

BLOWLAMP NEWS

No 63

MARCH

2008

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

Firstly my apologies for this issue of blowlamp news arriving late, there is no real excuse other than pressure of work.

The one benefit of being late is that I can report that the meeting at Lochristi, Belgium on Saturday 8th March was another resounding success.

There were 46 collectors in attendance and the displays of blowlamps, many of which were for sale or exchange, were quite breathtaking.

One blowlamp which attracted a lot of attention was a Sievert "Paraffinia" No 4, brought along by Paul Whiddett. On the face of it quite an ordinary looking lamp, that was until you remove the burner shroud, which revealed a burner quite unlike anything I have seen before. (I did take some photographs, but unfortunately I have not finished the film so you will have to wait for the next issue) If anyone has any catalogue information on this particular lamp, please let me know.

A total of 81 people enjoyed a 3 course lunch and I think everyone went home well satisfied with the day.

Thanks must go to Brigitte and Willy Mouton for their continued hard work in organising this event.

DIARY DATES

The first date for your diary is **Saturday 25th October** for the meeting at Toddington. This will be the only event organised in the UK for this year so let's try to make it a record attendance.

For those of you who like to attend the Steam Rally's, Keith Hawkins has sent in the following dated of events he will be attending and as always he would be pleased to see you for a chat and a cup of tea.

23rd / 24th March – Chatham Royal Dockyard; 3rd to 5th May – Rushden; 17/18th May – Belvoir Castle; 31st May to 1st June – Canal Festival, Eturia, Stoke on Trent; 28/29th June – Banbury.

Future dates for Keith's rallies will be published in the June issue.

SELF HEATING SOLDERING IRONS (S.H.S.I.)

We are all familiar with the soldering butts produced by European manufacturers such as Barthel, Primus and Sievert, but we are probably less familiar with the Self Heating Soldering Irons produced in the U.S.A.

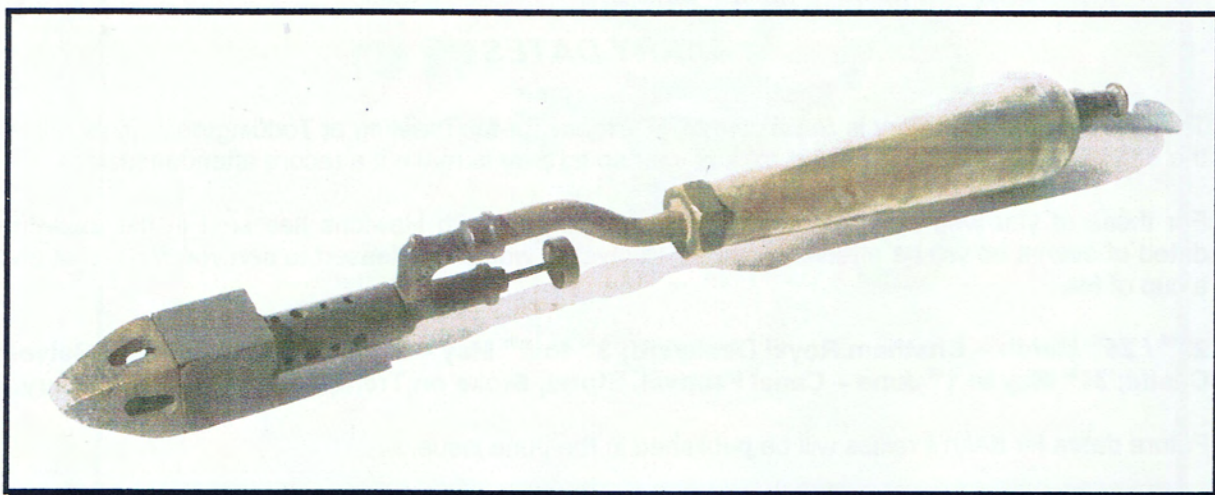
In issue 62 I included a photograph of a SHSI manufactured by the Frank J. Mann Tool & Appliance Co of New York and recently acquired by Charles Smith. Up until that purchase, Charles was unaware that the torch had ever gone into production as the only available information on it was a Patent document.

The design of this torch sparked my interest as it was quite unlike anything I had seen before. Armed with my copy of Vintage Blowtorches, an invaluable source of reference for all American

blowtorches, I discovered that there were several other makes and contacted Ron Carr, Charles Smith and Graham Stubbs to see if they could provide me with photographs of others.



The first photograph is of a Lyon Conklin & Co "New Marvell" torch, produced in Baltimore and owned by Graham Stubbs. The torch was invented by Roy W Marvell in 1912. He was awarded 5 SHSI patents between 1906 and 1914; the last 2 of which were assigned to Lyon Conklin. His 1914 patent includes a description of an absorbent block, soaked in a hydrocarbon or alcohol and used as a pre-heater.



Another torch owned by Graham is this Bennett-Marvell Co, which was designed by Roy W Marvell, in 1907 and assigned to the Bennett-Marvell Co of Philadelphia.

Charles Smith has provided the following extract from "The Metal Worker" dated 13th April 1901, together with a photograph of his torch.

"The Auto-Tool Company of 123 East Twenty-third Street, New York, are the patentees and manufacturers of the Vulcan self heating soldering tool. The points of recommendation in the tool, presented by the manufacturers are that it does away with the use of a stove and charcoal, that it is smokeless and odourless, and provides perfect combustion, together with complete regulation of heat, while it can be easily carried in the plumber's kit and made ready for use in a few seconds. The tool is about one and a half feet in length and one and

a half inches wide. It is economical, the claim being made it consumes on the average only about 1 cent's worth of gasoline for a day's work.



