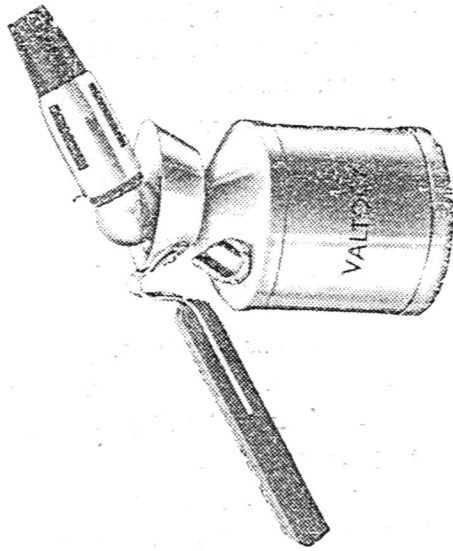




“Valtock” Blowlamp No. 3

Absolutely clean and safe to use in the home.

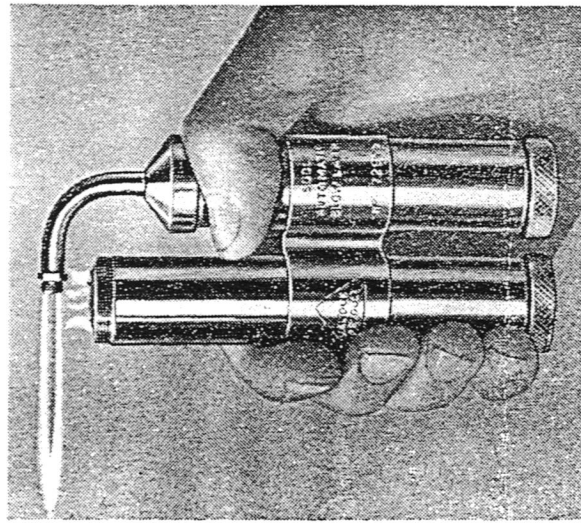
The ideal blowlamp for rapid paint stripping, soldering and all plumbing jobs.

Precision engineered from solid brass and burns only methylated spirit

Nickel-plated mirror finish and foolproof.

PRICE 63/- each

“Valtock” Automatic Blowlamps



Burns Methylated Spirit

Ideal for small silver soldering, glass bending and drawing, model making, etc.

A small thin pencil flame is obtainable with both models.

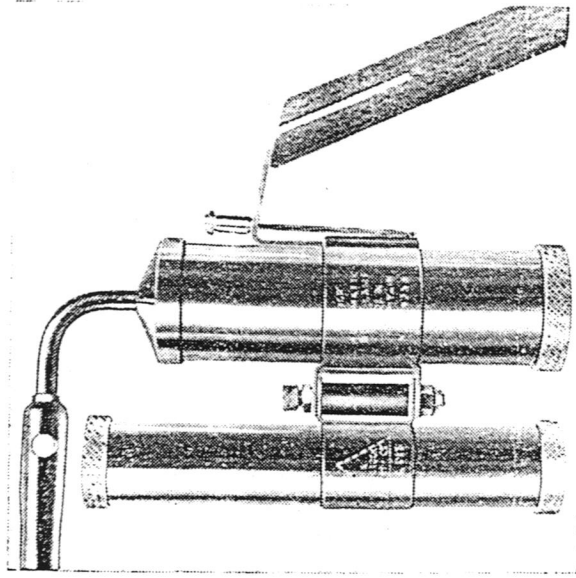
Made from solid brass tube.

Spare Parts obtainable.

“Miniature” Model

Weight, 7 oz. Height, 5½ in.

PRICE 14/7 each



“Major” Model

Weight, 2 lb. Height, 9 in.

PRICE 30/- each

ANOTHER SALES WINNER!

THE NEW, BIGGER VALTOCK "Major" Blowlamp

Following the Nation-wide success of their Miniature Blowlamp, Valtock Ltd. now proudly present the new, bigger model—the "Major". This handy, compact blowlamp burns only methylated spirit, is self-pressurising, and there are no working parts to go wrong.

Made of solid brass tube, the "Major" is equipped with a patent spring pricker, and a flame shield which gives a hot, large flame (approximately six times larger than that given by the Valtock "Miniature" model).

A pencil-flame is quickly obtained by removing the shield.



This model is ideal for big soldering and paint-stripping jobs, and for fine jobs like silver soldering, glass bending and drawing, etc. It is a *must* for every home workshop!

***Don't miss out
on Big Sales!***

Our Advertising Campaign will result in a lot of people asking for the new Valtock "Major"—so be ready to meet the demand. For full information, please get in touch with us at the address below.

