ID-271 (7-30)

SAFETY CODE

Western Electric Company
INCORPORATED
INSTALLATION DEPARTMENT

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Western Electric Company
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TELEPHONE AND TELEGRAPH BUILDING
195 BROADWAY
NEW YORK

CARL WHITMORE
GENERAL MANAGER
OF INSTALLATION

June 1, 1927

TO EMPLOYEES OF THE INSTALLATION DEPARTMENT:

Since our first Safety code Handbook was issued in 1924, remarkable progress has been made in reducing accidents and particularly the more serious and painful cases. The value of the Safety Code as a means of warning against hazards is fully recognized, but I am sure that the daily thoughtfulness of everyone is the underlying cause that has made possible our outstanding progress.

This new edition of the Safety Code is the culmination of three years' experience in studying accident causes. It represents not only the careful thought of the Committee and those responsible for the general organization of Safety, but has incorporated in it many suggestions received directly from Installation men. These suggestions typify genuine interest in personal safety and in the co-operative sense making the job safe for all. Thought for personal safety is always commendable and consideration for the safety of others carries with it also a feeling of pride in a task well done.

Education in First Aid has contributed to accident reduction. Progress in First Aid instruction has been gratifying when it is realized that over 50% of our employees are trained "First Aiders". Many of these men have brought high honor to themselves, their families, the Company and Bell System by courageous prompt and intelligent action in emergencies. Lives have been rescued heroically in fire, electrocution and drowning. Innumerable instances are recorded of relief in minor, but acute, emergencies.

A Section of the new Safety Code is devoted to the simple laws of health. Personal health must be recognized as an important factor in our daily life. The prevention of sickness deserves emphasis comparable to that given accident prevention. Your excellent record in the one gives assurance of equal effort-in preserving health.

Finally, let us look upon this code not as a "book of rules" but as a set of standards, which, having selected ourselves, we wish to live up to in the future as in the past. I am confident that in Accident Prevention, First Aid and in Health, the results, through your co-operative effort, will continue to be outstanding.

Yours for Safety and Health,

Carl Whitmore

General Manager of Installation.

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GENERAL REQUIREMENTS SECTION

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SAFETY CODE

1. Some Common Causes of Personal Injuries

Statistics gathered over a considerable period of time covering injuries to installers disclose that the kinds of work on which most injuries occur are as follows:

Cabling
Wiring and connecting
Handling materials
Ironwork
Assembly operations

The leading causes of accidents on the above kinds of work are:

Tool slipping and breaking
Striking against fixed objects
Falling and flying objects
Slipping, tripping and falling
Falling from a height

2. Cabling Hazards.

Cabling hazards and the protective measures are covered in detail in Methods Handbook No. 8. The leading sources of accidents in cabling work are:

Stripping Cable-The use of the guarded cable stripper shown on page 8 will minimize stripping hazards. The incorrect method is shown on page 9.

Sewing Cable-Soreness, bruises or cuts caused by the handling or breaking of lacing twine can be avoided by protecting the hands and by a slow, steady pull on the twine instead of a jerk.

Projecting Racks and Equipment-Contusions on head and hands are the commoner accidents. Padding of projecting points and caution will avoid this hazard.

Lead Covered Cables-The installing of heavy lead covered cables may involve back strains. While handling, avoid putting hands to nose, mouth or eyes, and wash hands thoroughly before eating. This is a general precaution used by all who work with lead or lead paints and, if followed, no danger exists.

Waxing-The use of hot wax introduces accident hazards in the form of wax burns and slipping. Details of the safe method of handling wax are covered in Handbooks No. 8 and No. 1'2 and in the Wax Heating Bulletin.

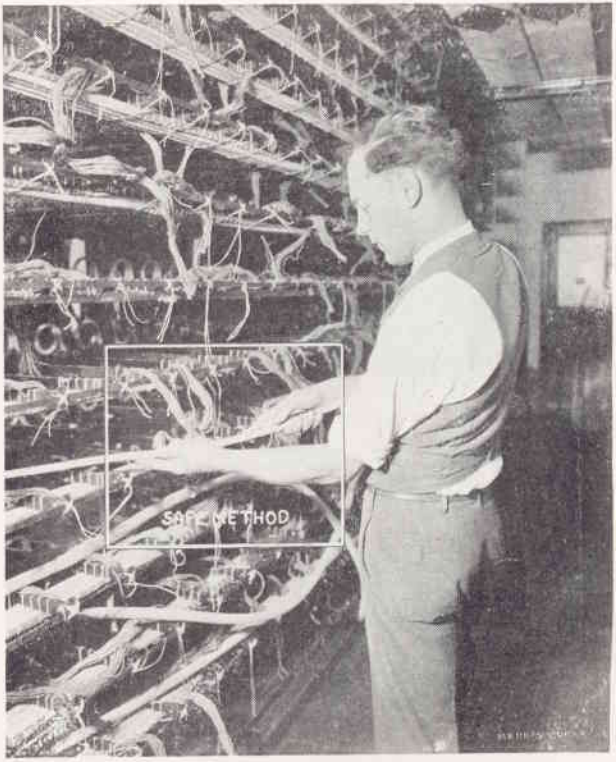
Falls and Falling Objects-The nature of cabling work calls for unusual precaution in order to avoid the risk of falls. Always place tools or other objects where they are not likely to fall.

Multiple Wedges-When raising multiples with wedges, be careful that wedges do not slip.

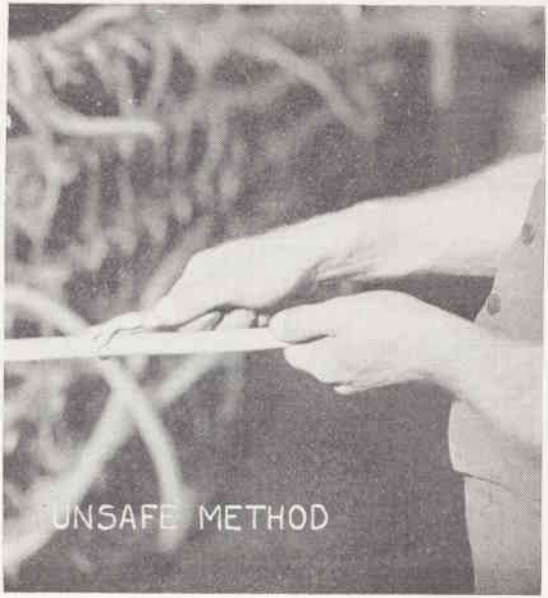
3. Cable Wells.

