

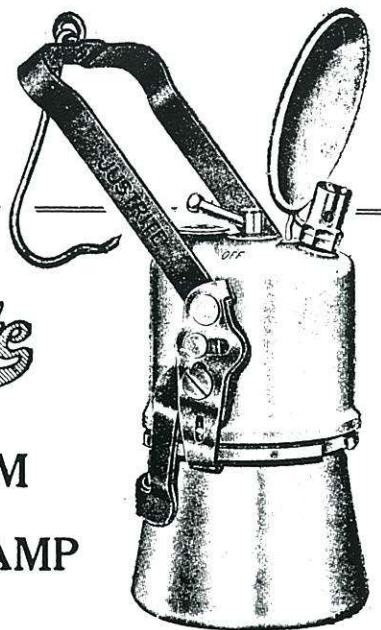
JUSTRITE'S UNCLE SAM LAMP

by Tony Moon
2763 E. Willow Wick Drive
Sandy, Utah 84093

The most successful aluminum lamp, if longevity is any measure of a lamp's success, manufactured by Justrite was the 6 hour Uncle Sam lamp. The first dated reference that I have been able to find is a 1917 advertisement in the *Engineering and Mining Journal* (July 14, 1917). Three sizes of Uncle Sam lamps, with either conventional reflectors or the special umbrella for wet mines, were offered. Both the Jumbo and Little Giant aluminum lamps were referenced in the same advertisement. The 6 hour Uncle Sam and the Little Giant were both illustrated in the 1925 *Keystone* catalog, but in the Justrite catalog No. 5, only the Uncle Sam was shown. This indicates that the Uncle Sam was the last style of aluminum lamp offered by Justrite.

The lamp used the spiral water feed valve stem which was originally used on their cap lamps. The lamp had a unique toggle lock arrangement to close the lamp, thus doing away with threads which frequently froze on aluminum lamps. The lamp shared many features with the Little Giant such as the spring loaded water door (first used on the Jumbo), the spiral water feed, the wind guard and the fish-tail burner tip.

Justrite UNCLE SAM CARBIDE LAMP



The three sizes of Uncle Sam lamps are shown in Figure 1. The key dimensions of the three known sizes are:

	No. 306	No. 308	No. 310
Capacity in hours	6	8	10
Height to water door	5 1/2"	6"	6 1/2"
Diameter of bottom	3 1/8"	3 3/4"	4"

However, a set of instructions from an unfired lamp indicates that a fourth, largest, 12 hour size lamp was available although some parts numbers, such as gaskets and screens were not listed. I have never seen an example of this largest size. If anyone has one or has seen one, please let us know.

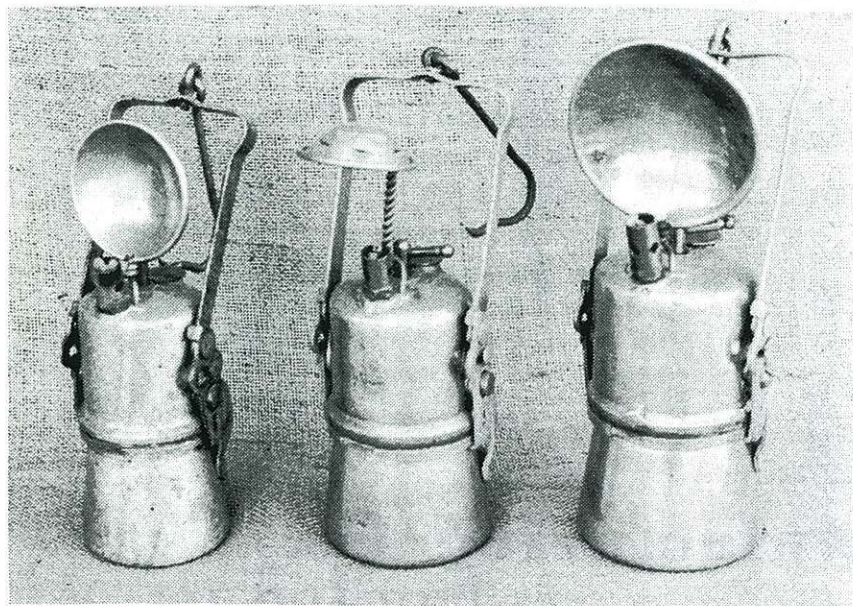
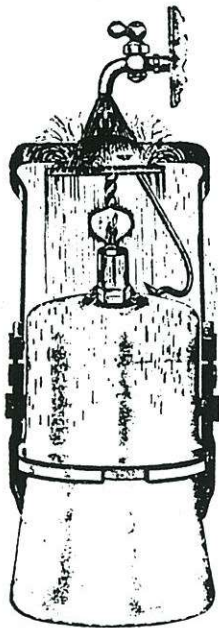


