



DANGER CAN BE AVOIDED  
CAUTION PREVENTS ACCIDENTS  
GO ABOUT YOUR WORK WITH SAFETY

SAFETY PRECAUTIONS  
FOR  
RAILWAY SHOPMEN

BRITISH  
RAILWAYS  
1954

NAME.....

CHECK OR CLOCK NO .....

### FOREWORD

ACCIDENTS can only be prevented by constant care and vigilance based on experience. The purpose of this Booklet is to pass to you for your protection the experience gained by others. Remember all the safety measures taken by the authorities cannot overcome carelessness.

So read, mark, and learn—and then carry out the advice given to you. It may be the means of saving you and those around you much pain and suffering, with the possible loss of an eye or limb or even worse.

This Booklet does not cover every source of accident and danger, but every case mentioned is based on accidents that have occurred.

#### (16) Obstructions

Do not leave obstructions foul of the lines or on footways in shops or yards. You may cause one of your mates to be seriously hurt due to your carelessness.

#### (17) Ladders, Planks, Trestles and Scaffolding

Make sure that the equipment is in sound condition, that it is of the right type, and that it is placed firmly and securely before using. Beware of fouling electric cables. When climbing ladders, use staves as hand holds. Use only ladders, planks, trestles and scaffolding which are provided for the purpose. Do not load materials on these unless you are sure they will not fall and cause injury.

If you have to go up on to roofs, do not leave permanent walking ways without using portable roof ladders or crawling boards reaching across the roof supports, as roofs may be of light construction, with glazing or asbestos sheeting, none of which is strong enough to carry your weight.

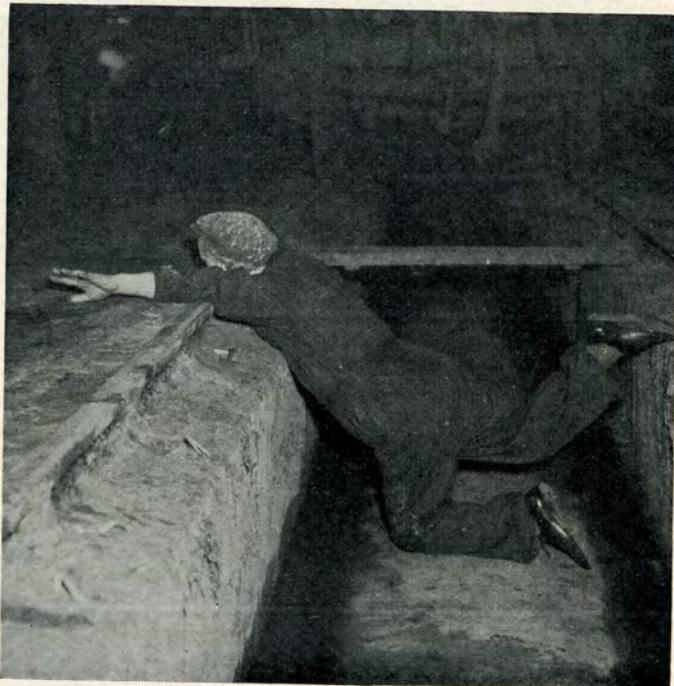


UNFIXED AND NOT SAFE

FIXED AND SAFE

### (18) Pits

A sprained ankle or wrist or a broken rib can all too easily result from jumping over pits. Do not do it—walk round, or use a pit plank.



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### (19) Excavations

Do not stack materials near the edge of excavations; the earth may collapse due to rain or other reason and it may cause injury to anyone working below.

### (20) Before Crossing Any Line, Look in Each Direction

Before crossing any Line or Roadway where vehicles run, look in each direction; it is just as dangerous not to do this on Railway premises as it is on the highway.

Staff are prohibited from walking upon the line or crossing the rails (except at a level crossing) unless they are required to do so in the performance of their duty or are proceeding to or from their work by a route permitted by the Railway.

