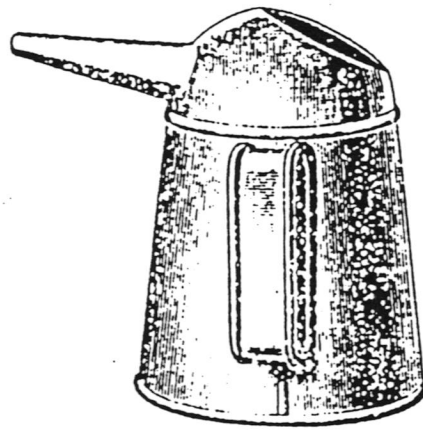


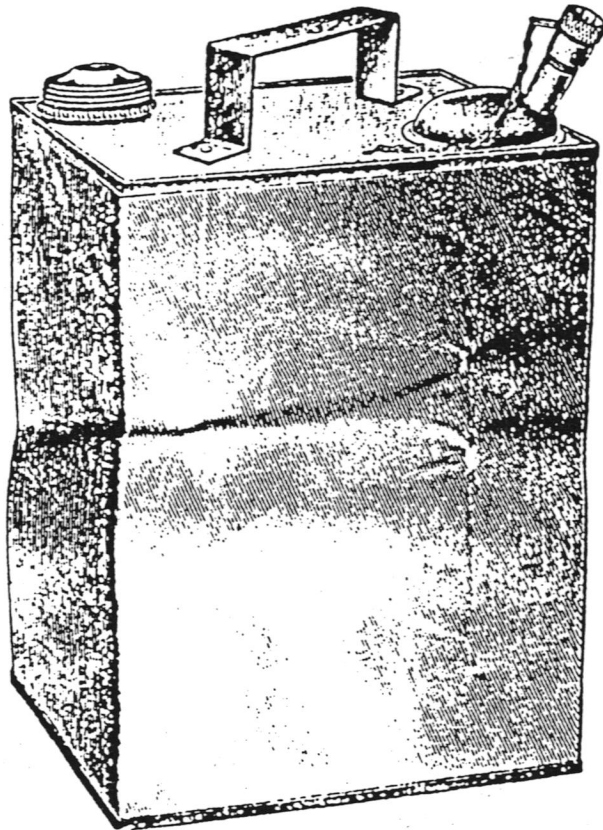
If average care is used Bladon Lamps will give good service, but clean spirit and oil are a necessity, therefore, we recommend the use of
IMPROVED FILLER AND FILTER.

Strong make from 3x Tin plate.
 Spout fitted with Fine Mesh Gauze.

Price 1/- each

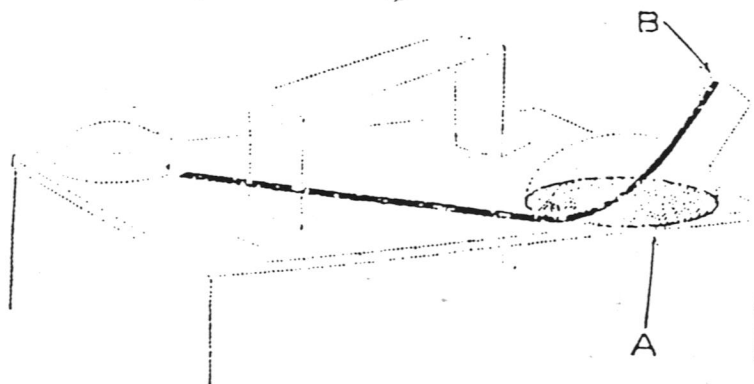


Registered Design No. 693740



or
 1 gallon combined
 Tank and Filler.

Price 3/- each



Showing Air
 pipe B and
 Gauze strainer
 A.

Either of these useful articles will soon save their cost, and prevent much waste of time and annoyance.

BLADON'S

Improved Filler and Filter

For Blow Lamps.



—
**STRONG
MAKE**
—

—
**FROM 3x
TINPLATE**
—

—
**SPOUT
FITTED WITH
FINE MESH
GAUZE**
—

Registered design No. 693740.

DESIGNED and manufactured for use with "Bladon" Blow Lamps, but can be used with any Stove or Lamp, saves waste, and prevents dirt getting into container, thus eliminating nipple trouble and clogging of vaporizer.

