

certain direction, which, if followed up, would reveal their great secret.

Shull followed up the lead, and put up a cabin near the place where the Indians had found the mineral, and commenced prospecting for himself for lead ore. But the Indians soon drove him off, and soon after this the Gratiot brothers, availing themselves of a friendly half-breed Winnebago woman, Catherine Myott, negotiated with the Indians for the right to dig for mineral or lead ore in their lands, they paying therefor a large amount of goods and supplies. And thus was the discovery made and utilized of the celebrated Shullsburgh mines, which have first and last yielded a vast amount of wealth.

From the dearth of timber in the immediate vicinity of Fevre River, the Messrs. Gratiot soon found out that smelting could not be made profitable where they had established their first furnace. The process of smelting lead ore at that time was very crude, being but a slight improvement on the Indian mode of smelting by a log furnace or an ash furnace. These simple modes were succeeded by the "Drummond furnace," or "cupola furnace," a most valuable invention, made by Robert A. Drummond, of Joe Daviess County, Ill. The log furnaces could only be used where there was an abundance of timber. Having obtained the right to mine on the Winnebago lands, Mr. J. P. B. Gratiot, procured to be made an authentic survey thereof, and the location was thereafter for many years known as "Gratiot's survey."

The brothers then determined to abandon their smelting operations at Fevre River, and commence them in a magnificent grove of timber, which from that time to this has been known as "Gratiot's Grove." On the prairie immediately adjoining the grove, they commenced building houses for their families, domestics, and workmen. The facilities for smelting soon became so great, that a large part of all the ore raised in the mines was brought there to be smelted. James Bennett, an old settler of the lead mines and of Joe Daviess County, and who was the proprietor of the old All-anwrath Diggings, a few miles from Galena, once told me that he hauled all his mineral to Gratiot's Grove to be