Where you cannot use a crossing, step over the rails and not on them. Keep to paths and do not walk along in the four-foot, because it is highly dangerous.

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## MACHINERY

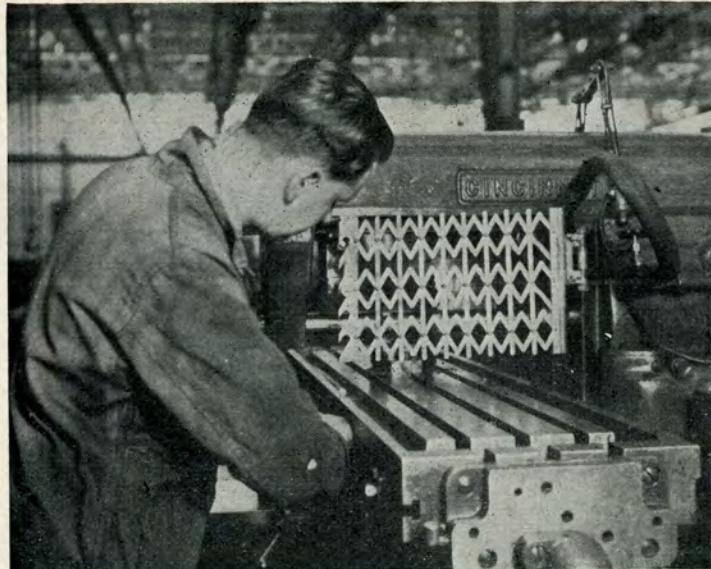
### (21) Guards for Power Saws

Guards are provided for the protection of the hands of the operator. Use the Guards and see that they are properly adjusted to the work to be done.

In the case of circular saws, see that the riving knife is always in proper position.

### (22) Push Sticks

Feed the wood past the saw by push stick. Do not risk injury by using your hand.

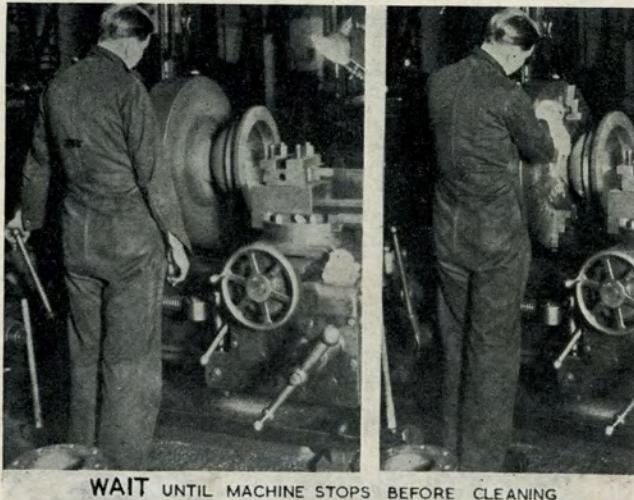


### (23) Guards on Machinery

Guards and other appliances are provided for the specific purpose of avoiding accidents. It is commonsense to use them. Fencing guards must not be removed or kept off while the machinery is in motion. Fencing that may have been removed whilst a machine is stationary must be replaced before it is set in motion.

#### (24) Oiling, Cleaning or Adjusting Machinery when in motion

Do not try to oil or clean or adjust moving parts of any engine, crane, or any other machine in motion. You may get hurt and it is no good regretting it afterwards.



**WAIT UNTIL MACHINE STOPS BEFORE CLEANING**

#### (25) Interference with Machinery

Confine the use of machinery, plant and tools to those which you are authorised and competent to operate.

Report defects to your supervisor.

You may hurt yourself or cause a mate to be injured if you interfere with machinery.

#### (26) Cranes, Traversers, Capstans and Lifts

When operating a crane, traverser or capstan, or using a lift, see that you do not endanger yourself or persons nearby, and always conform to any notices affixed thereto.

