TOOLS

USE AND CARE OF STEPLADDERS

1. GENERAL

1.01 This section covers the use, care, and maintenance of stepladders and includes safety precautions to be followed in their use.

2. DESCRIPTION OF STANDARD STEPLADDERS

2.01 Two types of stepladders are:

(a) The Mechanic's

(1) Has steps on the front section and oval rungs on the back section. This permits working from either section.

(b) The Building

(1) Has lightest construction.

(2) Has round rungs on the back section which are not intended to carry weight.

(3) Has a pail rest in the rung section to adapt to cleaning operations.

3. SELECTING LENGTH OF STEPLADDERS

3.01 Select a ladder long enough to work while standing:

(a) No higher than two steps from the top if the ladder is over 48 inches in length.

(b) No higher than one step from the top if the ladder is 48 inches or less in length.

4. SELECTING FOOTING FOR STEPLADDERS

4.01 Do not use stepladders on soft or uneven footing unless you take precautions to prevent tipping by blocking the legs or lashing the ladder in position. If necessary to block the legs, use a strong broad support that will not shift or break under load.

4.02 Stepladders may be used safely on moderate slopes if placed so the direction of slope is downward from the step section to the rung section. When necessary to erect a stepladder under such conditions, examine the footing for slipperiness to insure against the ladder sliding. If there is any doubt as to its stability, another workman shall steady the ladder.

4.03 Place stepladders, where possible, so that it will not be necessary to extend your body beyond the sides. If this is impossible, take additional precautions, such as having another workman steady the ladder.

4.04 WHERE IT IS NECESSARY TO ERECT STEPLADDERS IN FRONT OF ELEVATOR DOORS AND DOORWAYS, IN OR NEAR PASSAGEWAYS, OR AT ANY LOCATION WHERE THE LADDER MAY BE STRUCK BY VEHICLES OR PEDESTRIANS, THE LADDER SHALL BE PROTECTED BY LOCKING THE DOORS OR PLACING WARNING SIGNS OR BARRICADES. WHERE THIS IS NOT PRACTICABLE, MAKE ARRANGEMENTS TO HAVE THE STEPLADDER GUARDED BY ANOTHER WORKMAN.

5. CARRYING STEPLADDERS

5.01 Stepladders, up to and including the 12-foot size, may conveniently be carried by one person. See Fig. 1. When carrying the ladder in busy corridors or on crowded sidewalks, hold it as nearly vertical as possible, but watch for lights and overhead fixtures.

5.02 Two people shall generally carry ladders over 12 feet long. This is particularly necessary when passing equipment, office space, operating rooms, or busy corridors.

5.03 If necessary to handle ladders in narrow corridors, stairways, or other congested space, a workman shall not attempt it alone if there is any doubt about his ability to completely control the ladder.

6. RAISING AND LOWERING STEPLADDERS

6.01 You may erect ladders up to 12 feet long by holding the ladder vertically balanced on the step-section legs. Then push the rung section away from the step section as far as you can reach. The ladder then rests on all four legs and the spreaders are locked down.

6.02 In lowering ladders up to 12 feet long, first lift the spreaders to form an acute angle at the joint. Then face the side of the ladder and, with a hand on each rail, pull the front and back sections together. Grasp the rails so the finger tips are not in a position where they will be pinched between the side rails or spreaders when the ladder is closed. When both sections have been brought together, lower the ladder.

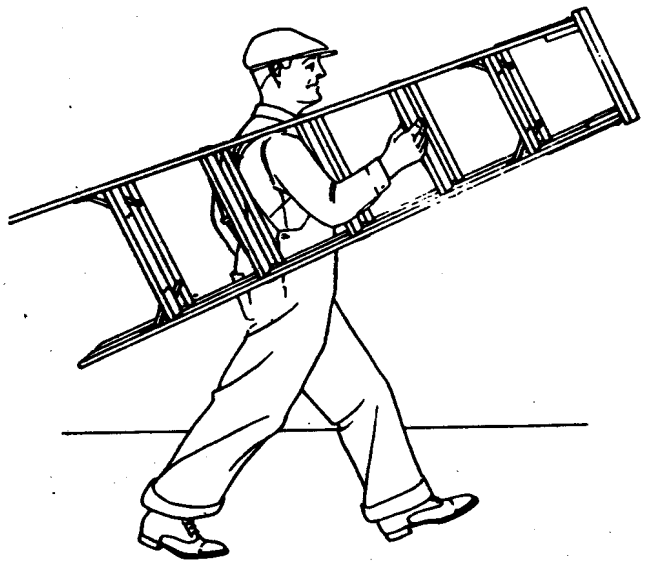

Figure (1)