The copper soldering head is attached by a clip and can be removed easily, and heads of different shapes may be used interchangeably on the same tool when required for a variety of work. The flame can be turned down or out when the tool is not in use, and it can be quickly relighted. No time is lost in reheating, as the tool is always hot when in use, and by regulation of the flame the tool can be made of any degree of heat required. The Vulcan tool is simple to manipulate and is designed to perfectly balance in the hand of the workman.

By simply removing the soldering point and substituting a brazing nozzle, the tool can be immediately converted into a complete brazing implement, which, the manufacturers claim, will fuse the common metals, including brass and copper, and take the temper from steel. It can also be used as a painter's torch to burn off paint and is useful in thawing frozen pipes.

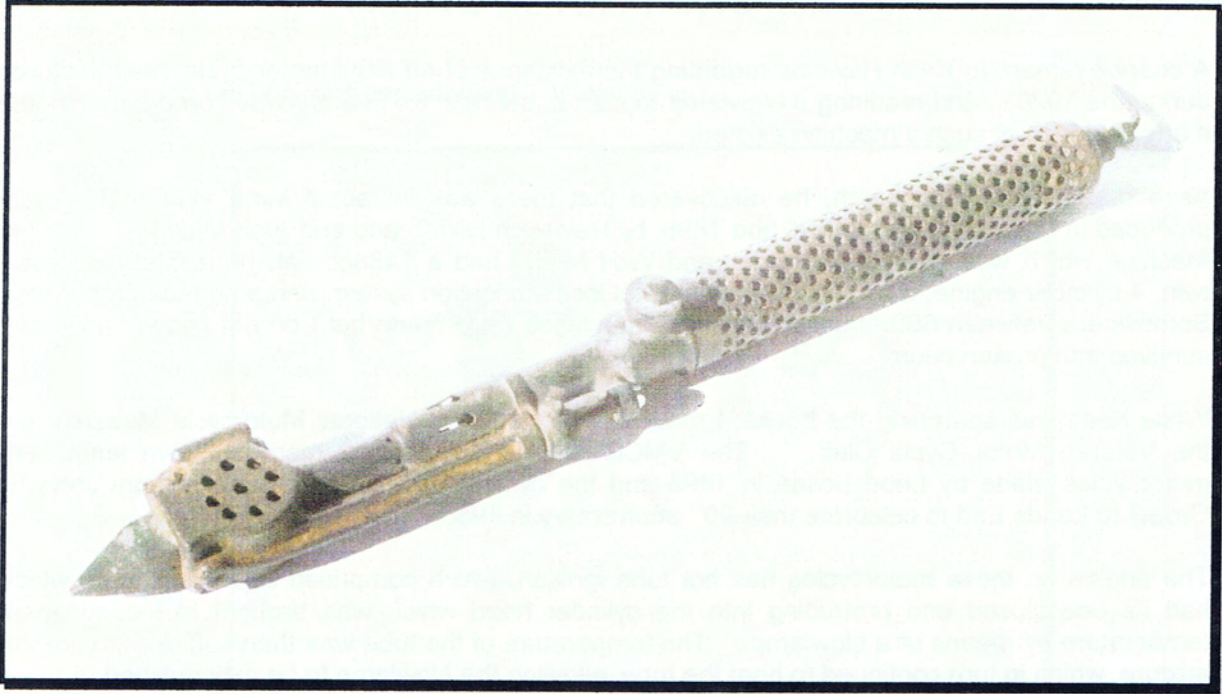
The company also manufactures a combination soldering and brazing tool known as the Vulcan No 4, which is specially designed for plumbers' use. All parts of the Vulcan tools are interchangeable, and the soldering points are furnished in different shapes. Vulcan No 5, a featherweight tool specially made for light work such as electrical inside wiring, jewellery or electroliner work, weighs less than one pound."



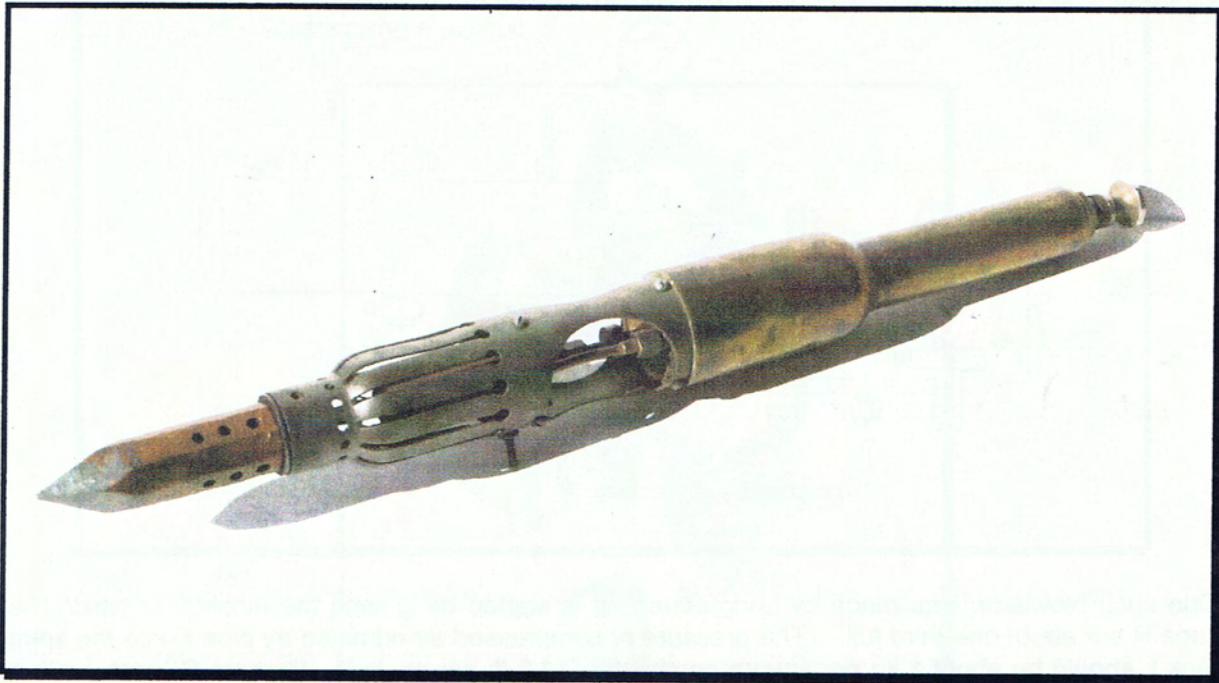
This SHSI is probably one of the largest made at over 26 inches long. It is the Otto Bernz No 75 and is owned by Ron Carr.