VALTOCK LTD

REGENCY HOUSE,
1-4 WARWICK STREET, LONDON, W.1.
Telephone: GERrard 1667



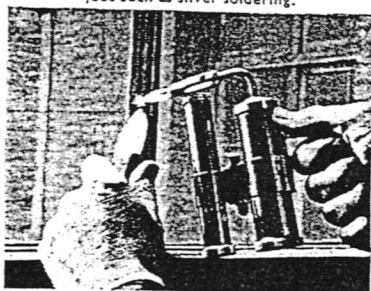
The highly localised, clean heat is perfect for glass bending and drawing, model making, etc.



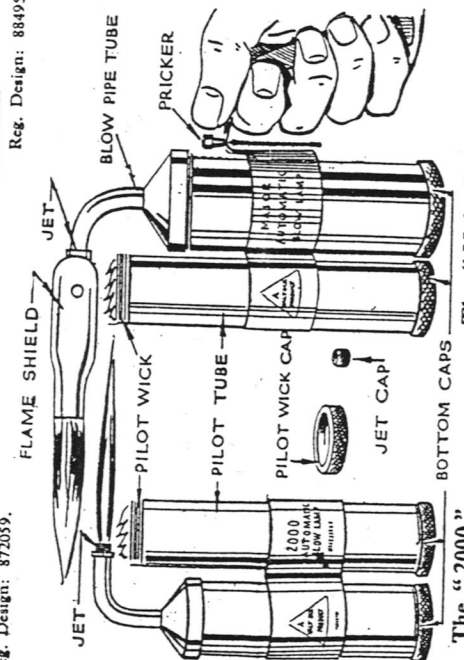
The pencil-flame of the "Major" (obtained by removing the shield) makes it ideal for all delicate jobs such as silver soldering.



In tinning and sweating, the "Major" brings the heat to the job—just where it is needed.



The large, hot flame given by the Valtock "Major" provides ample heat for paint stripping and "big" soldering jobs.



The "2000"

The "Major"

**ONLY PURE METHYLATED SPIRIT MUST BE USED
NO OTHER FUEL IS SUITABLE FOR THIS BLOW-LAMP.**

INSTRUCTIONS FOR USE

Unscrew both bottom caps. Fill both barrels with VIOLET COLOURED METHYLATED SPIRIT. DO NOT USE ANY OTHER KIND OF FUEL. The spirit should reach to about an inch from the ends of the tubes to allow for expansion. Replace both bottom caps, and lay the lamp on its side for 15 minutes to allow the wicks to become thoroughly saturated. The pilot wick tube should now be topped up to within an inch of the end of the tube to replace spirit absorbed by the wick.

Stand lamp upright and remove the cap on the pilot wick and the small cap from the jet. Adjust the pilot tube so that the jet is over the centre of the pilot wick and light the pilot wick. The lamp should start to blow in a few moments. Sometimes, if the lamp is held with the blow pipe at an angle of 45 degrees, pointing downwards, it will warm up more quickly.

The heat of the flame can be adjusted by changing the up and down position of the pilot tube in relation to the jet. If the flame dies off, it may be due to an air lock, which can be cured by turning the lamp momentarily upside down while it is burning. Take care that the lamp is not allowed to run dry, as this may burn the wick.

If the flame is crooked or spiral, it will mean that there is some dirt in the jet. A small piece of wire is enclosed for cleaning the jet. This lamp is a craftsman's tool, and with ordinary care it should last a life-time. In the event of damage, spares may be obtained from the makers.

THE FLAME SHIELD, supplied only with the Major Lamp, is screwed on to the jet when a broad flame is required.

VALTOCK LTD., REGENCY HOUSE, 1-4 WARWICK STREET, LONDON, W.1

P.T.O.

INSTRUCTIONS FOR SERVICING

THE VALTOCK AUTOMATIC SPIRIT BLOW-LAMP

This lamp contains no moving parts, and if instructions are followed carefully and the correct fuel is used, there should be no need for any adjustment or attention over very long periods.

1. **FUEL.** Methylated Spirit unmixed with vegetable oil is the only recommended fuel. In the U.K., methylated spirit is sold with a small proportion of castor oil added, under the name of surgical spirit, and this should not be used as the presence of vegetable oil will cause clogging of the jets and wick.

2. **CARE** must be taken that the lamp is not allowed to run dry of fuel as this will cause charring and burning of both the wicks.

3. **CARE** should be taken not to use a cleaning instrument for the jet which is too large, as this will cause opening of the orifice and prevent the correct functioning of the lamp. 30 S.W.G. wire is recommended and a prickler is supplied with each lamp.

4. **THE WICK** in the long tube called the pilot wick is fitted by the manufacturers, tightly compressed into the top end of the tube and the spirit is burned through this wick due to the heat of the flame being conducted down the tube and vapourising the spirit which is forced through the wick and burned at the top. Should this wick become loosened, it is a simple matter to rectify. The long tube should be detached from the clip, the top cap should be left in place, the bottom cap removed and the tube stood upright resting on the top cap. Any suitable round object can then be used to apply sufficient pressure to the wick to ram it tightly into the top of the tube. It is most unlikely that this wick will ever need replacement as should it become burned or charred at the top, it may easily be trimmed with a sharp knife and pushed higher up the tube.