Figure 1. Three sizes of Uncle Sam lamps. From left to right: Model 306 (6 hour capacity); Model 309 (8 hour capacity); Model 310 (10 hour capacity). Tony Moon collection

DIRECTIONS

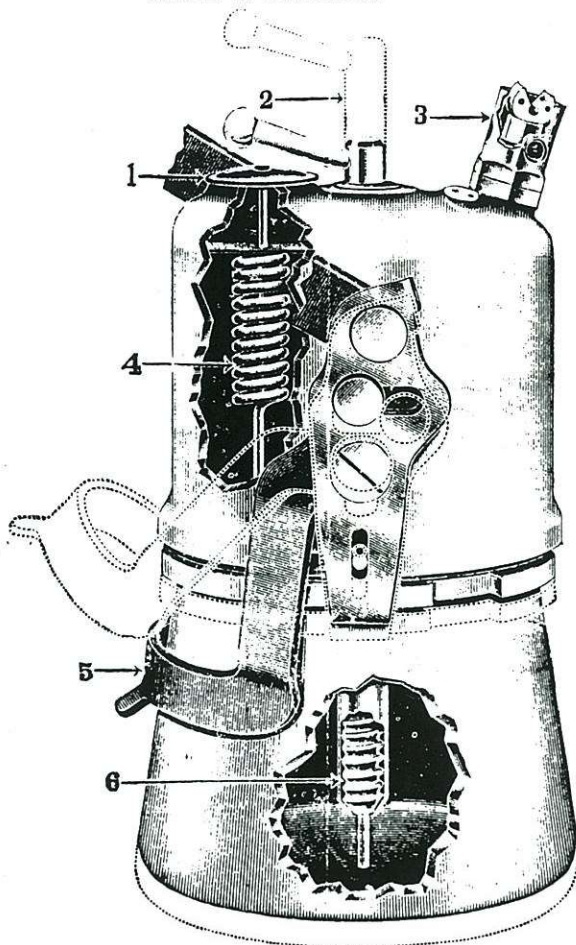
UNCLE SAM CARBIDE LAMP

"MADE IN AMERICA"



WITH UMBRELLA
 No. 307— 6 Hour Capacity.
 No. 309— 8 " "
 No. 311—10 " "

Showing Lamp burning under water faucet—flame is not affected by water when equipped with the Umbrella.



INSIDE CONSTRUCTION

1. Water Cap.
2. Removable Valve Stem.
3. Tip Protector.
4. Spring to hold Water Cap.
5. Locking Clamp.
6. Spiral Valve Stem.



WITH REFLECTOR
 No. 306— 6 Hour Capacity.
 No. 308— 8 " "
 No. 310—10 " "
 No. 306 and 308. With 3 inch Reflector.
 No. 310 With 4 inch Reflector.

TO CHARGE

WATER—Lift the water cap and force it to one side—when filled, let it snap into position.

CARBIDE— 6 Hr. Lamp, 6 ozs., $\frac{1}{4}$ in. Carbide
 8 " " 7 $\frac{1}{2}$ " $\frac{1}{2}$ " "
 10 " " 9 " $\frac{1}{2}$ " "
 12 " " 12 " $\frac{1}{2}$ " "

NOTE:— $\frac{1}{4}$ inch Carbide can be used in the 8, 10 and 12 hour lamp, but best results are obtained by using the $\frac{1}{2}$ inch size.

TO OPEN

TOGGLE-LOCK—Let Bail fall back as far as it will go—place thumb on bail and finger on shoulder (5), it will open with a slight pressure. To take off the bottom—turn until the slots are in line with catch, then pull down.

Manufactured by

Justrite Manufacturing Co.

