

# MEIONT <br> ASTORYOFASTANISLAUS RIVER TOWN 

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for

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Melones, about 1924, looking north from the Tuolumne County side of the Stanislaus River. The 1902 Melones Mining Company mill rests on the hillside on the east end of Main Street with Carson Hill rising over town just behind it. The mill for the Carson Hill Mining Company flanks the town to the west just above the old Highway 49 bridge.


## FOREWORD

Ahead of the first rising waters of New Melones Reservoir - during preconstruction, construction, and initial operation of the dam - detailed cultural and archaeological surveys were made of the New Melons project area and lower Stanislaus River.

This cultural resources program was conducted by the U.S. Army Corps of Engineers as project builder, the Department of the Interior, Bureau of Reclamation as project operator, and cooperating and consulting archaeologists and historians.

Over 675 archaeologic and historic sites were identified with many subsequently found eligible for nomination to the National Register of Historic Places.

One location, on the north bank of the Stanislaus, proved especially rich in Mother Lode history. Initially occupied by Native Americans, the area was later a bustling Gold Rush center, and eventually abandoned.

In "Melones: A Story of a Stanislaus River Town," archaeologist Julia G. Costello recaptures the past of this area, providing a glimpse of life in a once-thriving community that now rests beneath the waters of New Melons Lake.
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## INTRODUCTION

This book is devoted to the history of a small place on the north bank of the Stanislaus River known most recently as the town of Melones (fig. 1). People have lived at this location from thousands of years ago until the 1970's. The record of their lives remains in the stones and soils of the area as well as in historic documents. The old townsite now lies beneath the waters of the New Melones Lake, and this publication is, in some respects, a memorial to that vanished community. But the history of Melones is also representative of the history of hundreds of other places in California's Mother Lode - places that saw the sudden replacement of their Indian populations with thousands of goldseekers from around the world; the exodus of this population along with the gold; the hard-rock mining boom of the early twentieth century; and the eventual economic reliance on agriculture, ranching, and tourism.

The site of Melones, more than 200 feet under the surface of the New Melones Reservoir, is located just northeast of the Stevenot Bridge on Highway 49 between Sonora and Angels Camp (map 1). Situated on the lower flanks of gold-rich Carson Hill, the settlement was spread along the

Calaveras County side of the Stanislaus River just upstream from Highway 49's old crossing over the river. Before the arrival of the goldseekers, this relatively level riverbank area had been occupied at different times by Native Americans. Remains of their tools, campfires, and meals are still present in the soil; and symbols carved on the rock outcroppings next to the old river channel have lasted far longer than the cultures themselves.

Human activities that had remained relatively unchanged for thousands of years were suddenly and drastically altered by the discovery of gold in the Sierra Nevada on January 24, 1848. The bed and banks of the Stanislaus River, like those of other Sierran rivers, held placer (alluvial) gold which had been accumulating for millions of years. In this glittering wealth, goldseekers from all over the world saw their fortunes, and in its quest, towns and futures were made and abandoned overnight.

The history of the town which became Melones was bound not only with gold, but also with the other great Sierra Nevada resource - water. The townsite was located at a natural crossing point



Map 1: Location of Robinsons Ferry/Melones.
of the Stanislaus and a ferry was established here in the early days of the Gold Rush, placing the site on the map as Robinsons Ferry. Once the placer gold was exhausted and the mining hordes gone, it was the continued operation of the ferry that kept the community from disappearing with the majority of Gold Rush mining camps.

In the last decades of the nineteenth century, however, major advances in gold mining and milling technologies reversed this economic decline. Many lode, or quartz, mines idled earlier were reopened. In 1898, the Melones Mining Company established its base of operations at the town of Robinsons Ferry. From there its men and machinery could tap the rich mineral deposits of Carson Hill. This company not only brought people, activity, and money to the ferry crossing, but it also renamed the town "Melones."

The population, typical of most western mining camps, was characterized by large numbers of transient single male miners, many of whom were recent immigrants to the United States. Local services expanded to meet the new needs. Stores, restaurants, hotels, homes, saloons, bunkhouses, and a community hall were added to the town. The Sierra Railway completed a branch line through Melones in 1902, and in 1911 a highway bridge spanned the Stanislaus at this spot. Melones was physically connected with, and an active participant in, the industrialization of America.

The future of Melones, however, was already prefigured in the need for water for the growing agricultural industry in the San Joaquin Valley, and demands for electricity that far exceeded existing production capacity. Conceived in 1918 and completed in 1926, the Melones Dam was constructed about nine miles downstream from Melones by the Oakdale and South San Joaquin Irrigation Districts. The 112,500-acre-foot reservoir backed up the waters of the Stanislaus River to the edges of the community.

A lethargic foothill economy, a natural disaster, and the advent of World War II resulted in the town's demise. In 1936, the Sierra Railway was forced to abandon its line through town, reducing Melones' contact with neighboring communities.

A fire completely destroyed the newly rebuilt mill of the Carson Hill Mining Company in 1942. In that same year, gold mining was declared a nonessential industry by the National War Production Board. With the end of mining activity and the exodus of miners, businesses closed and the remaining residents drifted off to other towns and jobs. The only economic resources that remained were a camping and recreation area which provided access to the river and reservoir, a ranch which operated north of town, and cattle grazing on the rolling hillsides.

But California was still growing, and its needs reached further up the Stanislaus River canyon. The Central Valley Project, drafted by state and federal agencies in the late 1930's, outlined a comprehensive plan for development of water resources, including irrigation, flood control, domestic water supplies, navigation, and power development. In 1962, Congress expanded an earlier 1944 authorization, and construction of the 2.4 million-acre-foot New Melones Reservoir began in 1966. The 625 -foot high earth-fill dam was completed in 1979 by the Army Corps of Engineers, and subsequently the land and facilities were turned over to the Bureau of Reclamation.

Prior to the actual filling of the reservoir, the land affected was studied by many specialists, including historians, ethnographers, and archaeologists. Physical remains of the area's history were identified and evaluated. Major archaeological surveys of the New Melones Lake project area conducted between 1968 and 1978 identified over 675 historic and prehistoric sites. The historic and archaeological significance of this section of the Stanislaus warranted the recommendation, made in 1974, that the entire area be placed on the National Register of Historic Places. More intensive archaeological and historical work was conducted from 1978 to 1982 including partial excavation of both prehistoric and historic period sites and analysis of the artifacts recovered. The town of Melones was one of these sites.

The history of Melones is significant, not only because the town was the largest nineteenth and early twentieth-century settlement in the project area, but also because, as noted above, Melones'


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history represents that of many other Mother Lode Gold Rush towns. Special attention was therefore directed at investigating and interpreting the history of this settlement. Information was obtained from three major sources: the memories of living persons, historical documents, and the archaeological remains.

An ethnographic study of Melones was conducted by Dr. Dorothea J Theodoratus and her assistants in 1976 through interviews with numerous former residents. ${ }^{1}$ This study contained personal accounts of the 1930's and later periods and oral histories of earlier years. Additional ethnographic information was added to this base by subsequent researchers. Documentary research pertinent to the town was most notably performed by Dr. Turrentine Jackson and Stephen D. Mikesell, who authored the initial historical overview of the project area in 1976. ${ }^{2}$ Paul Friedman also contrib-

[^0]uted original historical research to the data on which this summary is based. ${ }^{3}$

The historical archaeological investigations of the Melones site were conducted between 1978 and 1980 under the direction of Julia G. Costello. The overgrown Main Street vicinity was cleared of vegetation and the surrounding area carefully examined. Old walls, foundations, chimneys, mines, mills, rockdumps, roads, flumes, railroad grades, and an abundance of nineteenth and twentieth-century artifacts were recorded (fig. 2). Archaeological remains were identified as to their age and the activities which they represented. The resulting information has extended our knowledge of the daily activities of the town back past the reach of living memories and provides insights into the past not available from documents.
This publication is a synthesis of the documentary, ethnographic, and archaeological work conducted on the townsite of Melones. Through a synthesis of these three avenues of research, a history of Melones has been reconstructed so that the story of the town will be preserved.

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Figure 2: Ruins of nineteenth century structures were uncovered around the townsite of Robinsons Ferry/Melones. This large and well-made basement near Squirrel Gulch may have been constructed as a winemaking facility by Lorenzo Pendola in the $\mathbf{1 8 8 0}$ s. Photograph courtesy of the National Park Service.


## THE cold rusi

Stanislaus canyon gold, an omnipresent influence on the historic Melones townsite, is part of a story which began about 150 million years ago. Toward the close of the Jurassic Period, intensive geologic activity pushed and tore at the Sierran rocks, creating substantial deformation, folding, and large faults. Granites intruded deep in the earth, and cooling hot waters and gasses, carrying gold and silver as well as other minerals, penetrated these faulted areas forming mineral-rich veins. Those veins which contain gold in the Sierra commonly consist of quartz, although gold is not exclusively found in quartz and, as the miners quickly found, not all quartz veins contain gold. An especially rich zone of veins which occurred along the west slopes of the Sierra Nevada between elevations of about 1,500 and 3,000 feet
for some 150 miles, from southern Mariposa County to northern El Dorado County, is called the Mother Lode. For millions of years, goldbearing rock has been freed from these quartz veins by weathering, and the gold liberated from its matrix by the grinding and tumbling action of streams. The resulting flakes and nuggets of the precious metal, nearly twenty times heavier than water, are trapped and concentrated in the bottom gravels of the stream beds and in the cracks and crevices of the underlying bedrock, forming placer deposits.

There is no evidence that the prehistoric Native American occupants of the Stanislaus Valley valued gold. The early history of the human occupation of the region is not well known and only

recently have archaeological excavations begun to give us a better understanding of the various Native American groups who lived here. The earliest peoples to leave evidence of their presence were small groups of hunters who are thought to have visited the area eleven thousand to eight thousand years ago. Evidence of subsequent Native American occupants provides indications of hunting, gathering, and various stone-working activities occurring between eight thousand and thirty-five hundred years ago.

Next to settle the area were peoples thought to be ancestors of the Yokuts. These people established large villages on the floor of the San Joaquin Valley and regularly gathered additional food resources in the Sierra Nevada foothills. Their small camps, occupied about thirty-five hundred years ago, are found in the Melones region. It is quite probable that they were the ones who deposited their dead in the mortuary caves of the Stanislaus River area. Travelers from the Great Basin east of the Sierra were also probably in the Stanislaus region during this time period. These Paiute-related groups, in all likelihood, were making seasonal visits to take advantage of natural resources not available further east.

The Miwok, the latest group to occupy this area, are thought to have arrived from the north approximately five hundred years ago. They established large settlements, had a diversified economy, and traded with the Pacific coast peoples as well as with groups from the east. The staple food of the Miwok was the acorn. When ground and leached of its tannic acid, the acorn provided a versatile and nutritious fare. Distinctive acorn grinding stations, called bedrock mortars, are common throughout the Stanislaus area.

The remains of a Native American village were discovered at the townsite of Melones during the course of the archaeological excavations. Although the deposit had been greatly disturbed by the Gold Rush and later activities, enough evidence remained to identify it. Based on ethnographic and historic information, this site tentatively has been identified as the historic Miwok village of Wiyiji, thought to have been one of the largest Miwok villages on the Stanislaus.

Petroglyphs were also present next to the Stanislaus and suggest that the site was also occupied by earlier peoples. Thus, the human settlement of what was to eventually become the town of Melones began more than five hundred and perhaps as many as several thousand years ago.

The end of Native American lifeways was foreshadowed by Spain's settlement of the California coast in the eighteenth century. It occurred almost overnight in the Mother Lode region after gold was discovered. Today, a remnant community of several hundred Miwok, descendants of these early people, continue to live at the Tuolumne Rancheria near the town of Tuolumne.

The first known entry of non-Native Americans into the Stanislaus Canyon area is thought to have been that of a Spanish exploratory party under the direction of Gabriel Moraga in 1806. It is ironic that the Spanish, always on the lookout for gold in their New World territories, never discovered the rich deposits in the Sierra. The next known Spanish expedition, in 1828 , was directed to quell the rebellious Indian leader Estanislao whose encampment was located downstream from the New Melones Lake. Estanislao's name was later anglicized by John C. Fremont on his 1845 expedition when he named the Stanislaus River after this notable Native American.

Although other immigrating pioneers such as Jedediah Smith and John Bidwell may have passed close to the Stanislaus River during the first half of the nineteenth century, the area was not permanently settled by non-native peoples until gold was discovered by James Marshall in the spring of 1848. After that first find at Coloma, on the south fork of the American River, goldseekers flocked to the area and spread rapidly along the Sierran foothills looking for other strikes. Charles M. Weber is generally credited with opening the rich Southern Mines by training a group of Miwok living near Knights Ferry to prospect the Stanislaus and Tuolumne rivers for him. Inspired by their findings, Weber arrived on the Stanislaus in late August, 1848.

A researcher into gold rush settlements concludes, however, that, ". . . a number of persons of


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## PETROGLYPHS AT MELONES

Petroglyphs, designs pecked or carved into rock surfaces, along with pictographs, rock paintings, are among the most common types of art found in prehistoric North America. They range from simple geometric forms to naturalistic depictions of animals and humans. The techniques of rock carving involve either striking the surface of a rock with a piece of harder stone, or using two stones much like a hammer and chisel. Rubbing and scraping were also used to vary the surface finish.

Despite their widespread presence, very little is known about the meaning of the designs themselves. Where specific animals or activities are represented (by a human figure with a bow, for example) at least the forms can be identified, if not the intent of the artist. It has been commonly assumed that these rock carvings and paintings are related to religious or ritualistic practices of the people. The simple execution of designs and forms for artistic or personal pleasure, however, cannot be ruled out. Recently ethnographic accounts of California Indians have been studied for information on particular design elements and for accounts of the actual execution of rock art. Although some insights have been achieved, the pictographs and petroglyphs remain poorly understood.

There are several petroglyph sites around the Stanislaus area, one of the largest located at Horseshoe Bend, not far upstream from Melones. And at Melones itsell, at the east end of what was later to be Main Street, a gently inclined outcropping of metamorphic rock near the river bears a series of incised designs (fig. 4). The surface of the rock had weathered to a reddish patina and the designs, cut through to the lighter interior, show in contrast. Studies of these designs, and others on the Stanislaus, were made by rock art specialists who carefully recorded the forms themselves and their positions in relation to each other. ${ }^{1}$ Thought by some archaeologists to have been carved by peoples who were here prior to the arrival of the Miwok, they may have been executed five hundred to fourteen hundred years ago by Great Basin groups who traveled westward over the Sierra Nevada. Although their meanings or makers may never be known, these petroglyphs may, with further studies, provide a better understanding of some of the early residents of the Stanislaus River.