5. **THE ATOMISING JET** is quite easily replaced as it is screwed into the top end of the blow pipe tube. Do not exert too much pressure in replacing this jet as the blow pipe tube is only of a light gauge.

6. **THE BLOW PIPE WICK** consists of two strands, each 15" long folded double. Having removed the jet, a thin piece of wire, folded double, is pushed down the Blow Pipe Tube, folded end first, until it protrudes from the bottom of the large tube. The wick is then threaded through the loop so formed and pulled up until the doubled end just appears out of the top of the blow pipe tube, leaving four strands of wick hanging from the bottom of the big tube. The wire is then removed and the wick pulled back down the blow pipe tube until the top end is visible about $\frac{1}{4}$ " from the end of the blow pipe tube. When the jet is replaced the back end of the jet should be approximately up against the top end of the wick.

7. **THE CONICAL CAP** should on no account be removed. When fitted at the factory the threads are sealed in order to prevent any loss of pressure.

**ONLY PURE METHYLATED SPIRIT MUST BE USED.
NO OTHER FUEL IS SUITABLE FOR THIS BLOW-LAMP.
IN THE U.K. THIS IS OBTAINABLE FROM CHEMISTS
AND IS VIOLET COLOURED.**

P.T.O.

- 1963 -

NEW

SOLDERING IRON ATTACHMENT

Fits both the VALTOCK "2000" and "Major" Blowlamps.

Designed for those who prefer to use a bit for soldering. The bit is held rigidly in the correct position in relation to the flame. Provides you with a convenient soldering iron anywhere away from electrical supplies.

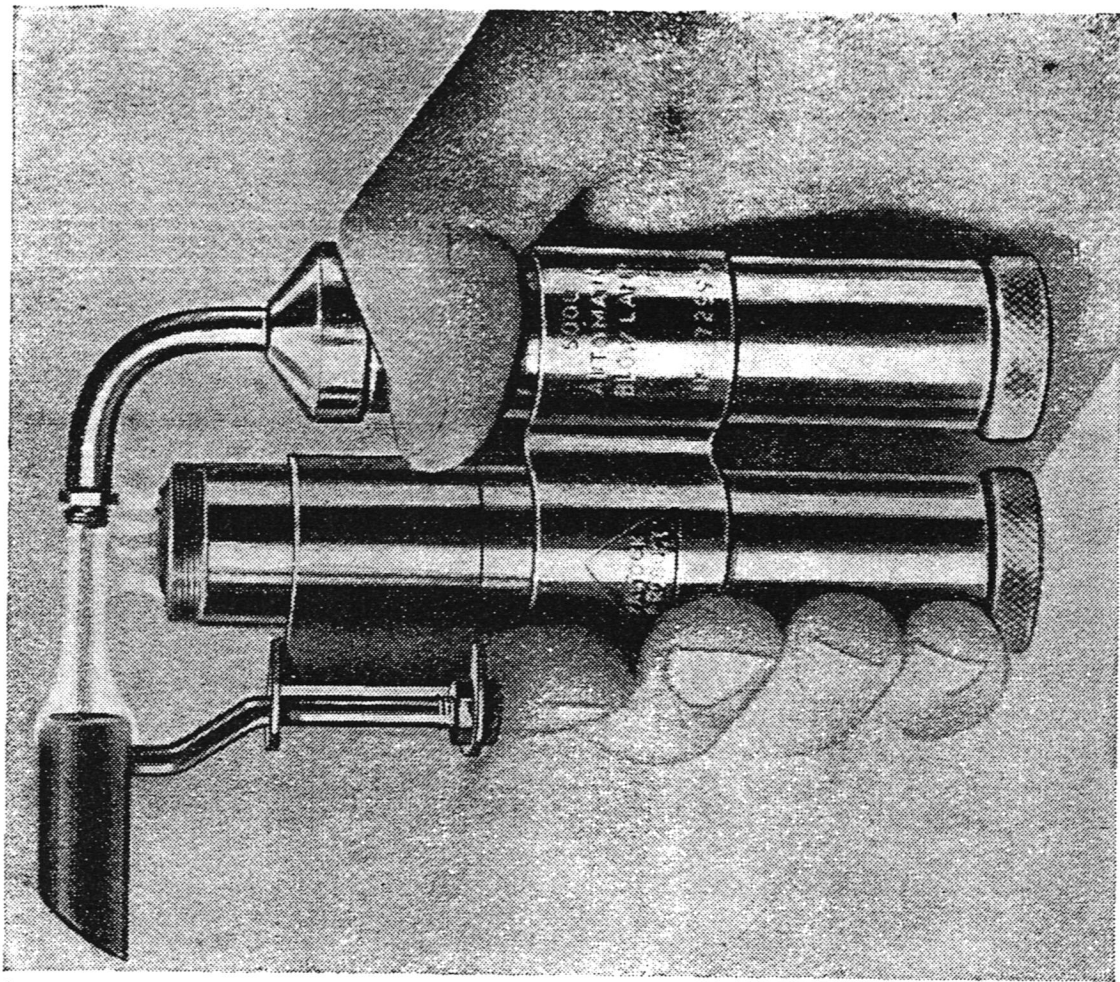
Ideal for service engineers, mechanics and for the home handyman.

