## BLOWLAMP NEWS

No 71

**MARCH** 

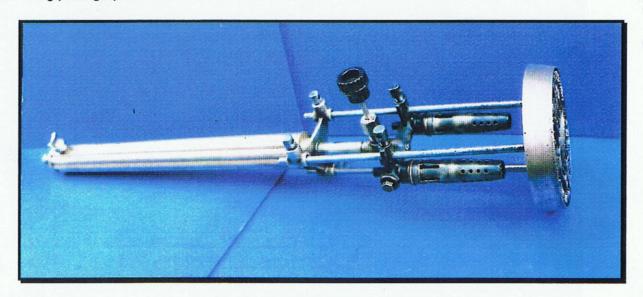
2010

The Newsletter of the Blowlamp Society - Founded by Les Adams, August 1992

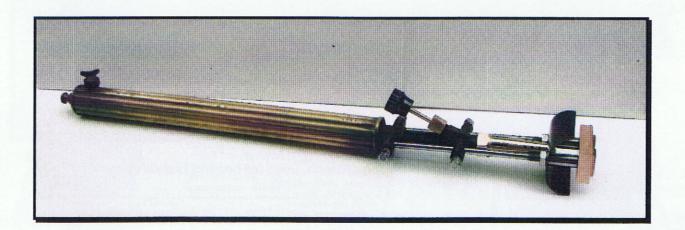
#### **BRANDING TORCHES**

There was a good response to the feature on branding torches in BN70, so here is the follow up to complete the story.

Firstly I must apologise for not mentioning that the Zurich-Oerlikon torch featured was owned by Gerard Muller. Gerard has probably got the largest collection of lamps by that manufacturer, and has sent the following photographs.



The two burner Zurich-Oerlikon



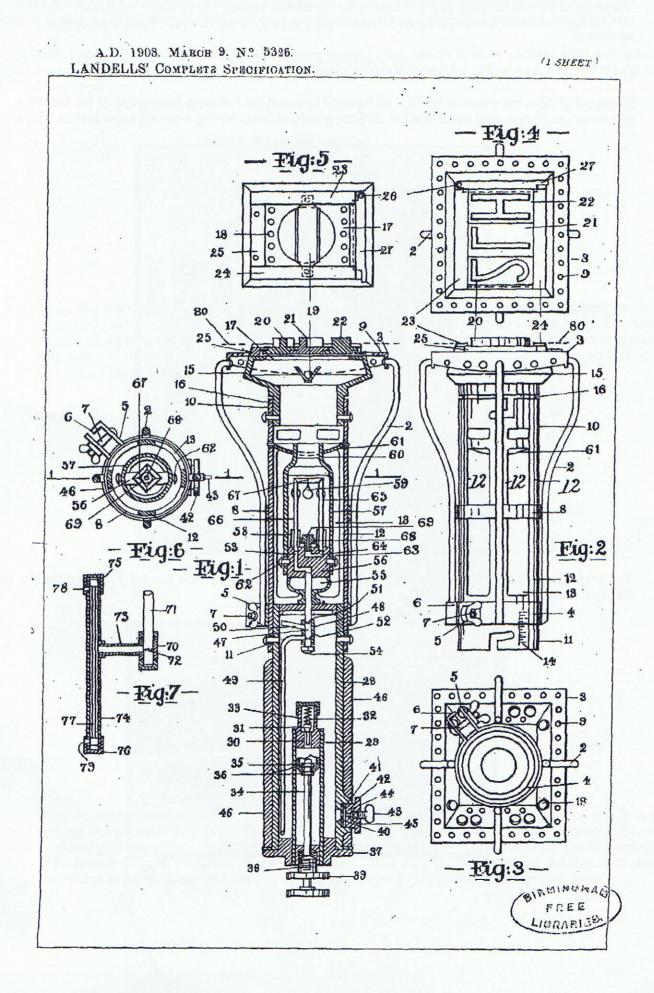
Single burner Zurich-Oerlikon



This is a most unusual blowlamp, used for heating branding irons.