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Figure 4: Petroglyphs at Melones.

Spanish extraction preceded the arrival of any significant group of Americans to the Tuolumne foothills, possibly by a month or two."2 One piece of evidence is the account of Antonio Franco Coronel, leader of a group of potential miners from Los Angeles. In August of 1848, he recounts:

> ". . . Upon arrival at the San Joaquin River. ...we met Father Jose Maria Suarez del Real who was a true vaquero and who had a great deal of gold with him. He told us that he came from Stanislaus Camp-recently discovered-which was a placer rich in gold. We went there and found the camp of some New Mexicans who had come from Los Angeles and who had recently settled there, one or two Americans or foreigners, and several other parties of Spanish people who came from San Jose and other nearby points."

As Coronel met his gold miner returning from the Stanislaus in August, there appears to have been Spanish speaking miners working the river by late July of 1848 , preceding Weber by at least a month.

Once word of rich diggings in the southern Mother Lode spread, nothing could restrain the onslaught of eager gold seekers (fig. 3). Discoveries occurred in rapid succession and many current place names date to these first gold strikes. George Angel, who arrived in the area with Weber's initial party, stopped to prospect and then opened a trading store which became the nucleus for a community known as Angels Camp. Two of Weber's other partners, John and Daniel Murphy, turned east from Angels and founded the settlement that was later renamed "Vallecito. A splinter group from this camp left "Murphy's Old Diggings" to found "Murphy's New Diggings," later shortened to "Murphys." James A. Carson, a Virginian who served in the Mexican war, went a bit further south to a profitable stream which, along with the adjacent goldrich hill, was later named after him. Carson and

[^3]his party took out 108 ounces of placer gold in just ten days.

To the south of the Stanislaus, discoveries were also being made at a rapid rate. In the fall of 1848 references are found to both "the great camp of the Sonoranians" [sic], ${ }^{4}$ present-day Sonora founded by miners from Mexico, and to Americans mining gold at Woods Creek near modern Jamestown. Mormon Gulch, or Mormonitos, later called Tuttletown, was also founded in the hectic days of 1848 , along with scores of other camps that sprang up wherever gold was found, only to be abandoned as soon as the gold played out or rumors of richer diggings reached the residents.

The Stanislaus River is located in what the miners termed the "Southern Mines." Initially this referred to the Sierran region of rivers draining into the San Joaquin River as distinct from the Northern Mines with rivers feeding the Sacramento. The Southern Mines differed from those in the north in climate, the geology of the goldbearing formations, and the ethnic make up of the population. The southern region was generally drier and hotter than the north, producing less reliable water resources and therefore greater problems for the miners.

As most of the overland routes from the eastern United States ended in the Northern Mines, and the initial discovery of gold was there, the Yankees tended to claim this territory as their own. Foreign goldseekers congregated in the Southern Mines where the international society was more hospitable. The preponderance of Mexicans, Chileans, Kanakas (Hawaiian Islanders), Chinese, French, Germans, and Italians gave the southern Mother Lode area its own distinctive atmosphere.

The gold, object of this largest world wide migration known to date, occurs in two geologic contexts: quartz veins and placer deposits. "Lode mining" involves excavating these primary veins, crushing and grinding the quartz ore to sand-sized particles, and amalgamating the remains with agents such as mercury to recover the gold. This requires an increasingly complex technology as the

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veins are followed deeper into the earth, a technology unknown in the Gold Rush years. In the placer deposits, however, where erosion and stream action have freed the gold from the quartz, the miner had only to wash away the dirt and gravel to recover the precious mineral. Ninetynine percent of the gold mined in California before 1860 was obtained by placer mining.

The mining equipment of the placer miners was minimal, inexpensive, and portable. The gold pan, mainstay of the miner's kit, was used primarily for prospecting. A shovel, pick, iron bar, and a knife completed the equipment list. When "paydirt" was located a "cradle" or "rocker" was generally utilized by partnerships of three to four men. This simple washing box allowed the heavy gold, often assisted by quicksilver (mercury), to accumulate behind bottom riffles while stones and dirt were removed from a screen in the top or washed away by agitation of the water. This technique was not as thorough as the gold pan but was considerably
faster in processing large quantities of earth, a major consideration for the impatient miners.

Improvements were made in this system with the development of sluices, wooden troughs with riffles or a blanket in the bottom (fig. 5). Set up on an incline with water running over the dirt shoveled into it, the sluice greatly increased the quantity of earth that could be processed by a group of men. "Long toms" were sluices that exceeded twelve feet in length. Ground sluicing was also utilized, the water being directed over a prepared incline and the gold washed out either in a sluice box downstream or simply picked out of the channel. These improvements in placer mining only increased the speed, not the efficiency, of the recovery techniques. Some estimate that the maximum extraction rate was only seventy-five percent, while many placer miners retrieved scarcely one third of the gold that passed through their separating mechanisms. Much of


Figure 5: The lithograph shows a method of lifting water into a sluice box by means of a water wheel. In the background are numerous stone piles resulting from placer miners washing the earth for gold in similar devices. Photograph courtesy of the Bancroft Library.


the fine gold thus lost was recaptured in later years by more careful miners.

During the 1850 's, "river turning," performed by large companies of men, became a popular method of reaching gold deposits in the riverbeds. This formidable undertaking necessitated the construction of a temporary dam and channel to move a river around its bed, and there was no guarantee that the enormous amount of time and labor required for the venture would be rewarded with the discovery of gold. Seasonal floods often destroyed months of work.

The locations, sizes, and lifespan of these ephemeral gold rush camps were rarely formally recorded and our knowledge of them is gleaned almost entirely from the diaries, journals, and newspaper accounts of the time. The archaeological remains of these sites are also difficult to identify due to insubstantial constructions, the transient nature of the population, and disturbances from more modern activities. Although some diggings were
productive for several years, placer areas were often worked over in a matter of weeks or months, and little effort was spent improving temporary home sites. Canvas or brush spread over sticks sheltered a level place and provided primitive but adequate accommodations. Even where fireplaces endured, it is difficult to estimate the numbers of miners who might have occupied an area. Gold Rush diaries reveal that a few warm hearths could serve as gathering places for a large population. Few artifacts were left around the camp sites from the miners' sparse packs.

Because of the meager physical remains of their living areas, the presence of the early placer miners is more easily and reliably identified from the remains of their diggings than from the ruins of their camps. Almost every stream and drainage course in the area around Melones is marked by the distinctive piles of rocks and stone retaining walls left by placer miners, while the hillsides are cut with numerous ditches shuttling water to the diggings (fig. 6). Examples of the rock piles can


Figure 6: Early mining activities on the Stanislaus River left these stone features, similar to those in Figure 5. The presence of miners can often be more easily interpreted from the remains of where they worked for gold than from where they lived.
Photograph by Julia G. Costello.


be easily seen in the drainages alongside old Highway 49 , which now is used for boat-launching on the Calaveras side of the New Melones Reservoir.

Of all the gold deposits in the Southern Mines, the richest was adjacent to the site of Robinsons Ferry. The promontory known as Carson Hill, rising some 1200 feet above the Stanislaus River, contained enormous gold-bearing quartz veins of unprecedented wealth. Although placer deposits on and around the hill had been worked since 1848, in late 1850 the quartz veins themselves were discovered. The find precipitated an enormous influx of both miners and travelers to the region by the spring of 1851:

> "The news filled the State with excitement. The town of Melones on the southern side of the hill, became the largest mining camp in the State, with a population variously estimated from 3,000 to 5,000 . People came in crowds to see the mine. Robinson's Ferry, on the Stanislaus River, two miles south of the place, took in $\$ 10,000$ for ferriage in six weeks."5

Quartz mining, however, required a substantially larger capital investment of labor, equipment, and effort than placer mining, as well as technical expertise in sinking shafts and driving tunnels, ${ }^{6}$ and in milling and separating the gold from the crushed rock. William Hance and his partners, who formed the Carson Creek Consolidated Mining Company, filed a claim on the first vein, discovered in November of 1850. Known as the Morgan Mine or Morgan claim after the principal investor, Alfred Morgan, the yield became a sensation in the State by exceeding $\$ 2,800,000$ in gold between February 1850 and December 1851. The labor force consisted primarily of Mexican miners who had learned the techniques of hard rock mining in their native country and who were invaluable in introducing these techniques to California. The Morgan Mine entered a period of litigation shortly after its opening, however, as various parties asserted their ownership of the abundant

[^5]wealth. Continuing legal controversy closed the mining operation in 1852. Almost thirty-five years passed before any major excavation of the rich deposits of Carson Hill although mining continued sporadically all over the mountain and provided widening discovery and mining development that eventually led to much more ambitious efforts.

A Gold Rush town named Melones, separate and quite different from the community of Robinsons Ferry that would eventually bear the same name, existed from 1851 to 1852 on the western slopes of Carson Hill. The town was founded by Mexican miners who worked the rich quartz veins of the Morgan Mine. The proximity of this camp to the twentieth-century town of Melones, and the sparse documentation on this Gold Rush settlement, have been confusing for historical researchers of the area.

An intensive study of contemporary journals, diaries, and newspaper accounts ${ }^{7}$ revealed that there were contradictions among contemporary miners and writers not only as to the correct spelling of the name, but as to the locality to which the name belonged. The first mention of the town is in the Sonora Herald of May 24, 1851 where " . . . the extraordinary deposits of gold just discovered at Carson's Creek, and 'Maloney's diggings'. . . " were reported. Numerous 1851 references to this locality were found, variously referred to as Carson's, Carson's Creek, Melones, Maloney's, or occasionally, Carson Hill. It is clear, however, that all of these accounts referred to the same general area. The lack of standardization of both the name and the exact geographic location is typical of descriptions of most Gold Rush camps.

The general location of Melones, deduced from historic references, was apparently close to the prospecting and mining area at the top of Carson Hill. References to the activities there often used the names interchangeably. That Melones was distinct from Robinsons Ferry is verified in several accounts of travelers and miners in the area who not only mentioned both places, but also discussed

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## THE CALAVERAS NUGGET

The largest recorded mass of gold ever found in the United States was taken from the Comstock Claim on Carson Hill on the evening of November 22, 1854. It was not, properly speaking, a "nugget," which is a piece of placer gold worn by water, but was part of a weathered pocket of gold removed from the earth in one large piece. Although there are many versions of the story of this famous find, it has perhaps been best summarized by Calaveras County historian Richard Coke Wood:
"The nugget was fifteen inches long, nearly six inches wide, and of irregular thickness, averaging four inches. Attached to one side were pieces of quartz, but over eighty percent of the lump was gold. It was weighed on Adams Express Company's scales in Stockton and balanced at 2,576 ounces or 214 pounds and eight ounces, Troy. The gold was valued at seventeen dollars an ounce and the worth estimated at $\$ 38,000$, making allowances for the quartz attached to it.

The claim was being worked by four Americans and one Swiss miner. The leader, a man named James Perkins, had come from Lexington, Kentucky, and had mined for a few years, but had never before had over $\$ 200$ in gold dust in his possession.

The nugget was shipped by Adams Express Company to New York. Perkins and another of the company accompanied it on the steamer. During the trip they met a man from New Orleans who purchased the nugget for $\$ 40,000$. He deposited it with the Bank of Louisiana in January, 1855, and in 1856 displayed it at the French Exposition in Paris.

After being carefully assayed in New Orleans, its real value was given at $\$ 38,916$. At seventeen dollars an ounce this would give a Troy weight of $1943 / 4$ pounds. " 8

Although there are plaster casts of famous nuggets at the Ferry Building in San Francisco, the Calaveras Nugget, unfortunately, is not among them and there are no known sketches or photographs of it. Apparently, after the 1856 French exposition, the nugget was melted down into bullion.

[^7]
## WHERE BID THE NAME MELONS COME FROM?

The camp known as "Melones" was variously referred to during its short existence as "Maloney's," "Malones," "Malona," "Meloney's," and "Melone." As observed above, there was a notable lack of formality in addressing Gold Rush settlements. A group of miners, a drainage, or a general region were not distinguished from each other in their naming. Designations were informally acquired and often simply referred to the discoverer (Woods Creek, Carson Infill, Angels Camp), a group of people who mined there (Mormon Gulch, Italian Bar, Soldiers Gulch), or some attribute of the area (Dry Culch, Murderers Gulch, Coyote Creek). The name was also passed on by word of mouth, and changes in spelling from the various pronunciations and interpretations of the miners made for a great deal of confusion. Newspapers and other published accounts of the day relied on verbal informaton, and inaccuracies in the identification of places were repeated in print, adding enormously to the confusion of later historians.

Two major theories on the derivation of "Melones" are 1) that the town was named for an individual; and 2) that the town was named by Mexican miners for the melon seed-like gold nuggets found on the site. Some evidence suggests that the settlement may have been named after John Melone, reportedly a saloon keeper in the area, or that Melone may have been the maiden name of either John W. Robinson's wife or mother. A Melones family in Alamo and Saratoga, California also had a forebear who came to the California mines in 1849. Although there is no evidence that the Melones ancestor was ever in the Southern Mines, family history links him with the town of Melons.

The evidence for a Spanish origin of the name appears to be stronger and has convinced some Melones historians. 9 The initial association of the town with Mexican miners suggests a Spanish origin of the name, and the size and abundance of the gold nuggets found in the area would support the contention that they were likened to the seeds of a melon. Edward Vischer states that Carson I Hill in 1851 was called el cerro de Melones (the hill of melons), and that several of the diggings were referred to as Meloncitos by the Mexicans in order to distinguish them from the hill itself. 10 Perhaps the most convincing evidence, however, is found in the Daily Alta California dated June 16, 1851. Here, in an article on a new gold strike in Tuolumne County, the naming of that camp is tied to its founders from Melones:
"An exceedingly rich vein of gold-bearing quartz has been discovered on the mountain running up from Wood's Creek, back of Saw Mill Flats, 3 miles from Sonora . . This vein is already a rival of the celebrated vein at Carson's and is even attracting persons from Camp Melone. As the latter word is the name for muskmelon, our Spanish neighbors have baptized the [new] camp Sandias - the Castilian name for Melone's brother - that is to say, water melon." [emphasis added]

As with many details of the past, we may never know for certain the origin of the name of this long-gone Cold Rush town. The prominence of the name Melones in the modern development of the Stanislaus, however, insures the continuation of the historical debate.

[^8]traveling between the river crossing and the mining camp. Although the exact site of the town might never be confirmed, the most likely spot lies just adjacent to present Highway 49 where three rolling hillocks on the south side of Carson Hill provide the only relatively level expanse of ground which fits the documentary information.