From all Plumbers Merchants and Ironmongers,
or, direct from the makers:—
Post Paid 1/-

T. E. BLADON & SON LTD.

Telegrams :
"Bladon"
Birmingham

PATENTEES & MANUFACTURERS

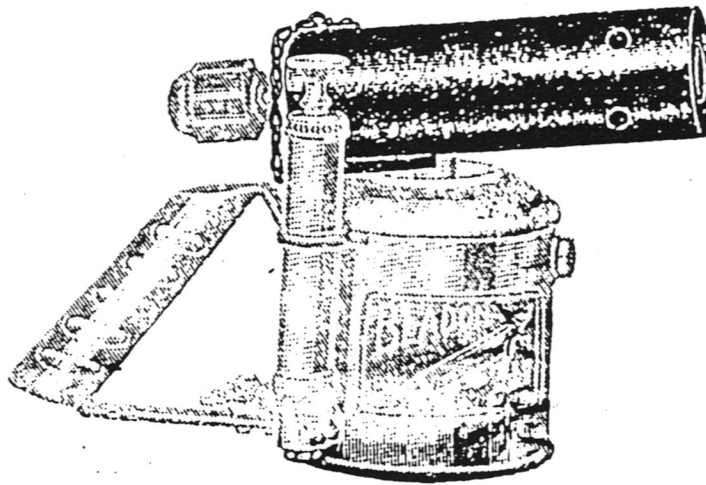
99-105 Northwood Street

BIRMINGHAM, 3

'Phone :
Central 6634

"Bladon" blow lamps are designed to work without "Additional" assistance—such as wind-guards or heat from another lamp—but the two wind-guards illustrated below will help the painter or decorator when working in a rough wind.

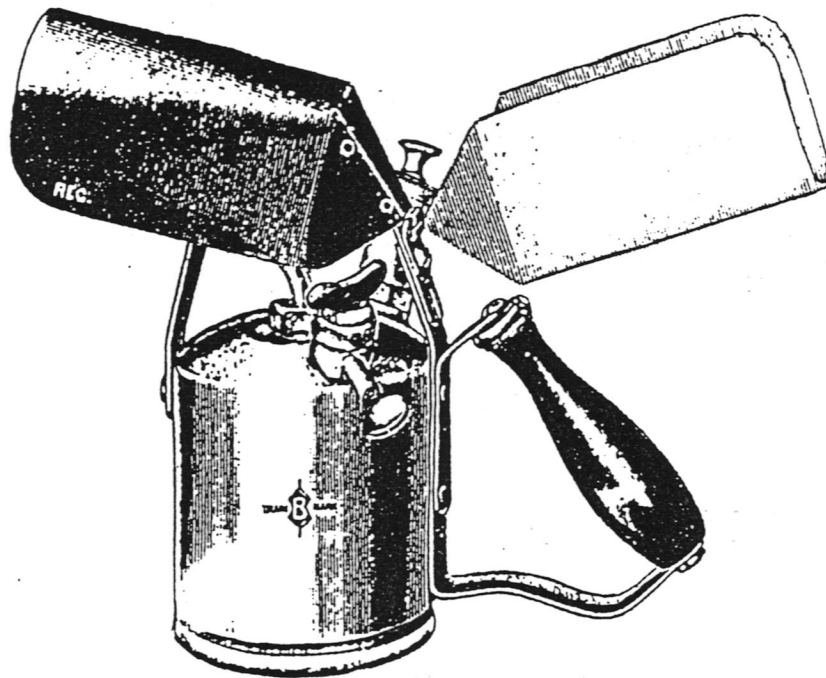
The design of both is registered. They can be quickly attached and the cost is 1/- each. When ordering specify if for paraffin or petrol.



We make wind guards for Petrol and Paraffin Blow Lamps.

These illustrations show both types. When ordering state kind required.

Price
1 / -
each





Hints and Advice

*for the use and upkeep
of*



(REGISTERED TRADE MARK)

PETROL BLOW LAMPS

HINTS AND ADVICE

FOR THE USE AND UPKEEP OF

Bladon Petrol Blow Lamps

Best spirit only should be used. The majority of Blow Lamp troubles are caused through dirt or grit entering the container. To prevent this, all spirit should be kept in a clean receptacle and filtered before use. For this purpose we recommend our SPECIAL FILLER & FILTER, the design of which is registered.