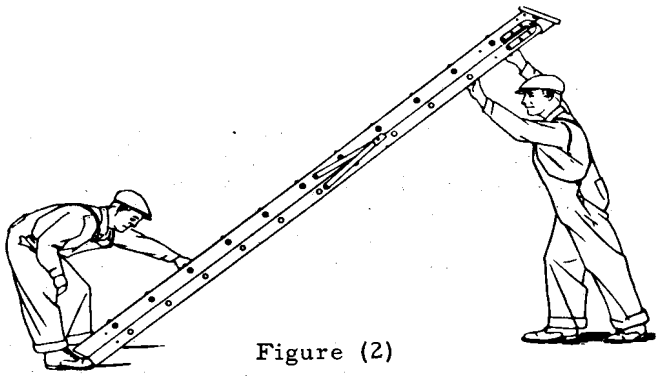

Figure (2)

6.03 When raising or lowering ladders in congested space or in close proximity to telephone equipment or moving machinery, take special precautions. And if necessary the work shall be done by two workmen. See 6.04 and 6.05.

6.04 In raising long stepladders, first place it on the floor with the step section up and the feet at approximately the location where you desire to have it stand. With the foot of the ladder securely braced by one of the workmen (see Fig. 2), raise it to a vertical position. After raising the ladder to the vertical position, the workman at the rung section then pulls this section open and locks the spreaders down.

6.05 In lowering long stepladders, have a workman face the step section with his feet braced against the bottom of the section. Then lift the spreaders to form an acute angle, grasp the rung section, lift it slightly above the floor, and push it against the front section. Then back up and lower the closed ladder while the other man holds it braced against his feet.

7. INSPECTION ROUTINE

7.01 Always determine if the ladder is in good condition and that its appearance indicates neither deterioration nor injury sufficient to affect its strength.

7.02 If a ladder has been dropped or subjected to any other treatment which might damage it, do not use it until it has been inspected and found to be satisfactory for use. See Part 8.

7.03 The supervisor shall inspect all stepladders used by his forces at least quarterly.

8. INSPECTION

8.01 The ladder shall be examined to determine the condition of all parts as suggested in the following paragraphs. To facilitate a careful inspection for defects, place the ladder in a good light and in a convenient position for examining all parts. If any of the defects listed are found, or if the condition of the ladder be such that there is any doubt about it being safe to use, exchange it at once for one in good condition according to the Company's established practice.

8.02 The important defects to look for inside rails are:

(a) Damage to rail. This may be a fine crack, a fold, a crease in the wood fibers, or a splintering of the wood fibers. Such defects are usually caused by overloading a ladder or subjecting it to a hard blow, and may result in breakage of the ladder under normal loads. The cracks or folds in the wood fibers are most likely to occur at rung-rail intersections. A very careful inspection is usually required to detect them. Usually the folds or creases appear alone, but there may also be some splintering of the wood fibers on the opposite side of the rail.

(b) Splits extending from one face of the rail through to the opposite face and are more than 24 inches in length, or that result in loosening of rungs, braces, or steps.

(c) Protruding nailheads.

8.03 The important defects to look for in the steps and rungs are:

(a) Cracked, split, badly splintered, or decayed steps or rungs.

(b) Loose step braces and loose tie rods.

8.04 Important defects to look for in fittings are:

(a) Loose spreader hinges and loose spreader attachment plates.

(b) Loose hinge joints and loose rivets holding hinge arms.

(c) Loose pail rests.

8.05 Ladders shall be tested praticularly for any tendency to sway or "walk" when shaken slightly in the open position. A ladder that sways easily should not be used until it has been tightened.

