washed down to (a) depth of eighty feet. He cleaned out this old engine shaft, and put in a column of pumps, but could not free it from water, the feeder being too strong, and the engines too old and not in good working order, the boilers leaking badly. At this point of operations the mine was abandoned, for want of means to drive forward."

For the next 20 years gold was to play an extremely important role in the history of Charlotte and Mecklenburg County. Blythe and Brockman point out that "from 1840 until the Civil War the production of gold sustained the economy of Mecklenburg and neighboring counties when other sections of the Carolinas and the South were seriously distressed."

As the mines grew deeper, improvements were required in mining, hoisting, crushing and gold recovery. In addition, pumps for removing water and ventilating the mines were required to perform greater tasks. The southern gold fields were the testing and proving grounds for gold-mining technology. Nitze and Wilkens report that "the South has been, much to its detriment, the 'proving ground' of almost all the patent gold-saving processes invented, and the greater proportion of these have, as might have been predicted, resulted in utter failure". 126

Some innovations were, however, on the right track. Improvements made by Bissel and Rivafinoli to the stamp mill were outstanding. Even modern dredge mining appears to have been forecast. It was reported by Dr. J. H. Gibbon, assayer at the mint, that in 1843 a Mr. Gibson took out a "patent" for a location on the border of Mecklenburg County in the Catawba River, "naively remarking that he cared nothing for the water, but for the gravel on its bed; the bottom of the river was scooped

out by men on a float, using long handled shovel-like scoops, and the material was carried ashore and washed for recovering the gold". 127

In 1845 Penman abandoned his carefree and extravagant way of life and his mining ventures to become a Methodist minister. "In the latter part of his life he behaved very civilly and did not need so much waiting on. The two women who lived with him, and whom he passed off as his sisters, are now forgotten--." 128

A PERIOD OF CHANGE

From the time Penman's operations ended until 1854 the Rudisill mine was worked only near the surface by local miners. These men probably obtained from two to ten dollars worth of gold per day per man. 129 The property changed hands a number of times during this period, being owned wholly or in part, by such men as D. F. Caldwell, Dan Alexander and James W. Osborne of Charlotte and James E. Mallory and Joseph Sturges of New York City. 130

At least as early as 1846, the Mecklenburg Iron Works was established, since castings have been discovered bearing that date and the company's name. 131 The company probably evolved from a simple blacksmith shop by the addition of capabilities for melting and casting iron. Most raw iron that was processed in the Mecklenburg Iron Works almost certainly came from neighboring Gaston and Lincoln counties. This company and its owners were to play important roles in the gold mining industry in Charlotte and the rest of the southern gold fields for at least the next 50 years.

The first agricultural fair ever held in Mecklenburg was also in the year 1846. Alexander describes the event. "The middle of the