To start Lamp fill three-parts full with petrol, replace filler screw. Pour a quantity of methylated spirit or petrol into well at top of Lamp, see that valve is turned off. Place Lamp in sheltered position then light the spirit or petrol in the top of the well.

It is most important that the reservoir is not overfilled. There must always be room left for the expansion of the petrol which takes place when the well containing the methylated spirit is lighted.

The centre tube of lamp contains a wick, this conveys the petrol to the vaporizer and the outside heat causes the petrol to turn into vapour.

As soon as the spirit has burnt away, turn on valve and apply light to nozzle. We recommend that until nozzle has become hot the valve is not opened full.

All petrol lamps require internal pressure, and this is obtained by heat in the first place from the well, afterwards from the nozzle. See, therefore, that nozzle is screwed on tight.

Where Lamps are fitted with pressure safety device a new synthetic washer is occasionally required.

Care should be exercised in fitting. Bladon safety valves are automatic and are accepted by Post Office Engineers as their standard.

Lamps are sometimes started up by placing on a fire; this is dangerous and bad practice; top heat only is required.

Models B61, B62, B63, B64, B48, B68, B43 & B46 are fitted with hurricane nozzles and self-cleaning nipples—a steel needle is secured by a small brass screw to the end of the control valve, and each time that is shut off the needle is passed through the nipple.

Types B62, B63, B64 & B48 are fitted with a side pressure Pump and patent valve. The pump gives extra pressure when a very fierce flame is required, but should not be used until Lamp has been burning some little time. To operate pump hold up lever which opens patent valve and allows pressure into Lamp. This valve automatically closes and prevents any mishap due to petrol leaking into pump. No other make of Blow Lamp is provided with this safety device.

All pumps are fitted with gauze to filter the air thus preventing dirt getting to the valves. To fit new washer, unscrew cap at bottom of pump, see that cap is screwed up tight when replaced.

After continual use it is advisable to fit a fresh wick. To do this remove hexagon cap in the centre of bottom of lamp, fitting fresh cork washer to cap before replacing.

"BLADON" Blow Lamps are tested and guaranteed. They can be obtained from all Plumbers' Merchants, Ironmongers and Paint Dealers, or direct from the makers.

When ordering spares, state number of Lamp and year of manufacture.

LAMPS, TORCHBLOWING, Nos. 1, 2 & 3

*[NOTE.—As this Instruction has been completely revised, individual paragraphs have not been 'starred'.]

1. General.—This Instruction describes the construction and operation of "Lamps, Torchblowing, Nos. 1, 2 and 3" and the precautions which must be observed in their use. These lamps all burn petrol and are illustrated in Fig. 1.

2. Capacities and Burning Times.—The petrol capacity and approximate burning time, without refuelling, for each type of lamp is tabled below:—

Type of lamp	Capacity (pts.)	Burning time (mins.)
Lamp, Torchblowing, No. 1	1 1/2	90
" " No. 2	1 1/2	70
" " No. 3	1 1/2	60

3. Functions of Lamps.—"Lamp, Torchblowing, No. 1" is a general-purpose blowlamp, as used by jointers.

"Lamp, Torchblowing, No. 2" is a heavier-type lamp which incorporates a pump, and is suitable for use in exposed situations where it would be impossible to maintain a flame of the "Lamp, Torchblowing, No. 1".

"Lamp, Torchblowing, No. 3" is a small lamp intended primarily for general soldering operations on small distribution cables (including small joints in cables on external walls. It has been introduced for use in exposed positions and high winds where the "Lamp, Spirit, blow-pipe" has proved unsuitable.

A general description of each type of lamp follows.

4. Lamp, Torchblowing, No. 1.—Fig. 2 shows a

sectional view of the lamp which has a brass body; it is tested to withstand a pressure of 150 lb. per sq. in. Mounted in the centre of the top and projecting into the body of the lamp is the brass wick-tube which contains the wick. The top of this tube carries the burner which consists of the nozzle, vaporizer, jet nipple, and regulator valve spindle which is operated by the knob.