Only one person should be authorised to give the signal at any one time, and these signals must always be visual.

#### (27) Grinding Small Articles

Keep your hands off the grindstone, or wheel, and do not attempt to grind small articles that cannot be firmly held.

### **(28) Portable Grinding and other Machines**

Accidents have occurred due to portable grinding machines or other portable tools not having been properly shut off. Make sure that this has been done before moving or leaving the appliance.

### **(29) Grinding Wheels**

When grinding wheels are chipped, damaged, or untrue, advise your Supervisor and have the wheel trued up. Rests in front of wheels should always be kept close up.

Machines should not be used without the guard which is provided, and should be used in such a manner that sparks are directed away from the operator.

Grinding wheels should be fitted to machines only by men specially detailed for the work who have been properly instructed in the method to be followed.

Always use goggles for grinding operations.

### **(30) Loose-Lifting Tackle**

Always use the correct type and capacity of loose-lifting tackle, check it over before using, and report any defect immediately.

### **(31) Suspended Loads**

Do not unnecessarily walk under any load suspended from a crane hook. In no circumstances must staff walk under any load suspended from a magnet.

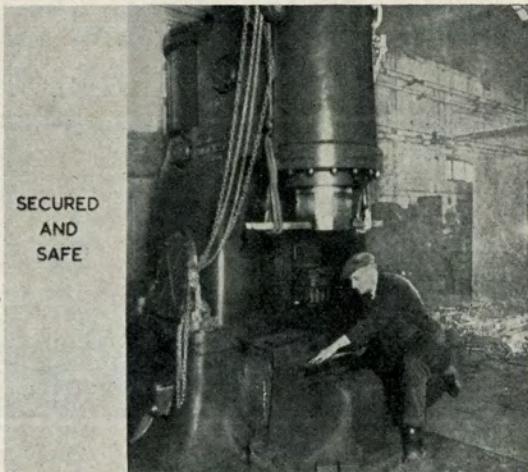
### **(32) Moving Belts from one Pulley to another**

Do not use your hand to move belts from one pulley to another. Use a pole or stick.

### (33) Power and Drop Hammers

If you work in connection with power or drop hammers, do not put your hands or any part of the body between the hammer head and block. Use tongs, or else satisfy yourself that the hammer head is properly secured or lowered on to the stop block or prop provided.

Hammer Drivers must not lower the hammers before getting the signal from the responsible operator, and they must then satisfy themselves that everything is clear.



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## TOOLS AND MATERIALS

(34) **Use of Unfit Materials, Tools or Machines**  
Promptly report any defect in any materials, tools or machines to your Supervisor—use of any defective material, tools or machines may involve serious accidents. Do not attempt to remedy defects in tools unless you are authorised to do so.

### (35) Chipping

When chipping any kind of metal, care should be taken to prevent the chippings from flying in the direction of other persons.

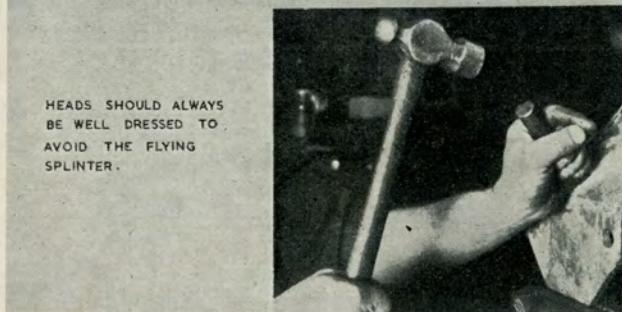
### (36) Cold Chisels and Sets

Special staff and apparatus are necessary to harden these tools.

Do not use chisels or cold sets with burred-over or mushroomed heads. Far too many eye accidents occur due to worn chisel heads being used.



CHISEL HEADS SHOULD NEVER BE ALLOWED TO BECOME RAGGED AS THIS MAY RESULT IN THE LOSS OF AN EYE.



