

The "Unbreakable" Cast Iron Lamps

of

A.C. Wells & Co.

Manfred Stutzer, Luwigshafen and Peter Appleton, Wigston

While there are many variations of cast iron oil lamps, the one known as the "Unbreakable" made by the English company A.C. Wells is the best known. Their manufacturing history is convoluted and still not fully understood. The following will review the extent of the authors' research.

Brief History

Arthur Collings Wells (A.C. Wells) was an engineer located in Manchester, England. In 1879 he founded the company Wells & Co. at Ogden Street, Manchester. This consisted of two shops: The A.C. Wells Mechanics Shop and the Wells Unbreakable Pulley Works. They collaborated with Roughsedge Wallwork, a member of the firm Ironfounders Henry Wallwork & Co., Union Bridge Iron Works located at Roger Street, Manchester.

Between 1883 and 1900 they applied for numerous patents with many different applications pertaining to industrial and domestic lighting systems (Table 1. Appendix). They also made pulleys, swivel bearings, and clutches.

It is our opinion that none of the Wells lamps were cast at their own plant (Wells Unbreakable Pulley Works (66 Ogden St., Ardwick, Manchester), but rather at the Wallwork Iron Foundry (Stretton, Manchester). There were only four employees at the Wells firm and it is known that a close relationship existed between A.C. Wells and Henry Wallwork.* It is

speculated that the smaller four-employee firm (A.C. Wells & Co.) was dedicated to selling cast iron oil lamps.

A.C. Wells sales offices were located in both Manchester and London. Throughout the years they changed location several times (Table 2. Appendix).

After 1936 the company was no longer listed in the London Trade Directory and after 1940 the company was no longer listed in the Manchester Directory.

*Personal communication with Mr. G. Harrison, a former employee of Henry Wallwork & Co., whose age today is 81.



OVER 17,000 "WELLS LIGHTS" SOLD!

USED BY ALL LARGE CONTRACTORS, ENGINEERS, RAILWAYS, MINES, &c.

OVER 500 USED ON THE MANCHESTER SHIP CANAL.

SUCCESS BRINGS IMITATIONS

Owing to the great success our Lamps have attained, several crude imitations are being passed off on the public. All the important and unique points in our Lamps, which have taken years to perfect, are covered by numerous patents. The "WELLS LIGHT" has stood the TEST OF THE MARKET; others have not.

Each Lamp sent out is Guaranteed.

THESE LAMPS HAVE BEEN SUPPLIED TO THE PRINCIPAL ELECTRIC TRAM AND LIGHT RAILWAY COMPANIES AT HOME AND ABROAD.

WELLS' PATENT "UNBREAKABLE" LAMPS.

These useful little **HAND LAMPS** are now so well known that description is needless. We have sold about half-a-million of this pattern alone. Petroleum, Paraffin, Kerosene, or Spirit can be burned in them, and they are a useful shape for all purposes.



	Per doz.
No. 4, HAND LAMP (holding about $\frac{1}{2}$ a pint), with plain turned Burner, as illustrated	18/-
No. 4, fitted with a heavy Wheel Burner for raising the Wick	24/-
No. 4, fitted with plain Burner, Cap, and Chain, and packed with wool for burning any Spirit Oil	21/-
No. 4a, with plain Burner as illustrated, holding $\frac{1}{2}$ pint. A larger wick and more powerful light than No. 4	27/-

SPECIAL WICK for use in these lamps, ready cut and tied, 6d. per bundle for No. 4, and 1s. for No. 4a Lamps.



Types of Cast Iron Oil Lamps

1. Wells' Engineers Lamp No. 4

These were made in different sizes and fitted with different burners as shown in the advertisement above (ca. 1904) and in the photo right.

Like all Wells' lamps, the bold lettering is cast into the body of the lamp, greatly increasing its appeal to the collector.