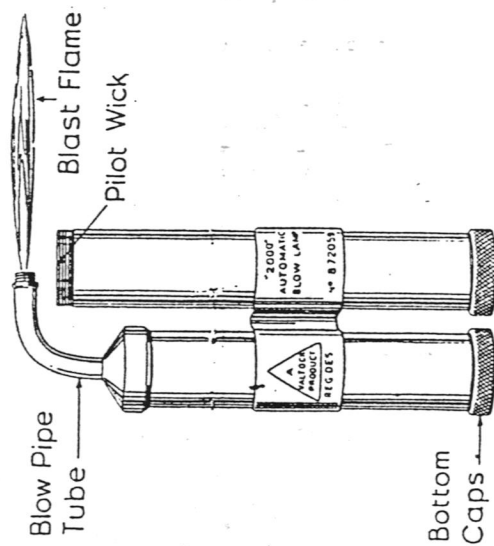
Price 5/- available from

VALTOCK LTD.

REGENCY HOUSE, 1-4 WARWICK STREET,
LONDON, W.1

Telephone: GERrard 1667





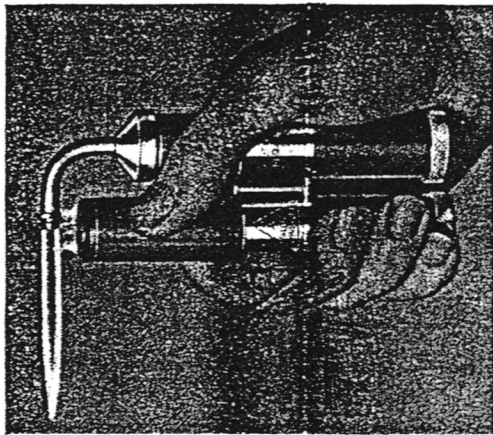
INSTRUCTIONS FOR USE

Unscrew both bottom caps. Fill both barrels with violet coloured methylated spirit. **DO NOT USE ANY OTHER KIND OF FUEL.** The spirit should reach to about half an inch from the ends of the tubes to allow for expansion. Replace both bottom caps, making sure they are screwed on firmly and lay the lamp on its side for 15 minutes to allow the wicks to become thoroughly saturated. Stand lamp upright and remove the cap on the pilot wick and the small cap from the blow pipe. Adjust the blow pipe so that its tip is in the centre of the pilot wick and light the pilot wick. The lamp should start to blow in a few moments. Sometimes, if the lamp is held with the blow pipe at an angle of 45 degrees, pointing downwards, it will warm up more quickly.

The heat of the flame can be adjusted by changing the up and down position of the blow pipe tip in relation to the pilot flame. If the flame dies off, it may be due to an air lock, which can be cured by turning the lamp upside down for a couple of seconds while it is burning. Take care that the lamp is not allowed to run dry, as this may burn the wick.

If the flame is crooked or spiral, it will mean that there is some dirt in the jet. A small piece of wire is enclosed for cleaning the jet. This lamp is a craftsman's tool, and with ordinary care it should last a life-time. In the event of damage, spares may be obtained from the makers.

VALTOCK LTD., 6, SHERWOOD STREET,
PICCADILLY CIRCUS, LONDON, W.1.
Tel: GERard 1667



A VALTOCK PRODUCT

An entirely new miniature automatic Blow Lamp

- No pumping- self pressurising
- No working parts to go wrong
- Burns methylated spirit
- Ideal for small silver soldering

The illustration gives an idea of the handy size of this wonderful little tool which weighs only 7 ounces and is 5½ inches in height. Designed by engineers for engineers, it is constructed of solid brass tube without soldered joints and may be safely carried in the pocket. All parts are interchangeable and spares are obtainable. Just a few of the many uses for the Valtock Blow Lamp:—

Soft Soldering. Ideal for tinning or sweating, it brings the heat to the job,—just where it is needed. The flame is neutral in character and will not oxidise or blacken the surface of the work. Where the use of a soldering iron is necessary, it is just right for pre-heating the job to ensure an easy, clean run of solder.

Silver Soldering. The small pencil flame is designed for delicate jobs. The work should be placed in a small hearth and surrounded with finely broken coke or charcoal to conserve heat. Although the Valtock Lamp gives a very hot flame, it is small in volume and if silver soldering is attempted "in the open," much of the heat is dissipated. It is the ideal tool for model making or jewellery repairs.