Made by the Karas Electric Co of Chicago and owned by Charles Smith. The soldering tip fixes into the end of the burner.



The Emile Block SHSI, owned by Graham Stubbs, appears to be influenced by the French FJ models.



The Eureka SHSI owned by Graham Stubbs.

Thanks to Graham, Ron and Charles for providing the photographs. On looking through the pages of Vintage Blowtorches, there are many other makes of SHSI listed, whether they all went into production is still to be confirmed.

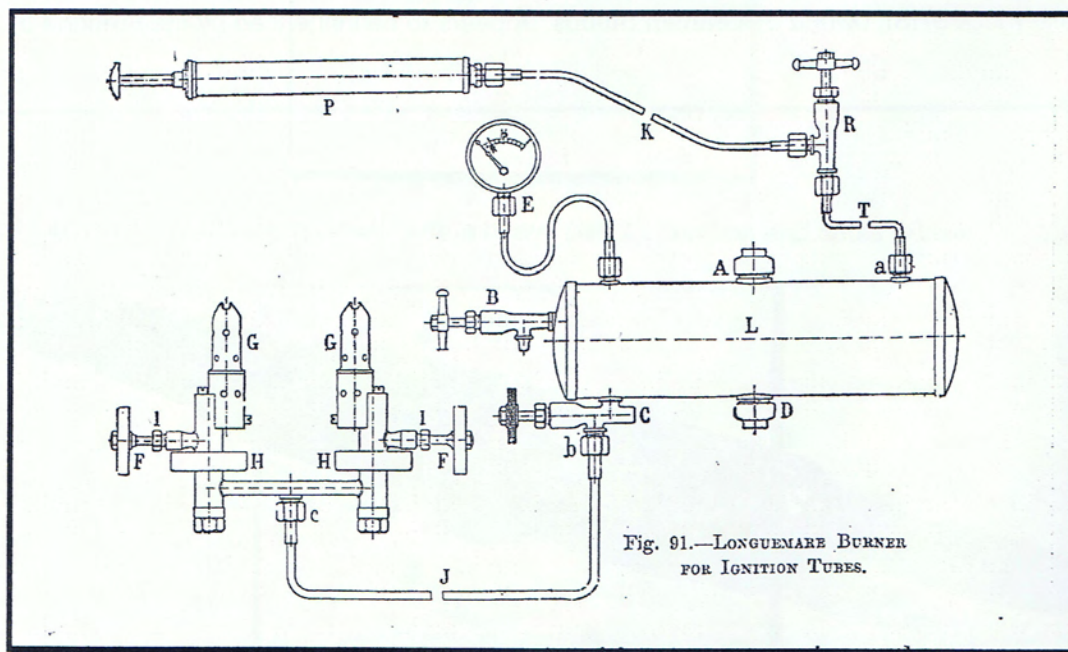
LAMP START MOTOR CYCLES

A chance remark to Keith Hawkins regarding the existence of an NSU motor cycle, manufactured during the 1920's, and requiring a blowlamp to start it, set both Keith and myself onto a trail to see if any evidence of such a machine existed.

As a result of Keith's search, he discovered that there was in fact a lamp start motor cycle produced in Munich between 1894 and 1896, by Heinrich Hildebrand and Alois Wolf Muller. The machine which was named the Hildebrand Wolf Muller had a 1488cc flat, horizontally opposed twin, 4 cylinder engine, with glow ignition, a total loss lubrication system and a surface carburettor. Somewhere between 800 and 2000 of these machines were made but I do not know if any have survived into preservation.

While Keith was searching the books, I made contact with the National Motorcycle Museum and the Veteran Motor Cycle Club. The VMCC said that 2 of their members own lamp start motorcycles made by Leon Bollee in 1896 and the owners rode these machines from John O' Groats to Lands End to celebrate their 90th anniversary in 1986.

The engine on these motorcycles has hot tube ignition, which comprised a platinum tube which had its one closed end protruding into the cylinder head which was brought to incandescent temperature by means of a blowlamp. The temperature of the tube was then sufficient to fire the mixture, which in turn continued to heat the tube, allowing the blowlamp to be extinguished.



One such blowlamp was made by Longuemare; it is started by igniting the alcohol, of which the cups H are about one third full. The pressure of compressed air admitted by pipe K into the spirit tank L should be about 1 kg per square centimetre (14.2 lb per sq. in.) Burners G, each have a blow pipe with platinum tube. Sufficient air for burning the petrol spirit is drawn in automatically. Incandescence is regulated by taps F, which have an asbestos stuffing box I; a temperature of about 1300 degrees centigrade can be attained. The spirit tank holds one litre of petrol spirit and can feed through J, two burners for eight hours.

Blowtorches as Detectors for Leaks of Halide Refrigerants Halides

When the colorless, odorless synthetically-produced gas Freon was adopted in the 1930s as a safe alternative for use in refrigeration and air conditioning equipment, a method was required for detecting possible leaks. It was found that a change in color of a blowtorch flame in the presence of minute quantities of the refrigerant was a reliable indicator. Several companies introduced products for a rapidly growing industry. Freon is one of a group of gaseous compounds, which may include chlorine and/or fluoroine and which are known as halides, hence the common term "halide detector" for these special adaptations of blowtorches.