2. Wells' Single Torch Lamps Nos. 5, 5a, 15, and 15a.

Shown on this page, the single torch lamp was made in different sizes and with a plain malleable iron hook or with a filling top. The advertisements shown date to 1904.

WELLS' SINGLE TORCH LAMPS were specially designed for burning heavy vegetable oils which do not smoke, but Paraffin and Petroleum are often burned in them. As Engine Room, Bunker and Stokehold Lamps, they are unsurpassed, being used by the leading firms on land and sea.



No. 5. SINGLE TORCH (half-pint) with a plain Malleable Iron Hook (old style, No. 3)	24/-
No. 5a. SINGLE TORCH (three-quarter pint) ditto ditto	30/-
No. 5b. SINGLE TORCH (one pint) ditto ditto (using a larger wick)	36/-

No. 5. SINGLE TORCH LAMP (half-pint) with Filling Top only (marked No. 1,	28/-
No. 5a. as above, only three-quarter pint	34/-
No. 5b. one pint, and with larger wick (a more powerful lamp)	36/-

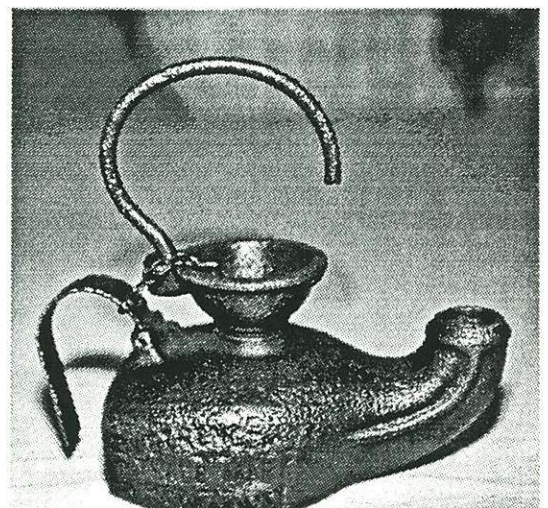
No. 5. half-pint, with Cup and large rigid wrought Handle cast in (marked No. 2)	29/-
No. 5a. as above (three-quarter pint)	35/-

These are used throughout by the P. and O., UNION, CLAN, MOSS LINES, &c., &c., and the PRINCIPAL STEAMSHIP COMPANIES IN THE WORLD.

SPECIAL WICK for use in these lamps, ready cut and tied, 1s. per bundle.

No. 6.—DOUBLE TORCH, same shape as No. 5, but with two wick tubes, giving a larger light	30/-
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Wick for this lamp, 1s. per bundle.



No. 15 & 15a, SINGLE TORCH LAMPS.

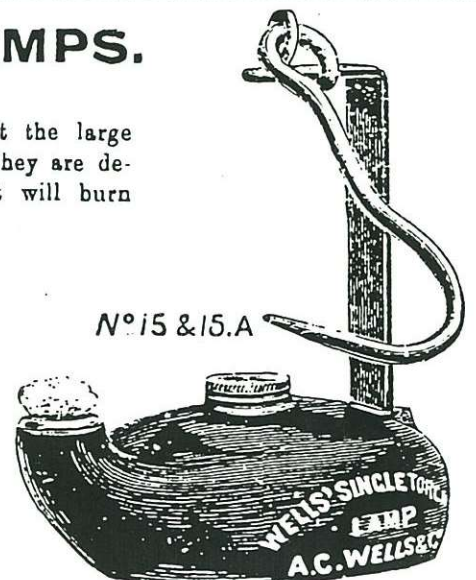
These Lamps are of the same sizes and shapes as Nos. 5 and 5a, but the large hooks and handles at the back make them more useful for hanging. They are designed for burning heavy vegetable oils, with a thick torch wick, but will burn Petroleum or Kerosene if the smoke is not objectionable.

They can be fitted with a small double wick heavy oil burner at 3/- per dozen extra.

If fitted with Reflectors at the back, 6/- per dozen extra.