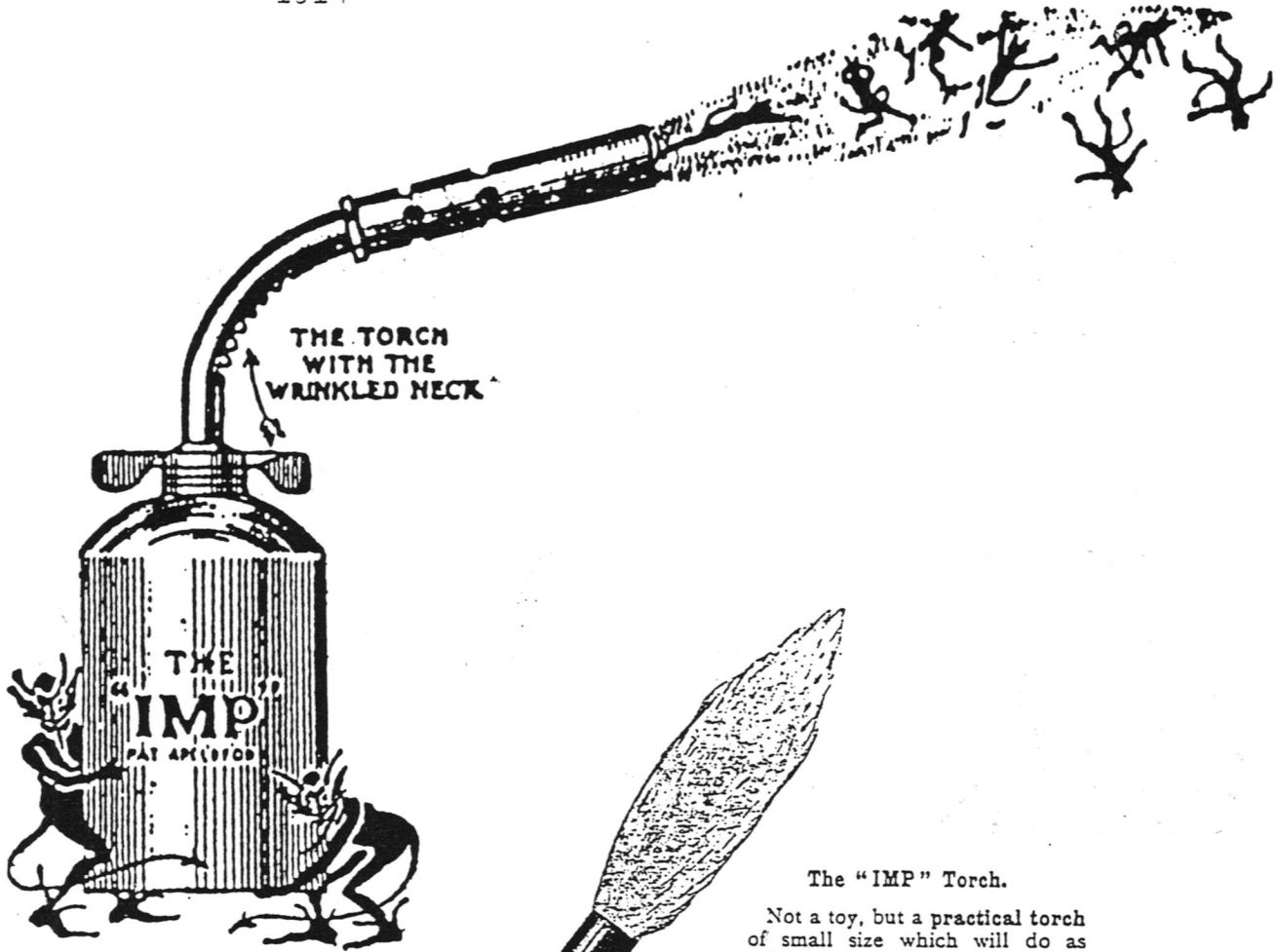
Paint Stripping. This little lamp will enable you to work round window frames without cracking the glass and to get into the odd corners where the ordinary blow lamp heats up too great an area.

Glass Bending and Drawing. The highly localised, clean heat is ideal for this type of work.

General. A Valtock Blow Lamp is a really valuable addition to every tool kit for service engineers, electricians, dental and type-writer mechanics, motor engineers, model-makers, and last, but not least,—the handyman.

VALTOCK LTD., 6, SHERWOOD STREET,
PICCADILLY CIRCUS, LONDON, W.1.
Tel: GERard 1667

- 1914 -



Imp Blow Lamp.
Holds $\frac{1}{2}$ pint

The "IMP" Torch.

Not a toy, but a practical torch of small size which will do as much work as a large one. Produces a perfect Bunsen flame of over 2000 degrees Fahrenheit.

