

Copper smelting and milling in the old county of Gloucestershire

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For the industrial archaeologist, the mention of copper smelting and milling is often associated with Swansea, and the various copper works there. In the 19th century copper ore was shipped from Devon and Cornwall. The benefit of smelting copper in Swansea was the ready availability of coal.

However, earlier and certainly less well-known copper smelting sites were to be found in Gloucestershire which historically included Bristol. Of these, the best-known one was Crews Hole, outside Bristol, but there was also a copper smelting works at Redbrook. As for milling, another less well-known site was Swineford (or Swinford) Mill at Bitton.

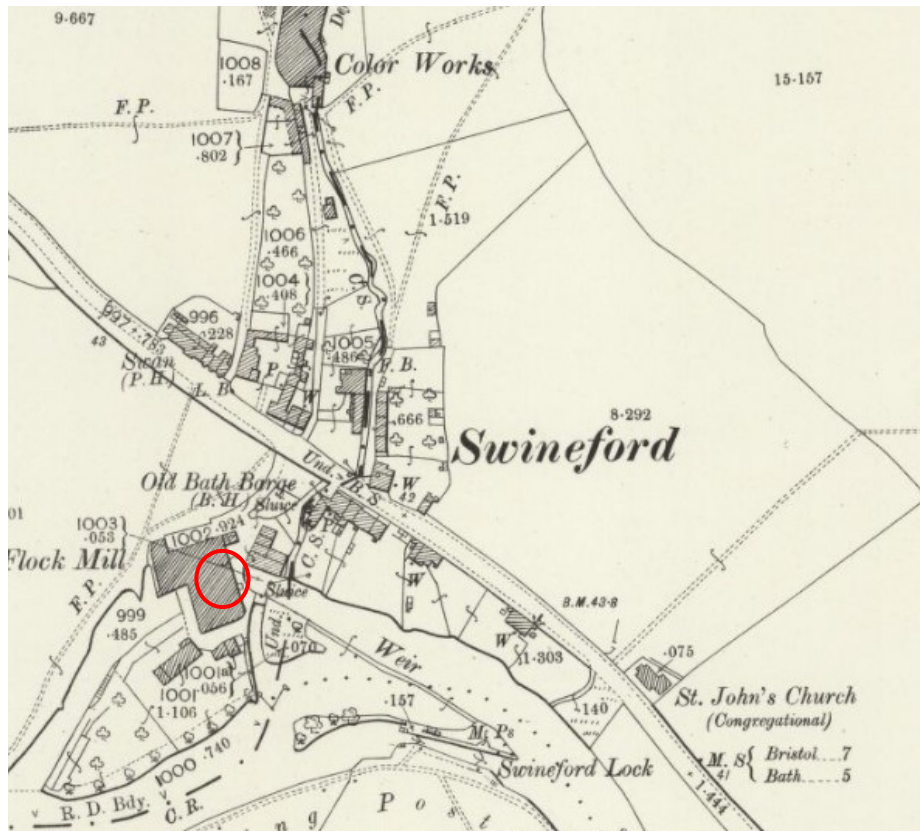
There is a little evidence for copper ore shipments from Plymouth in the 1711 Port books which show two shipments to Bristol and one to Chepstow. In 1718, accounts from the Duke of Bedford's Tavistock estate papers show copper ore from his Marquis mine being shipped directly to the Costers of Crews Hole. The Coster family operated the copper smelting works there as well as Redbrook.

I came across Swineford Copper Mill as a result of a planning/listed building application for alterations to its Wharf Building, to enable it to be converted to a residence of two storeys with three bedrooms. The documentation accompanying the application included a Heritage Statement and Impact Assessment by Colin Sellars written in 2021. This document notes in the historic details section that the site is near Swineford Lock on the Bristol Avon Navigation which meant easy water transport for the mill. The river also provided the water power. The mill, which had previously been a fulling mill, was purchased in 1708 by John Coster, the same family operating the Crews Hole and Redbrook copper smelting works. It was a rolling mill producing sheet copper and used copper ingots produced at the Coster's smelting site at Redbrook. The ingots were processed in annealing ovens, then rolled. The process was repeated until a pure copper sheet was obtained. By 1713, only finished goods were made there, and production finished in 1859. The mill then had other uses and the Ordnance Survey 25 Inch map of 1882 surprisingly refers to the site as a "Lead Works" and by 1902 as a "Flock Mill".

I commented on the application on behalf of the Association for Industrial Archaeology. I noted the condition of the empty building meant it was in need of repair and reuse and that a residential use would be the most secure. I pointed out that a number of the changes proposed were not appropriate for an industrial warehouse building. I was particularly concerned about the windows, in poor condition and completely missing in places. Photographs showed that originally they had 24 panes, a typical industrial type window. In the proposal they were to be changed both pane-wise and in the case of the ground windows in the river facing elevation, partially shortened by using a deeper cill. I suggested it would be preferable if the original design of the 24 paned windows could be used, albeit in modern metal frames. Another feature which I considered inappropriate and detracted from the building's industrial nature was the balcony on the south elevation. Ideally, I would have preferred there to be no balcony, but if it was deemed essential for the conversion, then it would be better if it had minimal visual impact and be less intrusive. I made a number of other comments on less controversial features.

The application has been withdrawn but will probably be re-submitted.

Additional information on the copper industries of Crews Hole and Swineford can be found in the 2017 BIAS publication of *The Industrial Archaeology of the Bristol and Bath Region*.



The red circle shows the site of the mill (OS Map 1924; Reproduced with the permission of the National Library of Scotland)