CHAPTER VI

PROMINENT MINES IN THE ALMA DISTRICT BY ARTHUR J. HOSKIN

LONDON MINE

The London mine, on London Mountain between the two branches of Mosquito Gulch, was opened during the early seventies, but it did not become a producer of any note until early in the eighties. In 1882 this mine had over 3,000 feet of levels and raises, and had begun mining from five large stopes. In 1883, according to the "Fairplay Flume," the development had exceeded 4,500 linear feet, of which more than one half mile was in ore. This ore is said to have maintained a grade during that year as follows: 3 to 4 ounces of gold, 6 to 12 ounces of silver, and 1 to 3 per cent copper.

A narrow-gauge railroad had been built during 1881-82, as an extension from the then Denver & South Park Railroad from its station known as London Junction (now known as Alma), seven miles up North Mosquito Gulch to the first mill and the loading-bins of the London mine. These bins were several hundred feet lower in elevation than the portal of the mine, and an aerial wire-rope tramway—the first one in Colorado—was constructed to transport the ore down this intervening horizontal distance of about 3,300 feet. At the same time, a second stamping and concentrating mill was erected at London Junction by the associated London Companies.

This mill was started up in 1883, and during the first seven months of its operation it treated an average of 850 tons per month—certainly a remarkable tonnage for such pioneer times. During this same period of seven months the mill recovered gold bullion amounting in value to \$124,000, and made 240 tons of concentrates that averaged close to \$60 per ton gross. These concentrates and fifteen cars of high-grade ore were shipped by rail to the smelteries at Black Hawk and Denver.

The costs of mining the ore and of tramming it to the bins at the portal of the mine amounted to \$3.60 per ton, and it cost about 20 cents per ton to handle the ore down the aerial tramway to the railroad loading-bins. The overall costs of mining, transportation to the mill, and milling were figured at \$7.50 per ton. So, taken all together, the mine was doing very well indeed. But about this time the owners were attacked by litigation—a frequent sequel to the initial success of mines—and the entire property was forced to close down in 1884, pending adjustments of ownership.

The property now owned by the London Mining Company is really a consolidation of a number of groups of claims originally held by a number of distinct, but closely related, companies, in which there appears to have been a considerable proportion of common ownership. The adjustment of certain disputes about holdings resulted in the organization of the present London Mining Company, which holds a large group covering all of the desirable ground along the vein for about four miles. This group comprises five lode claims originally held by the parent company, three lode claims of the Vienna Mining Company, three lode claims of the Rome Mining Company, and seven lode claims of the Berlin Mining Company. There are also about 100 acres of mill sites and placer ground, as well as three other lode claims on Loveland Mountain a considerable distance from, and having no connection with, the London vein or the company's main operations. This consolidated London Mining Company was incorporated in New York, among the first officers being George R. Blanchard, president; H. S. Comstock, secretary; and John T. Herrick, of Fairplay, general manager.

The main opening or portal of the London mine was formerly along the Mosquito Pass wagon-road on the north side of London Mountain, and about one and one-quarter miles from the pass. Reference to the contour map will show that this mountain stands somewhat alone, with other high peaks surrounding it. The mine has always been worked through adits, the topography being particularly favorable therefor. The elevation of the first London adit (now called the North London) is 12,280 feet. Some twenty years after the beginning of operations in this property, owing to the approaching exhaustion of the ore-bodies along and above the initial adit, the company established a new mining plant around on the opposite side of the mountain and

drove a new adit at an elevation of 11,970 feet. This has since been the chief mine mouth and is called the South London.

The plant at the South London encloses the portal of the adit. The main building houses three departments; viz., the boilers, the blacksmith shop, and the compressors. Since the property is above timber line, wood for fuel is unobtainable, and the boilers are fired with bituminous coal that costs nearly \$20 per ton delivered in the bins at the mine, it being hauled seven miles by wagons up a hard road. There are two Imperial Type, Rand, cross-compound compressors, but only one of them has been required to supply drilling air for a number of years. Extending from the dump adjacent to this large building, a trestle extends out to an independent structure that constitutes the ore-bins. The capacity of the bins is 750 tons. This amount of storage was provided in order to take care of the interruptions that are inevitable in the hauling of the ore by wagons to the railroad station, through severe weather or blockaded roads. During one of the most active seasons of this mine, a few winters ago, it was found necessary to store several months' output of ore in a great heap on the ground beside the ore-house.

There are commodious boarding- and bunk-houses, an office building, and stables.