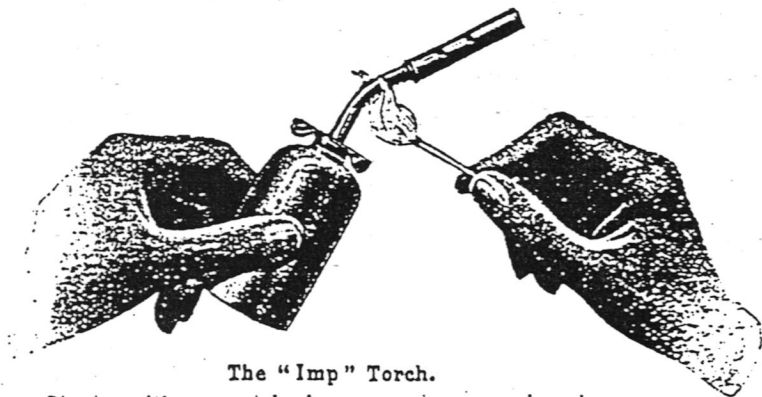
The corrugated neck largely increases the heating surface and creates a greater pressure than could otherwise be produced.

Perfectly safe and can't get out of order. Heats a soldering copper or takes the place of one.

For any purpose where quick, cheap, clean and intense heat is desired.

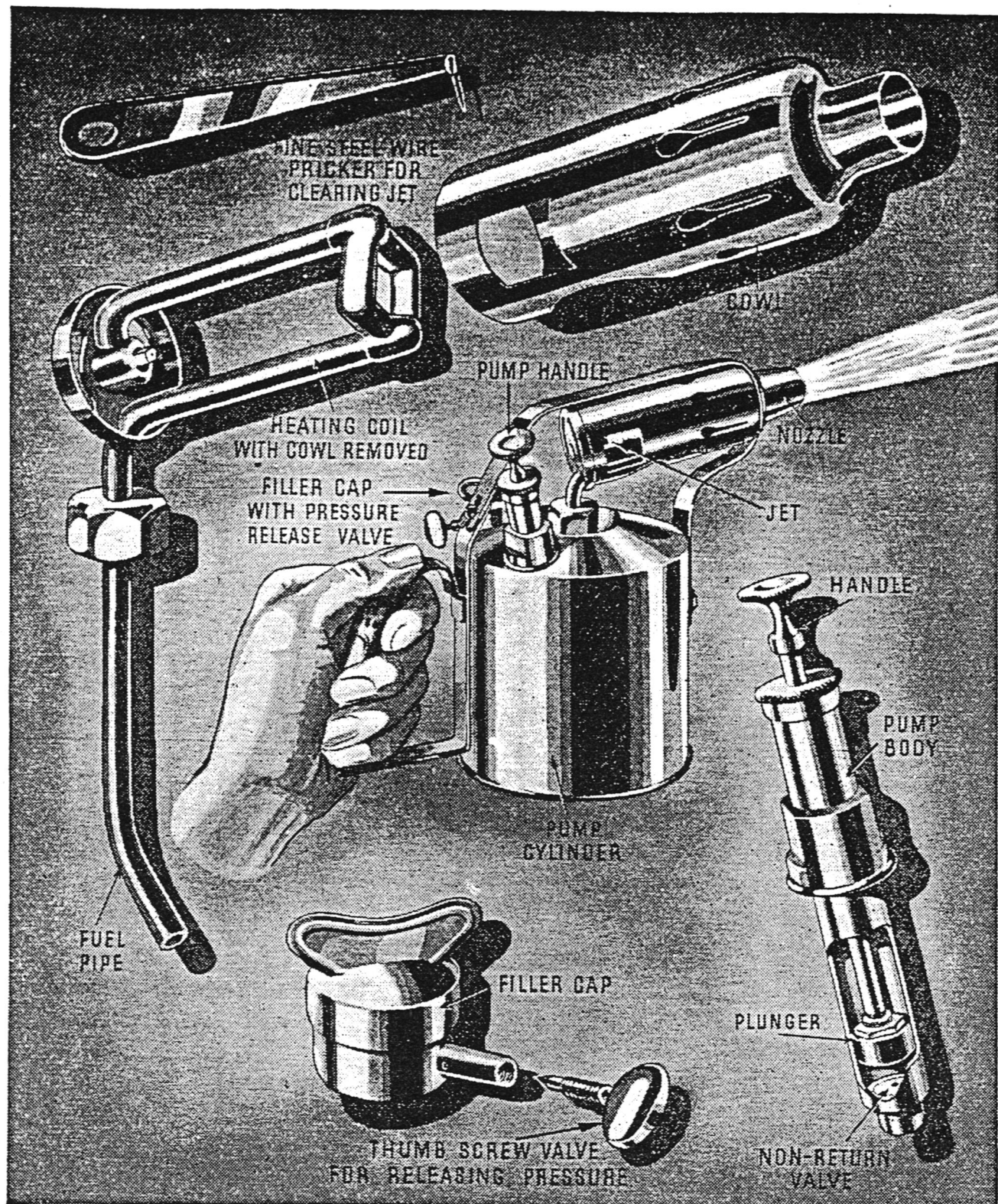
Suitable for Telephone and Telegraph, Dental and Jewellery Manufacturers. Simple, efficient and powerful. No household can afford to be without one. Every motor car should have one in their kit.

each $\frac{4}{6}$



The "Imp" Torch.

