

operations for at least two years longer.¹⁸¹

The history of the St. Catherine mine for this period of time is similar in many respects to that of the Rudisill. John Wilkes appears to have been the owner of the St. Catherine mine but it is not certain who actually worked it. The mine was relatively active through the 1880's. Mint records indicate that a new shaft was being sunk in 1881; in 1882 three shafts were open and the mine employed 30 men. A 10-stamp mill was erected in 1883.¹⁸² At that time, the mine had reached a depth of 460 feet (155 feet vertical and 305 feet on the incline, a total vertical depth of 370 feet) and consisted of seven shafts and at least eight developed levels (figure 20). The ores were first subjected to a preliminary cobbing, thereby separating out the massive pyrites and lean ore with the latter going to the stamp mill. The free gold was caught in the amalgamation process and the tailings led directly to Frue vanners (figure 21), where the pyrite was concentrated. The cobbed pyrites and concentrates were then shipped north and elsewhere for processing.¹⁸³

The following assays show the range in character and value of some of the ores of the St. Catherine mine:

Assays of Gold Ores and Concentrates at the
St. Catherine Mine, Mecklenburg County¹⁸⁴

Gold, per ton* \$58.69 (1.7 oz/ton)

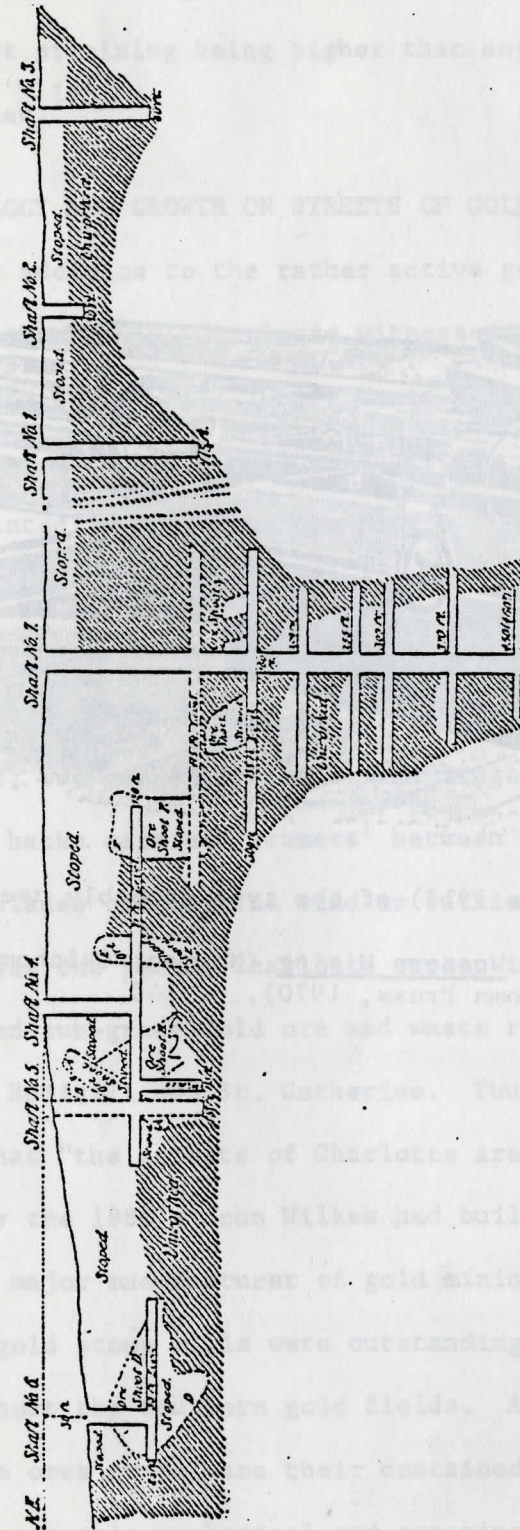
Silver, per ton $\frac{5.48}{\$64.17}$

Average Value of Concentrates

Gold, per ton \$79.92 (2.3 oz/ton)

Silver, per ton $\frac{1.19}{\$81.11}$

*Per ounce value of gold assumed to be \$35.00 (data had been revised for a publication in 1936).



ST. CATHERINE MINE.

A longitudinal vertical (in part) section, drawn from the notes of Messrs. G. W. Pitcher and Wm. Lewis, 1883. Scale: 1 inch = 150 feet. The ore shoot A is found on the foot wall and dips northward; shoot B is found in the hanging wall and dips southward; shoots E & F probably dip southward, but have not been explored sufficiently to permit of a positive statement. Shaft No. 5 is considerably in front of No. 4, and does not enter either the level or vein. The distance between shafts 1 and 7 is 1,300 feet. The section runs N. E. by S. W.

Figure 20. Longitudinal, vertical section of the St. Catherine mine, Charlotte, N.C. W. C. Kerr and G. B. Hanna, "Ores of North Carolina" in *Geology of North Carolina* (Raleigh, N.C.: Edwards and Broughton, Inc., 1893), vol. 2, 2nd ed., plate XXV.