The camp of Melones itself was described by various visitors. A copy of Captain Leonard Noyes' diary (Calaveras County Museum and Archives) contains the following passage:
". . . .the whole hill was worked by Mexicans hired on shares and a Town called Melone was started on the opposite side of the hill from Carsons (taking its name from the fact of the gold found in Carson Creek was in the shape of Mellon seeds). This place called Melones was built of Brush streets, say 10 feet wide, lined on each side with these Brush houses where Gambling was carried on at an enormous extent, all the Mexicans having money. It was supposed that they stole more gold than they accounted for to Morgan \& Co. I dont think there was ever in the Mines so wicked a crowd. Some are killed every night, shooting and cutting all the time. Our Cabin was the opposite side of the hill some 2 miles from Malones. We would usually go there Sunday nights in a body keeping together so as to be able to protect each other. I have always felt when in those narrow streets that I was liable to have a knife shoved into me at any moment. . . ."

The brush structures undoubtedly referred to ramadas, open-sided shelters roofed with leaves and boughs resting on vertical supports of branches. The ramadas were typical Mexican constructions and were actually much better adapted to the dry, hot summers of the Southern Mines than were the canvas shelters of the Yankees.

Melones clearly had the reputation of being a rough town full of gamblers, thieves, and murderers. This is the pervading theme of all the diarists and journalists who wrote about the place. Although there certainly was some truth in these accounts, it must be remembered that most of the early descriptions of the town were written from
a Yankee viewpoint, especially prejudiced against all Mexican (Spanish-speaking) miners. Our understanding of the Gold Rush would be greatly enhanced if more miners from other countries had recorded their experiences.

As in most Gold Rush communities, legalities were handled by the resident population. Claim sizes, occupancy requirements, legal transactions, and other mining rules varied according to the wealth of the diggings and the decisions of the miners present. In a world of tents and bedrolls, where security for property was almost impossible, theft was dealt with seriously and immediately. The parish priest from Sonora, Father Alric, was called to Melones to hear the confessions of two miners accused of stealing gold from a sluice box. Detained in crossing the Stanislaus, he arrived only in time to see two corpses swinging from a high tree limb. ${ }^{11}$

Despite the notorious reputation of "Mexican" Melones, the presence of this foreign work force of reportedly as high as 3000 to 5000 persons was tolerated by the Americans because of the Mexican's invaluable expertise in working hard-rock mines. From experience gained in their mother country, the Mexicans were among the few Gold Rush miners who actually knew the technical skills needed to excavate the quartz rock and to process the ore in mills to free the gold. J. D. Borthwick describes a claim on Carson Hill owned by Americans and worked by Mexican crews under the direction of an old Mexican miner:
> "They had three shafts sunk in the solid rock, in a line with each other, to the depth of two hundred feet, from which galleries extended at different points, where the gold-bearing quartz was found in the greatest abundance. No ropes or windlasses were used for descending the shafts; but at every thirty feet or so there was a sort of step or platform, resting on which was a pole with a number of notches cut all down one side of it; and the rock excavated in the various parts of the mine was brought up in leathern sacks on the shoulders of men who had to make the ascent by climbing a succession of these poles. The

[^9]


Figure 7: The man and mule to the left are grinding ore in an arrastra, the miner to the right is washing earth for gold in a cradle; while the gold-seeker in the center is prospecting with a pan. The scene is attributed to Mariposa County in 1850. Photograph courtesy of the Bancroft Library.


Figure 8: Two of the drag stones recovered from the site of an arrastra on Carson Creek. The heavy eyebolts provided attachment for pulling the stones. The polished grinding surface can be seen on the tilted stone at the right. Photograph by Julia G. Costello.
A

## arrastras

"Arrastra" comes from the Spanish word "arrastre," meaning to drag or pull, and refers to the crushing mechanisms which the Mexicans introduced into California during the Gold Rush. When ore was quarried out of the hard rock mines, the quartz had to be crushed to free the gold. The arrastra was the earliest and simplest device introduced into the Mother Lode to effect this separation. It was especially popular as it could be manufactured on the site with materials at hand, and was extremely effective, although slow, in processing the gold-bearing rock. The simplest form of the arrastra was a flat-bottomed drag stone placed in a circular, rock-lined pit and connected to a center post by a long arm. With a horse, ox, mule, or person providing power at the other end of the arm (and later, steam, water, and engine power), the stone was pulled slowly around in a circle (fig. 7). Ore introduced between the stone floor and the drag stone was crushed to a coarse powder to which water and quicksilver were added. The resulting slurry was then removed to sluices where the gold was recovered. A cousin of this device, a "Chili mill," employed a wheel-like crushing stone which was rolled, rather than dragged around the milling pit.

At the height of the 1850 s mining activities at Carson Hill, over 50 arrastras were said to be in operation (fig. 8). Although they were soon largely replaced by the vertical stamp milling machines, there were still over 100 arrastras operating in California in 1890 and three are recorded as being in use as late as the 1930s. 12,13

[^10]
quartz was then conveyed on pack-mules down to the river by a circuitous trail, which had been cut on the steep side of the mountain, and was there ground in the primitive Mexican style in "rasters." The whole operation seemed to be conducted at a most unnecessary expenditure of labor; but the mine was rich, and even worked in this way, it yielded largely to the owners." 14

Although at one time reported to be the largest mining camp in the state, Melones was virtually

[^11]abandoned barely a year after its founding. Once the quartz mines on Carson Hill were closed by the ownership dispute, the camp's residents departed in search of other employment. A memorial written in the Pacific on June 4, 1852, only 13 months after the first record of Melones' existence, describes the townsite:
". . . . That encampment, called by the Spaniards, Melones, is now silent and deserted. One old Mexican is found there watching the barley that has sprung up from last year's waste in horse lots that then were worth thousands of dollars each. The multitude has gone."



18 का

##  ROBINSONS FERRY

It was not only the miners of the earth who got rich in the California Gold Rush, but those who mined the pockets of the miners. Throughout the Mother Lode, entrepreneurs turned from the arduous and uncertain life of prospecting and opened stores, restaurants, hotels, gambling houses, saloons, and other commercial establishments. Freighting goods from the valley towns of Stockton and Sacramento was also lucrative, as virtually all of the material needs of the miners were imported into the region. A network of roads was quickly established over which passed a steady parade of mule trains, freight wagons, and stagecoaches, in addition to mounted travelers and pack-laden miners. All travelers complained of
heat and dust in the summer, and in the winter were wet, cold, and muddy. Key links in this vital transport of goods and people were the ferries that were established along the westward flowing Sierran rivers that cut across the north-south routes.
J. D. Borthwick, in his journey through the Southern Mines, noted the competitive aspects of this business:
"Ferries or bridges, on much traveled roads, were very valuable property. They were erected at those points on the rivers where the mountains on each side offered a tolerably easy ascent, and where, in consequence,


a line of travel had commenced. But very frequently more easy routes were found than the first one adopted, opposition ferries were then started, and the public got the full benefit of the competition between rival proprietors, who sought to secure the traveling custom by improving the roads which led to their respective ferries." ${ }^{1}$

The ferries themselves were generally simple barge-like affairs that would hold one wagon and its team. They could be made of hand-hewn logs, split logs, or sawn lumber. The ferry crossings were usually spanned by a cable which was fastened securely into eyebolts in the bedrock of each shore. When the boat was properly angled; the movement of the current provided the power to move the ferry from one side to the other (fig. 9). The landings had to be adaptable to both high and low water levels in the rivers, but often enough a rapid rise of the torrent would sweep the ferryboats off downstream.
"Robinson and Mead then had a store near the mouth of Indian Gulch, kept in a tent. Mr. Mead, a perfect stranger to us all, welcomed us on our arrival saying, "Camp anywhere around here boys, and any provisions you want I will furnish you, money or no money-price fifty cents per pound." A fall of fifty cents per pound on provisions and an increase of 200 percent in the diggings was encouraging to us all and we went to work with a will (fig. 10)."2

By the end of 1849 , Robinson and Mead had added a ferry to their commercial enterprise. Initially constructing a small boat that only accommodated foot passengers, they soon improved their facilities to handle wagons and their teams. With the rush to the rich diggings at Carson Hill in 1851, the ferry, as noted above, was reported to have taken in $\$ 10,000$ in fares in one six-week period.


Figure 10: Cover decoration, Personal Recollections of Harvey Wood.

In late 1849, John W. Robinson and Stephen Mead began operating a ferry at the foot of Carson Hill on the Stanislaus at what was to become the community of Robinsons Ferry and the twentieth-century town of Melones. Robinson and Mead had arrived in the Mother Lode region in 1848 and probably spent this first year looking for gold. Harvey Wood recalls crossing the Stanislaus on McLeans Ferry in August of 1849 and then traveling downstream to the future site of Robinsons Ferry:

[^12]In the early 1850s Robinsons Ferry must have operated in almost direct competition with McLeans ferry, located about one mile up the Stanislaus at the mouth of Jackass Gulch (map 2). Said to have been the first ferry on the river, and sometimes referred to as the Upper Ferry, it was established, by the spring of 1849, by the Englishman George McLean and his partner William Jeffery. Also called "Murphys Ferry" because it lay on a route to that settlement, it may have suffered from a shift of traffic south to Robinsons with the

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Map 2: Robinsons Ferry and vicinity.

Carson Hill discoveries. McLeans was last recorded in operation in 1854.

Like the mining claims of the Gold Rush, ownership in ferries was typically vested in several partners who sold, divided, and occasionally repurchased their shares in response to the rapidly changing fortunes and opportunities of the Gold Rush. Thus, the chain of title for Robinsons Ferry was divided into half and then quarter ownerships which went through a series of hands until about 1860 when Harvey Wood and J. M. French became the only partners. ${ }^{3}$

Wood's deed of December 1,1860 , gives a fairly detailed account of what he acquired:
> "That certain property known as the Robinson's Ferry property situated in the county of Calaveras aforesaid on the public highway leading from Sonora, in Tuolumne County, to Angels in Calaveras County. The same consisting of the Ferry privilege across the Stanislaus River the dividing line between the two counties aforesaid Ferry Boats, rope, tackle, and every thing connected with said Ferry, Ferry House, out houses, Bar, Barfixtures, liquors, provisions, and goods of every kind....."4

During the 1850 s and 1860 s, the ferry's facilities consisted of the boats and running gear; a ferry house which included a saloon, a place for meals and sleeping rooms; and a barn for stabling teams overnight, and storing feed (fig. 11). An unidentified frame structure mentioned in the assessment rolls might have been the residence of the early ferry tenders. With the ferry service as a nucleus

[^14]for settlement, other businesses were established to serve the needs of miners and travelers. After its founding in 1849, the settlement of Robinsons Ferry went through transitions typical of most Mother Lode towns. Initially prospering from the multitudes of gold seekers and their new-found wealth, the towns eventually saw their economic base disappear with the precious metal. By 1860, Robinsons Ferry's services had dwindled to a few stores, and the remaining residents engaged in diversified activities that included farming, ranching, and gold mining. However, some characteristics of the community's population remained relatively constant into the twentieth century: a large number of single male miners, a disproportionate number of foreign-born residents, and a high rate of transiency.

Few archaeological remains in the town could be positively attributed to the period prior to the arrival of the large mining companies in the 1890 s (fig. 12). This lack results from later mining development and expansion as well as from the generally insubstantial nature of early buildings. The walls of one stone store stood as a landmark through the 1970s and a few retaining walls and basements along Main Street represented the remains of the town's early commercial section. Some mining features, including shafts and tunnels, machinery mounts for a small mill, the trough for the water wheel of the Adelaide mine, and the faint scars of old water ditches that traveled along the hillside were also reminders of this period of diversified ownership and the chaotic development of the gold resources of Carson Hill.

Located on the Sonora-Angels Camp road, the Main Street of Robinsons Ferry stretched east from the ferry crossing along the Calaveras bank of the river. In this area were most of the community's stores, saloons, restaurants, and other commercial establishments, as well as a majority of the homes. Main Street followed the west side of Coyote Creek, passing through the Pendola Ranch, and then continued north around Carson Hill and on to Angels Camp. A secondary road forked off near the ranch and wound northeast up French Gulch to join the Parrotts Ferry Road. By 1900 a new road to Angels Camp, constructed at the west end of town, climbed directly up Carson Hill from the ferry crossing, passing along the



Figure 11: Looking north over the ferry crossing toward Carson Hill in about 1900. The edge of the ferry house is seen in the center of the photograph between the trees while the upper story of the Woods' home is visible to the right. Photograph courtesy of the Calaveras County Historical Society.


Figure 12: Among the last visible reminders of the Gold Rush period of Robinsons Ferry, these walls stood until just months before the rising waters of the reservoir covered the area. The structure, popularly known as the remains of "Ceccenello's store," was occupied by numerous enterprises during its long history of use. Photograph courtesy of the National Park Service.

north side of Indian Gulch. The old route of this road can still be seen from the Vista Point of present-day Highway 49. The Calaveras approach to the boat launch at the reservoir is a later improvement on the ca. 1900 route (map 2).

The earliest descriptions of the town are found in a few contemporary travelers' accounts. A letter to the editor of the San Francisco Herald dated October 15, 1857 reported:
> "At Robinson's Ferry there is a very pleasant little village, with a tavern, restaurant, some groceries, and a bakery. I had a very good dinner served up by a Frenchman. There are three or four brick and stone houses in the Village ...."

On March 3, 1863, Thomas R. Stoddart, under the pseudonym "Cosmorama," also described a visit to Robinsons Ferry. He estimated a local population of over two hundred people, about 20 of whom were women. He noted that the miners were doing well, writing that "The miners had congregated at the stores and saloons, all pretty flush with cash and whiskey, [sure signs of good diggings] singing and spreeing." For the town itself Stoddard noted that "Robinson's Ferry is a small place, but affords three or four good stores, a ferry-house, two saloons, a butcher's shop and a restaurant, together with some thirty or forty private houses, inhabited by Americans, Italians, Swedes, and some few French."5 (fig. 13).

A study of the assessor's records has provided additional information on the town's commercial properties. ${ }^{6}$ In the 1860 s, a livery stable and blacksmith shop were located near the ferry house, and an Armory Hall and Fandango House were listed briefly. North of town, near Squirrel Gulch, stood a quartz mining operation with a ten-stamp mill, railroad cars and track, and a two-mile-long ditch bringing water for mining from Coyote Creek. An orchard and vegetable garden of about ten acres were also situated on both sides of Coyote Creek.