No. 15, $\frac{1}{2}$ pint	...	30/- per dozen.
No. 15a, $\frac{3}{4}$ pint	...	33/-

SPECIAL WICK for use in these Lamps, ready cut and tied, 1s. per bundle.



3. Wells' Double Torch Lamp No. 6



4. South American silver Mining Lamp No. 10

Advertisement dates to 1904.



No. 10.

South American Silver Mining Lamp,

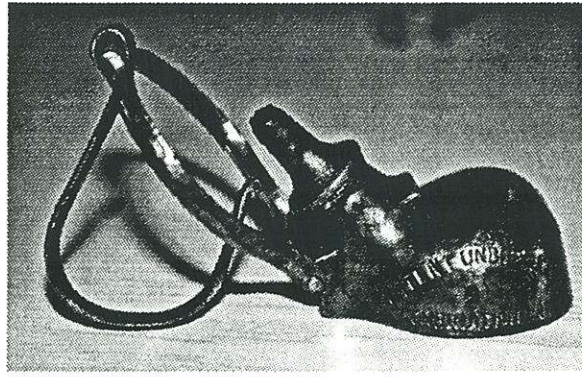
Fitted either with PLAIN BURNER FOR USING PETROLEUM or KEROSENE OILS, or with BURNER FOR HEAVY OILS, such as OLIVE or SPERM, but this must be notified with order. Supplied complete with Ash Poles 3ft. long.

Price - - - **35/-** per dozen.

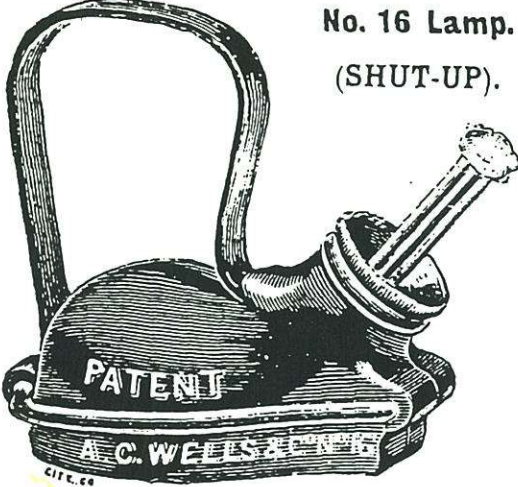
SPECIAL WICK for use in these Lamps, ready cut and tied, 6d. per bundle.

5. Hanging or Carrying Lamp No. 16

It is of interest that a very similar lamp or the same lamp was granted a patent No. 25226 in the year 1883 in Germany by Edw. Grube of Hamburg. We don't know if there was a relation between A.C. Wells and Edw. Grube at the time. (see Appendix).



Advertisement below dates to 1904.



No. 16 Lamp.
(SHUT-UP).

PATENT
A. C. WELLS & CO. N.Y.

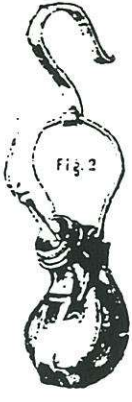


Fig. 2
(OPEN).

No. 16. PATENT COMBINATION HANGING OR CARRYING LAMP,

complete with ordinary Petroleum or Kerosene Burner (half-pint) as shown,
Price 30/- per dozen.

No. 16. as above, fitted with heavy Cast Wheel Burner, and packed for Benzoline Oil or Spirit,
Price 33 - per dozen.

No. 16. as above, fitted with good stamped Smoke Consuming Kerosene or Petroleum Burner,
Price 33 - per dozen.

Special in these Lamps, ready cut and tied 6d. per bundle.

6. Kettle Torch Lamps No. 18

Advertisement right dates to 1904.



WELLS' PATENT "Unbreakable" KETTLE TORCH LAMPS.

These Patterns have been most successful, many thousands have been sold, and we have sent large quantities to all parts of the globe.