HEADS SHOULD ALWAYS BE WELL DRESSED TO AVOID THE FLYING SPLINTER.

### (37) Striking a File with a Hammer

Using a file as a punch is dangerous. Pieces of the file sometimes fly off and an eye may be lost.

## **GENERAL**

### **(1) First Aid and Reporting of Accidents**

Injuries which seem trivial when they are received sometimes develop into permanent disability through septic poisoning.

On meeting with an injury, however small, go at once for First Aid treatment, even if you do not think it really necessary.

On meeting with an accident, it should at once be reported to your Supervisor.

### **(2) Safety Regulations**

The prime purpose of all Safety Regulations is to help in protecting you from personal injury.

There are certain Safety Regulations required by the Factories Acts which are made for the protection of staff against injury or ill-health, and a summary of these is posted on Notice Boards, to be read by the staff.

Play your part by reading the Regulations provided for your particular job and always keep to them.

### **(3) Conduct**

Many accidents occur through thoughtlessness. It is in your own interests for you always to be alert and keep your eyes open, and not to act in a manner likely to cause injury to yourself or others.

### **(4) Quarrelling, Playing, Throwing Missiles**

Avoid foolish behaviour. Accidents and injuries frequently occur as the result of playing, quarrelling, or throwing missiles.

### **(5) Moving of Articles and Material**

In the course of your work, do not throw articles about or allow them to slip in a manner which may endanger others.

### **(6) Nails or Screws**

Do not leave timber with protruding nails or screws lying about.

#### (38) Use of Sharp-edged Cutting Tools

Always see that the cutting edge of the tool points away from your hands or body—no matter what cutting tool you are using or material you are cutting.

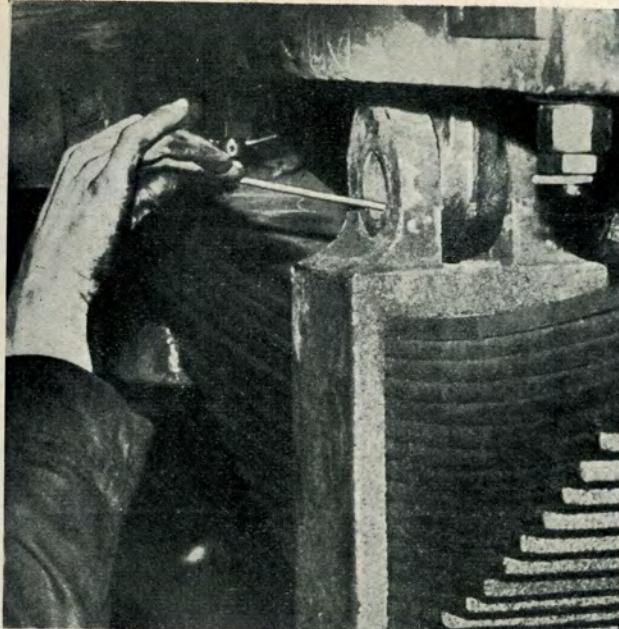
#### (39) Removing Borings

Never try to remove borings, drillings and turnings by hand, or the hand may be cut or trapped. Always use a brush or stick. Remember also that borings, drillings and turnings are apt to stick in, or cut the fingers. Use of a brush or stick avoids such cuts.

#### (40) Ascertaining if Holes in Two Pieces of Work are Flush

Do not in any circumstances use a finger to feel if holes in any metal or wood are clear or in line or to clean holes or thread gauges. Use a metal rod, drift, bar or pin.

You may do it without anything happening a few times, but far too many fingers are lost this way.



**USE A METAL ROD &  
SAVE YOUR FINGERS**

#### (41) Striking Hardened Steel

A soft hammer should be used, otherwise chips may fly off and an eye be lost.