Graham Stubbs also e-mailed me to say that when he was researching British Patents, there were three that made reference to branding attachments. The first is a self-heating branding iron for cattle which was patented in 1904 by Andrew McLeod of New Zealand. The documents refer to the heating element but there is no drawing included which shows a branding attachment.

The second reference is to another self-heating branding iron for cattle, this time patented in 1908 by George Landells of Australia. This time there is a drawing of the complete device.



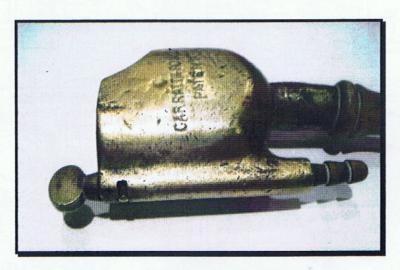
Finally there is reference to a patent granted to Leon Guilbert of Paris (GB191124126) for an adjustable support for early "Rapide" self-heating soldering iron. What is interesting is the reference in the description to the application to branding irons. Graham was unable to find any commercial literature relating to the branding application, perhaps one of our members from France might be able to provide an answer.

#### **GARRETT & FOWLER**

Following on from the article in BN70, Ted Rawson has sent the following photograph of the Garrett & Fowler lamps he has, and points out the difference with his lamp having a control valve (centre lamp).



The left hand lamp is stamped with the number 6203, the one in the centre number 7732 and the one on the right 7940.



#### **PUMPS**

Anyone who has read Blowlamp News will know that I like the more unusual looking blowlamps and also those which ask a question.

One question I often consider is what thought process went into the final design of a lamp and in this instance what finalised the position of the pump for pressurising the fuel in the tank. We have blowlamps which have the pump inside the tank, ones with the pump attached externally on the tank and ones with the pumps incorporated within the handle. What are the advantages of one layout against the other?

The first blowlamp I acquired which has a pump attached to the outside of the tank was a Bladon B40 and recently while looking for items to include in this newsletter I came across the following patent specification.



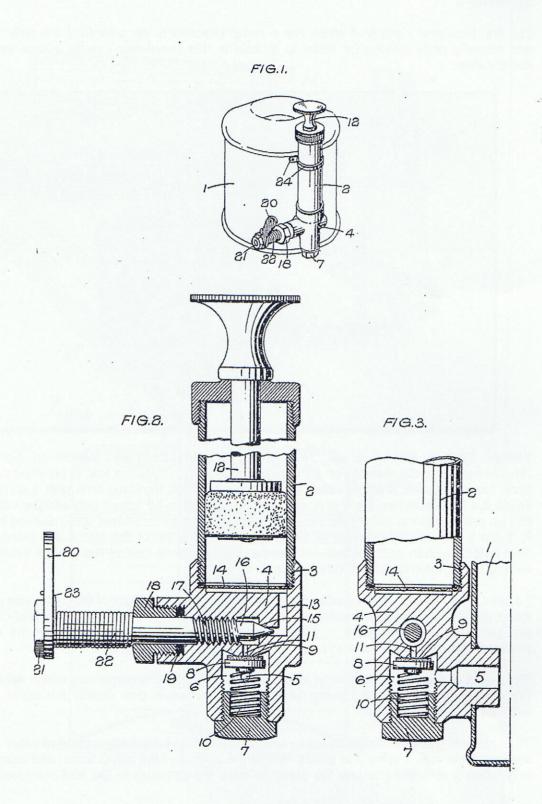
William Edward Bladon of 99 Northwood Street, Birmingham, registered his specification for "Improvements to Blowlamps" on 29<sup>th</sup> November 1929. He states that in previous constructions it has been found that with a single valve, when the lamp is left for some time with a considerable pressure inside the fuel container, there is a tendency for the fuel to be forced between the valve and its seating and up past the pump piston into the upper part of the pump. If when again desired for use, the lamp is lit, there is considerable danger of the lamp firing at the top of the pump; this being very undesirable. This defect is often encountered with lamps using a spring loaded flap or like valve, especially if the seating of the valve is not absolutely perfect.