2061-2081 Southport Avenue

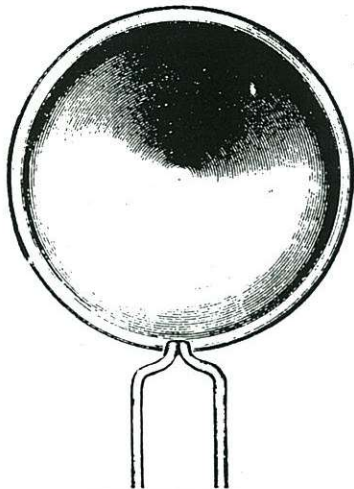
CHICAGO, ILL.

DESCRIPTION

"Uncle Sam" Lamps are made of 1/8-inch seamless aluminum in four sizes, 6, 8, 10 and 12 hour capacity. They are wonderfully simple and sturdy and embody features never before incorporated in a carbide lamp. They are superior to the lamps of foreign make because they are built stronger, easier to operate, have fewer parts, and cost less to maintain. The principal features are:

- 1st. THE WATER FEED—The removable Spiral Valve Stem fits snugly in the water tube, forcing the water to travel around the spiral groove a distance of from 17 to 22 inches, while other lamps have a straight water course of from 1 3/4 to 3 inches. This increases the gas resistance about seven times greater than any other water feed and produces a steadier, more even burning flame.
- 2nd. THE SPIRAL VALVE STEM can be lifted out, cleaned and replaced without putting out the light or flushing the carbide—eliminates clogging of the water tube. Takes only a few seconds to clean.
- 3rd. THE WATER CAP is held in place by a strong bronze spring which is anchored to the bottom of water tank—can be replaced if broken.
- 4th. THE TIP PROTECTOR is made of brass, threaded and can be removed for cleaning or changing the tip—protects the flame from wind.
- 5th. THE TIP AND PILLAR—The burner is a fish-tail air hole tip made of imported lava and inserted in a brass pillar with screw threads. The air holes in tip prevent carbonizing.
- 6th. THE LOCKING DEVICE consists of a toggle lock with steel bail and swivel hook attached. It has no screw thread to corrode and stick, and is very easy to operate.
- 7th. THE FILTERING SCREEN, made of fine mesh brass screen, prevents the carbide dust and sludge from entering and clogging the gas tube—locks in place by a slight turn. No felt or other gas strainer is required. Keep the screen clean.
- 8th. THE RUBBER GASKET is square and of the highest grade rubber—very resilient and especially made to resist the action of acetylene gas.
- 9th. THE REFLECTORS are detachable and made of brass, nickel plated, and highly polished—rimmed with strong wire with 2 prongs which fit holes in lamp.
- 10th. THE UMBRELLA is made of brass with vents—rimmed with strong wire with two prongs which fit holes in lamp—constructed so it protects the flame from water. Illustration shows severe test of lamp burning under a full force stream from faucet. Umbrellas and Reflectors are interchangeable.

Parts for Uncle Sam Lamps



REFLECTORS
 No. Each
 326. Size 3 inches. For No. 306 and 308 Lamp \$0.35
 330. Size 4 inches. For No. 310 and 312 Lamp50

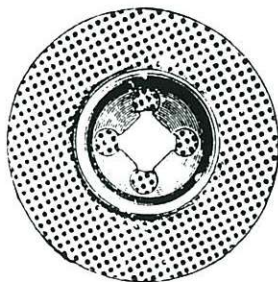


VALVE STEMS
 No. Each
 346. For No. 306 Lamp. \$.50
 348. For No. 308 Lamp. .50
 350. For No. 310 Lamp. .75



UMBRELLA
 No. Each
 324. For all Lamps.... \$.25

GASKET
 No. Each
 316. For No. 306 Lamp. \$.10
 318. For No. 308 Lamp. .10
 320. For No. 310 Lamp. .15



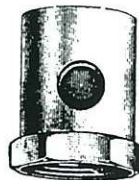
SCREENS
 No. Each
 336. For No. 306 Lamp. \$.20
 338. For No. 308 Lamp. .20
 349. For No. 310 Lamp. .25



BURNER TIPS
 No. Each
 354. For all Lamps \$.10



TIP AND PILLAR
 No. Each
 344. For all Lamps. \$.25



TIP PROTECTOR
 No. Each
 334. For all Lamps \$.25