In order to decrease falling hazards and provide a fire stop in unfinished or open cable holes, use the temporary closures and guard rails as defined in Handbook No. 12 under "Building Protection" and in Handbook No. 8 under "Cabling."

THE BEST SAFETY DEVICE KNOWN IS A CAREFUL MAN



The Safe Way Avoids Injury



Strip Cable the Safe Way (shown on page 8) and Avoid Injury

IT TAKES LESS TIME TO PREVENT AN ACCIDENT THAN TO REPORT ONE

Close cable holes at night and keep them closed or guarded at all times when work is not being performed. Install the permanent closure as soon as the cables are in position.

Do not use mineral wool filled canvas bags as cushions. When handling loose mineral wool, workmen should tie a handkerchief over nose and mouth and wear leather palmed gloves, and goggles. Protect arms with canvas. See illustration on page 18 and instructions in Handbook No. 8.

NOTE: The substance supplied under the name of mineral wool is finely spun glass which naturally is brittle. When handled it breaks up more or less into a large number of fine splinters.

4. Waxing.

Handbook No. 12 covers in detail the installation of Wax Pots and Handbook No. 8 covers operation of wax pots and safe methods for using hot wax.

Wax heaters shall be installed only in approved locations. Smothering covers on wax heaters should be kept in position for use in case of fire. Keep floor protection free from collection of wax and refuse of all sorts.

NOTE: Solidified wax when heated too rapidly melts at the bottom first. This creates a pressure which may eventually break through the unmelted portion and cause hot wax to spurt out.

Use only approved tools for baling or carrying hot wax.

Do not use hot wax on ladders or scaffolds while men are at work beneath. Wax spilled on scaffolds should promptly be removed to prevent slipping.

Wax wiping cloths are **a** fire menace. **Put** them promptly in metal safety waste cans.

The gas heated wax pot requires the attention of an attendant. Turn off flame under pot before baling or pouring wax.

5. Wiring, Connecting and Soldering.

Keep face above the level of your work so as to avoid possible injury to face or eyes. This applies particularly to the use of long-nose pliers.

Slinging solder from soldering irons is dangerous both to workman and apparatus. Keep iron tip clean by wiping on a canvas or fireproof muslin pad.

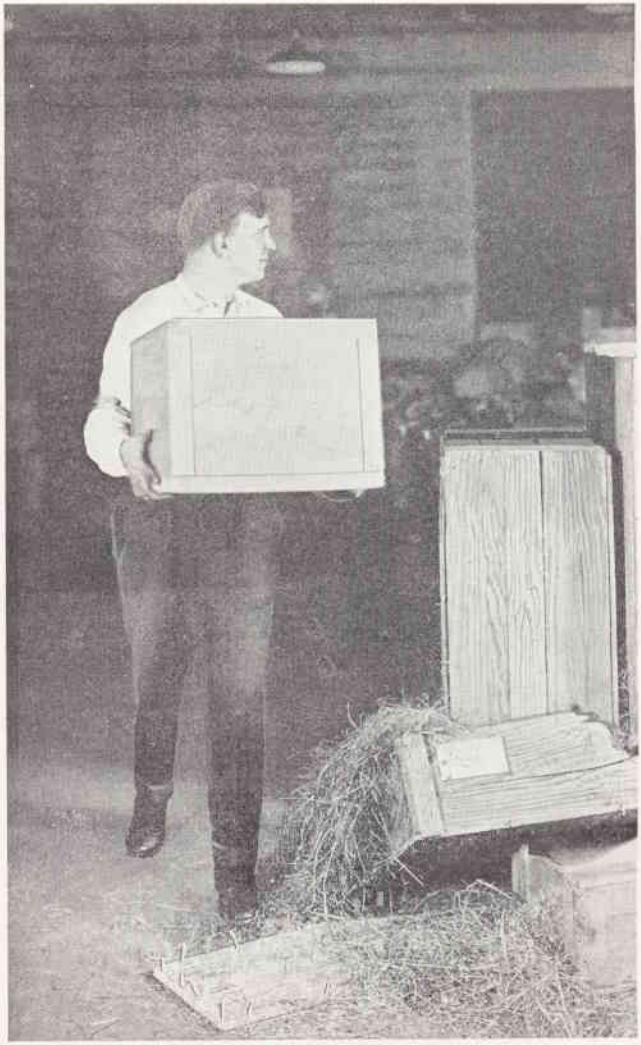
Snapping springs on apparatus **in** order to remove excess solder is a risk. Use brush for removing solder.

The use of metal bound brushes for the application of shellac to live conductors is forbidden because of the hazard of igniting the alcohol in the shellac through accidental arcing. Rubber set brushes without metal parts have been standardized for this purpose.

Shellac should be applied starting at the bottom of the rack to decrease fire risk. Only standard shellac cans should be used for the same reasons.

6. Soldering Irons

Before connecting any soldering iron to a branch circuit, make sure that the total load on the branch will not exceed the allowable load as defined in Handbook No. 12.



"Nail" the "Nail" Hazards

A Nail Puler Is Quicker and Safer

TAKE TIME TO BE CAREFUL

The National Electrical Code requires that the electric soldering iron may be instantly disconnected by means of the separable attachment plug. Do not tape or tie the cap and base of the plug together. Disconnect the iron whenever leaving the work even temporarily.

If the outer braid covering on flexible cords becomes broken or frayed it should be repaired by wrapping with friction tape. If the rubber insulation of the wire becomes broken, the iron should be turned in for replacement.

