the danger zone.

Operates by striking rubber cup against material to be handled. This produces and retains a vacuum within the cup until it is released by depressing conveniently located trigger. Cup is held to the handle by a concealed soft brass bolt moulded in the rubber. No danger of marring parts handled. Cups easily and quickly replaced when necessary. The overall length of the lifter is 15"; height at cup end 11½". Weight 4½ ozs.

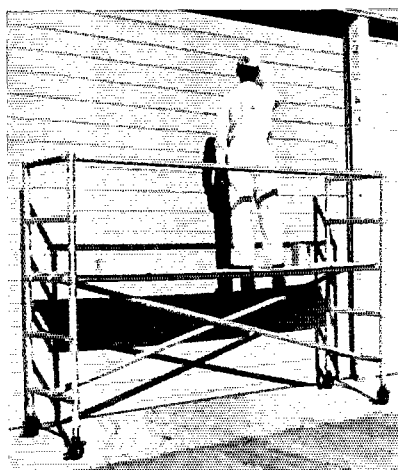
"Unox" Penetrant

Unox penetrant, a wetting agent developed for fire-fighting, is now available from Carbide and Carbon Chemicals Corp., 30 E. 42nd St., New York 17, N. Y. When one part of this penetrant is added to 100 parts of water, the extinguishing efficiency of water is increased 3 to 5 times.

Unlike most chemicals used for fire-fighting, this compound itself does not act on the fire but changes the characteristics of the water used to fight the fire. Water so treated has less tendency to run off the surface of a burning material. Instead, the water penetrates, allowing a more effective absorption of the heat from the fire. The fire is put out more quickly with less water and less water damage. Smoke and heat are also greatly reduced, giving the firemen a chance to attack the fire at closer quarters.

Up-Right Scaffold

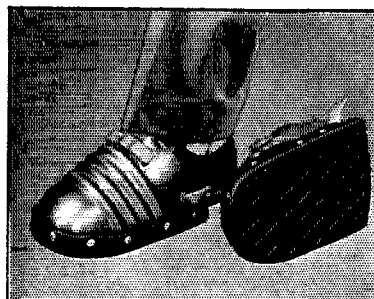
Up-Right Scaffold Co., Bank of America Bldg., Berkeley 4, Calif., has developed a new model scaffold of 10 foot span. The adjustable legs insure a level scaffold on uneven ground or floor as each leg has 24"



of adjustment. It can be extended or retracted the amount desired. This feature is provided by a locking collar and an expanding nut which allow sliding the threaded leg for adjustment. Hooks at ends of platform and at ends of braces lock in position and automatically. This new up-right scaffold is light in weight and permits quick assembly. It is only 29" wide and is extendable to provide continuous platform 20' or 30' long by adding additional platforms and uprights. The scaffold weighs only 119 pounds.

Foot Guard

A new foot guard equipped with full sole instead of toe clip has been developed



by Ellwood Safety Appliance Co., 225 Sixth St., Ellwood City, Pa. These soles which extend the entire length of the guard,

are made of durable rubber and are flexible and comfortable. They have an anti-skid tread and a flange around the guard that prevents dirt and other substance from working up inside the guard. This new guard is available in either aluminum alloy, 20 gauge alloy steel or 16 gauge carbon steel. The heaviest model weighs 31 ounces each.

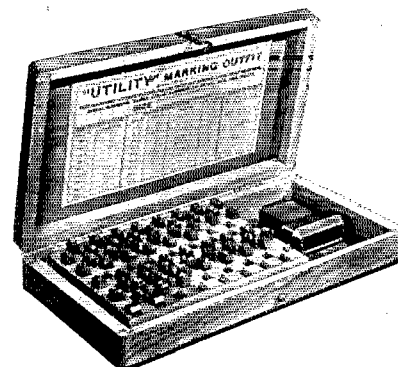
Eyeglass Frame

A new rivetless, screwless spectacle lens mounting is announced by Bausch & Lomb Optical Co., 635 St. Paul St., Rochester 2, N. Y. Employing a different structural principle, the semi-rimless mounting holds lenses in place by tension alone. The tension mount, known as Balgrip, clamps lenses firmly in finger-like brackets, eliminating the necessity of drilling holes in lenses or using rivets or screws in their mounting.

