to erect a 50 ton per day mill near the St. Catherine mine. The mill was to consist of a crusher followed by a fine-grinding mill. A hydraulic cone classifier was to follow the grinding step for the purpose of returning coarse particles, that happened to get through the mill, back for additional grinding. Free gold was to be collected from finely ground ore by passing it over two shaking amalgamating plates, and sulfides were to be concentrated on eight Wilfley tables (figure 23). The concentrates would then either be shipped to a roasting plant for chlorination or cyanide treatment, or, if there was a large enough volume of material, the company hoped to build its own roasting plant.

The mines were under the management of George E. Price, a mining engineer with South African Experience. Upon reopening the Rudisill, Price had the workings unwatered to within fifty feet of the bottom of the "Engine" or "Pump" shaft. He installed a hoist system and new pumps in December of that year and then proceeded to retimber the shaft and erect a shaft house 201 (figures 24 and 25).

Price estimated the ore remaining in the Rudisill stopes at 10,000 tons containing from 0.3 to 0.5 ounces of gold per ton, averaging about 0.4 ounces per ton, and an additional 10,000 tons containing ore of 0.25 to 0.3 ounces per ton. In 1906 the company employed twenty-four men, earning from \$1.10 to \$1.50 each per day.

The old levels developed earlier in the Rudisill mine resembled "rabbit burrows" (figure 26), the ore being either carried or wheeled out. Price had to enlarge the tunnel at the 250 foot level so that an ore car could pass through. This being done, he extended the tunnel

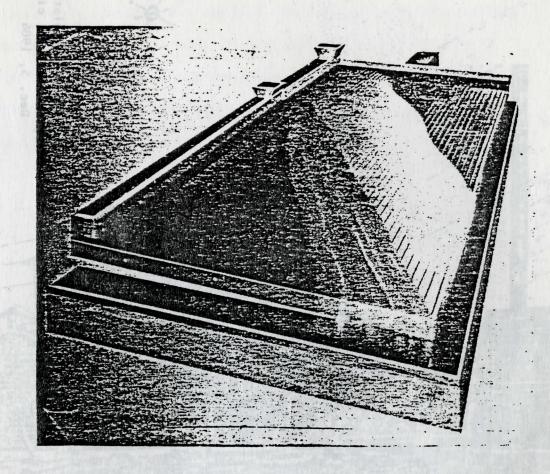


Figure 23. A Wilfley table of the type used to concentrate gold ore from the Rudisill and St. Catherine mines during the early 1900's.

M. W. von Bernewitz, Handbook for Prospectors and Operators of Small Mines (New York, New York: McGraw-Hill Book Company, Inc., 1943), 377.