5. Jet-cleaning needle.—The regulator valve spindle carries a needle at its tip; this cleans the small hole in the jet nipple every time the regulator is opened and closed. Other needles, pieces of wire, etc., should not be used to clean the hole in the burner as they may enlarge the hole and interfere with the satisfactory burning of the lamp.

6. Safety valve.—The normal pressure generated in this lamp, when burning, is approximately 15 lb. per sq. in., but pressures in excess of this figure do frequently occur. A safety valve is fitted, therefore, which operates when the pressure in the lamp reaches 45-55 lb. per sq. in. The safety valve is mounted in the body of the lamp in such a position that it will discharge away from the user. The safety valve has a brass body which contains a brass plunger fitted with a cork washer which is pressed against a brass seating by a steel spring. The valve screws into a socket, at the rear of which is an extension tube which projects above the level of the petrol in the lamp, so that if the safety valve operates with the lamp in the upright position, liquid petrol is not discharged. Petrol can be discharged, however, if the lamp is inverted.

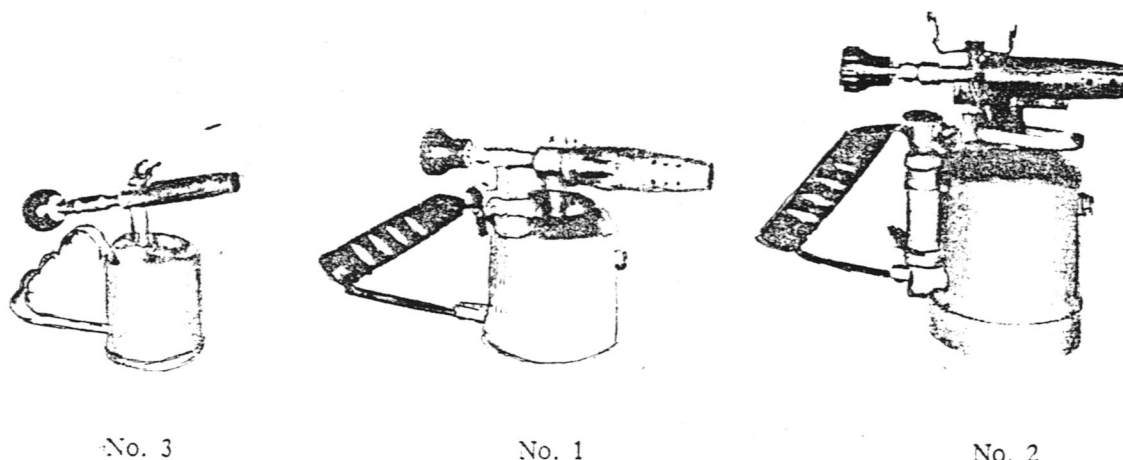


FIG. 1.—LAMPS, TORCHBLOWING

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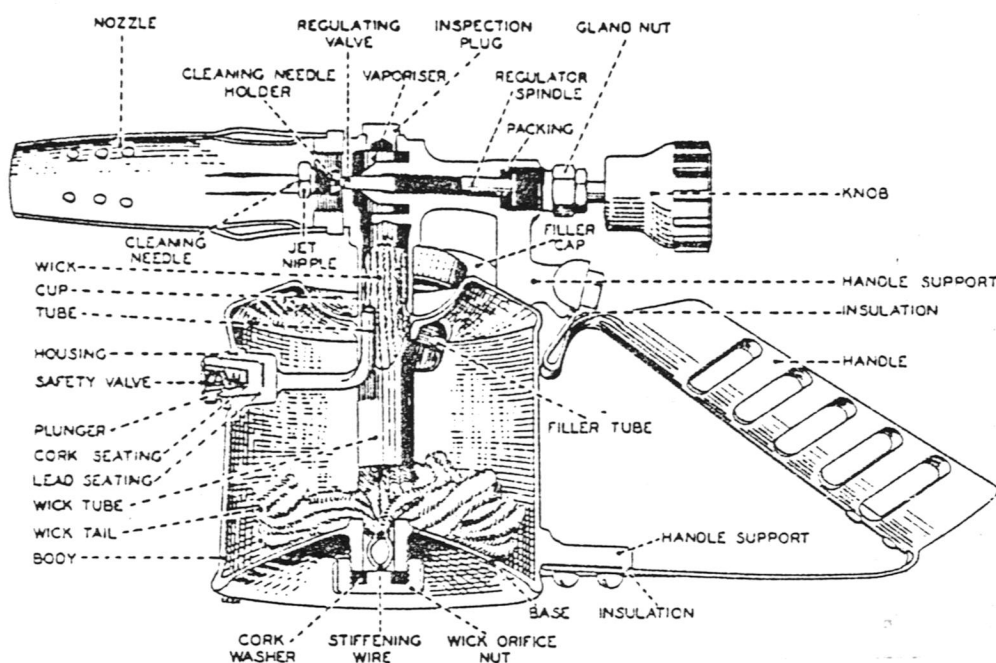