#### (42) Use of Double-handed Saws

In starting a two-handed cross-cut saw, a block of wood is better than a hand for guiding it.

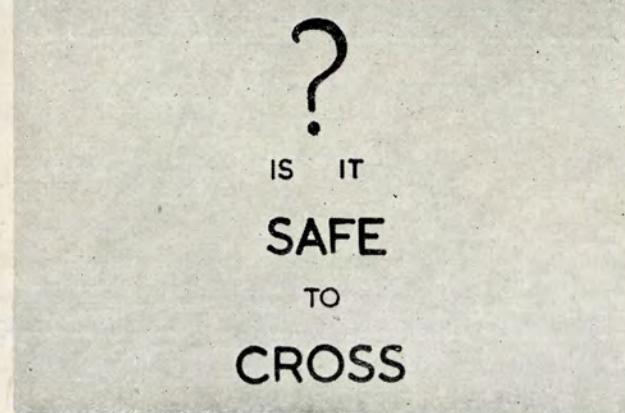
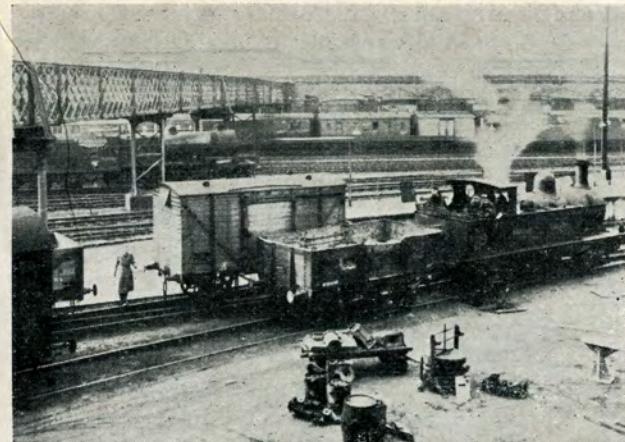
#### (43) The Care and Use of Blow Lamps

Use only the correct fuel in a blow lamp, and follow the maker's instructions for starting up. Remember it is dangerous to place a blow lamp on or near a stove or to use one blow lamp to heat up another. Special knowledge is required to repair a blow lamp so that it will work efficiently and safely. Do not interfere with the safety valve or other working parts, but have the lamp sent to a repair depot.

### VEHICLES

#### (44) Standing or Crossing in front of or between Vehicles

Do not go between vehicles or between vehicles and buffer stops or other structure until you are sure that the vehicles are not about to be moved. Do not crawl over or under vehicles and avoid passing between vehicles and walls unless there is enough room.



**(45) Moving a Vehicle (in Repair Shops, Roads and Yards)**

Do not move a vehicle without first satisfying yourself that no one is engaged in any work about the vehicle or upon any other vehicle which may be affected by the one being moved.

**(46) Work carried out on Vehicles on Lines Outside Shops**

It is very dangerous for men working on or beside vehicles on running lines outside the Shops to go under such vehicles without taking precautions by fixing targets or other authorised danger signals.

Use a wheel scotch when working underneath a vehicle. It only needs a vehicle to move slightly to trap you. Keep your feet and legs clear of the wheels. Make a scotch one of your indispensable tools.

Use suitable packings and trestles when lifting vehicles, wagons or coaches.

Care should be taken when entering or leaving vehicles. Accidents happen through treading on insecure objects nearby.

**(47) Capstan and Traverser Ropes**

Stand clear of capstan and traverser ropes when they are in use.

**(48) Wagon Doors**

Stand clear when opening wagon doors. Always fasten wagon doors securely to avoid possible injury to persons who will later have to open them.

You should satisfy yourself that the wagon doors are secure before work commences. Do not run the risk of wagon doors dropping down whilst you are working on or beside a wagon.

**ELECTRICAL**

**(49) Portable Electrical Hand Lamps and Tools**

Do not interfere with Portable Electrical Hand Lamps and Tools.