Advantages to eyeglass wearers are more attractive appearance, wider field of vision due to the elimination of screws, and greater safety to lenses. The tension mount clamps lenses in place by pressures ranging up to two pounds. This clamping pressure does not set up lens strain but provides axis alignment and permanent attachment.

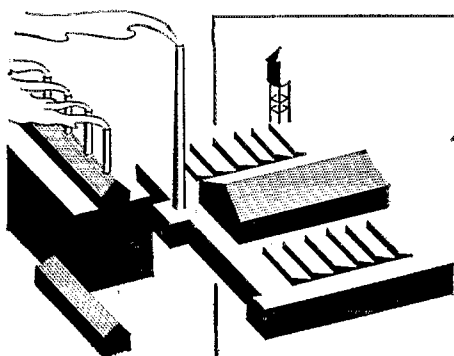
Marking Holder

The Cunningham "Utility" Marking Holder, part of the company's marking outfit for marking etched plates, tags, keys, stock checks; brand names or stock numbers on steel bars; special coding, serial



numbering, identification, inspection, etc., is now available in a wide range of slot sizes, according to M. E. Cunningham Co., 200 E. Carson St., Pittsburgh, Pa.

The new range of "Utility" holder sizes includes ¼", ⅜", ½", ⅝", and ¾" up to 2" slots, making possible the stamping of long part or stock numbers, down to short serial numbers in the smallest type sizes.



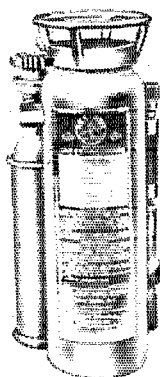
NEW SAFETY EQUIPMENT *for Industry*

Further information on these new products and equipment may be obtained by writing direct to the manufacturer. It will help in identifying the product to mention this announcement.

Nine sizes of type characters, from 1/32" through 1/4" sizes, may be used in the same holder.

Fire Extinguisher

All-Out Manufacturing Corp., 2 Park Ave., New York, announces a 10-pound unit dry chemical fire extinguisher designed to combine efficiency and protection. It performs effectively under all climatic conditions and in the presence of winds and drafts. Dry chemical is ejected, under pressure, in a flat stream that separates the flame from the burning material, instantly



forming a dense, fire-smothering cloud over a flaming area up to a distance of 18 feet. It creates an insulating barrier between the operator and the flame providing protection from radiant heat, thereby insuring more efficient performance by the novice operator. On hot metal surfaces, the dry chemical forms an insulating film, helping to guard against re-flash.

The new extinguisher, which is approved by Associated Factory Mutual Laboratories and Underwriters Laboratories, forms no toxic gases, is non-conductor of electricity, non-abrasive and harmless to finished surfaces. Extinguisher incorporates squeeze grip nozzle.

Cutters

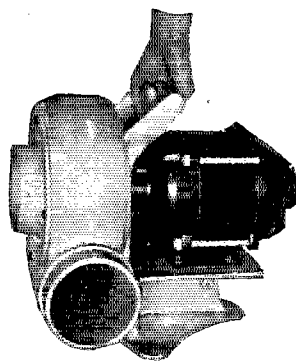
In announcing their new redesigned complete line of hand power cutters, H. K. Porter, Inc., Somerville, Mass., stress a new degree of ease, strength, safety and performance in the cutting of bolts, rods, wire, cable, chain, bars and metal of all kinds. Some of these features are: curved toe-in handles which decreases armspread and wrist bend making an easier and stronger pull, broad rounded palm-fit grip, which reduces fatigue, no protruding screws or bolts, metal safety handle stop, greater

tool strength in sections and handles, jaws plainly marked showing capacity and type of metal safety cut, and red color finish. All standard models have these new features.

Portable Ventilator

Designed to save lives and improve worker efficiency by providing fresh air to men working in confined places, a new lightweight aluminum portable safety ventilator is announced by its manufacturer, United Electric Motors Co., 178 Centre St., New York.