Near Robinsons Ferry were small temporary camps of transient miners. In 1860, census takers

[^15]recorded over seventy of these miners in the area around town, making up nearly eighty-three percent of the population. The international flavor of the Southern Mines was admirably maintained in Robinsons Ferry where less than a quarter of the residents at this time had been born in the United States. Countries contributing the largest numbers of men were England, France, Ireland, Italy, and Germany.

Although virtually all of the town was said to be located on the Calaveras side of the Stanislaus, extensive ruins of what appear to be the basement and terraces of a large building were found directly across the river in Tuolumne County. Well-made retaining walls of native fieldstone served as building foundations, formed large patio terraces, stairs, and a semicircular corner, and shored up a road which apparently connected this establishment with the ferry crossing. The presence of two small, domed ovens of stone on either end of the site suggests an association with Italian immigrants. ${ }^{7}$ Construction techniques and the few associated artifacts date the site to the nineteenth century. There is no documentary or oral history for this establishment and its role in the life of Robinsons Ferry may never be known.

The California Gold Rush was essentially over by 1860. The vast majority of would-be miners had returned to their homes and families or had drifted off to other gold strikes or to the larger cities of California. The total population of Robinsons Ferry dropped during the following decade to about 60 people. In 1870 , the only commercial establishments on record in town were the ferry itself and a store operated by Francisco Casseretta. All of the other male occupations listed in the census reports are either "farmer" or "miner." Several farms, gardens, and orchards had been extended along Coyote Flat and homes began to spread out from the former clustering on Main Street. A few small quartz mines were also developed, with tunnels of shafts driven into the still largely untapped gold of Carson Hill (fig. 14). The ferry crossing continued to insure a steady stream of travelers who helped support the town.

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Figure 13: A rare photograph of nineteenth-century Robinsons Ferry. Taken about 1870, it shows the store operated by Manual Airola. Photograph courtesy of the Calaveras County Historical Society and the Airola family.


Figure 14: The water wheel for the Adelaide Mine, about 1900. Belonging to Harvey Wood, it provided power to operate the primary crushers and stamps located just uphill. Water was carried to the top of the wheel in a flume which rested on the now-empty scaffoldings to the left. Photograph courtesy of the Calaveras County Historical Society.


Despite the small numbers of residents, the proportion of immigrants continued to rise. A large influx of Italians and Chinese, in the 1860s and 1870s, resulted in these groups' comprising over half of the known population by the last decades of the century. While the Italians had always been prominent property holders in the town, the Chinese also appear on the assessment records after 1865 as owners of gardens, houses on Main Street, and property on which other Chinese lived. A Chinese neighborhood just west of the confluence of Coyote Creek and the Stanislaus River was first referred to as "Chinatown" in 1865 and after that as "Chinese Garden" and "China Camp."

With the exodus of the miners, the town assumed a decidedly domestic nature. Nearly three quarters of the population were members of families which included the Morales, Marshalls, Woods, Whittakers, and Airolas. The seven women listed in the 1870 census contributed twenty-eight children to the community, and the numbers of children appear to have exceeded those of the adult male population until the arrival of the mining companies in the late 1890s. Appropriately, a public school appears in the historic documents after 1883. Ownership patterns also changed as, for the first time, several women are recorded as owning residences and other property in the 1870 s and 1880s.

The most prominent economic concern in towri was certainly the ferry. An invaluable part of the Southern Mines north-south transportation route throughout the nineteenth century, it literally kept the town on the map. The opportunity to supply additional facilities for the travelers who passed along Main Street was not lost on the ferry's owners. Robinson and Mead, and later Harvey Wood, operated next to the town landing a "ferry house" which offered meals, liquid refreshment, and overnight accommodations.

One of the most interesting archaeological finds in Melones occurred during the excavation of the ferry house remains. Many activities of the Wood family are known from historic documents, but there are always aspects of individuals' lives that do not become a part of official or family records. Archaeological research revealed that Harvey

Wood was apparently a member of the "California Botanical Society" and participated in the manufacture and distribution of a medicinal fig bitters. The dramatic discovery of bottles themselves, and eventually other clues, enabled researchers to piece together the story of this previously unknown enterprise at Robinsons Ferry.

The ferry house, possibly constructed as early as 1853, was first specifically mentioned in the 1860 deed to Harvey Wood. County assessment rolls for 1860 also listed a house and barn as improvements on the property of "J. M. French \& Co. ." Photographs from the late nineteenth century clearly show the building and also reveal a small rear addition built at some unknown date. '

We know from descriptions in official documents and remembrances of people in the community that the ferry house served several functions. It was, primarily, a rest stop for the travelers on the Sonora-Angels Camp Road. At the ferry facilities the teams were watered; a small store supplied commodities; and passengers found shelter inside the ferry house. As noted above, meals and liquor were available, and housing for travelers who wanted to spend the night, probably a common occurrence for this well traveled route in the Southern Mines.

The ferry boats continued to ply the river and visitors to patronize the ferry house through the first decade of the twentieth century. The railroad, operating between Sonora and Angels Camp by 1902, however, had greatly reduced the road traffic and freight. In 1904, Harvey Wood's son, Percy, decided that with profits down and a bridge in the planning stages, he would not renew the ferry concession. Instead he sold the concession for $\$ 800$ to the Boards of Supervisors of Tuolumne and Calaveras Counties who operated the ferry for its final years. In 1908 the two Boards of Supervisors contracted for the construction of a toll-free bridge at Robinsons Ferry.

The destruction of the ferry house was, ironically, caused by the very people working to make the ferry obsolete. Jorgensen Brothers Construction Co., who were awarded the bridge contract, housed their crew at the ferry house while working


## RATES AT ROBINSONS FERRY

## 1850

Set by court of sessions, Calaveras County, July 1850 for Robinson and Mead:

- for each passenger
50 cents
- for each mule, jack or jenny or other animal 50 cents
- for each empty wagon $\$ 6$
- for each loaded wagon $\$ 6$
plus 50 cents for each hundred weight of freight
- for each horse, mule, jack, jenny, and cargo


## 1901

Marinda Wood - granted permission to conduct and maintain a public ferry with rates as follows:

| two animals and wagon | 50 cents |
| :---: | :---: |
| - one animal and wagon | 50 cents |
| each additional animal | $121 / 2$ |
| - horse and rider | 25 cents |
| - teams of 6 to 8 animals |  |
| - foot passengers | 25 cents |

on the project. A fire started by a workman's cigarette burned the building to the ground. On March 20, 1909, The Calaveras Weekly Citizen announced on its front page:
> "LOST HEAVILY: The Jorgensen Bros., estimate their loss in the recent fire at Melones, when the old Ferry building was destroyed, at $\$ 800$, with no insurance. Their property consisted of books, plans and specifications, and surveying instruments."

It is interesting that the loss to the Wood family, which must have been considerable, was not mentioned.

The archaeological site of the ferry house lay within the confines of the Old Melones Reservoir, completed in 1926. The upper reaches of this reservoir just lapped at the town of Melones. During periods when the reservoir was full, the waters were held off from inundating the edges of town by a concrete retaining wall bordering most of the Melones riverfront. This retaining wall passed inland of the site of the ferry house.

The upper reaches of the reservoir had accumulated several feet of silt, deposited by the rapidly flowing Stanislaus when it reached the still waters behind the dam. Exploratory backhoe trenches cut through this thick covering and located the old ruins underneath (fig. 15). A large tractor was then used to scrape off the layers of silt; careful hand excavation followed to clean and expose the archaeological remains.

The foundations of the buildings were exposed first. Consisting of mud-mortared native fieldstone, they measured forty by twenty-three feet for the main building with a small rear addition of about eighteen by fourteen feet. Under the original building, a center cross-wall cut the rectangular foundation in half, structurally reinforcing the middle of the building as well as defining a basement twenty by twenty-three feet on the river side of the ferry house.

Excavations were concentrated in this basement area, where eventually the charred and melted remains of the building were uncovered. Beneath these remains, the contents of the basement had
lain undisturbed since the 1909 fire. However, the original basement floor lay under the level of the Old Melones Reservoir and a pump operated continuously to keep the excavation area from flooding. Compounding this problem was a period of rain which threatened to flood the remains completely. On what was thought to be the final day of excavation, the last portion of the basement was being cleared when a large lump of melted bluegreen glass was exposed. The excavation director recounts:

> "Then scores of fig bitters bottles, arranged in neat rows, began to appear, their necks standing just above the water level in the sounding. As the excavation was extended to the west these rows became stacks, and after exhaustive digging, a well-laid schist wall marking the western limit of the deposit was reached. It was clear that the deposit extended to the north and to the south, but since the [area] was expected to be flooded that day, excavations ceased. Documentation of the find was made, some of the bottles were removed, and the bottle deposit was covered with plastic sheeting and sealed with sand to protect it from the turbulent waters of the rising reservoir. Fortunately, the Army Corps of Engineers was able to cope with the runoff from the storms, thus saving the area from inundation and allowing excavation to proceed." 8

In all, over 1300 of the aqua-colored fig bitters bottles were recovered from the ferry house basement. The heat from the fire had reduced some of them to melted lumps, while others had been shattered when the basement walls fell in. Nearly 200 of the bottles, however, emerged intact. They were rectangular half pints measuring two and one quarter inches by almost three inches at the base and standing ten inches high. One of the large, flat faces was concave and embossed with "HIERAPICRA BITTERS EXTRACT OF FIGS" while the two side panels were embossed with "CALIFORNIA" and "BOTANICAL SOCIETY." A concave circular area in the center of the base contained the single word "FIG." The second large flat face of the bottle was reserved

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Figure 15: An aerial view of the exposed foundations of the ferry house. The 1909 bridge abutment is seen in the upper right. Just below it is the square outline of the ferry house basement. The overlying reservoir silt was removed by tractor and the marks of this work are evident in the surrounding area. Photograph by Julia G. Costello.
for the application of a printed paper label (fig. 16).

The bottles, although largely disturbed by the events which destroyed the building, had evidently been carefully stacked along the basement wall in wooden cases. Rows of these bottles were still preserved in place - a layer standing upright covered with a second layer inverted so their necks nestled in the ones below (fig. 17). Additional courses often were comprised of the bottles lying on their sides. In one corner a wooden packing box had been preserved with its efficient combination of vertically and horizontally stacked bottles. Close to the bottles, and surprisingly well preserved, were stacks of singed labels bearing the seal of the California Botanical Society. Other
paper labels carrying the society's emblem and the name of the product, were apparently designed for the wooden packing boxes.

In addition to the fig bitters bottles, a wide range of other artifacts was recovered from the basement - further remnants of the history of the ferry house and the people and activities associated with it. The few other containers found included beer and soda bottles and a pumpkinseed whiskey flask. Other finds, doorknobs, nails, a key, a lamp, a clock, and garment buttons, all attest to the domestic use of the building. There were very few ceramics in the basement, although a portion of a Chinese barrel-shaped storage jar was found. The introduction of electricity to the building was evidenced by insulators and a portion


Figure 16: Fig bitters bottles, recovered from the basement of the ferry house. Courtesy of the National Park Service.
of a switch, while carbon rods and a storage battery were also present. A pump handle and a scythe indicated storage of maintenance tools, while an assay pestle and a scale weight were perhaps remnants of Harvey Woods' lifelong interest in mining. A group of coins dating from 1854 to 1896 was found near a case of bottles, while the firing mechanism of a percussion cap firearm and rimfire bullet casings were also recovered.

Among the charred remains were a group of circular brass pins or badges found fused together from the heat. After cleaning in the laboratory, each was seen to be individually numbered, with
the name "Jorgensen Bros." around the top edge (fig. 18). The last occupants of the ferry house, the same people who caused its destruction, had left a small identifying artifact in the smoldering remains.

There was nothing in the collection of artifacts that would be unusual in a typical late nineteenthcentury basement in the Mother Lode except for the remarkable number of fig bitters bottles. What was Harvey Wood's relationship with this medicinal remedy? The California Botanical Society, founded by William H. Briggs in 1878 and including "several people in the mining town of


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Figure 17: Some of the fig bitters bottles as they were uncovered in the basement of the ferry house. The top row of the carefully stacked bottles has been deformed by the heat of the burning building. Photograph courtesy of the National Park Service.


Figure 18: Brass badge found in the remains of the ferry house.

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Angels," reportedly experimented with several plants before settling on the fig as their medicinal mainstay. ${ }^{9}$ On September 9, 1878, Briggs, "inventor and manufacturer of the California (Hierapicra) [sic] Fig Bitters," registered the product trade mark in Sacramento with the stated intention of distributing the medicine nation-wide ${ }^{10}$ (fig. 19).

Over the years of production, the Society changed the style of the product container and label several times. The bottle type that was so abundant in the Woods' basement was used only from 1890 to 1891. Perhaps this out-of-date container was simply put into storage in the convenient ferry house. In 1892 the name of the product was changed to "California Fig Bitters" and the alcohol content increased. Local production ceased in 1903 when the operation was sold to a San Francisco firm, whose subsequent success ended with the 1906 earthquake. ${ }^{11}$

Harvey was apparently involved in the production of fig bitters during the $1880 \mathrm{~s}^{12}$ as well as during the 1890 to 1891 period represented by the basement bottles. It is not known if he was involved between 1891 and his death in 1895, although the fact that he kept the obsolete bottles in his ferry house basement suggests some continuity with the society. These archaeological discoveries have added another dimension to the eclectic economic interests of Harvey Wood: ferryman, rancher, landlord, innkeeper, and now, manufacturer of medicinal remedies.

As the turn of the century approached, Robinsons Ferry was reduced from an active gold rush town to a community of about 50 people. Harvey Wood reminisced over these changes in 1878:
"As the seasons come and go, many changes have taken place, many once prosperous mining camps have now become almost deserted. An occasional 49er can be seen, generally

[^18]poor, grey-headed, broken down specimen of humanity.

Of the famous Carson Association which numbered 53 members on leaving New York in February, 1849, I do not know the P.O. address of a single living member; many have gone the long journey while I yet remain in the mines, running the ferry boats at Robinsons Ferry on Stanislaus." ${ }^{13}$

This quiet pace changed drastically in 1898, however, when the Melones Mining Company moved to the riverside community. Robinsons Ferry was not destined to disappear with so many other gold rush towns, but, continuing as "Melones," it played a major role in the economic development of the area during the early twentieth century.

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Figure 19: This advertisement, in the 1880 New England Almanac and Farmer's Friend, reveals some of the earliest claims made by the California Botanical Society for their fig bitters. Advertisement courtesy of Peter D. Schulz.