Authorised staff are provided to carry out inspections, repairs, extensions or modifications.

Any defect, including frayed electric cable, must be reported to your Supervisor immediately.

Never leave portable tools running.

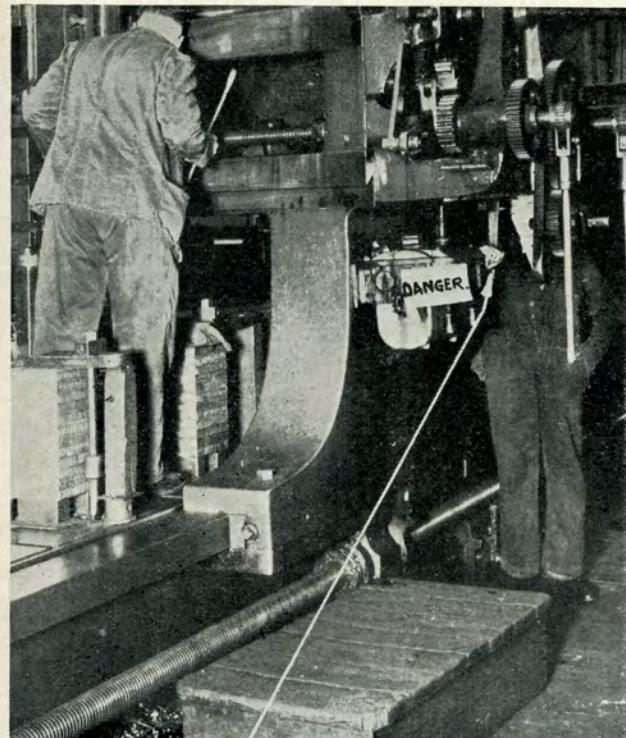
### (50) Electrical Switchgear

Electrical gear should be treated with great respect. Unless you are authorised to do so, do not interfere with any electrical apparatus.

No person whatsoever should operate any switch to which is attached a red 'DANGER' board, or 'CAUTION' notice.

Operators of electrically-driven machines before handling the switch should see that their hands are perfectly dry.

When any work has to be done on or in such proximity to the cables or switch-gear or electrical machinery that there is danger of accidental contact being made, the permission of your Supervisor should be obtained to have the current cut off the section. Before commencing the work, the appropriate isolating switches must be opened and proper precautions must be taken to prevent switch or switches being closed before the work is completed.



LEAVE THIS SWITCH ALONE

### (51) Inserting or Withdrawing Electric Lamps

To avoid danger from burns, shock or burst lamps, always switch off before inserting or withdrawing an electric lamp from its holder.

### (52) Oxygen and Acetylene Cylinders

The greatest care must be exercised in handling all cylinders containing gas under pressure. Acetylene, propane and pyrogas cylinders should be stored and used (preferably strapped) in a vertical position. Keep oil and grease away from cylinder fittings and welding hose. Do not store cylinders in 'hot spots', keep away from direct sunlight, boilers, radiators, etc.

Leakage of gases is wasteful and dangerous—do not use leaking hose or bad connections.

Do not change cylinders near naked lights.

Open and close valves slowly.

Never lift cylinders with rope, magnets or sling chains.

When lifting cylinders by crane, use a cradle.

## FIREs

### (53) Fires on Electric Switchboards

Great care must be exercised in dealing with electrical fires or fires adjacent to electrical equipment.

Water, soda-acid or foam types, etc., of extinguishers must not be used until a responsible person has satisfied himself that the current has been switched off. Hose-pipes must not be laid on the 'live rail' or water played thereon, or on electrically-charged overhead wires.

In all cases, except where machinery or instruments are involved, sand or earth may be used.

### (54) Burning Gas Cylinders

Fire extinguishers should not be used on heated or burning gas cylinders. Play water on the cylinders from a safe distance.