The characteristic fluctuations in the thickness of the London vein were strikingly exemplified when the mine was opened up from the South plant. The adit was driven as a cross-cut, and, despite the careful calculations as to where the vein should be encountered, it could not be found. Presuming the vein to have assumed a new strike or dip, the adit was pushed blindly ahead until finally a superintendent assumed the responsibility of driving a branch from the cross-cut, and this eventually found the vein. A drift was then made along the vein to the cross-cut which had penetrated the vein at a pinching out.

The two adits were first connected by a large raise that was necessary to create a natural system of ventilation. Since 1892, when the South plant started, the ore-bodies between the two main adits have been practically exhausted. In February, 1912, an exhaustive examination of the property was made by a prominent mining engineer, who recommended the development of a large block of virgin ground above the upper level and toward the northern end of the property. It is not known, at this writing, what the owners will decide to do.

During recent years the property has been under lease to the London Mine and Reduction Company. This company is made up of the parent company, which controls one-half of the leasing company stock, and of John M. Kuhn and John H. Singleton, both of Alma, who together hold the remaining half-interest. At the present time the ownership of the main London Mining Company is vested in three estates; viz., the Story, the Packard and the Jewett. Mr. Kuhn, one of the lessees, was for years the superintendent of the mine for the owners.

The mining has all been done by the ordinary overhead stoping methods. Wherever the value of the vein warranted, chutes have been built at frequent intervals along the levels, and stoping has proceeded upward. Owing to the narrowness of the veins, it has been necessary to break a considerable amount of the country or wall rock during drifting and stoping. However, the stopes have been carried as narrow as was consistent with efficient labor. These old stopes may be seen to vary in width from two and a half to four feet. The practice of resue or stripping has been followed, and some of the country rock, usually on the hangingwall side, has been first drilled, shot and removed. This waste material has been disposed of as filling for the same or other stopes, the surplus being shoveled into some of the cribbed millholes built up through the stopes from the chutes along the levels below. Certain of these mill-holes have been reserved as manways and air-ways. After a stretch of the vein has been uncovered by this stripping, short holes drilled into the hard quartz of the ore would serve for the light charges of explosives that would break this material down onto canvass sheets spread out for the purpose. Very often the ore could be worked down by hand tools, without any shooting. All the sorting of ore has been done in the stopes, the selected portions being shoveled into some of the mill-holes not then being used for handling waste. At times it may have been necessary for the miners to carry the ore rather long distances along a stope in order to deposit it in an ore-chute intended for ore, and this "packing" was done using sacks and boxes as receptacles. The same chutes have been used alternately for handling waste and ore, and since they are built of round pole timber, laid up crib-fashion, the practice is open to criticism; for not only was it necessary carefully to sweep or brush all of these timbers whenever a mill-hole was to be used for waste after it had contained ore, but there must have been a

considerable loss of the richer and finer ore through the openings in the sides.

Persons not familiar with the precise conditions confronting managers and superintendents of mines are prone to offer criticism of those cases in which costs have appeared to run high, but it is well for us to bear in mind that the people in charge of property are often obliged to submit to excessive costs in order to operate at all. In the case of the London mine, we must appreciate the unfavorable natural conditions, due chiefly to altitude and climate, before we assume that the expenses of mining have been unduly high there. This property has proved a wonderful producer and has made splendid profits.

In the earlier years of the London mine there were American miners, chiefly, in the district, but since the decline in activity which occurred a decade or more ago, most of the intelligent miners have removed to other mining districts. The demands, at times, for men to work isolated properties like the London mine has brought into the district some of the more ignorant European laborers, such as the low-class Austrians, Hungarians and Italians. The employment of such inefficient laborers to do metal-mining has increased the costs of ore production, thereby adding another handicap to the operation of the alpine mines of this region. At the London mine, during the years 1910 and 1911, the following scale of wages was maintained for eight-hour shifts: miners, \$3; machine men, \$3.50; stationary engineers, blacksmiths and foremen, \$4. This same scale of wages prevails throughout the district.

This mine has proved a wonderful producer and is credited with a splendid return of profits to the owners; but since the affairs of the company are maintained very privately, figures cannot be given. The mine has now reached a stage that requires a large expenditure to develop the vein at greater depth. This kind of a project would be perfectly feasible; however, owing to disagreements between the owning and the leasing companies as to which company should be rightfully responsible for this outlay, the whole scheme of further development appears to be indefinitely postponed. It is hoped that the near future will bring about a reconciliation of these factions and that there will be a realization of the recommendations that have been made by engineers relative to this new development.