FIG. 2.—LAMP, TORCHBLOWING, No. 1

7. The filler tube extends some distance into the body of the lamp to ensure that there is always a space above the petrol. If the lamp were completely filled with liquid, the body might burst under the pressure due to the expansion of the liquid when the body of the lamp becomes hot, whereas, with the proper vapour space in the container, the only pressure exerted is due to the compression of the vapour above the liquid. As a further safeguard, lamps should not be filled more than two-thirds full. The filler tube is closed by a brass screw cap with a leather washer.

8. The handle is insulated from the body so that it does not become excessively hot when the lamp is in use.

9. *Supports for Soldering Irons.*—"Supports, Iron, Soldering" are not supplied with "Lamps, Torchblowing, No. 1" but should be requisitioned separately. These supports can readily be attached or removed and provide a convenient means of heating soldering irons of the following types:—

Irons, Soldering, Small
Irons, Soldering, Instrument, Straight

The general arrangement of the support and method of attachment is shown in Fig. 3. The bolt and wing-nut permit easy removal when the support is not required. When the iron rests in the saddle it can be placed so that its tip is held in the hottest part of the flame.

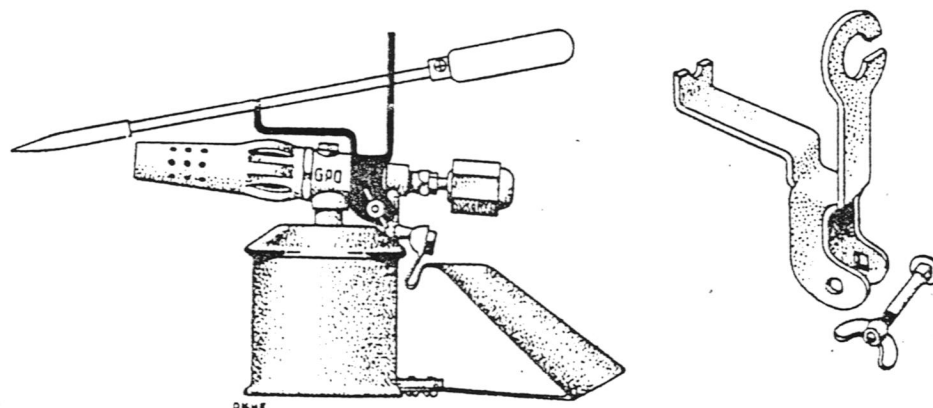


FIG. 3.—SUPPORT FOR SOLDERING IRONS

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10. *Steel-bodied lamps.*—Lamps, Torchblowing, of the No. 1 type, but having steel bodies, were introduced as a wartime measure; they are similar to the equivalent lamps with brass bodies. The following special precautions when using this type of lamp should be observed :—

- (a) The gland nut securing the burner to the body should be kept tight.
- (b) The body of the lamp should be examined frequently, both internally and externally, for any rusting. If rusting has occurred, the lamp should be maintenance exchanged at once.

11. *Non-standard type lamps.*—Owing to difficulty which was experienced in obtaining an adequate delivery of "Lamps, Torchblowing, No. 1" of the Department's standard pattern, it was necessary, as a temporary relief measure, to augment the stock by purchase of a quantity of lamps of proprietary makes, details of which are given below :—

- (a) *Max Sievert type A.*—Although this lamp does not meet the Department's specification in all respects, it is soundly constructed and reliable in operation.