##  ANB PENBOLAS

A town is made up of the people who inhabit it as much as it is by the structurcs that define its presence. One of the long-term residents of Robinsons Ferry was Harvey Wood, whose name became synonymous with the operation of the ferry. Harvey arrived on the Stanislaus in 1849, bought into the ferry business in 1856, married, and raised his three children in the home adjacent to the ferry house. He is representative of many of the forty-niners who decided to stay in California and expand their economic interests beyond prospecting. Harvey actively participated in the initial settlement of Robinsons Ferry, saw the exodus of the disillusioned miners, was involved in the development of agricultural interests, and had his hand in the quartz-mining enterprises around Carson Hill. He died before Robinsons Ferry became
the company mining town of Melones, but his family continued to occupy the homestead and to maintain an active role in the life of the community.

Harvey Wood was born in Bedford, New York in 1828. One of six children, he left home at 15 to work, for five years, as a clerk in a store in New Jersey. Caught up in the excitement of the California gold discoveries, he joined the Kit Carson Association, one of many companies of prospective gold-seekers organized on the East Coast. Sailing from New York February 13, 1849, the company disembarked at Galveston, Texas and then traveled overland to Los Angeles. They arrived at the diggings on the Merced River on July 30, 1849. The following month Harvey


Figure 20: The Woods' complex of buildings next to the Stanislaus River including the ferry boat in the water, the ferry house next to the landing, the family home to the left, and the barn across the street. The road to Sonora is visible on the hillside in the right background. Photograph courtesy of the Calaveras County Historical Society.

moved to the Stanislaus, where he made his prospecting base the store and ferry operated by Robinson and Mead. Harvey spent about seven years chasing down rumors of strikes and working the adjacent countryside for gold. John Goodman, who edited Wood's Recollections, speculated that Harvey may have worked for the proprietors of Robinsons Ferry between prospecting ventures. ${ }^{1}$

Harvey began his long career as a ferry operator in 1856 when he purchased a quarter share in Robinsons Ferry for $\$ 5,000$. His partners were Vermonters Joseph and Daniel French, although Harvey bought out Daniel's interest in 1860 and shared ownership with Joseph French for the next twenty years. It was apparently Wood who actually ran the ferry, but throughout the 1870s the assessment records describe the property as belonging to "J. M. French and Co." In 1863, Harvey also purchased a quarter share of Parrotts

[^20]Ferry, several miles upstream from Robinsons. He sold this interest in 1867 to Lorenzo Pendola, who would eventually develop the successful Pendola Ranch north of town. In 1881, Wood bought out Joseph French for $\$ 500$ and obtained full ownership of the ferry property at Robinsons.

In 1864, Harvey married Marinda Adelaide Gee. She had come from New England to San Francisco to visit her sister, an acquaintance of Wood's. One of the few women in Robinsons Ferry, and the wife of a major property holder, (fig. 20), Marinda was reportedly something of a matriarch and exerted her influence to keep liquor out of the community during the later nineteenth century. She bore three children in the family house: two sons, Carleton in 1866 and Percy in 1870, and a daughter, Allie, in 1874 (fig. 21). It was undoubtedly partly Marinda's influence that resulted in the construction of a public school in town in the early 1880s. Harvey was reportedly devoted to his wife and used her middle name not


Figure 21: A family portrait taken on the front porch of the Woods' home about 1890. Harvey and Marinda are seated to the right. To the left standing are James A. Wood, Harvey's brother, and sons Carlton (center) and Percy (right). Daughter Allie Wood is seated to the left with two friends. Photograph from the Mervyn Wood collection, courtesy of Ted Bird.
only for his quartz mine, the Adelaide, but also for every ferry boat he ever owned (fig. 22).

During his long residence in Robinsons Ferry, Harvey Wood was more than a ferry tender. His diversified economic interests included a hotel and restaurant at the ferry house, fig bitters manufacture, livestock, orchards, and mining operations. In the 1880s, he also began buying up houses and property along the largely vacant Main Street. Harvey's Adelaide mine, located on the north side of Main Street, was in full operation during the 1890 s, and Wood was a partner in the South Carolina Mine which tapped Carson Hill from near Coyote Creek. Harvey also attained some prominence as a civic leader. From 1873 to 1883, he served on the Calaveras County Board of Supervisors and was appointed postmaster of Robinsons Ferry in 1879, a position he held until his death in 1895 at sixty-seven. The position was subsequently occupied by his son Percy.

After Harvey's death, Marinda operated the ferry with her son Percy until 1904, when the Woods dropped their option on the ferry concession and sold out to the counties of Calaveras and Tuolumne.

During the twentieth century, when nearly all other property in the settlement had been acquired by the succession of mining companies, the Wood family retained its large private holdings at the south end of town. They also owned some 12 rental houses, leased to mining employees, and ran a combination store and gas station at the corner of the Angels Camp road and Main Street. Marinda resided in Melones until 1920, when she moved to Angels Camp. She died there three years later, just a few months short of her ninetieth birthday.

The old family house burned down in 1897, two years after Harvey's death, and the ferry house was consumed by flames in 1909. Percy and his family resided in the late nineteenth-century "cottage" which, in turn, was devastated by the fire of 1950 which swept through the town. The final Woods enterprise, the store and gas station, continued in operation on the corner of Main Street and Highway 49 until 1969. The old Wood homestead site served as a campground from the 1960 s until it disappeared under the waters of the rising reservoir.


Figure 22: Harvey Wood (1828-1895) and Marinda Adelaide Gee Wood (1833-1923), longtime residents of Robinsons Ferry/Melones. Photograph detail from Figure 21. Mervyn Wood collection, courtesy of Ted Bird.


## PERCY WOOD AND THE WILLS FARGO STAGE

Following Harvey Wood's death in 1895, his son Percy piloted the ferry. The following incident was recalled by Milo Bird, who spent much of his early life at Robinsons Ferry and often watched Percy handle the ferry when the Wells Fargo stage came to town.
"On another day, a shouted call and the squeal of brakes caused Milo to look across the river to where the Wells-Fargo stage, drawn by six sweating horses, had just started down the Double-S curve at the top of Mushroom Infill. Wondering if Percy Wood, the ferry man, had heard the call he looked in the direction of the Ferry House just in time to see him emerge. Percy looked up toward the stage for a moment and then walked quickly to the ferry slip.

Without giving the subject more than a passing thought, the boy knew that Percy was whistling "Turkey in the Straw. "He had ridden with Percy on the ferry often enough to know that he always whistled that tune as he untied the mooring lines, slacked off the stern ropes and pulled up on the bow lines thus causing the current to shove the ferry across the stream.

On that day, as usual, the ferry slid smoothly into its moorings on the other side of the river, and the current held it snugly against the ramp while Percy tied the mooring line. He then pulled up the slack lines and waited for the stage to come aboard. After the stage had come to a halt, Percy shoved a log through the rear wheels to act as chocks in case the horses became frightened and tried to jump overboard with the stage. He untied the mooring line, slacked off on what was then the stern lines and the ferry backed noiselessly into the stream and glided smoothly to its home shore.

While Percy was tying the mooring lines, the driver yanked out the chocks, jumped to his seat, released the brakes and screamed an oath at his horses as he had done innumerable times before. As the driver's long whip cracked above the horses' cars, they shot forward and streaked for the livery stable a hundred yards away. The boy often wondered why it was necessary to race the horses at a feverish gait just to go that hundred yards.

As many times as the boy had watched that scene, he never tired of watching it again for no matter how high or how low the river was, Percy always knew exactly how long or how short the bow and stern lines had to be to make a perfect berthing. "2

[^21]Like the Wood family, the Pendolas lived in Robinsons Ferry for several generations. The Pendolas and the Woods were able to weather the difficult economic time of the late nineteenth century partly because of their varied economic interests. Like Harvey, Lorenzo Pendola was an entrepreneur of remarkable diversification.

Pendola was born near Genoa, Italy, and came to the Stanislaus River area in 1852. He apparently mined in various areas along the river and according to family history acquired enough money to start a business. In 1860, Lorenzo is listed in the assessor's record as owning a store at Robinsons Ferry and is described as a "merchant." He is typical of the many young Italians in the Southern Mines during this period who were, more than other immigrant groups, leaders in the establishment of local services and prominent as whitecollar workers.

Lorenzo sold his store in town by 1861. Six years later in 1867, he purchased Harvey Wood's quarter share of Parrotts Ferry. At this time, the ferry became known as the Colton and Pendola ferry, so presumably Colton was a partner in the enterprise. Lorenzo reportedly spent a great deal of time and effort improving the roads to the ferry in order to be competitive with other north-south routes. Whether the ferry business paid poorly or Lorenzo simply had other plans is not known, but in 1869 he sold the operation to N. Anderson. Lorenzo appears to have reinvested his Parrotts Ferry proceeds immediately, for in that same year records show that he owned a house and lot at Robinsons Ferry as well as a garden on Coyote Creek, the eventual site of the Pendola Ranch.

Pendola was not the first to take advantage of the rich agricultural lands around Coyote Creek. As early as 1860, the assessment rolls show that John Whittaker owned "One orchard, vegetable garden, situated on both sides of Coyote Creek about three quarter mile from Robinsons Ferry . . . about ten acres enclosed." By 1865 , Whittaker evidently had acquired a house and lot in the town itself because he was assessed for both the garden on Coyote Creek and a residence on Main Street.

When Pendola moved to Robinsons Ferry in 1869, he acquired land adjoining Whittaker property along Coyote Creek and an adjacent house lot in town. Pendola and Whittaker were partners in some concerns as the 1870 to 1871 assessment roll shows them in joint ownership of a "lot and improvements near Robinsons Ferry."

In the early 1870s, Pendola and Whittaker began making improvements on their agricultural lands and in 1873 were apparently living on their garden properties. Whittaker had a "house, vineyards, (and) fence", while Pendola owned "two houses, two barns, orchard, vineyard, and fences" as well as an irrigating ditch. Records indicate that Pendola had sold his town residence by this time, although Whittaker not only kept his but also added another house and lot to his holdings. One of the prominent Robinsons Ferry families, the Whittakers reportedly continued living on their ranch on Coyote Creek through the first decades of the twentieth century.

Pendola proceeded to develop his Coyote Creek land, which soon became known as the Pendola Ranch (fig. 23). His vineyards evidently produced well, for in the early 1870 s he is assessed for 1500 gallons of wine worth $\$ 300$. By 1880 , the production of wine doubled to 3000 gallons. Lorenzo, a clever merchant, decided to market his wine directly to the town which, with the introduction of the large Melones Mining Company work force in 1898, had an eager market. Pendola also opened a saloon near the flume conduits on the edge of Coyote Flats. The establishment was shown as the "Riverside" in a 1902 photograph.

In addition to wine, the Pendola ranch supplied the town with cabbage, beets, celery, and other row crops in the winter and truck vegetables such as tomatoes and peppers in the spring and summer. The orchards produced figs, peaches, and apples, much of which were dried for sale. Extra milk from the dairy cows and eggs were also sold in town. Lorenzo apparently would personally deliver the produce to his customers, traveling to Angels Camp, Murphys, and Sonora. ${ }^{3}$

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Figure 23: The Pendola Ranch in 1979. The old family house is in the center-rear of the complex of buildings while the 1930s brick house built for the Ghiglieris is to the right. The large barn to the left was recorded by the Historic American Building survey in 1934 and the smaller barn in the foreground held the "branded barn doors." The master flume for the Melones Mining Company is evident on the hillside to the right. The road bisecting the building complex was the highway from Sonora to Angels Camp until about 1900. Photograph by Julia G. Costello.

In addition to being a gardener, stock raiser, barkeeper, and wholesale grocer, Lorenzo also kept his hand in at gold mining. The 1873 assessment record details a 300 - by 200 -foot placer claim on El Dorado Flats with water input, water wheels, and pipe. Pendola owned a mining and irrigation ditch along Coyote Creek which brought water to these diggings. Assessments were also made on a larger "mining and irrigation ditch" that originated on Coyote Creek, provided irrigation water for part of his land, and continued about two miles up the Stanislaus to Horseshoe Bend where the water was used for mining. A smaller ditch owned by Lorenzo also carried water to the placer diggings at nearby Dusty Bar. Since the records do not indicate that Pendola owned any claims at either of these two mining sites, he may have been only in the business of selling water to other miners.

Pendola was also involved in other mining enterprises in the area, including the Pendola Quartz

Mine and mill site, the Edith Quartz Mine, and possibly part of the Alta Consolidated Quartz Mine and the Belle Quartz Mine. In 1899, Lorenzo sold a right-of-way across his land for the construction of the master flume for the Melones Mining Company.

When Lorenzo died in 1900, his enterprises were carried on by his wife of 30 years, Madalina. Together with her five daughters and a like number of field hands, the gardens, orchards, and saloon continued to be maintained (fig. 24). In 1915, the saloon was listed as a "dwelling house" which was probably leased out. One of the hired hands, John Ghiglieri, married Edyth, a Pendola daughter, and assumed responsibility for the management of the ranch. The Ghiglieri's son, Virgil, eventually acquired the ranch and with his family successfully operated it until the property was acquired by eminent domain by the Army Corps of Engineers for the New Melones Reservoir.




Figure 24: The front of the Pendola home around 1905. Madalina Pendola, to the left in the dark dress, and her five daughters are in the yard area above the stone wall while the five hired ranch hands are standing below. Photograph courtesy of the Calaveras County Historical Society.


## THE BRANDED BARN DOORS

One of Virgil Ghiglieri's many talents was that of blacksmith. Over the years that he operated the Pendola Ranch, he often made brands for his fellow ranchers. To record his work, Virgil "branded" his barn door with each piece before it was delivered to the appropriate party. Before the Pendola buildings were demolished in preparation for the filling of the reservoir, these barn doors were removed as an "artifact" of this activity. The brands, identified where possible, are reproduced below.


Figure 25: Brands made by Virgil Ghiglieri and imprinted on his barn doors.

## TH I MINHO TOWN OF MELONS

By 1890, the quiet riverside community of Robinsons Ferry was entering a new phase of development. From the heyday of the Gold Rush, the town had declined in population to a peaceful community of a few families and some old miners. The main economic activity centered around developing agricultural enterprises and a few commercial services. The influx of hundreds of miners working in the newly opened mills and mines metamorphosed the town by the first decade of the twentieth century.

The new gold mining boom exploited the quartz veins which lay under Carson Hill. Although the
lode was discovered in 1850, the technologies needed to mine and process the ore were not perfected until the late 1800s. The earliest techniques of hard-rock mining included simply crushing ore in Mexican arrastras or in the stamp mills which pounded ore between a mortar and a heavy falling weight. The ground ore was then washed over riffles, similar to those of the placer miners, and the gold extracted.