A company that provides instrumentation for the air-conditioning industry, and training in its use, Bacharach Inc., in discussing detectors for refrigerant leaks, says this in relation to the torch method:

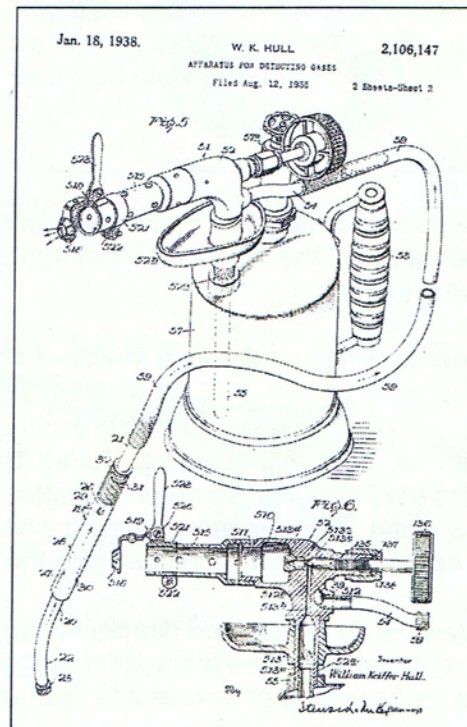
"Halide Torch: A halide torch is an inexpensive leak detector that is fast and reliable, but can only be used to detect chlorinated refrigerants. It can be used to detect leaks as small as ½ ounce per year. This torch works on the principle that air is drawn over a copper element heated by a hydrocarbon fuel. If halogenated refrigerant vapors are present, the color of the flame changes from blue to a bluish green. The halide torch detector is not as sensitive as modern electronic leak detectors, is somewhat awkward and could be dangerous because of the open flame."

US patents awarded to three companies provide insight into how these halide detectors torches work.

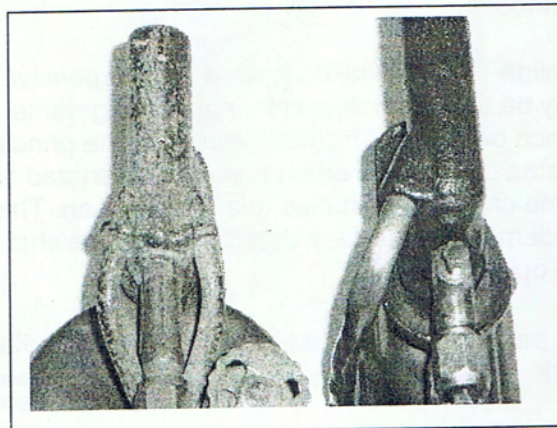
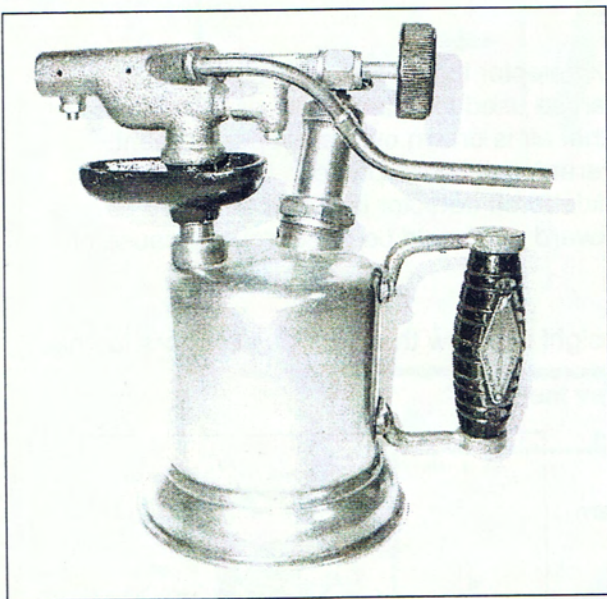
Hull Manufacturing Co. of Hagerstown Maryland.

US patent 2,106,147 was awarded in 1938 to William Keiffer hull and was assigned to Hull Mfg. Co. in Hagerstown, MD. The illustration in the patent appears, based on the appearance of the pump knob, to be an adaptation of a Bernz torch. The nozzle is specified as being made from gray cast iron, "free from any substance which would color the flame". A separate copper element, attached to the nozzle, is heated to red hot, and any trace of halide gas interact with the heated copper distinctive flame.

The patent reads "Broadly stated, the general object of the invention is to provide improved apparatus for detecting the presence of gases of the character indicated by means of characteristic light emitted by suitable reactive material, when heated, in the presence of the gas to be detected." Elsewhere, the patent discusses the use of copper for the "reactive element" and the change in the color of the flame to be expected in the presence of halides, going from normally blue to a greenish blue."



Several BTCA members have reported Otto Bernz blowtorches with a metal label attached to the handle with the words "HULL MANUFACTURING CO. HAGERSTOWN MD." The appearance of these torches is similar to the illustration in the Hull patent, with the exception that instead of a circular copper element mounted external to the nozzle, there is a copper slug attached to a screw mounted through the bottom of the burner. Other than the patent and the surviving halide detector torches, nothing more has yet been discovered about the Hull Mfg. Co. A variation of the burner on the Hull torches is shown below with two injector tubes rather than the one illustrated in the patent.