To overcome this defect it has been proposed to provide the plunger of the pump with a conical threaded extremity which engaged a seating in the housing connecting the pump to the fuel container, upon the plunger being screwed down. This arrangement had the disadvantage that the usual gauze filter, provided at the lower end of the pump barrel, could not be employed.

The object of the present invention is to provide an improved arrangement which will effectively prevent the passage of fuel into the pump barrel and at the same time enable the usual gauze filter to be retained.

Thus according to this invention, I will provide an additional manually controlled valve disposed between the usual non return valve and gauze filter at the bottom of the pump barrel and adapted to be opened only when it is desired to use the pump to raise the pressure in the fuel container. This valve is preferably of the needle valve type and is spring controlled, being opened against the action of a spring which returns the valve to a closed position on release of the opening lever or handle.

In this case the spring action ensures that the valve cannot be left open when the operator puts the lamp down, and further the spring ensures a good seating of the valve. The valve is adapted to be placed between the usual valve and the bottom of the pump so that if leakage of fuel does take place past the first valve, the auxiliary valve prevents the fuel passing further. Thus any fuel so leaking is trapped in the tube between the two valves and on again using the pump, this fuel is driven by air pressure back into the container. Thus danger of fuel reaching the pump is eliminated.



#### **IDENTITY & ASSISTANCE**

Russell Harrower has sent in the following picture of a logo which appears on a blowlamp he has been given. The lamp looks every bit like a Veritas with the style of handle, filler cap and pump chamber, but there is a transfer on the tank as follows.



The centre features a yellow crescent moon and stars on a blue background, the wording is in black on a white background. This logo was featured in issue 29 of Blowlamp News, but at that time there was no feedback. Does anyone have a similar blowlamp or know who the manufacturer might be.

Russell also sent photographs of a FALK and a COB, both of British manufacture, does anyone have similar lamps. Unfortunately the photographs were not good enough quality to reproduce.

# MODERN BLOWLAMPS By Keith Hawkins

I think that collectors should not just stick to the usual brass and steel blowlamps that we all know, but should take into account the transitional period where the conventional lamps using petrol, paraffin and alcohol have been replaced by gas fired ones and with the rechargeable lamps coming in gradually in the transitional period.



From the late 1800's to early 1960's, all blowlamps were for the most part fired up on petrol, paraffin or alcohol. Illustrated are three typical lamps in everyday use by plumbers, painters and many other tradesmen for all manner of jobs.

The three shown are from left to right, a Sievert Saturnus 3, a Sievert "S" Type, which incidentally was the first blowlamp to go into mass production; half a million a year were made before the advent of the 1900's. The third lamp was made by Bladon, with the pump in a vertical handle. The "S" Type was fired by petrol and the other two, paraffin.

As time went on, manufacturers started to use rechargeable lamps, although they did not last very long.



Shown here is a Wee-Dex with a fine spun copper tank, which I think was originally painted with a dull khaki colour. Why, I cannot think, when underneath it has such a lovely finish. Then there is the Bernz-O-Matic from the U.S.A. and the third one is a Dexagas; all running on propane. To recharge, all one had to do was to remove the burner assembly and swap the tank, as nowadays one does with a Calor gas drum. The Wee-Dex incidentally was made by I.C.I.



By the mid 1960's they also started to be replaced by removable tanks. When you finished a tank you simply threw it away and bought another, and this system is what is in use today.

The little lamp on the right is filled with lighter fuel, so is very easy to use. It fills through the bottom and to light you simply turn the knob and pull the trigger. The other four have to be lit with a match.

All these lamps are however not very economical on price. Bearing in mind that a gallon of petrol is about £5-00, a 360ml tank for a Taymar lamp is £3-87! It might therefore be cheaper to go back to the old brass lamps, although I am sure Health & Safety might not agree.