This process worked well for gold near the surface of the veins, for the long-term exposure to weathering had altered the gold matrix, and it was easily separated from the surrounding rock. As hard-rock


Figure 26: A lithograph by Eastman from Hutchings' California Magazine in 1857 showing a simple California mill with two batteries of five stamps. Ore is broken to fist-sized pieces and loaded in the hopper (B) where they fall to the cast iron bed plate or die $(\mathbf{H})$. The wooden stems of the stamps are elevated and dropped by the revolving cams on the cross bar, dropping their metal shoes on the die. A fine sieve prevents insufficiently crushed ore from being washed to the sluices at E and F. Photograph courtesy of the California Historical Society Library.
mining extended deeper, below the weathered zone, it became more difficult to liberate the gold from the quartz and from other minerals such as sulphides. In addition, the increasing depths of the mine workings created problems. The air in the lower passageways was consistently poor; water could not be efficiently pumped out of flooded areas; and the logistics involved in bringing the ore to the surface were formidable.

By the 1890 s, most of these problems had been solved. Underground mining was greatly enhanced as black powder and hand drills were replaced by dynamite and air drills. The primitive "California stamp mill" was enlarged, made more efficient, and harnessed into a battery of stamps that could crush large quantities of ore at one time. The process of freeing gold from its quartz matrix with cyanide was also being developed.

Electricity, generated by impulse-turbine water wheels (under such brand names as Pelton or Knight) was available at individual mines and mills and made possible the removal of both ore and unwanted water from the mines and the pumping of compressed and ventilating air into the lowest workings.

A final critical factor in the reopening, not only of the Carson Hill mines but of the Mother Lode mines in general, was the greater inflow of investment capital, both from the United States and abroad, that occurred at the end of the nineteenth century. ${ }^{1}$ The combination of new technological advances and an expanded economy produced a mining boom in the Sierran foothills.

The first of several major companies which mined the deep gold veins of Carson Hill was the English-financed Calaveras Consolidated Gold Mining Company, Ltd. Because of new discoveries on the hill, in 1888 this concern purchased 140 acres, including seven older mining ventures. The firm set up a twenty-stamp mill powered by a Pelton water wheel on the north side of the hill. Thirty-five men drove a 1400 -foot long tunnel into the hillside from Carson Flat, tapping the famous Calaveras Vein. The company, which operated sporadically and never produced great profits, sold its holdings in 1915.

[^23]Following closely behind the Calaveras Company, a Boston syndicate, headed by William G. Devereux and known as the Melones Mining Company, was formed in 1895. This firm acquired 151 acres of Carson Hill, encompassing more than sixteen recorded claims. The Melones Company set up their surface facilities in the town of Robinsons Ferry. This was the first of three phases of mining in the town corresponding with revivals and then closings of the mines.

In 1898, the Melones Company, under the direction of W. C. Ralston, son of the famous San Francisco banker, began work on the Bull Vein at the top of Carson Hill. The firm drove the 4500 -foot Melones tunnel under the ore body footwall at the 1100 -foot level and sank the Melones shaft to 3000 feet. The company's tunnels connected with older mining shafts from the top of Carson Hill and with the South Carolina mine to include an impressive network of underground passageways.

The mouth and portal facilities of the main Melones adit were located next to the newly built Angels Camp road, about a quarter mile uphill from the ferry. A large milling site was cleared just east of and below the adit entrance facing Main Street (figs. 27, 28). The mill began with sixty stamps in 1902; the number was increased to onehundred stamps within four years. Tailings from the operation were discharged into the Stanislaus River, a common practice during this period.

Gold retrieval requires water, and the Melones Mining Company needed to insure a large and dependable supply. An enormous master flume was constructed which diverted water out from the Stanislaus some 4 miles upstream (fig. 29). Electricity was supplied through contract with the Stanislaus Electric Power Company. To provide a strong "head," or force of water to turn the generators, nearly 4 miles of flume carried water from a higher elevation to drop it through penstocks into the powerplant site beside the stamp mill.

In 1902, The Melones Mining Company petitioned and received permission to change the name of the post office at Robinsons Ferry to "Melones." As the town had never incorporated,

## THE STAMP MMk

Although the arrastra was simple to construct and effective in grincling quartz. rock, it was "too slow for the Americans." ${ }^{\prime 2}$ A vertical crushing machine, a stamp mill, had been known in Europe and was introduced into the southeastern states prior to the California Cold Rush. Brought to the Mother Lode by miners from the south, it was modified and improved by the California gold miners into a highly efficient ore-crushing machine.

The first stamps were wooden stems equipped with square iron shoes that fell on iron dies below, crushing the quartz rock between the two surfaces (fig. 26). These were initially crude devices. During an 1861 survey of over 280 quartz mills in California, the observer "could only find between 40 and 50 in successful operation, several of which were, at that time, leading a very precarious existence."3 Preliminary rock breakers, or crushers, were introduced by 1861 to break down large pieces of quartz ahead of the stamps. By 1870 foundries, such as the one in nearby Altaville, were producing high-quality machines that would be the primary mechanism for crushing gold ore for the next fifty years.

Steady development between about 1870 and 1890 resulted in the highly efficient "California Stamp," consisting of a battery of five stamps all working in one mortar box, each stamp falling from ninety to one hundred times a minute on its die. The standard drop was about seven inches and each stamp weighed around 700 to 800 pounds. These five-stamp batteries were usually paired, and the ten stamps were operated by one drive pulley and one camshaft. The California Stamp was used subsequently in mining areas in the United States and around the world and provided the basis for the development of mills containing as many as 200 to 300 stamps.

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Figure 27: The mill of the Melones Mining Company constructed in 1902 with sixty stamps and enlarged to one hundred stamps by 1906. The white rock dump from the Melones adit is seen to the upper left and in the foreground are bunkhouses for the miners. Courtesy of the Calaveras County Historical Society.


Figure 28: The ruins of the Melones Mining Company mill in 1979. The batteries of stamps were attached to the vertical wall in the rear, while the concentrating tables rested on the rows of parallel footings to the left. Photograph by Julia G. Costello.



Figure 29: The Melones master flume, shown here under construction, was wide enough to accommodate a horse and wagon. After a 1902 photograph by Morgan North.
the name of the settlement changed also. Clearly, the new mining operation dominated the life of the Stanislaus settlement. The physical setting was altered by huge excavations which bored into the core of the mountain and produced large waste dumps outside the tunnel portals, and by the imposing mill which presided over the north end of town. New prosperity came with the infusion of people and money, and Main Street boomed; new stores, saloons, restaurants, and other businesses quickly appeared. Town society was also drastically altered as the quiet and independent agricultural community was subsumed by the company miners.

This new population was similar to that of the Gold Rush in many ways: the predominance of single miners, the large numbers of foreign-born residents, the high rate of transiency, and the economic dependence on gold. There were, however, some significant differences. While the fortyniners had been independent prospectors, moving about the gold fields as they chose, this influx of miners worked not for themselves, but for large mining corporations (fig. 30). For the most part, the houses they lived in, the stores they shopped in, and the recreational facilities they used were all owned by the company.

The mining operations of the Melones Mining Company were considered, during the time,
among the most efficient in the state. Between 1908 and 1910 the relatively low-grade ore was being extracted at the extraordinarily efficient cost of only $\$ 1.08$ a ton. With the advent of World War I, however, the effect of rising costs of materials and scarcity of labor began to influence the Melones Company which was finally forced to close the mine in 1918 and the mill in 1919. Over its twenty years of operation, as the longest sustained mining venture on Carson Hill, the company had extracted over $\$ 4,000,000$ in gold. At todays market prices, the sum would total between $\$ 90$ and $\$ 100$ million.

After the final closing of the facilities in 1919, most of the population disappeared within weeks. Although mining operations were revived twice in the following two decades, most of these later workers commuted daily to their jobs. The resident mining population at Melones never again reached the numbers of this first period of development.

The still untapped gold resources of Carson Hill were to insure continuation of gold mining at the town of Melones. Under the management of W. J. Loring, in 1920 the Carson Hill Gold Mines, Incorporated leased the facilities of the recently closed Melones Mining Company, moved its headquarters down to the Stanislaus River, and subsequently used the main Melones
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Figure 30: A group of miners at Melones in the early 1900s. Photograph courtesy of the Tuolumne County Historical Society.
adit to work its claims. The corporation had been buying options all over the hill since 1917, and eventually consolidated over thirteen claims into its holdings, including the Morgan, Melones, Calaveras, Relief, and Adelaide. The combined workings of these mines totaled over fifteen miles of underground drifts, shafts, and tunnels.

The Carson Hill Gold Mines, Inc., constructed a new mill of twenty stamps, later enlarged to thirty, at the south end of town. A portion of the Old Melones hundred stamp mill was converted into a cyanide treatment plant, to which the partly-treated, already-milled gold ore was slurried in a conduit. Tailings resulting from this process were pumped through large redwood pipes and deposited east of Coyote Creek on land leased from the Pendolas. This tailings pile was to grow into a formidable white hill of over three million tons of material, dominating the landscape north of town. At the height of its operation, the Carson Hill Corporation employed 232 men, and in seven years, produced about $\$ 7$ million in gold. Rising
production costs and a decrease in the quality of ore being mined resulted in the closing of the operation in 1926.

During the mid-1920s, life in Melones, as in most of the Mother Lode, was characterized by poverty, a high rate of turnover in the population, and a lack of employment security. John A. Burgess, later mine manager, wrote of this period:
"The times were hard. Men were out of work. Miners were eking out an existence on ranches, in pocket mining, and in placering the already worked gravels. One man, a graduate engineer, told [Burgess] he was getting 85 cents a day from his pocket mining, and others told a similar story. Miners were back again to pork and beans, with little pork." ${ }^{4}$

Old resident families such as the Woods, Ceccenellos and Pendolas persisted through these

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years, although Melones seemed like a ghost town after almost three decades of mining development.

Seven years later, the largely abandoned town again came to life with the reopening of mining operations as the price of gold increased in world markets (fig. 31). The newly organized Carson Hill Gold Mining Company, financed by the Anglo-American Mining Corporation, had Sonora businessman Charles H. Segerstrom as managing director and John A. Burgess as general manager of the mines. Some $\$ 200,000$ was spent on rehabilitating the mines, mill, and machinery. The reopening of the mill in September of 1933 was celebrated throughout the area. In Melones lunch was served, and rides given through the tunnel in the electric trolleys. The Angels Camp band played, and the town was jammed as curious locals flocked to see Jackie Cooper, child movie star, throw the switch which would start the stamps pounding once again in the town of Melones.

When President Roosevelt increased the price of gold from $\$ 20.67$ to $\$ 35$ an ounce, the mining and treatment of lower grades of ore again became profitable and production at the facility was increased from 650 tons a day to a maximum of 1100 tons per day. Rich pockets of ore were occasionally encountered by the miners. One account describes a period in which twenty-four hour shifts were instituted in order to clean gold off the separating tables (fig. 32). In total, the Carson Hill Gold Mining Company produced some 2,840,000 tons of ore, from which $\$ 6,500,000$ in gold was recovered.

With the return of the mining operations, businesses once again opened on Main Street. Although there was some turnover in the enterprises, many are clearly remembered by the former residents of Melones. ${ }^{5}$ The largest complex of businesses, owned by the Ceccenello family, included two separàte stores, a saloon, a bunkhouse, the Post Office for a time, several rental rooms, and the popular "Lillie Restaurant," run by Ernest Lillie. The restaurant served Italian food and was located beneath the Ceccenello home. Other stores included that of the Raggio

[^26]brothers and Melones answer to a " 5 and 10 ," run by Mrs. Abbotts. There were several bars and pool halls, a barber shop, a cobbler's shop, and the Ah Lee Laundry. Percy Wood, perhaps the largest private property owner in Melones, rented some dozen homes to the town families.

Despite the private homes and businesses in twentieth-century Melones, it was the mining companies that dominated the physical, economic, and social aspects of town. Almost all of the land along Main Street to Squirrel Gulch and up Carson Hill on both sides of Highway 49 was owned by the succession of companies. These holdings included the mining facilities, company offices, numerous residences for employees, bunkhouses, the railroad depot, community hall, and the majority of commercial properties.

The company residences were usually supplied rent-free to "top bosses" and other management personnel. Bunkhouses for ten to twelve men were apparently run by private individuals for company employees only. Boardinghouses supplied meals as well as lodging to patrons, and many families took in boarders for extra income. Mable Buckley ran one of these boardinghouses, the "Clark Hotel," and supplied room and board for $\$ 30$ per month. Another boardinghouse was reportedly patronized almost entirely by Mexican miners. The community hall was used for town dances, occasional movies, and sporadic visits by traveling entertainment acts. Some public meetings were also held on an open space on Main Street called the town court, although it was better known as the site of basketball games. The local baseball team, the "Melones Maulers," had their practice field east of Coyote Creek on the Whittaker Ranch.

Social and economic differences in the population were evident in the locations of the various residences and facilities. The "Devereux Mansion" dominated the promontory just above town. It was built for the owner of the Melones Mining Company, and later used to entertain company stockholders. Offices of the companies and residences of superintendents and "top bosses" were also located up on the hillside, as well as along the road north of town toward Squirrel Gulch. The least desirable locations in which to live, those closest to the mill, were occupied by



Figure 31: A view of Melones, about 1934, looking down Main Street from west to east. The newly renovated Carson Hill Mining Company stamp mill is to the left while the bridge of Highway 49 is in the right foreground. Photograph courtesy of the California Historical Society Library; photographer, Howe.


Figure 32: The concentrating tables of the Carson Hill Mining Company's mill in the 1930s. Donald Segerstrom Collection, courtesy of Mary Etta Segerstrom.


transient workers residing in the five bunkhouses constructed by the mining companies. Ethnic segregation was preferred by the immigrants and encouraged by the mining companies through competition between nationalities. This segregation was reflected in the clustering of some residences into the "Little Italy" and Chinese districts remembered by informants. A group of Chinese residences near the cyanide processing plant was also identified by archaeologists, who found distinctive Chinese ceramic fragments and food remains in this area.

The most imposing physical presence in town were the mills themselves. The Melones Company's 1902 mill presided over the east end of town, while the 1920s mill flanked Main Street on the west (fig. 33). Although the earlier mill did not operate again after its 1919 closing, its imposing size, along with the mountain of white tailings accumulating north of Coyote Creek, provided a constant reminder of the economic focus of the
community. The din of the pounding stamps, operating twenty-four hours a day, seven days a week, was so omnipresent that when the machinery was occasionally shut down, it was said that the sudden silence woke townspeople from a sound sleep.

