# **Blackswarth Leadworks**





Blackswarth Leadworks and chimney, 1921 – image from the Britain from Above website.

# **Bristol's Lead Industry**

Lead was mined in the Mendip Hills south of Bristol from pre-Roman times and continued at various times until the early 1800s with most of the lead being smelted in works near the mines. There have also been many leadworks in Bristol, for more a more general history of the lead industry see <a href="http://brisray.com/bristol/lead.htm">http://brisray.com/bristol/lead.htm</a>

## **Links to Troopers Hill**

In the Crews Hole area, near Troopers Hill, there has been smelting of both lead and copper since at least the 1700s.

Given that the smelting of both metals from their ore need similar equipment and furnaces some of the smelting works will have changed between the two metals over time.

Donn's map of 1769 shows leadworks that appear to be near the bottom of Troopers Hill. It's possible that the copper works that used the chimney on top of the hill, which we think dates from the 1790s, were built on the site of an earlier leadworks.

By 1840, and probably significantly earlier, Blackswarth Leadworks was established further east, next to the Netham Chemical Works on the site that is now occupied by Satellite Business Park. This works also has links to Troopers Hill; in the <u>apportionments to the 1840 tithe map</u> around half of the works are shown as occupied by <u>Dr Benjamin Somers</u>, who at that time owned Troopers Hill and the land between it and the river where Butlers Tar Works was built from 1843.

According to 'Industrial Archaeology of The Bristol Region' written by Angus Buchanan & Neil Cossons in 1969, 'Dr Benjamin Somers had a brick smelting-house erected for re-working old slag and slimes' at Charterhouse in the Mendips in 1824. 'This operated until about 1848, when Dr Somers died'. Given that there would have been a lot of both lead and copper slag in Crews Hole from earlier industry it may well have been this that attracted Dr Somers to the area.

#### **Blackswarth Leadworks**

In the photograph from 1921 at the top of this article the leadworks is in the foreground and its large 200 ft chimney is behind, on the other side of Blackswarth Road where the Weavers Mill residential development now stands. The stub of this chimney could still be seen in the 1960s. Also visible in the photograph is an inclined tramway running down from the works to the river.



Comparison of the photograph with the 1840 Tithe map, above (taken from the <u>Bristol City Council online maps</u>), shows that the works appears to have substantially the same footprint. By contrast the adjacent Netham Chemical works expanded significantly over that time.

In the 1840 Tithe, the whole works were shown as being in the ownership of Phillip George, part (429) as mentioned was occupied by Dr Benjamin Somers, the other part (428) was shown as jointly occupied by Christopher George and the 'Patent Shot Company'.

Philip George is perhaps better known for his involvement in brewing and George's Brewery (which was later owned by Courage) in the centre of Bristol. He was born in 1750 and died at his home in Berkeley Square, Clifton in 1828. The appearance of his name as owner in 1840 would be either due to the records not being updated or it still being in the hands of his estate or company.

Philip George had become a partner in William Watts' <u>lead shot tower in Redcliff</u> in 1787, Watts' patent for using a tower to drop molten lead into water to form perfect lead shot was very profitable and the business expanded quickly.

As recorded on the <u>Brisray website</u>, the Bristol shot tower taken over entirely by Philip George in 1818, followed by Christopher George and Patent Shot Company. It was sold in 1848 to James Williams Patent Shot Company, who in turn sold it in 1868 to the Sheldon, Bush and Patent Shot Company. Sheldon Bush continued to produce lead shot in Bristol until around 1995 and had a new shot tower built in 1969 when the Redcliff tower was demolished for road widening.

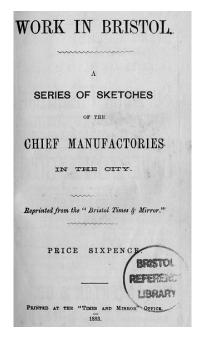
As noted above, the Blackswarth works were in the same ownership as the shot tower by at least 1840 and we also know that it was in the ownership of Sheldon, Bush and Patent Shot Company by 1883 (see below) so it appears that it was always part of the same business, though it is not clear when it was established.

### **Blackswarth Leadworks in 1883**

"Work in Bristol" published in 1883 contains a series of articles of the chief 24 Manufactories in the City reprinted from "Bristol Times & Mirror". It provides actual accounts of the processes, and workforce details as actually witnessed in 1883. A chapter is devoted to Messrs Sheldon, Bush & Patent Shot Co and the first part of this covers the Blackswarth Works, with the second part devoted to the shot tower.

<u>Much of this book can be read on the Bristol Industrial Archaeological</u>
<u>Society (BIAS) website</u>.

Some extracts from the description of the Blackswarth Works, which was where all their lead ore was smelted to extract both lead and some silver are quoted below. Ores seen at the works in 1883 included some from Australia, various parts of Wales and the Ilse of Mann.



"These works, which cover over seven acres of ground, stand on the banks of the Avon, in the midst of beautiful patches of scenery in the two counties of Somersetshire and Gloucestershire. There are a good many large and small detached buildings, some of which were formerly used in the copper works occupying the site. Several of thes are rather ancient, and we should not be surprised to be told they have an interesting history, for on the top of a tower in the central range is a large bell bearing the date "1570" and the inscription – When I toll, Then come and toil."

"the ore is sent to the works at Blackswarth. The whole of it is brought up by water, either in small vessels or barges, and the firm has a convenient little line of tramway for conveying it from the wharf to the works."

"Each charge is deposited in the furnace through an opening in the roof. It is retained in the furnace for about twelve hours, at the end of which most of the metal has been extracted. The process of extracting the metal is very simple, but it requires great care indeed on the part of the men in charge."

"The sulphur and smoke rising from the furnaces travel along an overhead flue about 12 ft in height and thence descend into an underground flue, to the bottom of which the sulphate falls. The underground flue is a huge kind of cavern 7 ft by 6 ft, extending about 1,200 ft before it enters the stack, which rises to a height of 200 ft. Twice a year the flue is entered by means of large man-holes, and on each occasion about 50 tons of flue dust, containing fully 50 per cent of lead is removed".

"The firm sends lead to various parts of the United Kingdom, but the bulk of it is used in the pipe making, sheet lead manufactory, and the patent shot works. They have a good export trade with Canada and some of our other colonies, but that branch of the trade is somewhat variable. At the present time, however, the foreign competition is very keen, especially with Germany6 and Spain. Lead can be obtained from these markets at something like £1 per ton less than it can be produced here."

## **Closure & Redevelopment**

Bristol City Council online maps have aerial views of Bristol from 1946 and 2016, images showing the area of the leadworks are shown below.

It can be seen that the works is still visible in 1946, but derelict. We have not found any record of when it actually closed. The site had been cleared by at least the early 1960s and some of the sheds forming Satellite Business Park had been built by then.

The 2016 view has the location of the works and the chimney marked in red.



