

The Inchbrook Works/Crystal Fountain Mills

Stephen Mills

We're all familiar with the numerous mills dotted throughout the Stroud valleys that once produced woollen cloth. When most finally went out of use, they were turned over to a variety of new uses, some better known than others. This article concerns perhaps one of the more unusual, about which little seems to be known.

But firstly, where was this located? It was based in the former Freame's cloth mill at Inchbrook near Stroud. Once cloth making came to an end, the mill became home to a number of new tenants and by the mid-1850s, Perkins, Critchley, and Marmont were making pins there. After this period, it was used for chemicals manufacture, and by 1870, had become known as the Inchbrook Works (Figs 1 and 2).

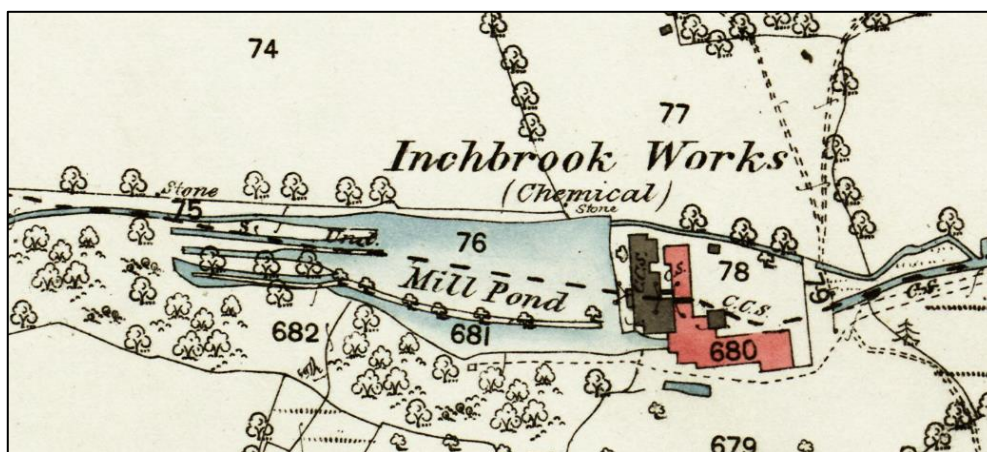


Figure 1 Location of the Inchbrook Works, complete with mill pond

The late Will Harris, a GSIA committee member for many years, first brought the business to my attention. Apparently, the Harris family operated the works, producing chemicals for several generations. The company was known as *The Boron Products Co. Limited*, manufacturers of borax and boracic acid. According to Kelly's directory of Gloucestershire (1897), the manager at the time was Mr T. Harris - telegrams were to be sent to 'Boron, Woodchester'.

Borax (often an umbrella term for a number of borate chemical variants) has had innumerable applications that include use as a pesticide, wood preservative, tanning agent, fire retardant, and in the manufacture of adhesives, glass, enamel, pottery glazes, laundry products, and soaps.

Boracic or Boric acid was usually produced by reacting borate-containing minerals with acids such as sulphuric or hydrochloric. Once the reaction was complete, a saturated solution of borax was formed. The hot solution was then cooled to create boric acid crystals. It seems that the process used at Inchbrook may have involved crystallisation around 'wicks', producing what were known as borax candles. As their name suggests, these were large, roughly cylindrical, and built up around a central core.

The remarkable construction shown in Figure 3 is the float built by Harris & Son to celebrate Queen Victoria's Golden Jubilee in 1887 - it was built almost entirely with borax candles (I wonder what would have happened had it rained on the day, as borax dissolves in water!). It was later reused as the company's entry for the Stroud Hospital Show in September 1890. Clearly, everyone dressed accordingly for the occasion, although Figure 4 shows the workforce in their normal working garb.



Figure 2 *The Inchbrook (chemicals) Works, c1900*



Figure 3 *The top-hatted figure is company boss, William 'Chemical Bill' Harris*



Figure 4 *The workforce, 1890s. Chemical Bill seated*

William Harris died around 1898, although the family continued to produce borax products from the mill until 1906. It was still referred to as the Inchbrook Works in 1909, but at some point after this period, the works was whimsically renamed, becoming *Crystal Fountain Mills*. It also found yet another use, becoming one of the flock mills operated by the Grist family (Figs 5 and 6).