Although they were typical of mining operations of the time, working conditions were hazardous and uncomfortable by modern standards. In addition to the deafening noise and potential pollution from the cyanide processing, former mine workers recall long shifts, dangerous working conditions, and low wages for exhausting labor. ${ }^{6}$ Those who blasted and drilled the rock deep in the mountain unavoidably breathed glass-like quartz slivers into their lungs, and, according to former resident Ted Bird, "usually did not last very long." The nature

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Figure 33: The thirty-stamp mill of the Carson Hill Mining Company on the west end of Melones in the 1930s.

of the jobs was humorously summarized by a former workman in the mines who said, "The work at Melones was quite democratic, everyone had a lousy job."

Also typical of mining operations at the time was the highly transient work force. Most of the names on the payrolls for the Carson Hill Mining Company did not appear more than two months in a row. ${ }^{7}$ Work hours also varied from less than ten hours a week to daily twelve-hour shifts for several weeks. With a work force of 300 , and estimating a conservative ten percent turnover per month, nearly 5000 different people would have been involved in the mining at Melones in the course of a decade. The fluctuating personnel demands of mining operations were met by the large group of transient laborers who could simply be laid off and hired on almost a daily basis. ${ }^{8}$ The "ten-day miner" was a familiar member of the Mother Lode population.

More than fifty percent of the population of Melones were single men; nearly half of these men were new immigrants from Italy, Mexico, and the Slavic countries. The young Italians comprised the largest immigrant group and, in conjunction with the older Italian population of Robinsons Ferry, maintained a distinct ethnic presence in the town. The Italian community supported several restaurants and social events. Serbians, those from the area of present-day Yugoslavia, also comprised a noticeably distinctive and socially cohesive group. They built a Serbian Orthodox Church in Angels Camp, read the San Francisco newspaper Crbski Dnvnik and relished their ethnic cuisine. Bachelors frequently participated in arranged marriages with young girls sent from the "old country." 9

[^28]Mexicans, who were another major ethnic group, were apparently at the lowest rung of the social ladder in Melones. Not only were they likely to have the worst jobs in the mines, but the single men were virtually all residents of the companyowned bunkhouses and boardinghouses.
Fewer Chinese lived in town at this time than during the late nineteenth-century placer mining. Most Chinese residents, involved in service industries rather than in mining, are well remembered by past residents of Melones.

Another important change in the working population was that, for the first time in the history of the settlement, the United States-born were in the majority. Most were California-born, the first wave of "native sons" to enter the labor market in significant numbers. They were more likely to be found in better paying jobs in the mills than were the other workers, and they were also more likely to bring wives and families with them.

Although the proportion of women and children in Melones was still quite small, they were more numerous than in any previous period, resulting in a relatively stable family environment. Women were chiefly occupied with their homes. Most families who could take in miners as boarders or provide meals to men living in the bunkhouses supplemented their incomes with these services. Because there was no resident doctor, women midwifed for each other and treated illnesses with popular medicinal remedies. The single-room school house, eventually increased to two rooms, included instruction for grades one through eight (fig. 34). At one time sixty students were enrolled, a high percentage of whom were Mexicans, Slavs, and Italians. Childhood activities in town were remembered by Ted Bird who writes about swimming in Coyote Creek, working for small change, and attending the visiting entertainment shows. Although the families provided a nucleus of domesticity in town, they were greatly outnumbered by itinerant miners who gave a "boom town" atmosphere to the community.



Figure 34: The Melones public school in 1914. The two teachers are May McKague, standing at the left, and Ruth McIntosh, in the center of the last row. Ted Bird, nicknamed "Chink," is identified in the center foreground. Photograph courtesy of Ted Bird.


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## THE SHERA RALWAY

The late nineteenth and early twentieth-century mining boom in the Mother Lode was dependent not only on improved mining technologies and better economic conditions but also on expansion of transportation and communication networks. Improved roads, bridge construction, and better vehicles all helped to provide access between the Sierra Foothills and cities such as Sacramento and San Francisco. The key link in the movement of people and goods to and from the Mother Lode was the railroad.

The earliest mention of a railroad into the Sierran foothills was in $1852 .{ }^{1}$ Schemes were presented

[^29]periodically to lay rails into the area; some plans were well thought out and others simply dreams on paper. In 1871 a route was opened from Stockton to Milton in Calaveras County, and Oakdale was reached soon after that by the Southern Pacific.

In 1897 plans for the Sierra Railway Company of California were completed. ${ }^{2}$ This colorful shortline eventually reached from Oakdale to Jamestown and on to Tuolumne City for a total of 57 miles. A side route, the Angels Branch, forked off at Jamestown, crossed the Stanislaus at Melones, and terminated at the town of Angels Camp.

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Figure 35: The Sierra Railway trestle at Melones with the train crossing into Tuolumne County ca. 1910. The trestle for the Melones master flume is seen overflowing to the right while Pendola's bar, the Riverside, is next to the redwood pipe in the center left of the scene. Photograph courtesy of the Calaveras County Historical Society.

Initial reaction to the building of the Sierra Railway included some reservations by the area's residents and outright opposition by the threatened teamsters. Like many of the grand development proposals in California, the Sierra Railway had the interest of its investors as a primary consideration. The railroad, connecting with smaller logging lines, would open up the Sierran timberlands from Calaveras Big Trees in the north to Yosemite in the south. The impressive holdings in these areas by Sierra Railway investors James B. Sperry and Thomas S. Bullock were more than a small consideration. The two other major partners, Prince Andre Poniatowski and banker William Crocker, were officers in the California Exploration Company which had for years been buying up mining claims, marble deposits, and timberland in the Mother Lode.

Public opinion finally swayed in favor of the railway construction. Development of the lumber industry would bring jobs and money to the foothills, and it was hoped that substantial increases in passenger and freight traffic would stimulate commercial and residential development of the area.

In November, 1897, the Sierra Railway reached Jamestown, its central terminus. Maintenance facilities established there included the yards, machine shops, and a roundhouse. By the following year the rails reached Sonora, and initial work began on a route to Angels Camp from Jamestown.

Major difficulties were posed by the formidable terrain over which the Angels Branch would pass. Table Mountain, between Jamestown and Tuttletown, proved a substantial barrier and the project's chief engineer considered the Stanislaus Canyon, for all practical purposes, impassable. Work was halted; a new engineer, W. H. Newell, hired; and the land was carefully studied for almost a year. When work commenced again in 1899, some of the major problems had been solved, although many decisions were made on site by Newell, who traveled with the construction crews.

Early in 1901, tracks had been laid to Tuttletown, where they eventually spanned Highway 49 with
a 50 -foot-high wooden trestle. In this same year, the 140 -foot-long steel bridge was constructed over the Stanislaus at Melones in preparation for the laying of track to that point (fig. 35). It was at this time that completion of the Angels Branch was threatened when the Sierra Railway's owners came into conflict with William Ralston of the Melones Mining Company. Ralston, counting heavily on the railway's commitment to cross the Stanislaus at Melones, maneuvered for financial advantage for his company by demanding excessive payments for the right of way as well as reduced freight charges from the Melones depot. The owners of the Sierra Railway, however, were not easily intimidated. They announced that the line would be terminated at Tuttletown and then put the completed bridge at Melones up for sale, pointing out to the Supervisors of Tuolumne and Calaveras counties that it would make a perfect road bridge over this important river crossing. Plans for an aerial tramway over the Stanislaus canyon with railway terminals on each end were announced as the Sierra Railway owners dared Ralston to call their bluff.

After long negotiations, work was resumed with the most formidable obstacle, the Stanislaus canyon, still to be surmounted. The grading crew climbed Jackass Hill and in August of 1901 emerged on the rim of the Stanislaus canyon overlooking Melones some 700 feet below. The crossing of this chasm was a difficult engineering feat and many professional railroad engineers swore it would never be done. The determination of the owners of the Sierra Railway and the expertise of W. H. Newell made a success of the venture (map 3). The canyon was crossed by using switchbacks - dead end places in the track where the train reversed directions in order to attain several vertical feet on steep grades. Other obstacles to the crossing were also overcome only by Newell's persistence. He lived in camp with the construction crews and completed late-night calculations in order to perfect the grade.

The railway began its descent on the Tuolumne side with the McArdle Switch, a double switchback on the McArdle ranch, dropping the train into the adjacent Soldier's Gulch. This torturous descent dropped 700 feet in four miles of track with grades up to 4.15 percent and twenty-seven


Map 3: The Sierra Railway's Stanislaus crossing at Melones.
to twenty-eight degree curves. After crossing the Stanislaus, another switchback on the Pendola Ranch moved the track up the flanks of Carson Hill from where they climbed the 3.68 percent grade to Gee Whiz Point. Rain slowed the work in the winter and it was not until September of 1902 that the train finally rolled into Irvine (Carson Hill). The celebrations here were particularly heartfelt. The population of Melones and the surrounding hillside had participated intimately in the daily labor and setbacks during the year it had taken to span the canyon.

The two hundred workers who blasted the rock, cleared the land, smoothed the grade, and laid the rails formed their own community. Establishing a base camp first on the Tuolumne County side and then across the river in Calaveras County, they created a small town in each location. The railway provided tents for housing, and food was apparently plentiful and robust:
"Meals here, as at all camps along the line, consisted of ham, "hen fruit," spuds, beans, bisquits and coffee for breakfast. Noon and evening meals included steaks, mulligan stews, vegetables, spuds, cakes, pies and gallons of coffee. Vinegar and raisin (or fly) pie was a favorite dessert. Serving platters and pie pans filled with these foods were placed on the table in reach of everyone, beside stacks of bread, pounds of butter, cans of Eagle Brand cream and coffee mugs, to be replenished as desired." ${ }^{3}$

Altercations, accidents, and surprises also occurred along the construction route. The most serious row was a fight between the work forces of the Sierra Railway and that of the Stanislaus Electric Power Company who were constructing the master flume to Melones. Both crews unfortunately coincided in their work where the tracks

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## G堅 WHZ PONT

Gee Whiz Point is located on a high promontory just west of modern Highway 49 on the Calaveras rim of the Stanislaus Canyon. Here the railroad takes a sharp turn as it leaves the river and continues on to Angels Camp. Several popular stories in accounting for the naming of this point, add color to the history of the place.

In her book on the Sierra Railway, Dorothy Newell Dean attributes the naming to the formidable ascent of the railway bed up the canyon side. 4 Although the engincer, Newell, designed the grade, others would have to negotiate it. The trepidation of the engineers who ran their trains over the Stanislaus Canyon was aptly expressed by the first one who tried the crossing - an unrecorded engineer on Sierra's No. 9. He had complacently descended the Tuolumne side and crossed the Stanislaus when he looked up ahead to the top of the cliff where his next run would come out. Tumning to his fireman, he shook his head doubtfully with a solemn "Cee whiz." This exclamation is said to have been ascribed to that point ever since.

Others, such as Ted Bird, say the name came from the exclamations of the passengers on the Sierra Railway as they first rounded the bend and viewed the magnificence of the Stanislaus Canyon. The much-acclaimed beauty of the Angels Branch scenery was unsurpassed by this sudden and breathtaking view of the river and surrounding countryside.

Tone Airola remembers the point as the location of a dramatic accident, the scene of which he saw as a child. On June 26, 1906, a special train had left Melones with only six cars, the fifth a boxcar loaded with fifteen tons of dynamite. At Gee Whiz Point this car jumped the track and before it toppled over, exploded with a noise that shook the countryside. Airola was in class at the nearby Ramona school and rushed on horseback to the point. Behind the first three cars, still on the rails, was a great hole - the remaining cars had been reduced to small fragments scattered over the hillside. Most passengers in the last car were killed instantly, although Alfred E. Roberts miraculously lived to recount the drama. ${ }^{5}$

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and flume crossed near the river. After several days of mutual harassment, tempers broke out into a full-fledged brawl, ending in numbers of broken bones and other injuries. Work was stopped for several days.

Accidents also occurred occasionally from falls, blasts, and falling rocks. Rattlesnakes were commonly encountered although fewer delays in work were caused by snakes than by the poison oak that grows profusely throughout the area.

A more attractive diversion for the crews was gold. Small nuggets were occasionally recovered during earth-moving operations, and almost all of the railway workers became amateur prospectors. Dorothy Newell Dean tells the story of a grader who uncovered a pocket of gold in the cut he was making. Helping himself to all he could carry, he left the rest to be quickly retrieved by co-workers. The combined haul of nearly $\$ 300$ inspired careful attention to the local rocks throughout the workers' remaining time in the canyon.

Unanticipated benefits of the Angels Branch were the remarkable vistas of the Stanislaus Canyon consistently noted by early passengers. ${ }^{6}$ Throughout the literature on the Angels Branch are superlative descriptions of the countryside through

[^33]which the line passed. By contrast, the financial rewards were not remarkable. Although the railway provided vital service to the communities along its routes, especially to the mining operations, the revenue anticipated from the development of the lumbering and tourist industries did not materialize.

The same economic fluctuations that affected the mining industries, the advent of World War I and the cessation of mining operations in the foothills dealt a severe blow to the Angels Branch. The advent of automobile and truck traffic over much improved roads also cut into revenues of the railway and by the mid-1920s the cars on the tracks were a small fraction of their former number. In 1934, passenger service was terminated on the Angels Branch, and two years later the line was abandoned completely. The last train to travel this line pulled up the rails behind it and hauled them off as the final freight.

Remains of the Sierra Railway bed can still be seen alongside Highway 49. The State Landmark plaque for Mark Twain's Cabin, next to the turnoff from Highway 49 to Jackass Hill, sits on the old right of way. Other portions of the railway's path are visible in Calaveras and Tuolumne Counties and can still evoke an image of steam trains passing and the distinctive shrill of their whistles.


## ABANDONMENT

Although the Carson Hill Mining Company's mill was refitted in 1933, it was destined for a short life. Only nine years later, in May of 1942, a fire swept through the mill, completely destroying the facility. Any plans for rebuilding were abandoned when, in October of the same year, the United States Government closed gold mines throughout the country as a wartime measure. The mines at Melones had closed for the last time. Machinery was removed; company facilities were disbanded; and workers left for other employment. The remaining population of Melones had only the ghostly shells of the mills to remind them of the boom times.

A few residents stayed on in town. Several of the company houses were occupied through the early 1970s, although they were badly deteriorated by that time. At least two mobile homes were moved into the area and occupied for several years. The town of Melones was essentially abandoned, as
were other mining towns in the Sierra foothill region in the 1940s. World War II diverted the nation's energies to war-related industries, and the mining-oriented Mother Lode suffered a drastic loss of population and income. Not only did the draft take manpower, but the war effort required that all scrap and expendable metals be converted to military hardware. The abandoned mills at Melones were gutted of their machinery, with cutting torches used to remove equipment embedded into foundations. Mining facilities were effectively destroyed.