#### **BEANCO**

In issue 57 of Blowlamp News I included a photograph of two blowlamps, an Optimus and a Primus, both of which had BEANCO stamped on top of their tanks. Whilst recently delving into my archive, of material which might just come in handy one day, I found this letterhead from Baxendale & Co Limited of Manchester, showing Beanco as being their registered trade mark.





The Optimus and Primus "Beanco" lamps owned by Keith Hawkins.

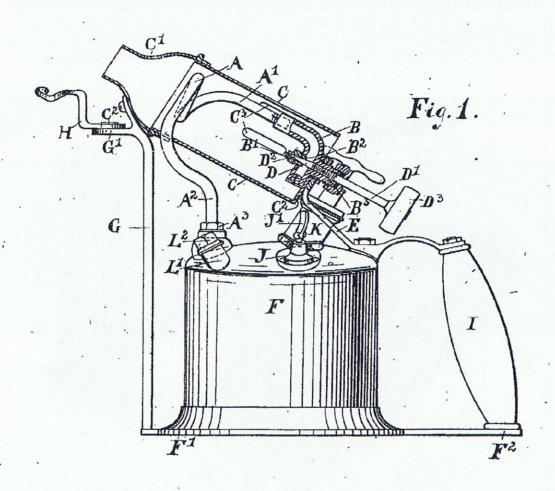
### **TYERS**

Many of us will be familiar with the Tyers furnaces as shown in the photograph below.



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What we might be less familiar with is that in December 1899, Fredrick Tyers of 47A Waldeck Road, Carrington, Nottingham, applied to register a patent for a blowlamp. His claim was that he had invented a blowlamp for burning off paint, or for like purposes and it has for its object, to provide a stove that will burn what is ordinarily known as paraffin oil and in which the length of the flame and the consequent heat may be readily regulated to suit the particular purpose to which it is to be applied.



As you will see the fuel tank has a striking likeness to several of the American "bell shaped" tanks. Is there anyone out there lucky enough to own one of these? If so I would like a photograph for the next newsletter.

#### FROM THE PATENT OFFICE

I spend quite a lot of time searching the internet for useful bits of information which could be used in Blowlamp News. One site which provides a lot of information is the Patents Office, and thanks to Graham Stubbs, the task has been made easier as he has produced a list of British Patents which have a connection to blowlamp manufacture.

What you have to be careful of is interpreting the information contained within these documents as I was recently looking at patent which listed Julius Alfred Boult as being the inventor and applicant. As it turned out Boult was only the Agent who was registering the application on behalf of Gustav Barthel.

I have included this patent as it is of an interesting design and the claim is that the invention relates to a hydrocarbon lamp for soldering, heating or other purposes. It presents this advantage over the arrangements hitherto in use, that the increased pressure in the reservoir resulting from the initial heating and subsequent burning of the combustible, forces the hydrocarbons into an evaporation tube extending nearly to the bottom of the reservoir and provided with a coil of wire gauze or metal wires or rods in which the hydrocarbons are rapidly vaporized without having time to be deposited or condensed.

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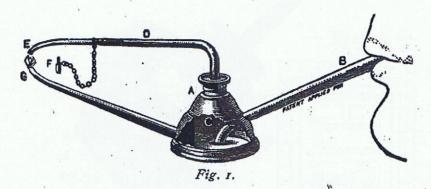
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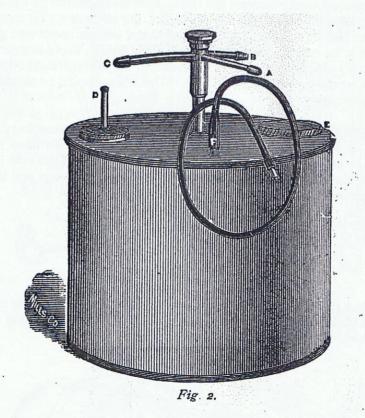
#### THE ART OF HARD SOLDERING

This is an extract from a book called "The Art of Hard Soldering" by Henry G. Abbott, dated 1895. Unfortunately I don't have all the pages but I feel there is enough of interest to be included.