Approved holders should always be used for electric soldering irons. Do not place holders where there is danger of fire or injury.

A grounded electric iron shall be taken out of service at once.

All hot soldering irons when returned to storeroom shall be cooled by inserting the ends into dry sand.

7. Material-Handling and Storing.

The methods, equipment and risks incident to handling and storing material are covered in Handbook No. 12. The fire hazards connected with the handling and storing of material are also covered in Handbook No. 12 and in the section of the Safety Code relating to "Fire Hazards." The principal hazards in handling and storing are:

Strains in lifting. (See illustration on

Projecting nails. (See illustration on page 12.)

Insecure stacking of boxes or material on shelves or floor.

Using hammer instead of nail puller for opening boxes. (See illustration on page 13.)

Sharp-pointed tools or other objects protruding beyond edge of storage shelves.

Storage of material or tools close to unguarded windows where they may fall through.

Storing material within prohibited distances from heat sources.

Blocking of exists and fire escapes.

Dangerous accumulation of excelsior, paper or other inflammable material. (See illustration on page 12.)

8. Eye Hazards.

Accidents to the eye are likely to be very serious and very painful. The loss of eyesight is a calamity second only to the loss of life itself. Eye accidents may easily be prevented by the use of goggles.

Wherever the work involves danger of flying particles or liquids, such as drilling plaster or concrete, pouring electrolyte, using Prest-O-Lite or other gas torches, goggles should be worn. Supervisors have a definite responsibility to see that this is done.

Goggles should be kept clean and in good repair. If misting of the goggle glasses interferes with the vision, coat the lenses with the special compound which may be obtained from the storeroom.

Do not attempt to treat an eye injury on the job. Send the patient to a doctor immediately.

9. Ladders and Scaffolding.

Ladders and scaffolding by their very nature are potential sources of accidents. Method Handbook No. 12 provides safe equipment and erection methods. Use them with judgment and caution and with full appreciation of your responsibility for the safety of your fellow workers.

Accident statistics have proved the wisdom of recommending these cautions :

Scaffolding should frequently be inspected to insure safety.

Makeshift equipment for ladders or for scaffolding is unsafe. See Handbook No. 12 for safe equipment. (See illustration on page 24.)

Scaffolding hangers which extend below runways endanger those passing underneath. Where proper clearance is not possible, projections should be padded liberally with canvas.

When moving a rolling ladder be sure no one is on it. (See illustration on page 37.)

Keep scaffolds free from wax to prevent slipping..

Tools or material left on ladders or scaffolding are a very definite hazard.

When ascending or descending, always face the ladder.

Always place your ladder so that the work is within easy reach. Use ladders of proper length. (See illustration on page 25.)

Use only approved ladders or ladder seats.

From time to time, alterations will be necessary in the best planned scaffolding. Suitable guard rails should always be installed.

Stepladders should not be used as part of any scaffolding or as a means of climbing onto it.

A stepladder should not be used in a leaning position; that is, with the legs folded back. It is apt to slip. (See illustration on page 31.)

Ladders should be examined for loose steps, protruding nails and defective hardware. Makeshift braces of rope or wire are dangerous.

Packing boxes or the "three position stools" placed one upon another are dangerous, even when clamped together. They should not be used as a base for planks in building up a scaffold.

10. **Tools-General.**

The company furnishes approved **standard** tools. Handbook No. 28 covers the proper inspection and maintenance of such tools. Defective tools never should be issued to **a** workman. When tools become defective they should be returned to the storeroom.

In order to revent injury from flying chips, never use tools with mushroomed heads.

Tools should not be carried in your pockets so as to be dangerous to others or yourself. (See illustration on page 36.)

'Knives and sharp-edged tools are potential hazards. Efforts are being made to eliminate the necessity for using knives. If necessary to use a knife, never cut toward yourself.

AN OUNCE OF PREVENTION IS WORTH A POUND OF CURE

Use Complete Protection When Handling Mineral Wool

Use the Legs to Lift

Hammers should frequently be inspected for loose heads or defective handles.

The screwdriver is responsible for many accidents. Use in a manner that will avoid injury if screwdriver slips. Screwdrivers in a hip pocket are a menace.

When using a wrench be sure that it fits the nut. Always put wrench on right way so that it will not spread and slip. Wrenches should not be used as hammers.

11. Cleaning Hazards.

Gasoline, Benzine or other inflammable liquids must not be used for cleaning purposes. Carbon tetrachloride is the only approved cleaner.

NOTE : The use of carbon tetrachloricle involves simple precautions in order. to avoid temporary ill effects. Carbon tetrachloride sometimes causes nausea headaches due to the inhalation of fumes. Accordingly, places where it is being used should be well ventilated.

Regarding so-called skin burns from carbon tetrachloride, this is a sensitive condition of the skin brought about by excessive contact which washes out the natural oils of the skin and leaves the latter dry or chafed. Do not clean hands with carbon tetrachloride and avoid excessive contact. As a corrective measure after using, grease the hands with Vaseline or petrolatum.

Used cleaning rags and waste should be deposited in standard metal safety waste cans to avoid fire risk.

Broken glass never should be put into the receptacle with other refuse. Dispose of it in the building ash container where there is little chance of cutting hands. (See illustration on page 30.)

12. Power-General.

When working in the vicinity of, or when changing live bus bars or feeder cables, every precaution for safety should be used. Screwdrivers, wrenches, etc., should be covered with insulating material in order to reduce the liability of short circuits. The bus bars near the work should be wrapped with canvas as a further protection.

When pulling in cables near live bus bars, hemp rope must be used instead of the wire pulling rope. The bus bars should be insulated with canvas and boards. A man must be stationed continually at the danger point in order to prevent trouble.

Where a cable winch is used in pulling power cable, frequently inspect the wedges which anchor the winch to the ceiling.

When pulling cable or wire into a conduit, a man should avoid strains-holding himself in such a position that a sudden release due to some unforeseen condition would not cause him to fall or to be hit by a released part.