9. DISPOSITION OF STEPLADDERS REQUIRING REPAIRS

9.01 Stepladders having defects which cannot be repaired in the field shall be immediately withdrawn from service for repair or destruction. Employees in the field shall see that such stepladders in their possession are tagged or marked "Dangerous, Do Not Use" and returned to the storeroom. If the Company has established the practice, employees remote from the storeroom shall destroy and dispose of irreparable ladders, on the job, upon instructions to do so by the supervisor. Stepladders that are considered junk shall not be destroyed if they are needed in an investigation that may be made to determine the cause of an accident or a ladder failure.

9.02 When disposing of a ladder, remove and return to the storeroom all hardware which can be used in repairing other ladders. Then destroy the defective ladder.

10. CARE OF STEPLADDERS

10.01 Do not drop stepladders or place heavy objects on them.

10.02 If practicable, keep ladders free from accumulations of dirt, oil, paint, plaster, etc.

10.03 When the paint on a ladder is worn excessively, the ladder shall be repainted according to the Company's established routine.

10.04 Ladder rails, rungs, and steps shall be kept free from splinters. Remove splinters by dressing them with a knife, file, or sandpaper.

11. STORAGE OF STEPLADDERS

11.01 Store stepladders not being used where they will not be exposed to the elements but where there is ventilation. Never store ladders near radiators, stoves, steam pipes, nor where the wood may be subjected to excessive heat or dampness.

11.02 Store ladders to provide ease of access for inspection and prevent danger of accident when withdrawing it for use.

11.03 If ladder racks are not provided, store stepladders in a vertical position. Do not store ladders so they will be subject to pressure that would cause warping or twisting.

12. SAFETY PRECAUTIONS

12.01 Observe the following precautions when using stepladders:

(a) IN GENERAL, BOXES AND OTHER SUBSTITUTES FOR STEPLADDERS SHALL NOT BE USED UNLESS THEY HAVE BEEN DESIGNED FOR THAT PURPOSE. UNSAFE SUBSTITUTES, SUCH AS FOLDING CHAIRS, ROCKING CHAIRS, SWIVEL CHAIRS, CRACKER BOXES, ETC., SHALL NEVER BE USED

(b) Using ladders that are too short is a common cause of ladder accidents. Be sure to select a ladder of adequate length. See Part 3.

(c) Do not leave tools or other articles on the steps, pail rest, or top of a ladder.

(d) Before moving a stepladder, always make sure there are no tools or articles resting on the steps or top.

(e) Always face the ladder when ascending or descending. Do not hurry or try to take more than one step at a time.

(f) When getting off a ladder, avoid stepping on loose debris. If practicable, clear the area around the base of the ladder before ascending.

(g) When working on ladders, do not overbalance. If necessary to reach to the side, take care that the body is not extended so far beyond the side rails as to

unbalance the ladder. If necessary to exert a strong pull or push on a tool, apply the force so that if the tool slips the body will move toward the ladder and not to the side or backwards.

(h) A stepladder is designed to be self-supporting. Its use as a straight ladder shall be avoided except where the feet can be securely braced or the ladder lashed in position.

(i) Never step from one ladder to another without first descending.

(j) Do not attempt to shift position of ladder while standing on it.

(k) Only one workman shall be on a ladder at the same time.

(l) Do not borrow a stepladder unless you inspect it (see Part 8) and find it to be in sound and safe condition.

(m) Never use the pail rest of a Building ladder as a step.

(n) Do not carry tools in pockets of your clothing while working on a stepladder.

(o) A workman holding a ladder for another shall give it full attention. The safety of the man on the ladder is dependent upon the holder's vigilance.

(p) ALWAYS REMEMBER TO FIRST ERECT THE LADDER SO THAT IT IS STEADY, AND THEN STAND ON IT SO YOU ARE BRACED AND WILL NOT BECOME UNBALANCED AND FALL IF SOMETHING GOES WRONG. THE MANNER IN WHICH THE WORKMAN DOES THIS WILL DEPEND, OF COURSE, ON THE CONDITIONS OF THE JOB.