The Poppen Lamp shown in Fig.1 consists of a lamp body, which is to be partially filled with gasoline, and from which projects a mouthpiece, a gasoline vapour or gas tube, and a wick tube, as shown in the illustration.



In lighting the wick G, the tube D, above it, becomes heated sufficiently to vaporize the gasoline as it is forced into the tube by the pressure from the lungs of the workman through the mouth tube B, and the vapour promptly ignites on issuing from the tube E. An adjustable tip admits of the flame being made of any size. The blast is controlled entirely by the mouth piece B. This device leaves both of the workman's hands free.



Another lamp, similar in design, is shown in Fig.2. This is known as the Bush lamp and in it both alcohol and gasoline are used. The body of the lamp is divided into two sections. Alcohol is poured in at D and gasoline at E. The wick D is lighted and the blow pipe revolved until the desired opening is just above the flame as shown in the illustration. The tube is then placed in the mouth or can be connected to a foot blower and the gas formed by the gasoline is ignited by the alcohol flame.

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Several patterns of alcohol lamp are now sold, any of which will be found satisfactory, although those that are made to adjust at an angle, like that shown in Fig.3 are undoubtedly the most convenient.



Fig. 3.

Avoid small lamps, as a wick that is much less than a half-inch in diameter is too small for the average work of the watchmaker, jeweller, dentist and metal worker. The wick should be large enough to fit the tube tightly when saturated with alcohol, but not so tight that it cannot be moved up and down the tube at will. Never fill an alcohol lamp quite full of alcohol, but allow room for expansion of the liquid when it warms up. Never allow the wick to get so short that it will not reach well down into the liquid, and do not allow the liquid to be entirely used up. Use a little care in these respects and you will always have a good light and there will be no danger of explosion. The lamp should be supplied with a cap to cover the end of the wick when the lamp is not in use. This cover should be placed over the wick immediately after blowing out the flame.

The hot blast mouth blow pipes are a great improvement on the ordinary pattern and are especially designed for use by jewellers, dentists and chemists. The pipes have nearly double the power of ordinary mouth blow pipes. The reason for this is that the end of the pipe is coiled, as shown in Fig.7, by means of which the blast is superheated before it strikes the flame and does not decrease the heat, as the blast from an ordinary pipe will do.



Another mouth blow pipe of special form is shown in Fig.8. It is totally different from all others; the mouth piece is particularly commendable, as the heaviest continued blowing causes no strain on the lips, while the tongue has the necessary control over the opening.

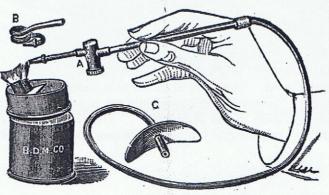
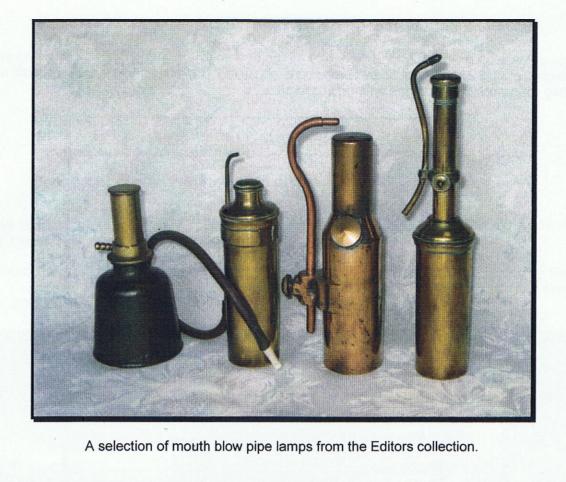


Fig. 8.