The sweating of power lugs involves just ordinary caution in the handling of hot lead, and in the use of the electric solder melting

pot or the Pyrotip electric burner or the Prest-0-Lite torch. Guard against spilling liquids into molten lead or solder.

Sometimes it is a practice among workmen to wet the tips of their fingers and place them against exposed contacts as a test to determine whether or not the circuit is alive. This is dangerous.

Changes in transformer connections should be made only when the transformer is dead. Under no circumstances should the secondary of a transformer be open circuited when the primary is alive. The high voltage produced in the secondary may result in injury.

Never assume that a conductor is dead. Ample facilities are available **to make this** determination safely.

A shunt field circuit which is alive must not be opened unless provided with a field switch for that purpose. Two risks are involved : first, the heat of the arc, and second, the temporarily **produced** high voltage.

When closing power switches use only one hand and do so firmly and without hesitation. The positive closing of a switch will reduce flashing.

As men become more familiar with rotating machinery they seem to become less careful. Always stop a machine if anything is to be done which might endanger the operator.

Covers of a rectifier should not be removed while the rectifier is alive, due to the hazardous voltage produced by the step-up transformer.

Goggles should be worn for chipping operations, pouring electrolyte, and when burning battery plates.

No exposed flame should be permitted in a battery room, cabinet or case while cells are gassing.

Torches or burning outfits should be extinguished when not in actual use. They should not be left in such a position that an employee may be burned.

When working around moving machinery do not wear gloves or clothing which may become entangled.

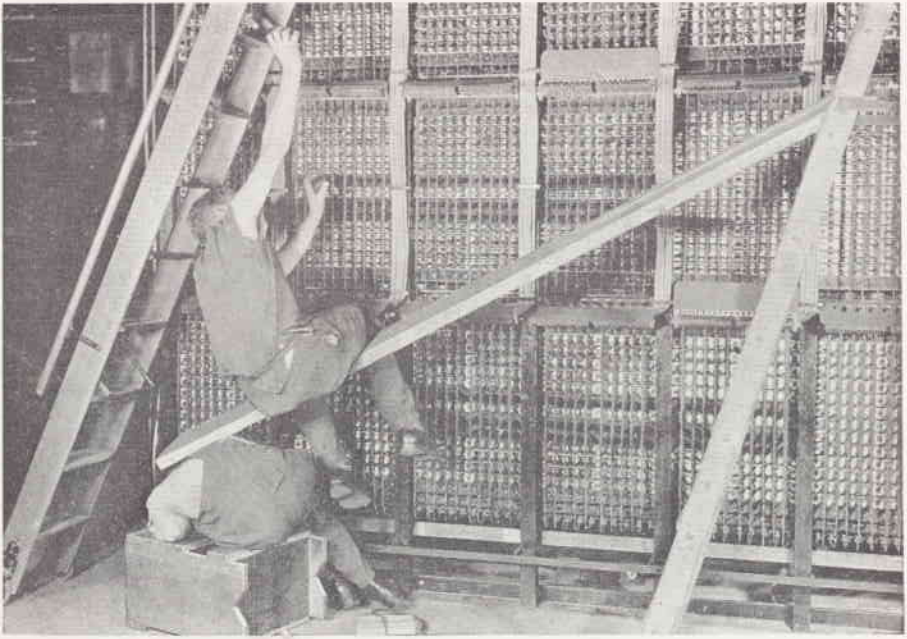
Portable lamp leads with fibre guards should be used on power work where there is danger of shorting terminal or bus bars.

Finger rings, metal pencils, watch chains, and tools that are exposed in pockets should be removed while working around power equipment.

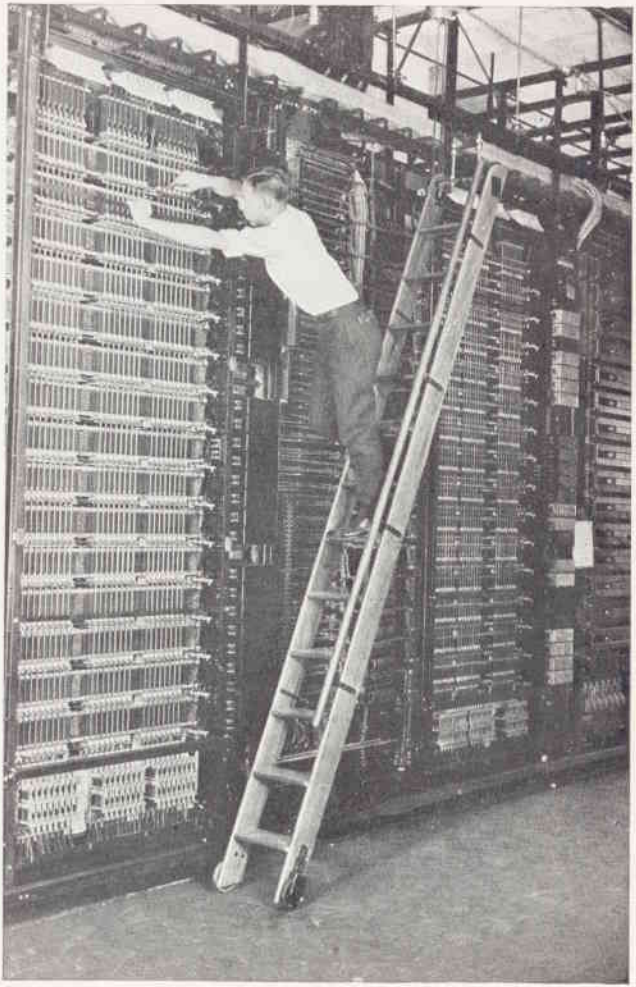
Acid burns may be avoided by wearing goggles, rubber aprons, gloves, boots or rubbers, which may be obtained from the storeroom.

13. Gas Engines.

Gas, gasoline vapors and exhaust gases are risks that are too often ignored in the operation of a gas or gasoline engine. Watch for leaks that may be caused by cracks, loose joints, defective gaskets, etc. Engine rooms should always have "abundant ventilation,"



Use Standard Supports for Scaffolds



Place the Ladder Convenient to Your Work

In the operation of gas engines, the following precautions should be observed:

Never put feet on the flywheel to start.