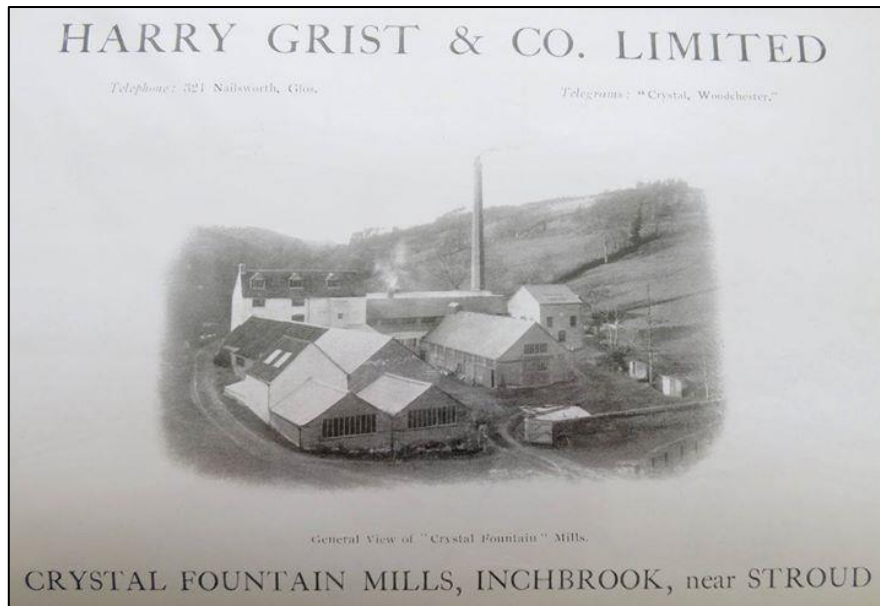


Figure 5 An advert for Grist & Co's flock mill, now known as Crystal Fountain

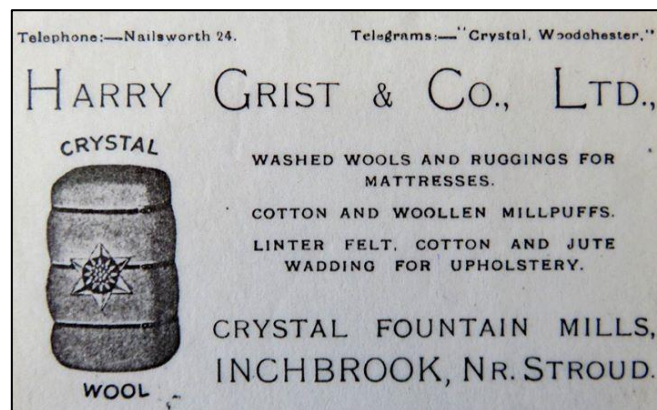


Figure 6 An advert showing the range of products. Note reference to 'crystal wool'

The mill was later taken over by an engineering company before it was eventually demolished to be replaced by a retirement village. This swept away any residual traces of the borax trade, one of the more odd-ball ones to capitalise on the availability of cheap factory space created by the demise of local cloth manufacturing. So, over the centuries, the mill had a succession of uses that included cloth making, pin manufacture, flock production, and engineering. However, the production of borax candles must rank as oddest!

Postscript

In July 2019, two rather battered architect's drawings were auctioned in Stroud, marked 'Boron Products Co. Ltd, Inchbrook, Stroud'. They were stamped 'T.H. & J. Daniels, Lightpill Ironworks, Stroud', 1896 and 1908 (Fig 7). This suggests there were plans to expand the chemical works. However, it's difficult to reconcile some aspects with the site's final layout, so it may have not come fully to fruition, although Figure 8 (of 1909) definitely shows additional buildings and some changes in the plant's footprint. Nevertheless, it gives an indication of some of the interior features, showing possible tanks and pipework used for processing.

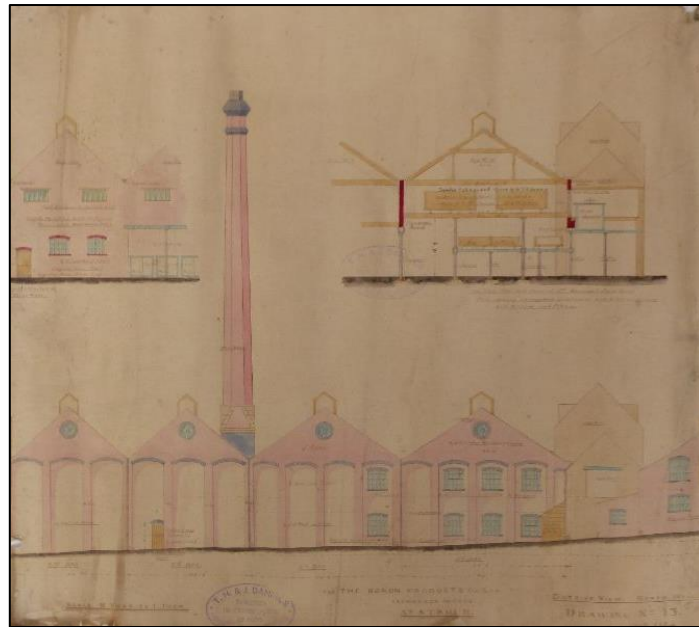


Figure 7 Architectural drawings for possible site enlargement (1898?)

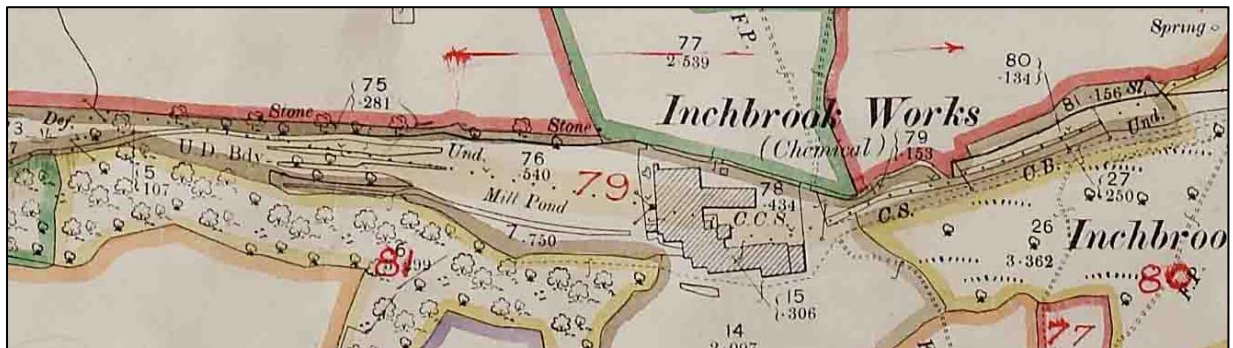


Figure 8 From the Lloyd George survey of land values 1909, showing larger footprint of to Figure 1