THEY ARE EXTENSIVELY USED BY CORPORATIONS, COUNCILS, ELECTRIC LIGHT ENGINEERS, GAS AND WATER COMPANIES, CONTRACTORS, &c.

THE ONLY LAMP USED IN THE GOLD AND DIAMOND MINES IN SOUTH AFRICA.

(commonly known as the "Coffee Pot" Lamps.)

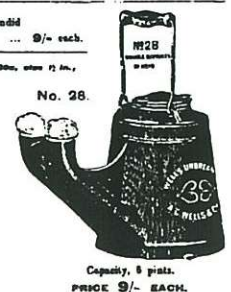
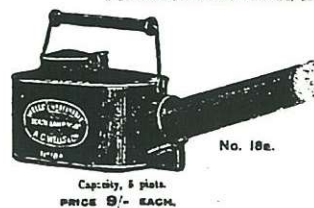


Burn ordinary Petroleum, and are unsurpassed for TRENCH WORK, CABLE LAYING, STEAM TRAWLERS, and all kinds of rough outside work, where a large flaming light is required.

No. 18.—KETTLE TORCH LAMP. Holds about 3 pints, 1 1/2 inch wick	4 6 each.
No. 22a.—Same as above, but double capacity	9 - "
No. 28.—Holds double that of No. 18 (6 pints) with two wicks	9 - "

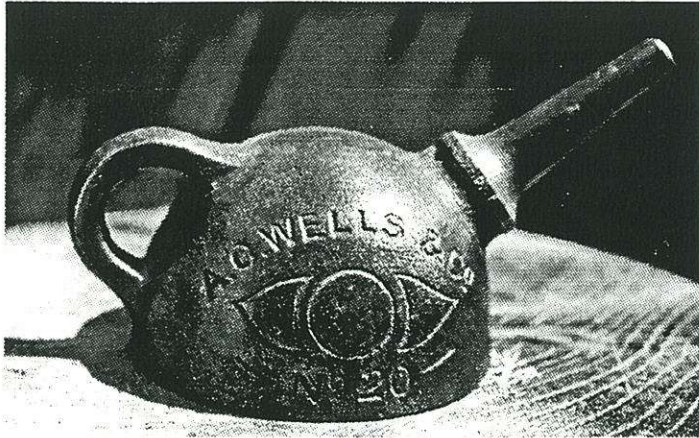
No. 18a.—LARGER KETTLE TORCH. 4 pints. Long spout. A splendid lamp	9/- each.
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SPECIAL WICK, not used in America, to suit Lamps Nos. 18, 20, and 20a, when 7 in., 1 1/2 inch diameter. For No. 18a, also 2 in., 2 1/2 inch diameter.



7. Moulder's Lamp No. 20

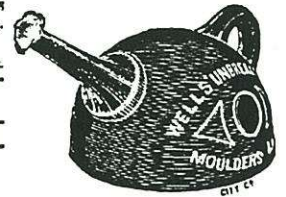
The photos and 1904 ad show that the moulder's lamp was fitted with different burner spouts.



No. 20, MOULDERS' LAMP. The shape of this lamp makes it specially suitable for foundry use. It burns ordinary petroleum or paraffin.

With ordinary turned burner, as illustrated	Per doz.
...	21/-
If stuffed with wool for burning spirit, with cap and chain	...
...	24/-
If fitted with solid cast wheel burner	...
...	27/-

SPECIAL WICK for above, cut and tied, to fit these lamps, 6d. per bundle.



8. Miner's Lamp No. 29

Undoubtedly this is the best one for collectors. The design is similar to the German frog lamps. Ad dates to 1904.

WELLS' PATENT "UNBREAKABLE" LAMPS.

No. 29. MINER'S LAMP.

This Lamp is made in our special Unbreakable Metal, cast in one piece to avoid leakage or breakage. It burns heavy oils, such as Colza, Sperm, &c.; is provided with hook, pricker, and oil save-all, and also with a malleable-iron face plate upon which owners can stamp their names or numbers, and fitted with small kinged lid, giving easy access to wick for adjustment or removal.