When turning the flywheel of an engine manually for other than starting purposes be sure that the ignition circuit is open.

See that guards are in place before starting.

Keep floor free from grease and oil at all times.

Do not handle belts when engine is running.

Do not attempt repairs on ignition while engine is running.

Avoid the use of loose clothing, particularly flowing ties, and loose sleeves while working around an engine in motion.

Do not carry long handled tools or lengthy material near the moving flywheel of an engine.

When using starting bar, stand clear. The pull on the bar shoud be exerted by lifting and not pushing downward. The "kick back" when lifting merely bends the fingers, whereas in exerting pressure downward. injury to the arms or body may result.

14. Gas Hazards.

Gas hazards are as follows:

a. Asphyxiation
b. Poisoning
c. Explosion and fire.

Most gases give warning of their presence by their characteristic odor. Pure carbon monoxide, however, is colorless, odorless, tasteless and non-irritant, and usually renders the victim unconscious without warning. The gas is commonly found in automobile and gas engine exhaust and in gas from coal-heating furnaces. One per cent. (1%) will kill a man in a few minutes.

Acetylene gas (used in Prest-0-Lite torches) when mixed with air in proportions of 2.5% or greater is highly explosive.

15. Gas Tanks-High Pressure.

Acetylene, oxygen and other high pressure tanks should not be stored in strong sunlight or near heat sources, as the increase in pressure may cause the fusible safety plug to blow. Store also where they are not likely to be struck by passing or falling objects.

Should a leak occur in a cylinder, take the cylinder into the open air and exhaust the gas slowly. Close the valves, replace the cap and notify the foreman immediately. Also ventilate room where cylinder was stored.

Never use gas from high pressure cylinders without reducing the pressure through a regulator attached directly to the cylinder. Be sure that the regulator adjustments are closed (unscrewed on the lead burning outfit) before opening valve on the tank. Open the valve slowly.

Use no oil or grease on regulators, valves or other gas equipment.

Oxygen containers particularly must be absolutely free from any traces of oil or any other combustible substances. Oil in contact with oxygen under pressure may create an explosion hazard.

See Handbook No. 20 for safe method of using and caring for high pressure gas tanks.

16. Clothing.

The special clothing specified in Handbook No. 20 should be used when working around storage batteries or electrolyte.

Gloves, loose sleeves or other loose clothing are a definite risk around moving machinery.

Working clothes should be hung only in a place provided away from inflammable material and where the air will circulate freely about them.

Oily rags or waste shall not be left in working clothes or lockers.

The use of celluloid eye shades is prohibited. They are both a fire and a personal risk.

17. Fire Hazards-General.

NOTE : Handbook No. 12 covers in detail the placing and use of fire fighting equipment, the handling and storage of inflammable material and other requirements for fire prevention. The "Safety Code" covers only the broad requirements of fire prevention.

The safety of our employees and those of the Telephone Company, and the protection of its property and its service to the public, de-

pend on the thoroughness with which you follow the precautionary methods specified for fire prevention in Methods Handbook No. 12.

Fire protection apparatus shall be accessible at all times.

The installer shall observe the Telephone Company's rules with respect to fire prevention.

Stairs, fire 'escapes and fire exits shall not be obstructed in any way.

Portable lamps, torches, soldering irons, etc., are more than ordinary hazards and care should be used in handling.

Wax pots shall be installed according to the approved standards. See Handbook No. 12 and Wax Heating Bulletin. Wax shall not be allowed to accumulate around the pot and the specified fire equipment shall always be within easy reach.

Cheesecloth or ordinary muslin or wood less than 7/8 inch thick is prohibited for use as protective material because of the fire risk.

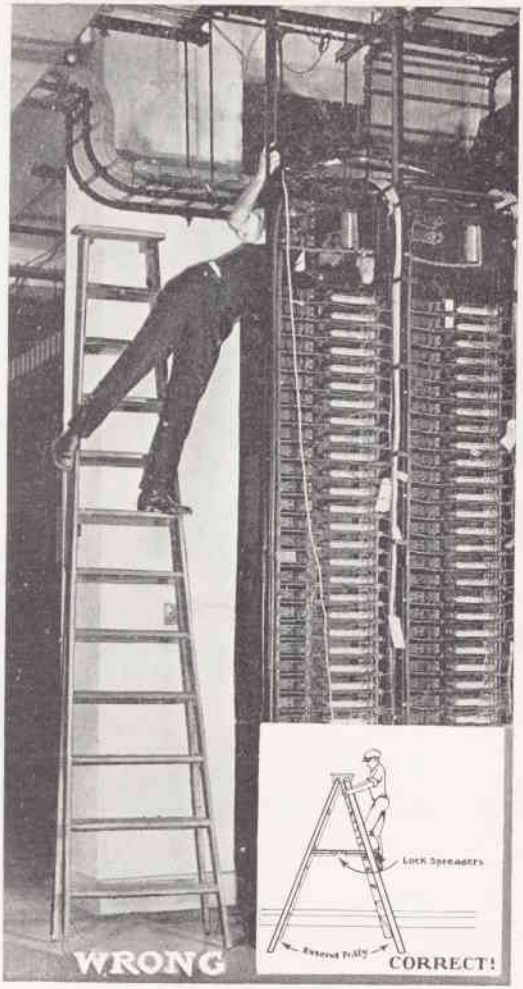
Canvas, fireproof muslin, fibre, asbestos millboard, sheet iron or wood of suitable thickness shall be used wherever building and equipment protection are necessary.

Crates or cases of flimsy wood which expose combustible material shall be unpacked as soon as received.

Packing material and empty packing cases shall be disposed of at frequent intervals, and shall never be left in the building overnight.

ACCIDENTS ARE CAUSED— THEY DON'T HAPPEN

Think of the Other Fellow's Safety



Locked Spreaders Make Safe Ladders

Doors through fire walls shall not be blocked open by the installation of temporary wiring or building protection, but shall be free to close at all times. Windows, fire shutters, etc. removed to facilitate the hoisting of material, shall not be left out overnight.