What remained in the area were the ranching interests, other towns which served the rural foothill communities, and the lumbering activities higher up in the Sierra. The Pendola Ranch, the oldest continuing enterprise at Melones, continued its operations on the north end of town under the ownership of Virgil Ghiglieri. Much of the land around Melones was leased to the owners of


Figure 36: With the surface of the New Melones Reservoir lying over 200 feet above the town of Melones, vacationers enjoy the recreational advantages of the clear lake. The Tuolumne County Shore and the Stevenot Bridge of Highway
49 are seen in the background. Photograph by Julia G. Costello.
large cattle ranches in Calaveras and Tuolumne Counties. Among them were the Whittles and Airolas, families established in the area since the Gold Rush.

The Woods' property next to the old ferry crossing was operated as a public campground for many years by the Army Corps of Engineers. The Old Melones Lake just reached the crossing of Highway 49 , and the historic site adapted well to the recreational needs of visitors and residents of the area.

In 1962 Congress decided the ultimate destiny of the Stanislaus settlement. In addition to the gold which had periodically attracted and sustained the area's population for over a century, and ranching which had provided continuity over the decades, water had always been a major natural resource of this riverside community. The Central Valley Project called for the construction of a new dam on the Stanislaus River that would produce a reservoir of 2.4 million acre feet, flooding the canyon and its tributaries to an elevation of 1088 feet above sea level. This would cover the town of Melones with over 350 feet of water (fig. 36).

In preparation for this project, the Army Corps of Engineers began the purchase of land which
would be affected by the new reservoir. The benefits of increased water storage, downstream flood control, and additional electricity, were not gained without some losses. Thousands of acres of grazing and agricultural lands were condemned and the rolling whitewater of the Stanislaus River itself would be stilled for some fifteen miles. By this time there were few residents in the project area, decidely more cows than people, and local support for the project was strong. A major loss, however, was the historic Pendola Ranch, which had been operated by the same family for three generations. It was with great anguish to the family that this site was abandoned to the rising waters of the new lake.

The New Melones Reservoir now covers the landscape of the lower Stanislaus with a shining expanse of water. It is busy on weekends and during the summer with fishermen, water skiers, and boaters of all kinds. To those who are aware of the history of the area, there are many stories beneath the clear waters (fig. 37). Old Highway 49 does not end at the new boat ramps - it still winds down the flooded mountain sides and leads to the now-silent world of Indian villages, forty-niners, Robinsons Ferry, the Wood and Pendola families, stamp mills, immigrant miners, and all the things they left in the earth that tell of their lives gone by.


Figure 37: Located at a natural crossing point on the Stanislaus, Melones served as a link between Calaveras and Tuolumne Counties. The ferry berthed just to the left of the vegetation in the foreground; the broken abutment of the 1911 highway bridge is in the center; while the 1930s replacement bridge is seen to the right. The new Stevenot Bridge, some 400 feet above the river, will soon span the reservoir and, in turn, make the former crossing obsolete. Photograph by Julia G. Costello.


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published as a series of newspaper columns, this work provides an invaluable historical account of Tuolumne County for the years 1848-1850.
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on Twain's Mother Lode experiences are also suggested.
"The Luck of Roaring Camp" and Other Sketches, Brete Harte. Houghton Mifflin Company, Cambridge, 1939. Harte was a prolific writer and there are numerous publications of his works. This volume contains the title story and "The Outcasts of Poker .Flat," two of his best known Gold Rush stories.


# R是OMMEND PLACSE TO VIST 

MUSEUMS

Angels Camp Museum - 753 Main Street, Angels Camp. Among other displays, it contains a scale model of the mill at Melones and an impressive collection of old wheeled vehicles.
Calaveras County Museum and Archives-30 North Main Street, San Andreas. Exhibits of prehistoric and historic periods are located in the restored Court House building, itself worth a visit.

Old Timers Museum -470 Main Street, Murphys. The museum was started by historian Richard Coke Wood and contains memorabilia of the town of Murphys and of Calaveras Big Trees.
Tuolumne County Historical Society Museum-158 W. Bradford Avenue, Sonora. Informative exhibits of count" history are displayed in the renovated Coun y Jail.

STATE PARKS

Calaveras Big Trees State Park -about 25 miles east of Angels Camp on Route 4. One of the few stands of redwoods in the Sierra foothills, the grove features an impressive walking tour and an interpretive museum.
Columbia State Historic Park -3 miles north of Sonora on Parrots Ferry Road. This Gold Rush town was purchased by the State in 1946 and has been carefully maintained and restored. It features several museums, shops, and restaurants, and is the location of traditional events such as the annual Firemen's Muster.
Indian Grinding Rock State Historic Park-off of Route 88 east of Jackson, Amador County.

Although some distance north of the Stanislaus River area, the park provides an outstanding example of the acorn-processing stations of the Miwok. Traditional dwellings and a roundhouse have been reconstructed.
Railtown-off of 5 th Avenue in Jamestown (Route 108 and Highway 49). Purchased by the State of California in 1982, the park contains a unique operating railroad museum with original buildings, maintenance facilities, and rolling stock. Railtown features local steamtrain excursions.

## POINTS OF INTEREST

Carson Hill Rest Area -almost 4 miles south of Angels Camp on Highway 49. The rest area is located at the base of the famous gold-rich hill and provides a view of the "glory hole" resulting from excavation of the surface veins. Paths leading from the parking lot pass rock piles and retaining walls typical of placer-mining sites.

Cave City - 8 miles east of San Andreas off of Mountain Ranch Road. An extensive complex of limestone chambers and underground lakes previously known as "Mammoth Cave," it was a popular area for exploration by miners and visitors to the once-thriving Gold Rush town of Cave City. Public tours are offered.


Highway 49 Vista Point-overlooking the New Melones Reservoir on the Calaveras side of the Highway 49 bridge. The historic town of Melones, now at the bottom of the reservoir, is located east and downhill from the parking area, next to the old Stanislaus River bed.
Lightner Mine-adjacent to and west of Highway 49 at the north end of Angels Camp. Machinery from the Lightner mine, abandoned since 1920, can be inspected by visitors.
Mark Twain's Cabin on Jackass Hill off Highway 49, about one mile south of the New Melones Reservoir in Tuolumne County. Visitors should be aware that the present cabin was constructed in the 1920s and sits close to, not on, the site of Twain's three-month residence.
New Melones Dam Public Overlook-near the Bureau of Reclamation Headquarters off of O'Byrnes Ferry Road, about ten miles south of Sonora on Route 108. The overlook provides an unsurpassed view of the New Melones Dam.
Mercer Caverns -off of Sheep Ranch Road out of Murphys, about 12 miles east of Angels Camp. A guided tour leads through hundreds
of feet of limestone caverns, which were used by prehistoric populations and rediscovered during the late nineteenth century.
Moaning Cave-about 8 miles east of Angels Camp, on Parrotts Ferry Road south of Vallecito. Public tours are offered into this enormous limestone cavern which contains evidence of prehistoric as well as historic visitors.
State Historical Landmarks -There are 40 registered California Historical Landmarks in Calaveras and Tuolumne Counties. Descriptions and locations of these sites can be found in California Historical Landmarks published by the Department of Parks and Recreation in 1982 (P O Box 2390, Sacramento, 95811).
Towns -many towns in the area have retained their historic settings and preserve structures and streetscapes of the past. In Calaveras County these include: Angels Camp, Campo Seco, Copperopolis, Mokelumne Hill, Mountain Ranch, Murphys, Sheep Ranch, and Vallecito. In Tuolumne County are Chinese Camp, Groveland, Jamestown, Sonora and the town of Tuolumne. Knights Ferry, on Route 120 in Stanislaus County is also well worth a visit.



[^0]:    ${ }^{1}$ Theodoratus, Dorothea J, "An Ethnographic Study of the New Melones Lake Project: Part I, The Gold Rush and After: Non-Native Peoples" 1976.
    ${ }^{2}$ Jackson, W. Turrentine, "Historical Survey of the New Melones Reservoir Project Area," 1976.

[^1]:    ${ }^{3}$ Friedman, Paul, research files in possession of the author.

[^2]:    ${ }^{1}$ Lee, Georgia and Daniel McCarthy, Stanislaus River Rock Art 1979.

[^3]:    ${ }^{2}$ MacKinnon, Richard Malcolm, "The Historical Geography of Settlement in the Foothills of Tuolumne County, California," p. 145. 1962.
    ${ }^{3}$ Coronel, Antonio Franco, Cosas de California, cited in William Perkins, Three Years in California, p. 22. 1964.

[^4]:    ${ }^{4}$ Colton, Walter, Three Years in California, pp. 295-296. 1869.

[^5]:    ${ }^{5}$ Brown, J. Ross, Resources of the Pacific Slope, p. 59. 1869.
    ${ }^{6}$ Technically, a "tunnel" must be open at both ends. But in the Mother Lode the term has commonly been applied to what is more accurately an "adit" - a horizontal or nearly horizontal passage driven from the surface for working a mine. An adit driven through a hill to the opposite side would be a tunnel.

[^6]:    ${ }^{7}$ Jackson, W. Turrentine and Stephen D. Mikesell, "Report on the History, Derivation of the Name, and Location of Mexican Melones, 1851," 1979.

[^7]:    8 Wood, Richard Coke, Tales of Old Calaveras, p. 25. 1949.

[^8]:    ${ }^{9}$ Jackson, W. Turrentine and Stephen D. Mikesell, "Report on the History, Derivation of the Name, and Location of Mexican Melones, 1851," 1979.
    ${ }^{10}$ Gudde, Erwin G., California Gold Camps, p. 212. 1975.

[^9]:    11 Jackson and Mikesell, "Mexican Melones," 1979.

[^10]:    12 Irelan, William, Jr. Ninth Annual Report of the State Mineralogist, p. 25. 1890 .
    ${ }^{13}$ Kelly, Roger E. and Marsha C. S. Kelly, "Arrastras: Unique Western Historic Milling Sites," 1983.

[^11]:    ${ }^{14}$ Borthwick, J. D., Three Years in California, 1948.

[^12]:    ${ }^{1}$ Borthwick, J. D., The Gold Hunters, pp. 309-310. 1917.

[^13]:    2 Wood, Harvey, Personal Recollections of Harvey Wood, with anintroduction and notes by John B. Goodman III, p.-21. 1955.

[^14]:    ${ }^{3}$ John Robinson, the original owner and namesake for the ferry, actually divested himself of all interest in the operation in the early 1850s, when he sold his half-share to James S. Beckworth. Robinson reportedly left California to join the Confederate cause, dying on the battlefield in 1863. In 1853 Beckworth conveyed this half for $\$ 10,000$ to Joseph M. French who maintained his interest until 1881. Stephen Mead, the other original owner, sold his half interest in 1853 to George Graham, also for $\$ 10,000$. The following year, Graham turned around and sold half of this share (or one quarter of the ownership) for $\$ 5,000$ to Daniel M. French, brother of J. M. French who was already owner of half the business. Graham's remaining quarter interest was reacquired in 1855 by Stephen Mead who, in the following year, resold this interest to Harvey Wood. In 1860 Wood picked up the quarter interest held by D. M. French to become a full partner with J. M. French, a relationship which lasted until 1881 when Wood bought out French's half to become sole proprietor.
    ${ }^{4}$ Calaveras County Deeds Book, G:28. Calaveras County Museum and Archives.

[^15]:    ${ }^{5}$ Stoddart, Thomas Robertson, Tuolumne Courier, Mar. 14, 1863:2.
    ${ }^{6}$ Jackson, W. Turrentine and Stephen D. Mikesell, "Reconstructing the Town of Robinsons Ferry through the Use of Assessment Rolls," 1980

[^16]:    ${ }^{7}$ Costello, Julia G., "Historical Archaeology: Identifying Italians in the Mother Lode," Archaeology, 1981.

[^17]:    ${ }^{8}$ Friedman, Paul and Marcus Arguilles, "Robinson's Ferry," 1980.

[^18]:    ${ }^{9}$ Wilson, Bill and Betty Wilson, Western Bitters, pp. 18-19. 1969.
    10 California State Archives, Trademark Application No. 449, filed September 9, 1878.
    ${ }_{11}$ Wilson, Bill and Betty Wilson. Western Bitters, pp. 18-19. 1969.
    12 Greenwood, Roberta S. and Laurence H. Shoup, "New Melones Archaeological Project, California: Synthesis of Historic Archaeology," 1982.

[^19]:    ${ }^{13}$ Wood, Harvey, "Recollections," p. 27. 1955.

[^20]:    1 Wood, Harvey, "Recollections," (p. xvii). 1955.

[^21]:    ${ }^{2}$ Theodoratus, Dorothea, "Ethnographic Study of New Melones," p. 214. 1976.

[^22]:    ${ }^{3}$ Theodoratus, Dorothea, "Ethnographic Study of New Melones," p. 319, 1976.

[^23]:    ${ }^{1}$ Phil Bradley, mining engineer; personal communication.

[^24]:    ${ }^{2}$ Jenkins, Olaf, Geologic Cuidebook Along Highway 49, p. 33. 1948.
    ${ }^{3}$ ibid.

[^25]:    4 Jenkins, Olaf, Geologic Guidebook Along Highway 49, p. 90. 1948.

[^26]:    ${ }^{5}$ Most of the following information on the residents and businesses in Melones in the twentieth century is from Theodoratus, "Ethnographic Study of New Melones," 1976.

[^27]:    ${ }^{6}$ Most of the following information on the residence and businesses in Melones in the twentieth century is from Theodoratus, "Ethnographic Study of New Melones," 1976.

[^28]:    7 Jackson, W. Turrentine and Stephen D. Mikesell, "Transiency and Ethnic Diversity in Melones during the 1920s," 1979.
    ${ }^{8}$ Ibid.
    ${ }^{9}$ Theodoratus, Dorothea, "Ethnographic Study of New Melones," p. 182. 1976.

[^29]:    ${ }^{1}$ Jackson, Turrentine, "Historical Survey of New Melones Reservoir Project Area," p. 178. 1976.

[^30]:    ${ }^{2}$ Most of the story of the construction of the railway was drawn from Dorothy Newell Dean's book The Sierra Railway, 1960.

[^31]:    ${ }^{3}$ Dean, Dorothy Newell, The Sierra Railway, p. 168. 1960.

[^32]:    4 Dean, Dorothy Newell, The Sierra Railway, p. 67. 1960.
    5 Stevenot, Archie, "The Sierra Railroad," Las Calaveras, April 1954.

[^33]:    6 Jackson, Turrentine, "Historical Survey of the New Melones Reservoir Project Area," pp. 185-186. 1976.