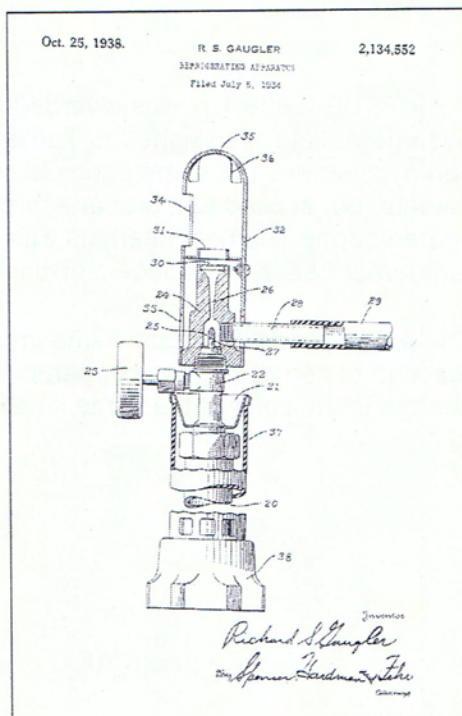
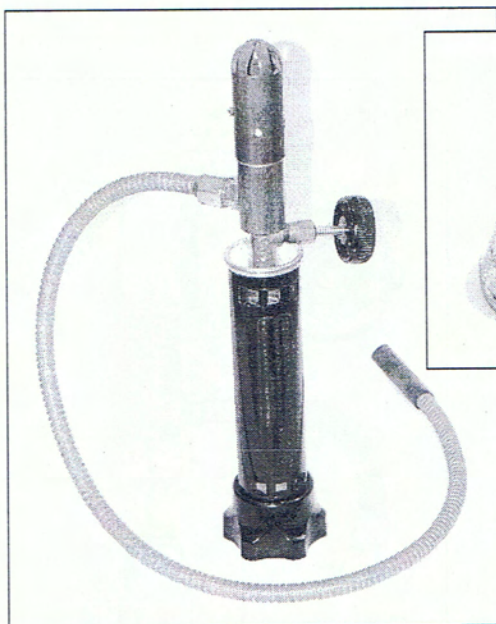


It is interesting to speculate that there might be a relationship between this Hull and the John S. Hull, the "father of the American blowtorch", who moved to Maryland from Ohio in the late eighteen hundreds.

Frigidaire Division of General Motors Company.

In the same year that the Hull patent was issued, US 2,134,552 was awarded to a Richard Gaugler and assigned to General Motors, the parent company of Frigidaire. This patent illustrates the Frigidaire refrigerant detector which was adapted from a bakelite Justrite torch. It includes a ring shaped copper element which is attached to the inside of the burner with a small bolt; a spare element was shipped with the torch..

The patent reads "Supported directly above the screen 30 and the burner is a ring shaped copper element which will react with free halogens in the flame to emit the characteristic color to indicate the presence of halogens in the flame."



Turner Brass Works

The 1939 catalog of Turner Brass works illustrates two versions of halide detectors. A Turner H-1 refrigerant detector in the author's collection has a copper rivet projecting into the inside of the burner tube near the exit. The burner itself appears to be made from yellow brass. There is no mechanical purpose for this rivet. I believe it to be the "reactive copper element" discussed in the patents.



TURNER Halide Refrigerant Gas Leak Detectors

DEVELOPED, PERFECTED AND GUARANTEED BY THE MANUFACTURERS OF TURNER BLOWTORCHES MARKERS OF QUALITY TOOLS SINCE 1871!
Positively detects leaks of all chlorinated hydrocarbon refrigerants including methyl chloride (Artic), ethyl chloride, trichloroethylene, methylene chloride (Carrene), dichlorodifluoromethane (F-12 or Freon), trichloromonofluoromethane (F-11), and dichlorotetrafluoroethane (F-113). Thousands in use by country's largest manufacturers and installers of electric refrigerators and refrigerator units.

A REAL NECESSITY

The rapidly expanding market for electric refrigerating units of all classes has created a real necessity for an efficient, reliable and yet simple device for testing refrigerant gas leaks. TURNER Halide Detectors meet every requirement in this field and are regarded as indispensable service tools by some of the country's largest manufacturers and installers of electric refrigerators and refrigerator units.

Basically TURNER Halide Detectors are alcohol burning blowtorches having specially designed burner housings which syphon the air supply thru a flexible rubber exploring tube. If the open end of the tube is held close to a leaky joint the gas is syphoned and on striking the burner the color of the flame is changed from blue to green. They are positive in effect and give rapid detection as the tube traces the pipe line being tested. Leaks equivalent to a loss of approximately one pound of refrigerant gas in 7 1/2 years have been detected easily under special tests.



No. H-1

NO. H-1 TURNER HALIDE DETECTOR (Illustrated Above)

The TURNER Halide Detector may also be used as an efficient blowtorch for general service work, such as soldering, heating coils to expel gases, and similar purposes. It is sturdy and compactly built and fits well into mechanics kits. The dual purpose needle valve cleans the orifice or gas opening each time it is closed and thus prevents clogging and the cool composition valve handle has a deeply corrugated edge which gives a firm grip. All metal parts, except the burner, have a highly polished nickel finish. Capacity one pint. Shipping weight 4 pounds. List price No. H-1 \$7.50



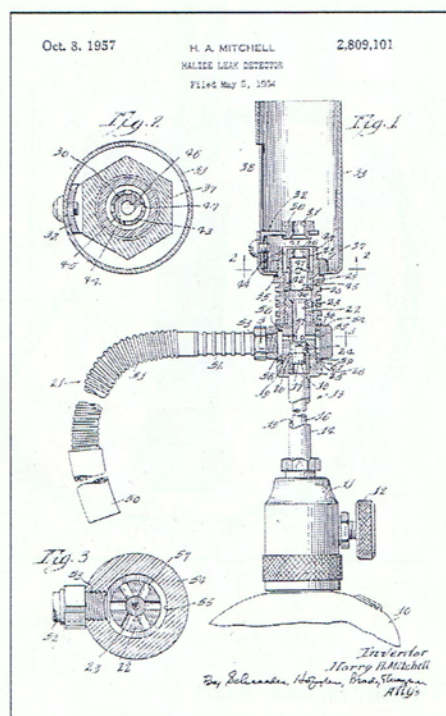
No. H-15

NO. H-15 TURNER HALIDE DETECTOR

This effective Detector has been developed for those who use a detector occasionally but do not want to buy the larger and more expensive Turner H-1 which was perfected especially for refrigeration manufacturers and service men. Specifications: 1 1/2 pint nickel plated brass tank, alcohol fuel, shipping weight 1 1/4 pounds. List price No. H-15 \$3.30

In 1957, US 2,809,101 was awarded to a Harry Mitchell of Sycamore, IL, and assigned to Turner Brass Works.. This patent illustrates the same principle as in the earlier patents, but applied to a propane torch. Once again heated copper element interacts with the traces of refrigerant gases to produce a distinctively colored flame

The patent reads: "The gas flame impinges on a heated reaction material, such as copper, causing a characteristic change in the color of the flame if halides are present."