18. Fire Fighting.

If a fire occurs, quick action is essential. Every man should know the location and method of operation of tire fighting equipment. Time lost in searching for or learning to operate such equipment may mean disaster.

The location of fire alarm boxes should be noticed. If it appears that a fire will require outside aid, no time should be lost in turning in an alarm, but do not unnecessarily summon the public fire department.

When a fire occurs in apparatus, do not use water or a liquid extinguisher, except as a last resort. Sand is the first agent that should be employed to put out fires, except where carbon dioxide (gas) fire extinguishers are provided. Sand should be thrown with force onto the blazing equipment. Where carbon dioxide gas extinguishers are furnished, all men should be instructed in their use.

For fires in oil or beeswax, use sand or gas extinguishers. Do not throw water or chemical liquids into such fires, as they will only spread the fire without extinguishing- it. Liquids thrown into a blazing wax pot may cause an explosion.

Asbestos blankets folded and stored in cylindrical cans are provided to smother a fire, to prevent incipient fires from spreading, or to

protect the hands and clothing of a person when snuffing out a fire. Asbestos gloves of the gauntlet type are provided for use in snuffing out small fires with the hands or reaching into or removing blazing apparatus.

If sand fails to extinguish the fire in equipment, water from the fire pails may be employed, except on oil or wax fires.

Chemical extinguishers are provided for use on fires that cannot be controlled by the previous methods. Chemical extinguishers operate immediately after turning the tank upside down. To stop the discharge, turn extinguisher right-side up. It is possible to do injury to the skin and eyes of a person with the contents of these chemical extinguishers.

Standpipe and hose equipment are provided for use only as a last resort when fire cannot be brought under control by previous methods. Keep kinks out of hose when unreeling, and keep someone at standpipe to turn water on and off as directed.

19. Fire Protection Panels.'

Asbestos or metal fire panels in switchboard sections shall be replaced every night, at lunch hour, and each time a section is left unattended, when there is battery on the board. If panels cannot be replaced, install asbestos millboard over the cord shelves so as to project two inches beyond the back edge.

20. Paints and Oils.

The requirements covering the storage and use of paints, oils, varnishes, shellac and other highly inflammable materials are covered in

detail in Handbook No. 12 under the sections covering "Fire Prevention" and "Metal Lockers and Furniture." Such inflammable material shall not be stored within the building unless so approved by the Telephone Company.

Where it is permitted to store within the building shellac pots, paint pots and paint brushes which are used daily, steel tool chests or metal lockers with self-closing doors shall be used. These shall be kept at least 3 feet from any apparatus or inflammable materials, and must be free of all rubbish. The covers or doors shall be kept closed at all times.

Gasoline, benzine, or any other unapproved inflammable oils shall not be used on any job.

21. Smoking.

The smoldering cigarette has caused much loss of life and property. No smoking is to be allowed in central office buildings except as permitted in special recreation or lunch rooms. Use only safety matches.

22. Protecting Equipment.

Handbook No. 12 covers in detail the methods of protecting equipment so as to avoid "personal hazards" and "fire hazards."

Never use burlap, muslin, cheesecloth or fireproof muslin for equipment protection nor lumber less than 7/8 inch thick. Use lumber or canvas as specified.

Any sharp corners or projections on superstructure, cable racks, frames, scaffolding, etc., which offer accident hazards should be protected with canvas whenever this will not interfere with installing operations.

Many of the protections and guards, both those supplied as installation devices and those furnished on the equipment, are designed to protect the workman (installer as well as Telephone Company maintenance man) and should be in place at all times except when the protected part is being worked on.

23. Temporary Lighting.

Temporary lighting shall be installed to conform to the National Electrical Code (see Handbook No. 17) and the Rules of the Local Authorities having jurisdiction.

Handbook No. 12 covers in detail the standard equipment for temporary lighting and approved methods for installing and using this temporary equipment.

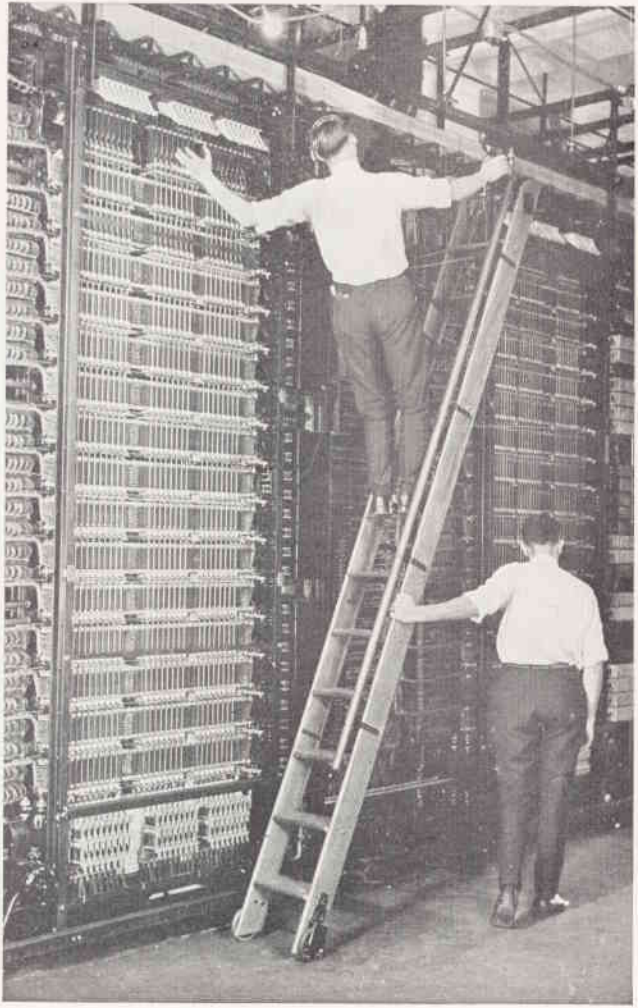
Fusing at the distributing panel boxes shall be in accordance with Handbook No. 12. Particular attention is called to the requirement that the neutral side of the circuit must not be fused. It should be permanently strapped. In main circuits, 25 to 100 ampere cartridge type fuses may be used, depending upon the type of box. In branch circuits, 15 ampere plug fuses only may be used. Using fuses too large for the carrying capacity of the circuit will permit overloading and constitute a fire hazard.

