

Benjamin Huntsman (1704-1776), and the Casting of Steel

OUR first acquaintance with Benjamin Huntsman, the Quaker inventor, was brought about by the record of his invention in J. S. Fletcher's *Sheffield*, in the series "The Story of the English Towns" (London: S.P.C.K., 7½ by 5, pp. 128, 3s. 6d. net).

In the thirties of the eighteenth century, Huntsman was in business as a clock-maker in Doncaster, and it was the difficulty of obtaining suitable steel for his work that made him experiment in its manufacture. He also required finer steel for lancets with which he performed gratuitous and very successful surgical operations. He was looked upon as the "wise man" of the neighbourhood. In 1742 he removed to Handsworth and in 1772 to Attercliffe.

Huntsman's main difficulty lay in discovering a fire-clay in which the bars or ingots of the bar iron or cement steel could be molten. No date can be assigned to Huntsman's final solution of the problem, nor does any record appear to exist as to the succession of his experiments [quoted in *Sheffield* from "Early History of Crucible Steel," 1894].

Owing perhaps to a review of his work in a French book in 1764, Huntsman's steel found favour in France, while Sheffield would have none of it. But ere long his steel, exported to France, returned in the form of cutlery, which was pronounced better than the home-made article. Upon this his fellow-manufacturers gave way and when he "moved his works to Attercliffe he was doing a big trade in his own neighbourhood."

There are curious legends in Sheffield to this day as to how various folk of the town tried to rob Huntsman of the secret of his discovery. One appears to have some basis. The first Sheffield firm to make crucible steel after Huntsman was that of Walker, of Ecclesfield. Some of the heads of that firm certainly became acquainted with the mysteries of Huntsman's process, and it is said that the secret was secured by one of them, who, attiring himself as a tramp, approached Huntsman's works one bitterly cold night in winter and craved permission to warm his starved body at the furnace fire. This being granted to him, and he seated

in some snug corner, he secretly watched what was done, and triumphantly carried away with him the knowledge so craftily acquired [*Sheffield*, p. 74; see also quotation from *The Useful Metals and their Alloys* in Hunter's *Hallamshire*, ed. Gatty, 1869, pp. 170-172; *Journal of the Iron and Steel Institute*, 1894].¹

Of Huntsman's Quakerism, little is known to us. The author of *Sheffield* informs us that he was so true to the tenets of his faith that he would not have his portrait painted, and would not accept a Fellowship of the Royal Society! He was of a very reserved and retiring disposition.

The writer of *Sheffield* states that Huntsman was born at Sheffield, but the Friends' Registers (followed by *D.N.B.*) state that he was born at Epworth in Lincolnshire, 4 vi. 1704, his parents being William and Mary Huntsman of that place. His elder brothers were John and Samuel and after him came Mary and William. These were all registered as Friends. The parents are said to have been of Dutch or German extraction. There was a considerable Quaker family of Huntsman in the Holderness district, across the Humber, in the later seventeenth and earlier eighteenth century. Thomas Huntsman, of Hull, married Priscilla Mowe, of the same place in 1675.

Benjamin's son and successor, William (1733-1809), was not registered among Quaker births. There is a tradition in the family that "Benjamin's wife, unknown to him, took William and had him baptised into the Church of England, in Derbyshire. Benjamin was so angry when he found this out that he said she should never have another child. William was, however, brought up as a Quaker and remained in that Society until his second marriage, when he was admonished for having married without the consent of the Society. He then promptly retired from the Society. His son, Francis, grandfather of the present Director of the firm of B. Huntsman, Ltd., was brought up in the Church of England."

¹ Samuel Doncaster, of Sheffield, who has kindly interested himself in this resuscitation of Huntsman, has sent the full reference to him in Hunter's *Hallamshire*; this has been placed with other ms. in D. We are glad to record also the help received from the present members of the firm of B. Huntsman, Ltd.