

SAFE USE OF STOVES AND LAMPS

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ELECTRIC HOUSE, FORT, BOMBAY

The principal means employed in this country for cooking and heating are firewood, charcoal segrees and primus stoves. Gas and electricity are in use in the larger towns. Electricity is rapidly finding its way into even the smaller villages.

For lighting purposes candles, hurricane lamps, oil lamps and petromax lamps and electric light are generally used.

The use of each of these methods has its dangers. They are all dependent upon efficient performance.

Candles

1. Use a candlestick that will not overturn easily, and in which the candle fits snugly.
2. Never stick candles in bottles or on boards.
3. Keep candles out of drafts and away from curtains or other things that catch fire easily.
4. Do not carry a lighted candle into a clothes closet.

Lamps and Lanterns

1. Keep all parts of lamps and lanterns clean. This includes burners which should be boiled in a solution of soda or strong soap-suds occasionally.
2. Keep petrol lamps and special process kerosene lamps in good working order.
3. Fill lamps and lanterns only in daylight, and see that cap and burner are tightly screwed in place.
4. Use lamps and lanterns with good bases so they will not tip over easily, and set them where they are not likely to get knocked over.
5. Do not set a lamp near curtains or other things that catch fire easily.
6. Do not leave a burning lamp unwatched for a long period, and do not leave the house without putting out all lamps.
7. A flashlight or battery lantern is safer for use on a farm than a kerosene lantern.
8. In reading or working by lamps see that you avoid shadows and glare so as not to strain your eyes.

Oil Pressure Stoves and Lamps

The primus stove, petromax lamp and the blow lamp used by mechanics, are based on the same principle, *viz.*, paraffin or petrol vapour under pressure passes through a fine, heated nozzle. This process converts the paraffin or petrol into a very fine spray of gas which then burns, giving either heat or light according to the design of the burner,

The dangers arising from the use of these appliances are due to imperfect handling, improper maintenance and proximity of clothes and hangings to the lamp or stove. In view of the large number of accidents which take place, it is advisable to devote some consideration to them.

The handling of these stoves should be learnt under the instruction of a competent teacher. The essentials are:

1. The lamp or stove should be properly cleaned and maintained, *i.e.*, joints tight, the nozzle carefully cleaned with the special needle provided for that purpose; the burner wiped, clean. If a pressure gauge is provided this should be kept in working order.

From time to time the lamp or stove should be examined by a competent mechanic and any worn parts replaced.

2. The oil container should be filled to less than $\frac{3}{4}$ full with clean oil, the remaining space is needed for the air that has to be pumped into it, to create the pressure that is necessary to force the air through the nozzle.
3. The air valve should be opened.
4. The stove or lamp should be placed on a strong table or cement covered platform at least 3 feet high (away from any draft or hangings).

Under no circumstances should a stove or lamp be placed on the floor, for the greater height of the body in relation to the stove or lamp places the flimsy clothing, ordinarily worn, in such a position that it can easily take fire from close contact with the flame.

Under no circumstances should a stove or lamp be placed under a shelf, as if it is placed in this position, there is a possibility of clothes coming in contact with the flame, when it is necessary to reach for something on the shelf.

5. The burner should be heated by good methylated spirits. A variety that does not soot is essential, for soot is a non-conductor of heat, and its presence on the burner will prevent the nozzle becoming sufficiently heated to vaporise the kerosene. Kerosene should not be used for this purpose.
6. When the nozzle is fully heated, the air valve should be closed and then only should air be pumped in. This should be done gently—not briskly. If the nozzle has been sufficiently heated, the spray of kerosene will become ignited and burn with a reddish yellow flame.
7. In order to maintain the flame or light, the air pressure has to be kept up. This should never exceed 4 to 6 full strokes of the Air Plunger in stoves; in lamps the pointer indicating the pressure should never pass the red line in the gauge.

Lighting a Fire: Firewood and Coal

Kerosene is sometimes used for lighting fires. This is not a good practice, but is sometimes necessary with wet wood or coal

of a low volatile quality which does not ignite readily. The following method may be used. Soak a rag in kerosene, place it within the firewood or coal and then light it.

Never pour kerosene on a lighted fire, it is positively a dangerous practice.

Chopping Firewood

In chopping wood for the fire: (1) see that you use an axe having a well fitting head with a sharp cutting edge; (2) in cutting, place a block of wood between you and the piece being cut, to act as a safety barrier in case the axe slips.

Charcoal Segrees

Always light and use these on raised platforms three feet in height. Always have at least two openings in the room. Open windows or doors whilst using.

Gas Stoves

Gas taps should never be handled by children. See that the gas taps are tight. Keep the stove clean. Keep the kitchen well ventilated.

Electric Stoves

Never allow children to operate the switches. Never handle them yourself with wet hands. Keep the stove clean. See that the earth wire earthing the frame of the stove is properly maintained and that the connections are secure.

Safeguards

In addition to the position of the lamp or stove it is necessary to exercise care in the selection of clothing for use during the lighting of stoves and lamps and whilst cooking. Loose or flimsy clothing should be avoided.