### (55) Clothing

Care should be taken to see that articles of clothing and other similar material are not hung too near to radiators, stoves or fires as a precaution for the prevention of fires.

#### (56) Smoking

Dropping a lighted match after lighting a pipe or cigarette, or dropping a lighted cigarette end, may cause a fire. Lighted matches must be put out when used. In no circumstances must you smoke in any of the woodworking or other Shops where it is prohibited. The reason for the prohibition is the special risk of fire by reason of the inflammable nature of the materials used.

The use of naked lights, except by skilled maintenance staff, and smoking in the vicinity of electric storage batteries, is prohibited owing to the danger of explosion.

#### (57) Welding and Cutting

There is always a fire hazard when welding or cutting operations are carried out. Make sure no sparks or hot particles are left to smoulder after the cutting or welding operation has been completed.



FIRE HAZARDS  
TO BE AVOIDED

#### (58) Working in Tanks, Receivers and Boilers

If you have to work inside a tank, receiver or boiler, make sure people know you are inside.

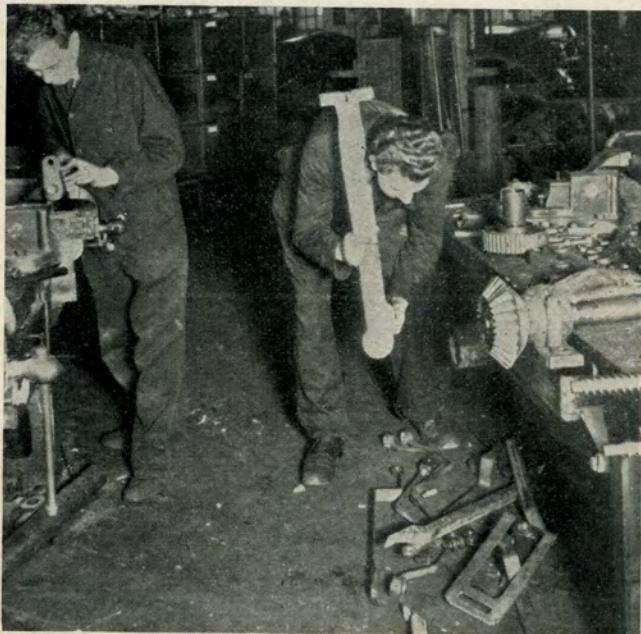
*This Booklet is issued to help you to protect yourself from injury. It must be kept in your possession and you should keep yourself familiar with the advice it gives. You will be asked to produce it for inspection from time to time.*

*On receipt, you should insert your name and clock or check number in the space provided on the front cover. You should also complete the separate acknowledgment form and this will be attached to your employment papers.*

*If the Booklet is lost you should notify your Supervisor immediately.*

### (7) Dropping or Lowering Articles

Care should be taken when dropping heavy articles from the shoulder that they do not fall where they are likely to rebound on the legs or cause other pieces of material to fly.



### (8) Long Hair

Countless serious accidents have occurred through long hair being caught in machinery.

You must either—

see that your hair is maintained at a sensible length—and this is always best !

or

always wear a suitable cap when working near to moving machinery.

### (9) Handling Panes of Glass and other Sharp-edged Material

Hands should be protected when holding panes of glass and other sharp-edged material to prevent cutting.