CAPACITY ABOUT HALF-A-PINT, BURNING 12 HOURS.

Price 36/- per dozen.

SPECIAL WICK 6d. per bundle.



9. Miner's Lamp No. 32

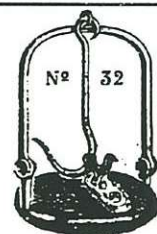
A typical lenticular lamp. This may have been a resale lamp.

No. 32. MINER'S LAMP.

A strong iron Lamp of convenient shape for burning heavy oil, provided with large strong wrought iron hook; burns 20 hours; holds $\frac{1}{2}$ pint.

Price 30 - per dozen.

SPECIAL WICK, 6d. per Bundle.



10. House Lamps

In addition, Wells sold a range of typical house lamps.



WELLS' PATENT "UNBREAKABLE" HOUSE LAMPS.

ABSOLUTELY SAFE! NO EXPLOSION! NO FIRE! NO LEAKAGE!

The steady glow in the side of these small unbreakable Glass Lamps is a proof of their perfect adaptation to place of the light every domestic lamp needs. These lamps are not dangerous, especially when handled at all times, and excellent conditions are necessary to replace.

The "Wells" Lamps, of which nearly two millions have now been sold, are made in this unbreakable form, and the bodies are perfectly unbreakable and non-combustible.

The design, which may at first appear a disadvantage, is in reality an important feature in favour of the lamp, as in the case of a fall or being upset the weight liberates the light.

The lamps supplied on these lamps are the best sold, and are much superior to the cheap ones generally used.

<p>A. Benzoline Lamp. Price 1.0 each.</p>	<p>AA. Benzoline Lamp. Price 2.0 each.</p>	<p>B. Benzoline Lamp. Price 1.10 each.</p>	<p>C. Chimneyless Paraffin Lamp. Price 1.0 each.</p>
<p>Improved Flat Glass with very strong Reinforced Glass Burner. Square Burner, 80 each. Circle 1.0 per doz.</p>			
<p>H. Paraffin Lamp (with Chimney) Price 1.0 each. H.K. Best Oil. - 2/- - These lamps are specially recommended and are supplied with new pattern high quality burners. Illustrated below. Very low hand made glasses are supplied for these lamps, which will not fly. 5/- per doz.</p>	<p>H & L. Two shapes of glass Benzoline Lamps. Price 1.0 each. Fitting with good quality lamp oil. Rivets Burner, 60 each for extra lamp.</p>	<p>G. Benzoline or Paraffin Lamp. Price 1.0 each. With very strong iron Wind Burner, which makes get out of order. Rivets Burner, 60 each.</p>	<p>Special Wok for Wells' "Unbreakable" House Lamps, set ready in lengths, 3d. per bundle.</p>

Appendix

Table 2.
Locations of A.C. Wells & Co. Sales Offices

Manchester

- 1882 Exchange Chambers, Cromford Court, Market Street
- 1886 4 Garden Street, Wither Grove
- 1889-1940 Carnarven Street, Cheetham

London

- 1882 56 Cannon St., London, E.C.
- 1884 80A Fenchurch St., London, E.C.
- 1889 102, 103 & 104 Midland Rd, St. Pancras. London, N.W.
- 1929 75 Victoria St., London, S.W. 1
- 1931 4 Bradleys Buildings, White Lion St., London, N.1
- 1933-36 82 Victoria St., London, S.W. 1

Table 1. Patents owned by A.C. Wells & Co.

- Pat No. 0260/83 - Oil lamps, Oil Feeders
- Pat. No. 11530/84 Lamps or Lamp Holders
- Pat. No. 14616/85 Tubular Oil Lamps
- Pat. No. 3543/87 Gas Burners
- Pat. No. 13328/91 Lamps
- Pat. No. 21626/97 Lanterns

German Patent No. 25226. Edw. Grube, 1883.

