

CIVIL DEFENCE ORGANISATION

- SOUTH AUSTRALIA -

PRACTICAL FIRE FIGHTING

THE STIRRUP PUMP

DESCRIPTION OF PUMP

Double action piston type pump worked by hand, held firmly in bucket or water container by placing foot on stirrup attached to barrel of pump.

There are only three moving parts:-

- (a) The Plunger Tube, to bottom of which is fitted the piston.
- (b) The Metal Ball which forms non-return valve in the piston.
- (c) The Metal Ball which forms foot valve in base of the barrel.

In the bottom of the pump is the strainer which can be unscrewed and taken out when necessary. At the top of the pump is the outlet to which is connected 25 to 30 feet of half-inch rubber tubing, on the end of which is fitted a nozzle, some being dual purpose to give spray or jet, others just jet. Spray can be obtained from the single jet by placing the thumb over the end of the nozzle.

CARE OF THE PUMP

The pump should be used with water at regular intervals, once a week if possible. The hose must always be cleared of water after use and coiled in the proper manner. Keep in a cool dark place when not in use.

The pump must not be used to spray strong disinfectants or insecticides, as they will corrode the valves and render the pump unserviceable.

POSSIBLE DEFECTS AND REMEDIES

The following defects are most likely to occur:-

- (a) Choked strainer cover.
- (b) Choked hose nozzle.
- (c) Ball valves stuck on seating through lack of use.
- (d) Rusted ball valves.

A choked strainer cover can be cleared by removing whatever is sticking to it.

A choked hose nozzle can be cleared by unscrewing the nozzle and removing dirt from the hole.

Ball valves stuck to the seating can be freed by pushing a piece of wire through the filter.

To remedy rusted ball valves, first dismantle the pump by unscrewing strainer at foot of pump, remove handle at top and withdraw plunger from lower end of pump. Rust may then be removed from valves by scraping with pocket-knife. (Note: the later models are fitted with the phosphor bronze and nylon balls, which do not rust.)

The gland at the top of the pump should not be interfered with, but should it leak it can be put right by tightening the gland nut. If this fails, repack with oiled string. Do not over-tighten gland nut.

ORGANISATION OF TEAM

A stirrup pump team consists of three or four members, preferably four when there is a long carry for water. All members of the team are inter-changeable. Equipment for team comprises one stirrup pump and four buckets, and one fireman's axe.

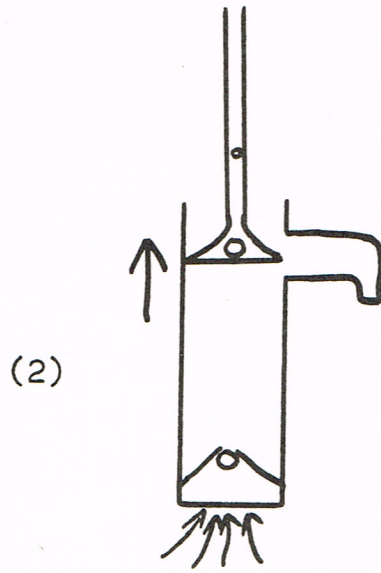
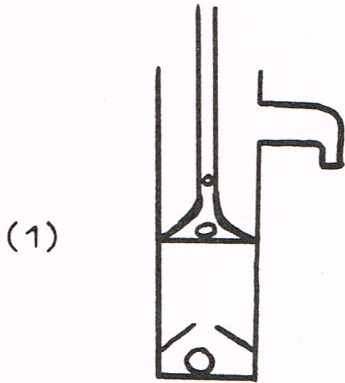
DUTIES OF TEAM

Teams of three or four. No. 1 fights the fire, No. 2 operates the pump, Nos. 3 and four maintain water supply. All members are interchangeable.

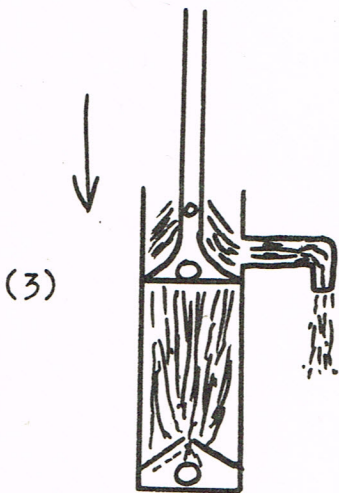
CONCLUDING SUMMARY

Object has been to describe the stirrup pump, to teach and practise care and maintenance, including remedies for possible defects, and to explain the organisation of stirrup pump teams and their duties.

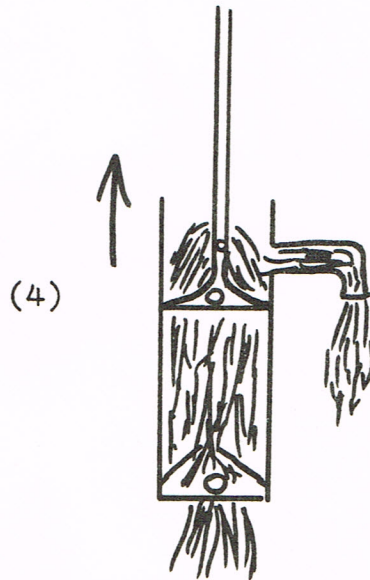
THE STIRRUP PUMP



UP STROKE
WATER IN



DOWN STROKE
Water through
hole and fills
barrel.



UP STROKE
Water in and out.

FIRE FIGHTING HINTS

The principal points in fire fighting are briefly summarised below in the form of "DO'S" and "DON'TS".

DO

1. Break a panel near the lock if it is necessary to force a door.
2. If practicable, turn off gas at the main on entering.
3. Make certain a building has been thoroughly searched.
4. Exclude air by keeping doors and windows closed when possible.
5. When in thick smoke, crawl, don't walk. Remember, there is a pocket of cool clean air near the floor.
6. In a building, damaged by fire or blast, keep near walls, where floor and stairs are strongest.
7. Attack fires at closest possible range.
8. Attack the heart of the fire.
9. Attack oil fires with sand, earth or foam extinguishers.
10. Before leaving, be sure that all fires are out.
11. Remember that phosphorous will re-ignite when dry.
12. Keep all fire fighting appliances in order.
13. Keep ample supplies of water. YOU CANNOT HAVE TOO MUCH.

DON'T

1. Go alone into a smoke-filled building except to save a life.
2. Enter a burning building or room without fire-fighting appliances, except to save a life.
3. Play water or chemical extinguishers, other than CTC or CBM types, on electric wiring.

GENERAL

Make note of the position of the nearest -

1. Fire Station.
2. Emergency water supplies, e.g. ponds, rivers, etc.

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