Special precautions.—The safety valve of the Max Sievert lamp is incorporated in the filler cap, and special care must be taken to ensure that the filler caps do not become changed-over when lamps of the Department's standard pattern are being used at the same time, as the latter do not incorporate the safety valve in the filler cap. Filler caps on similar lamps should not be changed as this may cause leakages between the filler cap and tube.

- (b) *Paraffin blowlamps.*—The types of paraffin blowlamps which are approved, and the special precautions which should be observed in their use, are described in L 1163.

All non-standard types of lamp, including paraffin lamps, will be replaced when the supply of the standard type becomes sufficient to meet demands.

12. *Lamp, Torchblowing, No. 2.*—Fig. 4 shows a sectional view of the lamp and it can be seen that the construction resembles that of the No. 1. The vaporizing chamber, however, is of different construction, consisting of a passage formed in the base of the barrel of the nozzle. The body is tested to withstand a pressure of 200 lb. per sq. in. The approximate size is 7 in. high and 10½ in. long.

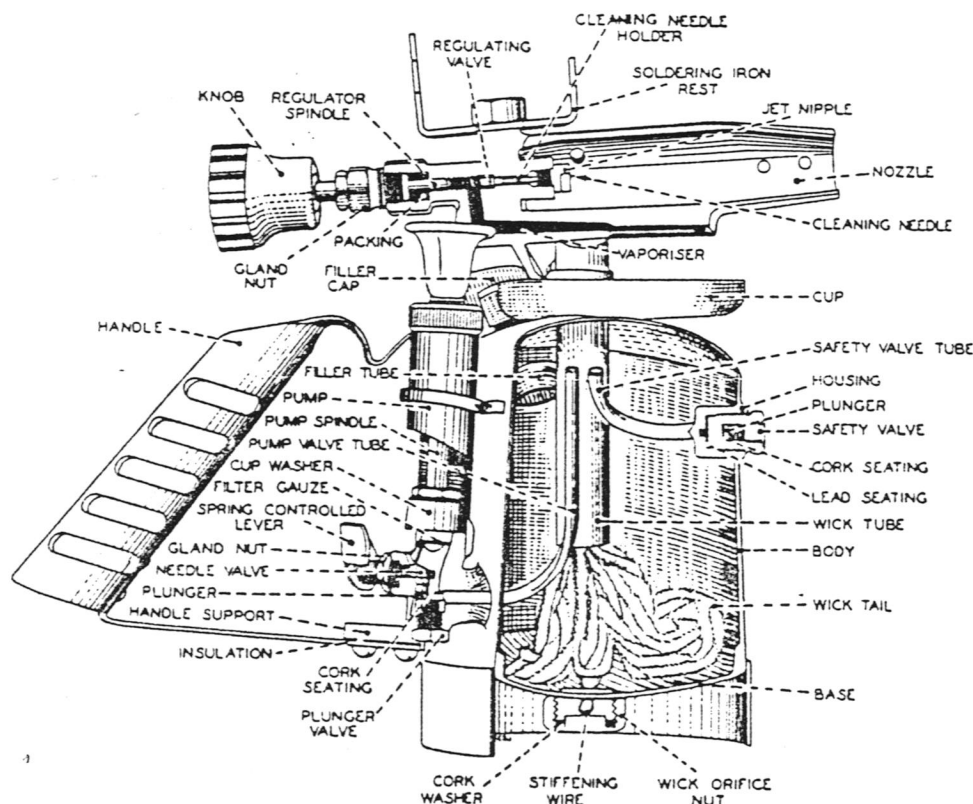


FIG. 4.—LAMP, TORCHBLOWING, NO. 2

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13. The pump is provided with two valves, one of which is an ordinary spring-type non-return valve, and the other is controlled by a thumb-operated lever which is restored to the closed position by a spring. The air from the pump is passed into the lamp through a brass tube which extends up into the crown of the lamp. This prevents liquid petrol reaching the barrel of the pump.

14. *Support for soldering irons.*—The lamp is provided with a soldering iron rest which is fixed by means of a set-screw.

15. *Lamp, Torchblowing, No. 3.*—Fig. 5 shows a sectional view of this lamp and it can be seen that the construction is similar to the "Lamp, Torchblowing, No. 1". The approximate dimensions are 5 in. high by $7\frac{1}{4}$ in. long.