Before connecting such tools as pipe threaders, power hacksaws, vacuum cleaners, electric drills and hammers in branch circuits make sure that the total load will not exceed the allowable load as defined in Handbook No. 12.

It is advisable to have a lamp burning in all dark aisles as a matter of safety.

THE A-B-C OF SAFETY
ALWAYS BE CAREFUL

A Point to Remember—"Carry Tools Safely"



Look Up Before Moving Ladders

IT PAYS TO STOP AND THINK

Portable lamp leads should not be hung from cabling or local forms.

Special portable lamp equipment may be obtained from the storeroom for clamping on the vertical channels of machine switching frames.

Portable lamp leads with "fibre" guards are to be used on power work where there is danger of short circuiting terminals.

At the lunch period and at the cose of each working day all temporary lighting circuits shall be cut off at the fuse box.

Frequent inspection of the temporary lighting equipment should be made to insure that the requirements are met at all times.

24. Testing.

New work frequently contains circuit faults which if not properly cared for may start fires. The following precautions should be observed during the "test out":

(a) In the new offices where no equipment is in service, open the main battery discharge circuit fuse at noon and night.

(b) In operating offices where main circuits cannot be opened, fuse only those circuits being placed under test. In cases of additions to working offices, fuses on circuits under test shall be removed at night.

(c) Use only approved fuses. Strap wire, solder, doubling fuses, grouping several circuits under one fuse are dangerous practices. Test wires shall be fused at the ***source*** not to exceed *2* ***amperes*** and should be disconnected when not in use.

Unopened cases of material **shall be stored in** an orderly manner, with aisles at frequent intervals and ample space for each aisle. Piles shall be kept of uniform height and shall in no case reach within 2 feet of any ceiling or mezzanine floor.

Do not locate material within 6 feet of any gas heater, furnace, or soldering stove, nor within 5 inches of radiator or piping.

Burning packing material in furnaces or bonfires around the premises is forbidden.

Combustible wire scrap of sufficient value to justify collecting shall be deposited in standard covered metal safety waste cans.

Sweepings shall be kept in metal safety waste cans which shall be emptied daily or oftener, and which shall be kept closed.

Unless empty, alcohol or kerosene torches shall be stored outside the building. They shall be filled, lighted and brought to blasting temperature in a safe place. Such devices shall not be kept on window sills or fire escapes in the building overnight, nor shall they be packed for shipment until all fuel has been drained out.

Gas soldering furnaces, except where they form part of the permanent equipment in the building, shall not be used in preference to electric soldering equipment.

Where a portable furnace is used it shall be located at least 3 feet from any combustible material and the area around the furnace should be free from litter. All gas shall be cut off at permanent piping at noon and at quitting time.

HEALTH HINTS .

SECTION TWO

YOUR HEALTH

Our forefathers were proud of the fact that they were considered healthy and we all can remember the hardy old fellow who boasted at the age of 50 that he hadn't "been to the doctor" in twenty years and still was able to chop wood for the breakfast fire.

Modern life, however, and the more congested city life, together with the less active indoor work in which most of us are engaged, have changed the public viewpoint considerably. We now recognize the necessity of careful thought about our health and the advantage of "going to the doctor periodically" for an examination or inspection of our physical condition in order to prevent future illness. The benefits of this practice have already been demonstrated and no longer is a man of 50 considered old.

Continued good health keeps us young and consequently lengthens the period in which life can be enjoyed to the utmost in addition to actually increasing the number of years we live.

Our Friend the Doctor.

Prominent medical authorities agree that it is easier to stay healthy than to recover from disease and that by using ordinary common sense in the care of our health the majority of cases of sickness can be eliminated. Numerous diseases can be prevented or combated by the resistive defences of nature, a resistance force strengthened by exercise and careful living. What the physician does is the small

end. What nature does, aided by what you do to help nature, is the big end of it. Eight out of every ten persons in this country who are sick, are sick because they have not observed some of nature's simple laws.

In the following pages no attempt has been made to establish a definite set of rules with the idea of saying "Do this and be healthy." Rather than establish rules for your guidance, it is hoped that the discussion of this health subject will interest you sufficiently so that you will study your own health and set up your own rules with the advice and guidance of your family physician.

A Good Healthy Start in Life.

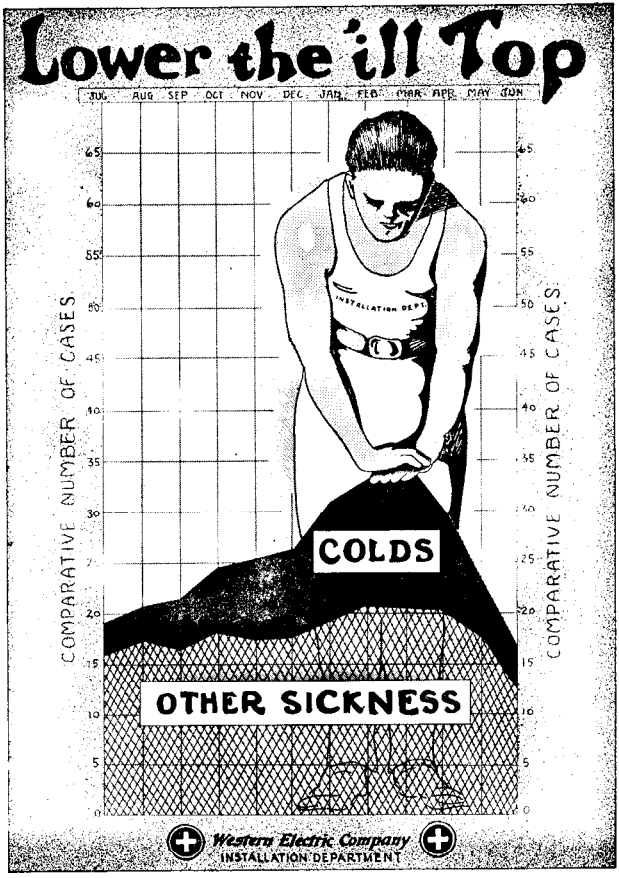
About 98% of all humans are endowed with a healthy body and consequently have the "edge" on sickness at the start of life. Why should anyone become ill? Primarily because some of the laws of health have been broken.