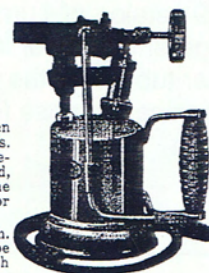
Otto Bernz Co.

NO. 98 REFRIGERANT LEAK DETECTOR (With Alcohol as Fuel)

A NECESSITY FOR REFRIGERATOR MECHANICS, ELECTRICIANS AND
UTILITY COMPANIES

THE NO. 98 REFRIGERANT GAS LEAK DETECTOR was developed to detect even the slightest of leaks in connection with halide gases used with electric refrigerators. Many of these gases are relatively odorless, tasteless, and colorless. The No. 98 detector which is in use by the largest refrigerating companies has a specially designed, special composition burner to which is attached a suction tube. When the end of the suction tube is held near a leaky joint, the induction of the leaking gas changes the color of the blue flame to a brilliant green.

Alcohol is used as a fuel, and the article is also efficient as a regular blow torch. Furnished with extra heavy drawn seamless cartridge brass tank, and can also be supplied with flat tank when specified. Pump is patented Bernz "Never-Leak" type with screw-down feature. "Keep Kool" valve wheel of best grade bakelite. Detector is given a highly polished and lacquer finish.



FOR ALCOHOL
No. 98—1 Pint
Wt. 3 1/4 Lbs.

Otto Bernz Company offered its own version of a halide detector in its 1936 catalog. The catalog entry indicates that it was available with an ordinary one pint round fuel tank, and optionally with a flat auto-style tank.

BTCA member Charles Smith has a Bernz flat tank halide-detector torch with a burner similar to that found on the Hull products.



Lenk Manufacturing Co.

In its 1940 and 1941 catalogs, Lenk offered a halide detectors based on the company's model 105 series of alcohol torches. Examples of these halide detectors in BTCA members collections do not appear to have any separate "copper element" for interaction with traces of halide gases; it is supposed that the copper content of the burner nozzle sufficed.

Lenk HALIDE DETECTOR

for Detecting Refrigerant Gas Leaks

COMBINATION BLOTORCH and LEAK DETECTOR

NO. 205A LENK HALIDE DETECTOR

The most positive method of locating leaks of commonly used refrigerants such as Sulphur, Methyl, Carrene, F-12, Freon or Ethyl Chloride.

To detect a leak, the open end of the rubber tube when in close proximity to a leaky joint, syphons the gas through to the burner and the color of the flame immediately changes from blue to green. The slightest leak is positively detected.

The Lenk Halide Detector is also an effective Hi-Heat Alcohol Blotorch. Generates quickly. Tanks are of heavy gauge seamless drawn brass, with funnel shaped bottom for easy filling. Sturdy construction.

Height 6". Diameter at base 3". Capacity 1/2 pint. Shipping weight 13 lbs. per dozen. Packed in individual cartons.

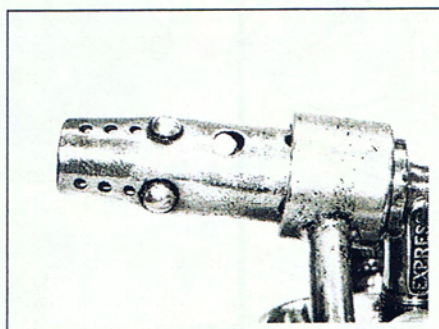
No. 205A

List Price Each \$5.00



L-G Express, France

This halide detector from France, is based on an Express No. 44 torch, adapted in somewhat the same way as the Bernz and Turner torches. Inserted radially into the burner nozzle are three red copper rivets, presumably acting as the "copper elements described in the American patents.



LENK TORCHES (Part 1)

*By
Keith Hawkins*

I do get terribly confused when trying to sort out my Lenk collection. No 104 is supposed to have 2 rows of holes in the burner and 3 rows on the 105. They are supposed to be petrol and alcohol fired respectively but my 105 says gasoline on the tank.

As you will see from the first photograph which shows 2 different burners on the same 104 torch, has someone changed the burner or is it meant to be like that.



2 different versions of the Lenk 104



Lenk 105

I also note that the spirit cups are not the same size but do understand that Lenk did produce some different sized ones periodically.

These lamps are of $\frac{3}{4}$ pint capacity and 7 $\frac{1}{2}$ inches tall.



This next photograph shows 2 smaller versions of $\frac{1}{2}$ pint capacity, both with an "A" after their number and both types are sometimes called "High Heat" torches. Just to add to the confusion, these torches both have different handles. Lenk also do not put model numbers on their torches, which makes identification more difficult.



This next torch was bought in Newmarket, Virginia in 1993 for \$11 and I then had great difficulty convincing the security at John Dulles airport that it wasn't a bomb. When they finally agreed, having taken the whole thing completely apart, I remarked that if it had have been a bomb, would I have been stupid enough to have got onto the same plane. I also bought an even smaller oilcan, which was treated in the same way.