### (10) Respirators

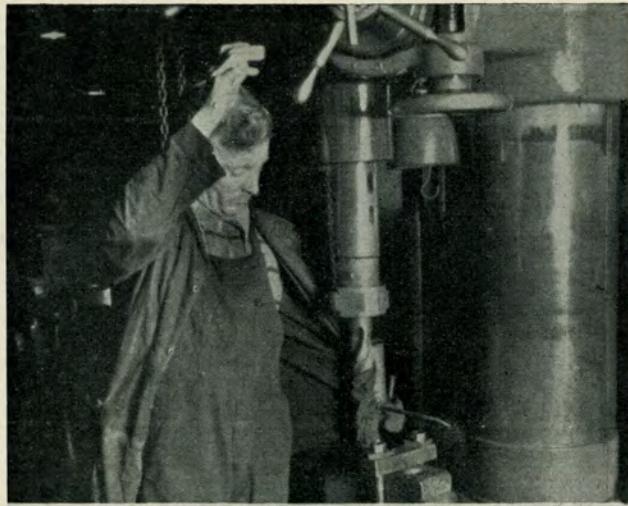
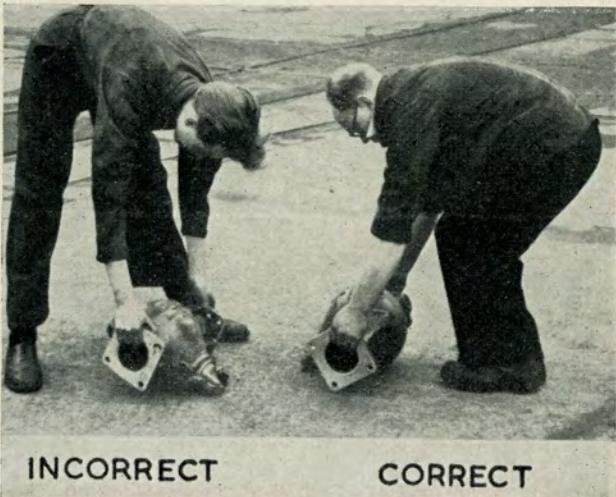
British Railways provide Respirators and new pads for them on application to the Supervisor. It is better to keep out of your system dust or fumes. Let your maxim be 'Use a respirator'; keep it clean; change the filter pad at least once a day.

### (11) Lifting Articles

When lifting a heavy object from the ground, keep the legs together and obtain leverage by slightly bending the knees. If the weight is beyond your capacity, obtain assistance.

Many ruptures are caused through the legs being wide apart while lifting.

Anyone who has had the misfortune to incur a rupture knows only too well what a physical drawback it is.



THE UNBUTTONED JACKET  
GETS CAUGHT

### (12) Clothing

Serious accidents result from unsuitable clothing worn by staff operating lathes and other machines.

You are advised, in your own interest, against wearing loose-fitting clothing whilst operating any kind of machine. The fronts of jackets should be buttoned, or fastened securely, and the cuffs fastened round the wrists.

### (13) Hand Rails

Hand Rails are provided for assistance and guidance, but they are not intended to sustain loads. Do not attempt to use Hand Rails to take the weight.

### (14) Eye Protectors

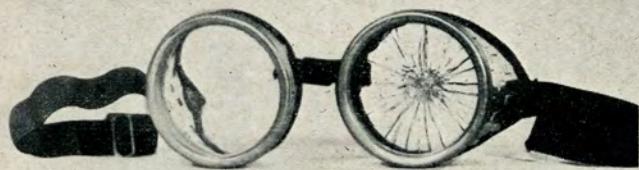
Take every precaution to safeguard your eyesight which is too valuable to risk; use goggles whenever there is the slightest danger to the eyes from flying particles.

Goggles can readily be obtained on application to your Supervisor, and a pair will be provided for your personal use if you so desire. Don't leave them in the cupboard until it is too late !

To overcome the difficulty of lenses 'fogging', moisten the finger and apply a film of soap to the lens, wiping off with a clean, dry cloth.

Do not look directly at welding flames without the special eye protection provided

EYESIGHT IS PRECIOUS AND CAN EASILY BE LOST—TAKE EVERY CARE.



THE GOGGLES WERE DAMAGED  
BUT THE EYES WERE NOT

### (15) Leaving Work

When time for leaving work arrives, you should walk to the exit. If you run, you may possibly get out a little earlier, but you certainly run the risk of falling over objects that may be in your path, falling owing to greasy or slippery surfaces, or colliding with other men.