Children. Burns are of all too common occurrence among infants. They should be prevented by keeping babies and very young children away from stoves, open fires and gas or electric heaters. Keep them in a crib or in a play pen, at a safe distance from any heater. Never bathe them close to a stove, as tragic accidents have been caused by overturned kettles of hot water. As soon as children are old enough to understand they should be taught not to go near any "burning" thing they see.

Clothing is a very important factor, and flimsy clothing, sarees, etc., are most unsuitable for wear when cooking; heavier sarees or close fitting clothes should be worn during cooking operations.

Fire Guards. Always use a fire guard. Attach it firmly to the wall or grate to prevent any mishap.

The fire or stove should be placed on a steel plate or concrete base. This will prevent the hot ashes, etc., from burning the floor. If the floor is a wooden one, this precaution is of course essential.

The guarding of fires is of special importance when there are children about. In England, if a child under 7 years of age is allowed to be in a room with an open fire grate insufficiently protected against risk of burning or scalding, the parents are liable to be convicted for cruelty.

An efficient guard for enclosing the flames of a primus stove and which has the approval of The Safety First Association can be obtained from Mr. Fakirji K. Badshaw, 613 Dinshaw Building, Parsi Colony, Dadar, Bombay. This guard will prevent damage occurring from clothing, etc., coming into contact with the flames.

Removing a Cooking Vessel from a Fire. Never remove any cooking vessel from a fire with the aid of the saree; this is a most prolific cause of burns. Have at hand a piece of heavy damp cloth and use it for this purpose. Handles fitted to the cooking vessels are even better.

Airing and Drying Clothes. Use care, when placing clothes to dry or air, to see that the fire is far enough away to prevent the clothes from burning. Place the clothes on something secure—the clothes horse or sigaree basket is the proper appliance.

Inflammable materials such as Flannelette or Winceyette, Celluloid, etc., should never be placed near a fire. They burn very quickly.

Hot Liquids. Scalds are common among children and are due to:

1. Interfering with the kettle or pots of food that are being cooked.
2. Walking by stoves or sigarees and knocking the contents over by coming into contact with the handles. Always turn saucepan handles and kettle spouts inwards.
3. Pulling vessels containing hot liquids, e.g., tea pot, cup of tea, shaving mug. This is frequently done by a child pulling the edge of a table cloth.

Gases.

When fuel burns carbon dioxide in varying quantities, according to the efficiency of the combustion, is formed. This is a harmless gas, but in situations where there is an insufficient supply of air, the dangerous carbon monoxide is formed. Such situations are: a sigaree burning in a closed-up room; a motor car engine running in a closed garage; the burning of lime and bricks; water heaters (gas, oil or coal) burning in a closed room. The cause of formation is generally speaking due to insufficiency of air, and the faulty adjustment of burners. The remedy is therefore simple: Adjust the burners, and always have two openings in a room, one for the exit of air and one for entrance; this will allow the air to circulate.

If a bath room has no windows and its door has to be closed at the time of taking a bath, care should be taken to see that the boiler, in which the water for the bath is heated, is NOT still burning. Neglect of this precaution has caused many deaths from carbon monoxide poisoning.

Carbon Monoxide Poisoning

This gas is poisonous if breathed. It has little or no smell. *Symptoms.* The first symptoms are giddiness, weakness in the legs and palpitation of the heart.

If anyone feels these he should at once move into *fresh warm* air when he will quickly recover if slightly affected. He should avoid exposure to cold. Any exertion is harmful.

First Aid. Remove the patient into fresh warm air.

Begin artificial breathing at once, if the patient is insensible, and continue it for at least half an hour, or until natural breathing returns.

Send for the doctor.

How to put out Clothing on Fire

1. Since running fans the flames, it is important to make all movements slowly.
2. If possible, wrap yourself in some heavy material such as a carpet, blanket, rug, woollen coat, etc., in order to stifle the flames by reducing the supply of air.
3. If there is nothing to wrap yourself in, drop to the floor and roll over slowly to put out the flames.

Protect your face by resting it in the recess formed by placing your left hand on your right shoulder and your right hand on your left shoulder.

4. As some of the gases produced by fire are highly toxic, it is important not to inhale any of the gases.
5. If there is water at hand, douse yourself with it and roll in the spilled water on the floor.
6. If the clothing of another person takes fire, use similar measures. It may be necessary to trip him or force him to lie down so that you can roll him. Then, if water is available, it can be applied at once.

Burns

In cases of burns, apply freely a solution of freshly prepared tea, very strong, which has been cooled to body temperature.

Keep the burns uncovered if possible until the doctor comes or until the child or person can be taken to a hospital. If it is absolutely necessary to cover the burns, such as for taking a baby to hospital in cold weather, use linen, if possible, soaked in tea. Never use absorbent cotton (raw cotton) on a burn.

MALE NURSES' SECTION**ANKYLOSTOMIASIS**

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Synonyms. Ankylostomiasis. Hook worm disease.

Definitions. A disease in its more pronounced forms characterized by great anæmia; debility and cardiac incompetence due to absorption