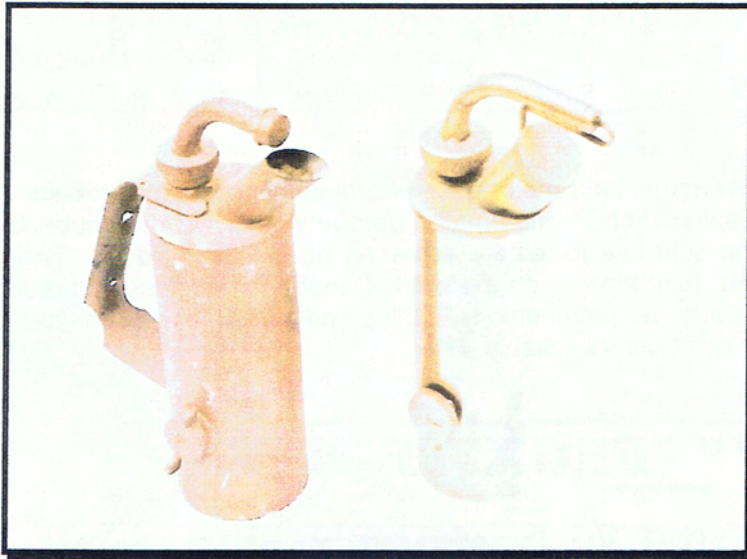
The torch has 2 tanks, the bottom one feeding the large burner at the front by means of a wick and the upper tank feeding the self igniting top burner. This torch has enough of the original label left to describe it as a Master Blowtorch No 50, Lenk's Combination and running on alcohol.



The next torch is a No 40 mouth blower with a heavy cast top section and dates from the 1930/40's



Another mouth blower, this time a No 20.



Both these torches appear to be Lenk No 30, but the right hand one is also signed up as being a Companion No 30. In the Vintage Blowtorches and Philippe Touillet's Catalogue of American torches, the Companion is shown with a handle, but mine is without and does not show any trace of ever having one. The 2 torches do look different, but are both, I think, No 30's. (If they are not, I hope someone will correct me) The one in Phillipe's catalogue is shown in a 1936 publication issued by General Electric Supplies Corporation.



Another version of the No 50, but here the tank is only 2 inches wide as opposed to 2 ½ inches for the previous torch. This torch is all brass, whereas the previous one had a chrome finish, and was primarily a jeweller's torch.

BRAZING & SOLDERING LAMPS

The following article is from "Modern Motor Engineer" of 1937 and was submitted by Arthur Madeley.

Every motor engineer and indeed motor user who does his own small repairs should be provided with a blowlamp of some kind. The smaller garage worker will, no doubt, find a methylated or petrol spirit blowlamp sufficient for all the soldering he is likely to do. There are a number of petrol and methylated spirit torches on the market, made for wireless and motor purposes. For small soldering work such as petrol unions, cables and similar items, the spirit lamp supplied with the Fluxite soldering outfit is very suitable.

The "FLUXITE" GUN (REGISTERED)

(MADE IN ENGLAND)

PRICE 1/6

is always ready to put "Fluxite" on the soldering job instantly. A little pressure places the right quantity on the right spot and one charging lasts for ages. The Gun also projects grease into bearings, etc., and is used for grease like an oil can is for oil.

1-Dozens on Attractive Display Card.
ALL OUR GOODS ARE EXTENSIVELY ADVERTISED



The Fluxite Soldering Set

CONTAINS SPECIAL "SMALL SPACE" SOLDERING IRON WITH NON-HEATING METAL HANDLE, POCKET BLOWLAMP, FLUXITE, SOLDER, ETC., with full instructions.

A compact, substantial outfit, suitable for carrying on a car or motor cycle, or for any soldering jobs about the Home.

Fluxite THE PASTE THAT SIMPLIFIES SOLDERING

Recognised world-wide as being the most effective flux invented. Used for thirty years in Government Works, and by the leading Engineers, Manufacturers and Railways.

In Tins 4d., 8d., 1/4 and 2/6 of all Factors.

WITH FLUXITE, "WIPE" JOINTS CAN BE MADE SUCCESSFULLY THAT ARE IMPOSSIBLE BY ANY OTHER METHOD—ASK FOR LEAFLET

Another use for FLUXITE—

HARDENING TOOLS & CASE-HARDENING

A beautiful bright glass-hard surface without scale. Ask for Leaflet on Improved Methods

FLUXITE LTD. (Dept. 78), Dragon Works " " Bermondsey Street, S.E.1 (10)

It consists of a tinned steel container, provided with a vertical tube in which is placed a circular cotton lamp-wick. Inside this tube is another metal tube of around 3/8 in. diameter, closed at its upper end and provided with a tiny hole near the latter. A solid lamp-wick is inserted in this tube. The action of the lamp is as follows: when filled with methylated spirit, and the outer concentric wick is lit with a match, the heat of the flame vaporises the spirit soaked up by the centre wick in the closed ended tube. The vapour pressure thus created causes the vapour to issue with some force from the small hole, and in its emission it is ignited by the outer wick flame, and so forms a long flame of much heating value. With it a number of soldering jobs can be performed without the aid of a soldering iron. Indeed, if the Soldo preparation described later on in this work is used, the soldering iron can be dispensed with for all small jobs.



Fig. 40.—An efficient Petrol Torch known as "The Imp."

Fig. 40 illustrates the Imp petrol torch, which is much used for motor repair work. It consists of a cylindrical reservoir with a screw top for holding the torch member and for filling purposes. It has a corrugated neck, the object of this being to increase the heating surface and to create a higher pressure. The lamp is started with an ordinary match, the flame from which is held under the corrugated neck. This blowlamp has no pump or valve and is quite automatic in action. It gives a very hot flame of the Bunsen type, suitable for heating a soldering iron or for direct soldering purposes. The reservoir contains sufficient spirit for 2 hours continuous burning. It is claimed that a temperature of 2000° F is attained by the flame.