Starts with a match, has no pump or valve, is entirely automatic and burns two (2) hours on one filling. For hand or bench work.



VAPORIZED PARAFFIN, ejected under pressure, produces the intensely hot, reddish-violet flame of the blowlamp. To start the process of vaporization, a small quantity of methylated spirits is poured into the well at the neck of the cylindrical container. Once ignited, the spirit burns long enough to heat both the burner and the air inside the container. The air expands and forces some of the paraffin fuel up the pipe to the loop-shaped heater coil. Vaporization takes place at this point, and a match applied to the nozzle gives the desired flame. Pressure is then built up by operating the hand pump and the flame is soon transformed into a concentrated jet. The fierce heat obtained is the result of vapour intermingling with air drawn in through the openings of the cowl. A thumb screw valve is fitted to the filler cap for extinguishing the flame or reducing pressure. It is essential to keep the pin-point jet free from accumulated carbon; a steel pricker is supplied for this purpose

BLOWLAMP

How is it that the flame of a blow-lamp is so much hotter than that of an ordinary wick-burner? In a wick-burner the total amount of heat obtainable from a given quantity of fuel is produced slowly at comparatively low temperature. The blowlamp, on the other hand, is designed to produce the opposite effect and convert the fuel into heat at a faster rate and therefore at a higher temperature. The purpose of the blowlamp is to provide an intensely hot, clean flame for use whenever a concentrated source of heat is required.

Accelerated combustion, as it is called, is brought about by forcing fuel through a special burner where it is vaporized and mixed with a current of air to form a highly inflammable gaseous mixture.

Heater Coil

The body of the lamp contains the paraffin fuel and is provided with a small handpump for creating a pressure of air in the container. The fuel pipe is brought up through the centre of the container and continued in the form of a loop referred to as a "heater coil". The lower end of the heater coil terminates in a fine jet, and the whole is enclosed in a cylindrical cowl. Air pressure forces fuel up the fuel pipe and through the coil to the jet, by which time the fuel has become inflammable vapour.

While the pump is working the flame keeps the whole burner at such a temperature that the fuel is continuously vaporized, but in starting from cold the initial heating is derived from a methylated spirit flame. The receptacle for a small quantity of methylated spirit is a circular well situated at the top of the container, around the neck of the burner.

Once ignited, the spirit in the well burns for a few minutes, sufficiently long

to heat not only the burner but also the air trapped inside the fuel container. This warmed air expands and exerts a downward pressure on the paraffin fuel, forcing a small flow up to the now heated coil, where the fuel becomes vaporized.

Increased Pressure

The outlet jet is so placed as to cause a rapid stream of vapour to pass through the cowl, where it intermingles with a current of air drawn in through vents appropriately spaced round the sides of the cowl. A match applied to the nozzle of the cowl ignites the vapour.

By this time the methylated spirit flame is probably on the wane and the source of pressure must be replaced by the hand-pump. The action of the pump is similar to that of a bicycle pump; it consists of a leather-washed piston and a spring-loaded ball valve. When operated the pump drives air into the container with every downstroke, while the one-way action of the ball valve prevents air being sucked out on the upstroke. Thus the pressure of the air trapped in the container is increased and gives a correspondingly hotter flame.

Pressure-release Valve

By operating the pump occasionally the pressure is kept constant, or if a flame of great intensity is required, the pressure is increased by further pumping. Maximum efficiency is obtained when the flame is short and of reddish-violet appearance.

The filler hole, it should be noted, is provided with a pressure-tight cap, and a small pressure-release valve gives facility for reducing excessive pressure or extinguishing the flame as required.

In everyday use the blowlamp provides a convenient source of heat for many kinds of work, including plumbing.

HISTOIRE DES LAMPES GEM

Le capital de la Société est de 3000 livres divisés en 3000 actions de 1 livre, le plus ancien document que nous avons de la société est

WOODWARD AND COPELIN

17 BIRD IN BUSH ROAD

PECKAM, LONDON S.E. le premier Janvier 1904.

En 1906, la Société se déplaça au 44 Hill Street Peckam London S.E. en 1906.

Mon grand-père était Walter Seth WOODWARD, mon père était Walter Leslie WOODWARD, ils travaillaient pour la société, puis s'installèrent à la fabrique "GEM" à Oakhill road, Sutton, Surrey vers 1930, avec leur cousin Frederick WOODWARD, fils de John Thomas WOODWARD.

Quand la bombe volante tomba (V1) sur l'usine en 1944, ils se réinstallèrent à Crunden Road, Croydon.

En 1947, mon grand-père mourut et ma grand-mère voulu que son gendre Arthur BENNETT prenne en charge la direction de l'usine pour une nouvelle expansion, mon père et Fred refusèrent de travailler pour lui jugeant que le marché des lampes GEM n'avait plus d'avenir en raison de la fin de la guerre (l'armée étant le principal client), et que l'intérêt de la Société était de diversifier ses fabrications.