16. *Safety valve.*—The safety valve at present fitted to this type of lamp is of the soldered-pin type but future lamps will be fitted with a valve of the spring-loaded type. The pin is brazed to the base of the lamp and the upper portion is soft-soldered to the top of the lamp body. Under excessive pressure, the bottom of the body "bells" out causing the fracture of the solder at the top, thereby releasing the pressure. The wick tube which carries the burner is screwed into the top of the body. On the burner, fixed by a screw, is a fitting suitable for supporting an "Iron, Soldering, Extra small".

17. *Operation of all types.*—When spirit (S.B.P. 4 petrol or methylated spirit) is burnt in the cup situated below the burner, heat is transmitted to the body of the lamp causing an increase in the pressure and forcing some petrol, via the wick, into the hot vaporizer. When the regulator valve is opened, with the lamp hot, the vapour issuing from the jet mixes with air in the nozzle and can be lit.

When in use the nozzle of the lamp becomes red hot and sufficient heat is conveyed back to the vaporizer and body of the lamp to maintain vaporization and pressure in the body of the lamp.

18. Instructions for Use.

NOTE: IT IS DANGEROUS TO INTERFERE WITH THE WORKING OF THE SAFETY VALVE IN ANY WAY.

Filling

- Unscrew the filler cap and fill the container two-thirds full with S.B.P. 4 petrol.
- Replace the filler cap and screw it down by finger and thumb pressure only. The use of tools for this purpose is forbidden.
- See that the regulator valve is closed.

19. Lighting out of doors

- Place the lamp away from draughts, but not in a manhole, footway box or vehicle.

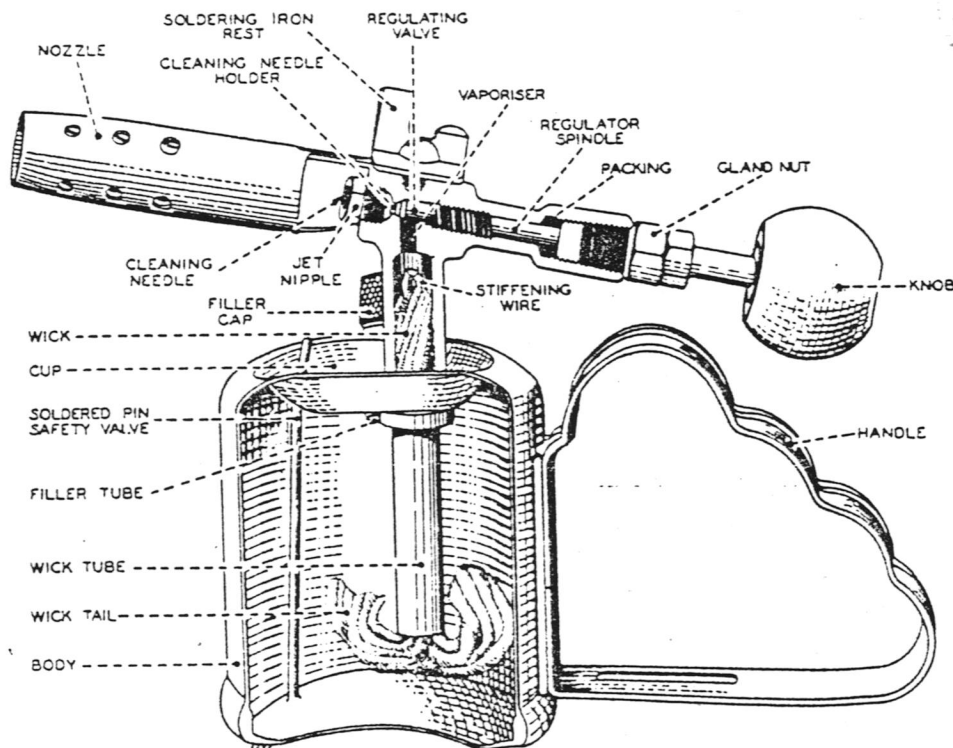


FIG. 5.—LAMP, TORCHBLOWING, No. 3

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- 1939 -

JOHN HALL TOOLS LTD.