A larger, simple form of blowlamp, particularly suitable for motor repair work on the road, and for carrying with the spare tool equipment of commercial motor vehicles is shown in Fig.41. This lamp burns either petrol or benzole, and is of the pressure type, a hand pump being provided in the handle of the lamp for this purpose. It has a nipple with a fine hole for regulating the quantity of petrol emitted, so as to give, with the air drawn in, the correct heating mixture. The nipple has an automatic nipple-cleaning device consisting of a screw with a fine needle and forces any dirt through it. The lamp in question has an annular tray (shown in Fig.41) just above the reservoir on the vertical tube, for containing the methylated spirit used for starting the lamp. It is necessary to heat the vertical tube for two or three minutes (with the air pressure released in the reservoir), after which the air valve is closed and a few strokes given with the hand pump, to apply pressure to the surface of the petrol in the container and thus force it through the heated vertical tube, in which it is vaporised, issuing from the jet of the nipple as a fine stream of vapour, which instantly ignites.

The blowlamp shown has a special rest above the torch tube for holding a soldering iron for heating purposes.

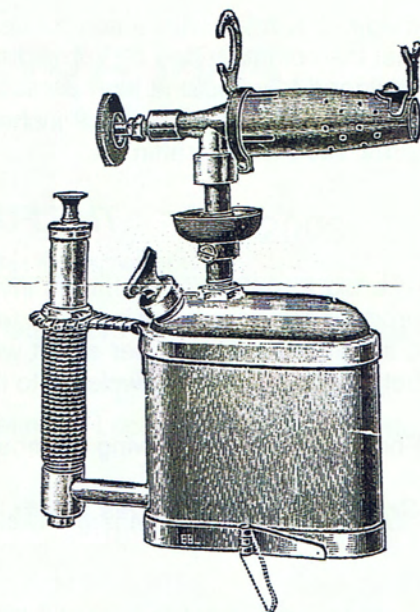


Fig. 41.—A useful Blow-lamp for Motor Owners.

For more serious work, and for larger objects, in the garage and repair shop and for general brazing purposes, it is necessary to employ a larger blowlamp, giving a much larger and hotter flame. Fig. 42 illustrates a typical lamp of this type, using paraffin and suitable for motor and cycle braking work. The lamp is made in three sizes, namely 2 ½, 4 and 6 pint. The heating value of a blowlamp is generally measured by the length of flame it emits; the respective flame lengths in the case of the lamp sizes mentioned are 9, 15 and 16 inches.

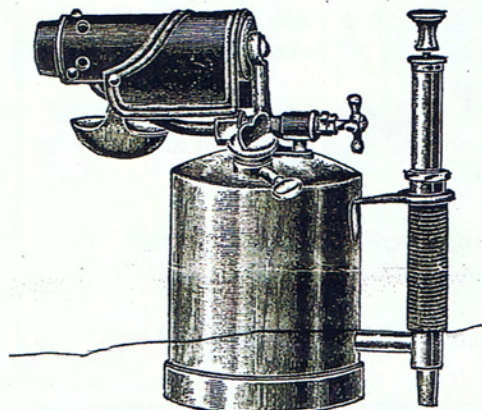


Fig. 42.—The "Marco" Blow-lamp which is used for heavy work.

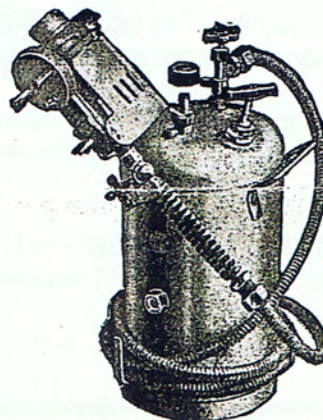


Fig. 43.—A large Portable Brazing Outfit.

The lamp has a strong hand pump in its handle and has an automatic nipple cleaner. The methylated spirit for heating the torch, when starting, is placed in the cup suspended just below the burner. The blowlamp in question is strongly made in brass, and before issue, is tested to a much higher pressure than the working value. The heat from the flame of the larger sizes mentioned is sufficient to melt a 10 S.W.G. hard brass wire in about 20 seconds. It will head a 1 inch diameter by 22 S.W.G. thick steel tube to a brazing temperature from cold in about one minute. For larger work still it is necessary to use either a coal-gas blowlamp supplied with air from a foot bellows and tube, or one of the larger blowlamps sold for that purpose.

Messers Brown Bros. Ltd. Supply a portable brazing outfit (Fig. 43) which is specially designed for heavy brazing work and which will melt a solid bar of copper, 1 inch in diameter, in 6 minutes. It works on the same principle as the lamp previously described, but is larger and more strongly

made; it is fitted with a control valve, pressure gauge and flexible metallic tube to the burner, so that the container can be some distance from the work. The flexible tubing in question is specially designed to withstand high pressure without leakage. The reservoir has a capacity of 2 gallons and is 19 inches high and 9 inches outside diameter. The outfit weighs 21lbs. empty and 38lbs when filled with paraffin.

THE FUTURE OF BLOWLAMP NEWS

In a bid to get more members involved with the production of Blowlamp news, I have decided to produce the newsletter in colour for everyone who has an article or photograph published. I gave it a trial run in December and it was well received, so this will be a small thank you to those who help to maintain the newsletter to the standard we have achieved.

For this issue the following members will receive colour copies with my thanks:-

Graham Stubbs, Charles Smith, Ron Carr, Keith Hawkins, Arthur Madely & Frits Ordelman.

AND FINALLY



An interesting photograph sent in by Frits Ordelman of a blowlamp he would like identified. The only marking is P.KNY & Co NEW on the base. The tank looks very much like a Barthel Granat. Does anyone have any ideas?

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

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