Aucun arrangement ne pu aboutir et ils décidèrent de se démettre.

La société survécu jusqu'aux années cinquante, mais nous ne savons précisément la date, car nous n'avions que peu de contact avec cette branche de la famille.

Je ne connais pas la destinée des droits de fabrication qui furent vendu dans les midlands.

Mme LEFFERS

Née WOODWARDS

GEM LAMPS

WOODWARD BIOS + COPELIN LTD INCORPORATED THE 15 TH. DAY OF
MARCH 1918

By John Thomas WOODWARD
23 West St Lane
CARSHALTON, SURREY

ENGINEER

Walter Seth WOODWARD
18 Hugard Road
PECKAM S.E. 15

ENGINEER

William Edward Copelin
14 Commercial Road
PECKAM S.E. 15

MANTLE MANUFACTURER

The capital of the company is £ 3000 divided into 3000 ordinary shares of £ each.

The earliest records we have of the company is WOODWARD and Copelin, 17
bird in bush road PECKAM, LONDON S.E. January 1 ST 1904.

Then moved to 44 Hill street Peckam LONDON S.E. in 1906.

My grand father was Walter Seth WOODWARD, my father was Walter Leslie
WOODWARD worked for the company when they moved to the "GEM WORKS"
Oakhill Road, Sutton, Surrey, from about 1930, also his cousin Frederick
WOODWARD, son of John Thomas WOODWARD.

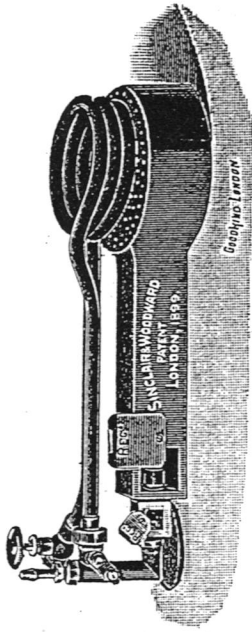
When the flying bomb fell on to the yard in 1944, they moved to Grunden road,
Croydon.

In 1947 my grand father died and my grand mother wanted her son in law
Arthur BENNETT to takeover and expand the firm, my father and Fred
WOODWARD refused to work for him, saying the call for GEM LAMPS was
waning, due to the end of the war, and they needed to diversify.

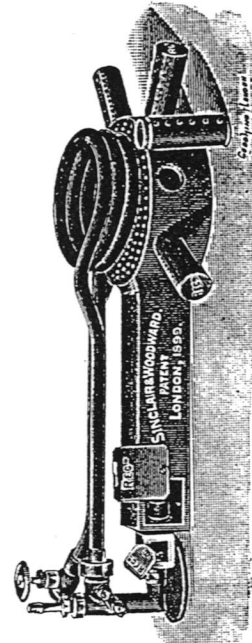
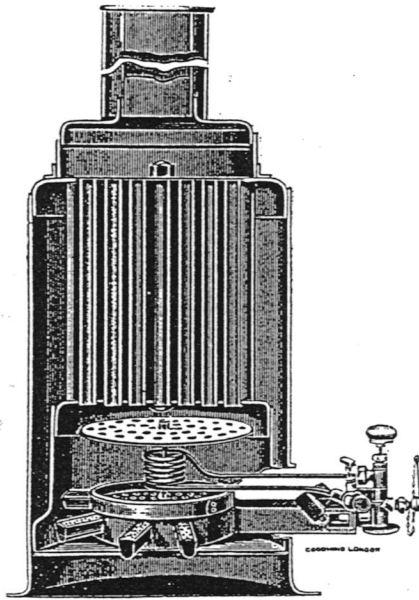
As no agreement could be reached, they both left and moved away. The firm
struggled on till the end of fifties, but we cannot be sure as we did not have much
contact with that side of the family.

The manufacturing rights were sold to someone in the Midlands.

MRS LEFFERS
NEE WOODWARD



6 inch Without Arms.



6 inch With Arms.

THE COMET LIQUID FUEL BURNERS

(Sinclair & Woodward's Patent) 1899.

Also two Registered Designs, Nos. 35715-6.

The above Burners are for the purpose of Raising Steam in various sized Tubular Boilers, and are especially suitable for Motor Cars and Steam Launches, &c., from 2 to 20 H.P. The oil used being Refined Petroleum.

THERE IS NO SMOKE OR SMELL AFTER IT IS STARTED, COMBUSTION BEING COMPLETE.

The best results are secured by Vertical Tube Boilers with Water Jacket round Fire Box. Tubes $\frac{1}{2}$ in. to 1 in. diameter. No Fire Bars are required but an Iron plate, Atmospheric air being only admitted through the burner itself.

Where the fire door is not large enough Arms can be screwed into the burner after it is in its place so as to cover a larger surface with flames.

The following Report of Practical Trials made by Professor T. HUDSON BEARE, of University College, London, will show at once the utility of the Comet Burner for the purpose designed.