BLOWLAMPS

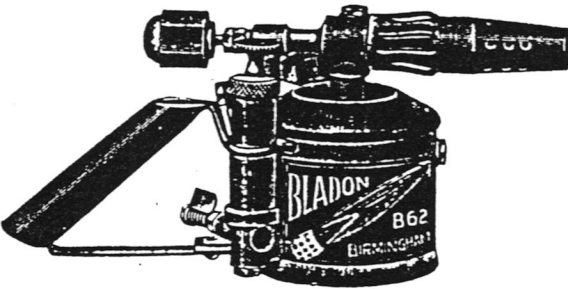
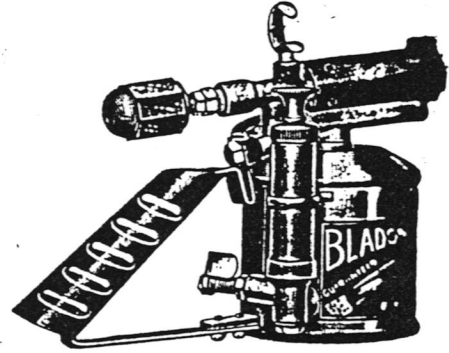
"BLADON" PETROL BLOWLAMPS (JH 2469)

B64. 2 pint capacity, of new design. Will burn outside when conditions are unfavourable. Very powerful flame. Recommended for electricians and plumbers for heavy work. Fitted with automatic safety valve, patent non-return self-locking pump, insulated handle and self cleaning nipple device. Made from heavy gauge metal, all joints brazed, and steel wearing rim around base. Unrivalled for outside work in exposed positions. Complete set of spares provided.

Price £3 12 0

B68. 1 pint capacity. Design and construction same as B64 but smaller and lighter, flame not so powerful. Complete set of spares provided.

Price £2 3 0



B48. 1 pint capacity. Fitted with Improved vapouriser, same design as B64 and B68. Used by Corporations and cable layers. Squat construction enables jointing etc., to be carried out in any position. Will burn outside and in unsheltered places, very useful for plumbers. Insulated handle, patent non-return pump and self-cleaning nipple device. Complete set of spares provided.

Price £2 7 6

3/4 pint model .. £2 2 0

B62. 3/4 pint capacity. Very efficient lamp for decorators and painters. Flame not so fierce as B48. Fitted with automatic safety valve, patent non-return self-locking pump, insulated handle, and self cleaning nipple device. Complete set of spares provided.

Price £1 16 0

1 pint model .. £2 0 0

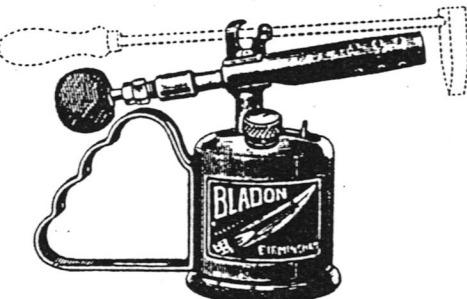
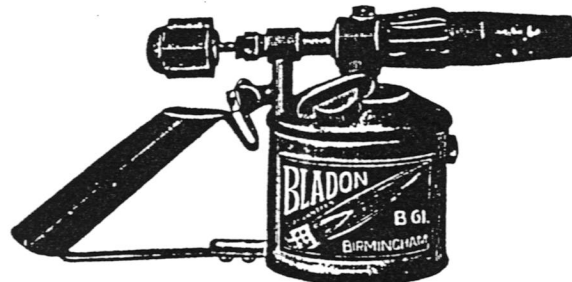
B61. 3/4 pint capacity. An Ideal tool for inside work. Suitable for painters, electricians and mechanics. Fitted with hurricane nozzle, self cleaning nipple device, insulated handle and safety valve.

Price £1 10 0

Model B60. Not self cleaning .. £1 5 0

B43. 1/2 pint capacity. Ideal for the small job, suitable for the amateur home mechanic. 4" flame, self-cleaning nipple and fitted with a bracket to carry a small soldering iron.

Price 19/-



B46. 1/2 pint capacity, used by wireless and electrical workers. Gives a small pointed flame 3" long. Is fitted with bracket to carry soldering iron. Self cleaning nipple device.

Price 14 0