Called "SAF-T-Air" the new electric motor-driven ventilator has a capacity of 425 cubic feet per minute yet weighs only 50 pounds. One man can carry it by a balanced handle placed over the center of gravity so that the unit cannot tip over when carried or hung. Made of non-corrosive spark-proof aluminum, it can be connected with the nearest lighting or power supply outlet without danger of overloading. Its compact size allows it to pass



through small hatchways and hard to get to places. The ventilator can be used either as a blower or exhauster for eliminating hazardous gases, fumes, vapors, and dust from drums, vats, tanks, tank-cars, boilers, sewers, manholes, shipholds and other inaccessible places.

Ladder Jack

The Caster Mold and Machine Co., 1171 Wooster Rd., Barberton, Ohio, is now producing the Caster Hi-Jak—new safety ladder jack for repairmen, painters and other ladder-scaffold workers. By constructing the support grips to attach on the rails of the ladder, rather than the rung attachment, the danger of accidents arising from faulty rungs is eliminated. The bracer bar acts as a solid rest for the vertical supports of the jack and at the same time prevents the

supports from exerting any strain on the lower ladder rungs.

The 12 notch adjustment bar allows the jack to be used either over or under the ladder. Any of the four machine bolts can be easily inspected or replaced. Constructed of heavy gauge steel, yet weighing only 12 lbs., the jack can be readily folded for easy carrying or storage.

News Items

Davis Emergency Equipment Co., Inc., 45 Halleck St., Newark 4, N. J., announce that J. S. Allen has been appointed manager of their Safety Equipment Division, replacing M. S. Rundel who will represent their company in connection with the Instrument Division.

* * *

Truck-Man, Inc., formerly a division of Yard-Man, Inc., Jackson, Mich., has incorporated as a separate and distinct unit to carry on the manufacturing of the Truck-Man, Model "D" a gasoline powered, hydraulic lift truck, and the Truck-Man Utility, gasoline powered platform truck. Yard-Man, Inc., continues as manufacturers of lawn mowers exclusively. Officers of Truck-Man, Inc., are T. B. Funk, president; W. S. Butterfield, secretary and treasurer, and Walter Mayer, general manager.

* * *

Lily-Tulip Cup Corp., 122 E. 42nd St., New York 17, N. Y., recently opened their new Southern factory in Augusta, Ga. The new plant is of modern design and construction and covers approximately 180,000 square feet of floor space. It has many novel features which include underground tunnels for all service lines; an air conditioning and humidifying system in the manufacturing section; wired music; and the latest type of industrial cafeteria.

All production machinery and equipment is new and of company design and represents several recent developments in product manufacture. Extensive use has been made of automatic material handling equipment.

* * *

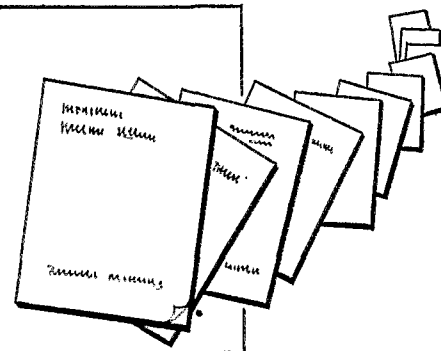
S. W. Montgomery of Aeme Products, Akron, Ohio, died early this year. Mr. Montgomery, one of the pioneers in safety, was the founder and president of his company.

Man's eternal struggle is to keep his earning capacity up to his wife's yearning capacity.

TRADE PUBLICATIONS

in the Safety Field

These trade publications will help you to keep up-to-the-minute on new products and developments in industrial health and safety equipment. They are free and will be sent by manufacturers without obligation to readers of NATIONAL SAFETY News who are responsible for this work. Send in the coupon below checked for the publications you desire. Please make your request promptly.