As well as operating these blowlamps with the mouth, which required a practiced technique to maintain a steady flame, there were a series of pumps available which were either operated by the foot or under the Below are some examples offered for sale by S.Tyzack & Son Ltd.

#### S. TYZACK & SON, LTD.

#### FOOT BLOWERS

These are the only Foot Blowers giving absolutely steady air pressures in all positions. No. 3 is the most useful size for small Blowpipe work, and is generally used for the soldering of lead chambers, being worked by the foot or under the arm, as most convenient. No. 5 for the larger Blowpipes. All patterns supply the air at a pressure of about 11 lb. on the square inch. These blowers have proved themselves to be efficient, simple, strong, and able to stand hard and constant work.

Size over all, including step and air pipe. Pressure in Size of Price £2 10 0 13 × 10 ×  $6\frac{1}{2}$  deep , 2 13 6 15 × 12 × 7 , 36 in. 20 oz. on sq. in. 36 " 20 Diameter of Air Reservoir, No. 3, 8 in.; No. 5, 10 in.



#### DOUBLE BLAST FOOT BELLOWS



No. TW1595:3.

TW1595:5.

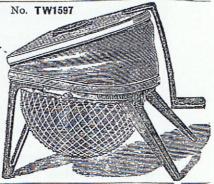
These are com pact and powerful, suitable for all small brazings and solderings for brassfounders, coppersmiths, silver-W1596r smiths, electroplaters, glassblowers, dentists,

Width of Bellows 6 8 12 14 16 in. IO Price No. TW1596r ... 22/6 29/- 37/6 46/- 55/- 65/-

#### FOOT BLOWERS

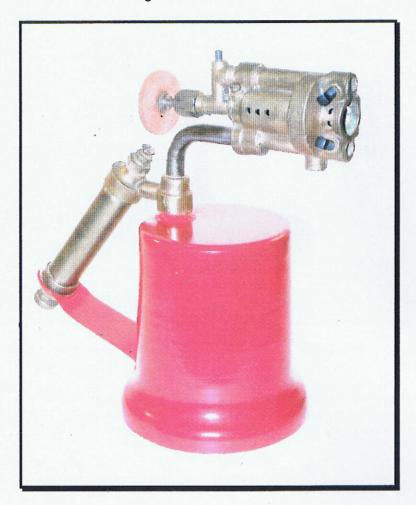
This pattern, by reversing the posi-tion of the Blower, reduces the risk of mechanical injury to the disc, and does away with the necessity for a wood casing or protection. It also prevents the Valve from picking up dirt from the floor, keeping the whole arrange-ment cleaner, and the Valves in more

perfect order. No. TW1597:3. ... £2 13 Price 0 Extra rubbers ... 3 TW1597:5. Price 0 ... Extra rubbers 3 6 Two Rubbers used on each Blower.



#### AND FINALLY

Just as I was finishing this edition I received an e-mail from Charles Smith with the following photograph attached of an Everhot, steel bodied branding torch. This is a most unusual and rare torch and is a fitting conclusion to the feature on branding torches.



#### CLASSIFIED

For Sale – Willy Mouton is selling his entire collection of 1000 blowlamps. Anyone interested in purchasing the collection <u>as a single lot</u> should contact Willy by e-mail at <u>brigitte.willy@skynet.be</u> For those attending the meeting in Belgium on 20<sup>th</sup> March, Willy will be able to provide further details of the collection.

**For Sale** – Tom Morris has 3 Sievert blowlamps for sale, a rapid, a soldering butt and a 2 pint paraffin lamp with pre-heater. For more details (and photographs) contact the Editor.

Blowlamp News is published in March, June, September and December. Any items for inclusion should be with the Editor at least 4 weeks before the issue date.

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My thanks go to Gerard Muller, Graham Stubbs, Charles Smith, Keith Hawkins and Russell Harrower for their contributions to this newsletter.