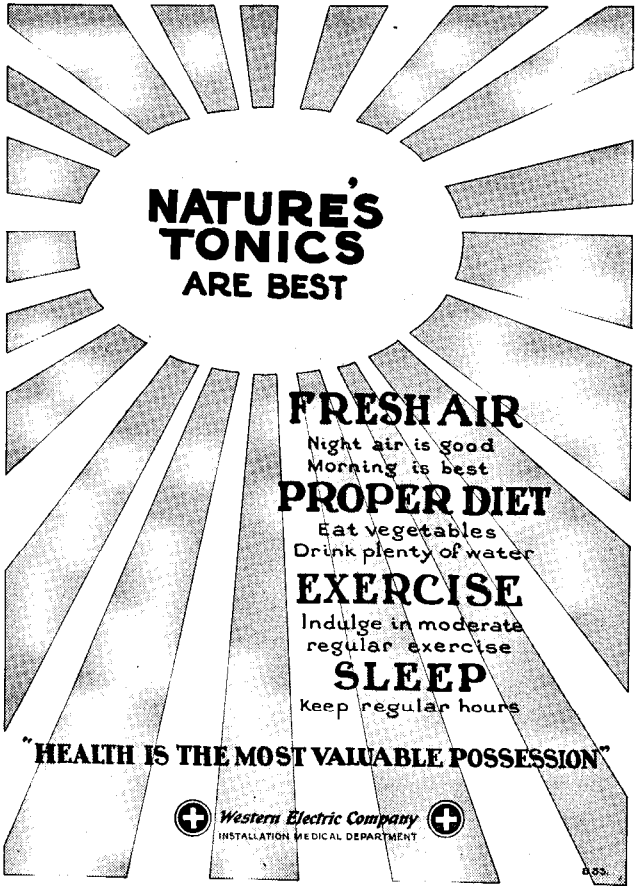
The Laws of Health.

There are laws governing health just as there are laws of state, laws of science, laws of motion, laws of lubrication, and so on innumerably.

When the farmer hears his wagon squeaking he knows that some grease must he applied at once or the squeaky bearing will be worn and it will be unsuited for future use. If he does forget to apply the grease and ruins a bearing his neighbors are inclined to doubt his ability as a manager.

A man arrested for damaging his neighbor's fence gets little sympathy in court. We are inclined to say he should have known better.


Lower the 'ill Top
JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN
COMPARATIVE NUMBER OF CASES
COMPARATIVE NUMBER OF CASES
COLDS
OTHER SICKNESS
Western Electric Company
INSTALLATION DEPARTMENT


NATURE'S
TONICS
ARE BEST
FRESH AIR
Night air is good
Morning is best
PROPER DIET
Eat vegetables
Drink plenty of water
EXERCISE
Indulge in moderate
regular exercise
SLEEP
Keep regular hours
"HEALTH IS THE MOST VALUABLE POSSESSION"
Western Electric Company
INSTALLATION MEDICAL DEPARTMENT
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When sickness comes, our sympathies are extended to the afflicted one as well as those of the immediate family with no reference to responsibility for observing the laws of health.

The Law of Fresh Air.

Fresh air is necessary to life and health. Defying this law by sleeping with the windows closed, in an overheated room or with not enough space for the minimum air requirement per person may result in sickness if continued for any length of time. The power to combat disease is lowered and often a siege of some respiratory disease results that is hard to overcome.

The Law of Sunshine.

Sunshine is a very important law of health. It is an essential aid to health and the prevention of disease all through life. Get out into the sunshine as much as possible. The only caution necessary is to be careful during extremely hot weather and avoid sunstroke or excessive sunburn.

The Law of Proper Diet.

Eating the right kind of food in the right kind of way is the first law of health. This law has a very severe penalty for disobedience -the punishment is minor, however, for the first offense, but increases in severity if the health crime is repeated continuously. Ample warning is given to those violating the law and, if heeded, no serious results will be felt. One of the commonest violations of this law is overeating. Obedience, on the other hand, is not difficult, as the normally healthy person

can eat most foods without ill effects. In other words, the average individual needs no special diet prescribed by a doctor. A fairly evenly balanced diet of simple foods is a great asset in continued health. Such a diet list is shown:

¼ meat or fish
¼ fresh fruit or fresh vegetables (raw)
¼ fresh fruit or fresh vegetables (cooked)
¼ whole grain products and water in copious quantities.

Temperance in eating probably is as good a rule as any to observe in these clays of modern rich foods so temptingly displayed in hotels, restaurants, etc., if we expect to keep within this important health law of diet.

The **Law of Sleep.** '

This is a beneficial health law **that** often **is** broken. Sleep is as necessary to health as proper eating. It is a restorative and, taken as required, builds up and renews energy in the body. By recharging and re-energizing the cells of the body and aiding in the elimination of waste it builds for good health and prolongs life.

The Law of Recreation.

Exercising the body builds muscle and tissue and keeps them in a good healthy condition. Not only are the arm and leg muscles developed by exercise, but in addition the important unseen muscles of the heart, the stomach and those assisting the digestive organs, as well as many others, get their share of reflected development. This all greatly aids keeping the human machine in good running order.

It is easy to observe the health laws. Obeying them brings its own reward. Forming good health habits is one good way of making observance of the health laws easy. It does not pay to defy any good law, but it is particularly unprofitable to disregard the laws of health.