1. "Trutractor Catalog": Catalog on materials handling machines and special handling attachments, featuring items which handle unit loads based on sheets of corrugated paper, fiber board and other similar material. Clark Equipment Co.
2. Gas Welding Rods: A 24-page brochure on gas welding wire, its use, applications, procedures, physical properties, and a convenient reference chart on welding electrodes and gas welding rods. Information for welders includes: oxy-acetylene flames, torch tips and pipe welding. Page Steel & Wire Division.
3. Fire Alarm Equipment: Information on fire alarm equipment with wiring diagrams, illustrations and descriptions for various types of fire alarm systems. Also shown is complete data on fire alarm boxes, signals, punch and printing recorders. The Auto-call Co.
4. "Industrial Awards": Catalog of Industrial safety awards that include buttons, badges, medallions, trophies, plaques, and emblems for awarding organizations and individuals. Williams Jewelry & Mfg. Co.
5. "Life-Line": Booklet showing the various processes of manufacturing wire rope from wire rods, through wire and rope mills. The story is presented in pictures with short captions in a similar manner to a film strip. Macwhythe Co.
6. Washroom Driers: Catalog folder on washroom fixtures including such items as pedestal model hand driers and recessed wall model that provides a sanitary method of hand and hair drying, with no soiled litter, unsightly metal containers, and drying quickly without chapping. Chicago Hardware Foundry Co.
7. Burn Oil: A folder on a burn oil effective for local applications on burns, scalds and sunburn, providing instant cooling relief of burning pain, protection against air and infection, the promotion of healthy granulation and stimulates the growth of the cells. Rich Laboratories.
8. "Industrial Electronics": A folder on electro-mechanical automatic machinery and machine process controls with examples of machine applications used in industry on special jobs such as automatic cutting, automatic inspecting, automatic positioning, automatic feeding, and automatic handling. John T. O'Connor & Co.
9. "Free Footsteps from Fear": A new catalog describing a line of walkway products featuring safety treads for stairs and ramps, elevator sills, thresholds, window sills, curb bars and trench covers. Cross-sectional views and complete description clearly describe each product. Wooster Products, Inc.
10. "Turner System of Materials Handling": A book describing a plan for cutting labor, handling and storage expense, speeding production and reducing accidents with materials handling equipment. Factory Service Co.
11. Emergency Lighting: A folder on emergency lighting for use by public utility crews and others who work in streets. The flashing red light is high enough to be seen above automobiles and is visible from a great distance. Carpenter Mfg. Co.
12. "Sound Motion Pictures and Slide Films": A 24-page booklet of sound motion pictures and slide films available for industrial use, loaned free except for cost of transportation. Subjects include electronics, radio, RF heating, industrial maintenance, safety, and slide-film instruction courses on resistance welding control, electrical measuring instruments, electronics and RF heating. Westinghouse Electric Corp.
13. Materials Handling Catalog: Catalog of materials handling equipment, illustrating drum and barrel slings, universal grab slings, barrel grab, sheet steel grab, boom skid, drum and barrel tilt, and automatic dump box. Palmer-Shile Co.
14. Small Tool Grinding: A circular on a small tool grinder, that features rapid change wheel arbors, triple speed selection, precision spindle and other important advantages, used for deburring, buffing, polishing and numerous special applications. Corlett-Turner Co.
15. Self-Cleaning Air Filter: An 8-page booklet explaining the operation and application of self-cleaning air filter for engine and compressor service. Installation photographs as well as detailed engineering data is included in bulletin No. 150. American Air Filter Co., Inc.
16. "Overhead Handling Equipment": A 56-page book showing the successful applications of an overhead handling system that ends floor deterioration, reduces damage in motion, increases plant capacity, production pace and conserves skilled labor. The American Monorail Co.
17. "Make Safety Pay": A circular giving complete details on an automatic radial guard for use on all portable horizontal tools, minimizing the lateral ejection of slag, wires, metal dust or chips, and protects the operator as well as adjacent workers. Flohr Safety Equipment, Inc.
18. "Welding with Bronze Electrodes": Bulletin W-17 contains factual information on how to weld a wide variety of alloys using bronze arc welding electrodes. Detailed information on welding procedures and techniques is given with a comprehensive chart listing alloy types, specifications, chemical compositions, physical properties and weldability values. Ampco Metal, Inc.

NATIONAL SAFETY NEWS

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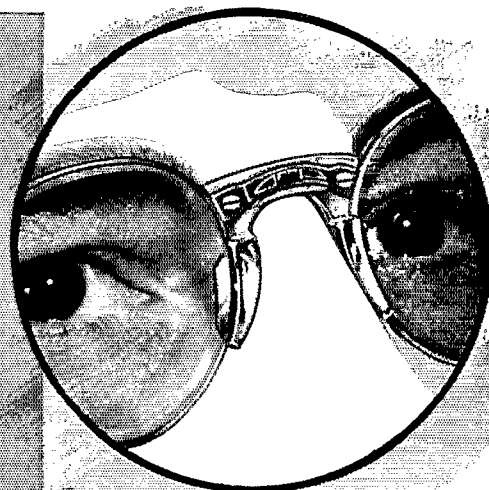
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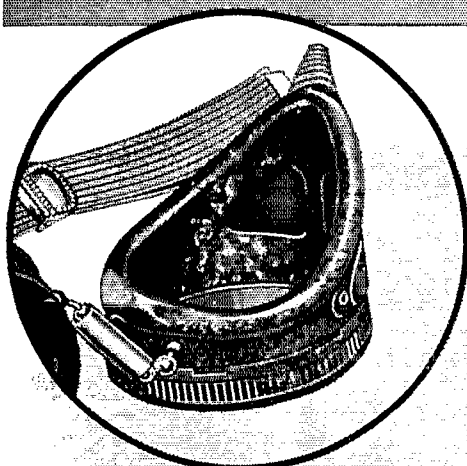
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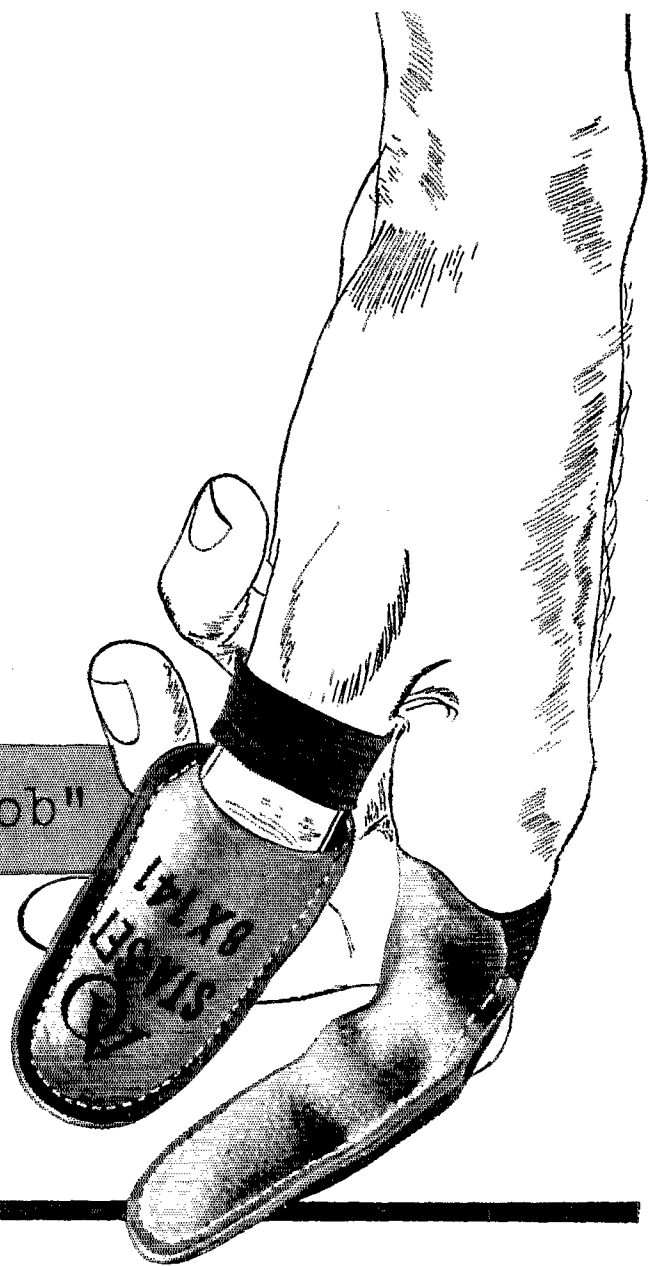
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