A Trip to the Big Placers

Compliments of The American Placer Corporation 1511 Marquette Building Chicago, Ill.

Photos by Herbert A. Parkyn



FREIGHTING ACROSS DESERT.

For handling heavy freight in the desert nothing equals oxen. They move slowly—8 to 12 miles daily—but their maintenance in the desert is far less expensive than that of horses or mules and they can go much longer without water.

The boiler shown in the photograph, weighs about 15,000 lbs., and is one of two of the same size recently delivered at Lee's Ferry for the combined plant.

The distance from Marysvale to Lee's Ferry, is 195 miles.

Page Two

FERRY AT LEE'S FERRY.

John D. Lee, an outlaw, leader of the Mountain Meadow Massacre, hid himself at this place on the Colorado for twenty years until captured and shot by U. S. troops.

He maintained a ferry for his own convenience. Cocanino County, Arizona, now maintains the ferry. The boat in the illustration was built and installed by the American Placer Corporation, the county supplying the materials. The former boat was too light for carrying heavy machinery across the river, and was replaced by the present boat after an A. P. C. employee and a team of horses had been drowned. The county pays the A. P. C. \$65.00 per month for maintaining the ferry and collecting tolls.



Page Three



LEE'S FERRY CAMP.

This photo shows the pipe dredge on the Colorado river being operated from the power plant on shore. To the right is seen a section of one of the new pumps recently delivered for the combined plant now being installed.

Every foot of ground showing in the landscape in this photograph, and also in the previous photograph, is gold bearing. In some places the pay dirt rises 3,000 feet above the river.

Page Four

POWER PLANT, LEE'S FERRY.

A flume can be seen carrying material washed from the banks down to the Amalgamator. To the left, but not seen in this photo, is the dredge operating in the river. The gold recovery made during a prolonged run of this plant, using driftwood for fuel, showed the operations to be a great commercial success.

When coal is being delivered regularly, this plant and a second plant, twice as large, now on the ground, will be operated night and day.

During the recent flood this entire plant was dismantled and moved to higher ground.



Page Five



MOTOR-BOATS AT LEE'S FERRY.

There are now four gasoline motor-boats at the Lee's Ferry Camp. Only three are shown in this photograph. The fourth is a 30 h. p. Mullins steel boat, capable of making 16 miles per hour. All the boats were carted across the desert.

The chief objections to the use of gasoline launches on the river, is the difficulty and expense of keeping them supplied with gasoline, which has to be hauled overland 200 miles.



LABORATORY AND ASSAY OFFICE LEE'S FERRY CAMP.





AMALGAMATOR IN OPERATION.

There are now two of these large Amalgamators at Lee's Ferry. Their combined capacity is over 3,000 cubic yards of material daily.

It is in the Amalgamator that the gold values are recovered. The gold bearing dirt is washed through the machine, and the gold, coming in contact with a bath of mercury or with a copper plate, covered with mercury, is trapped and remains in the Amalgamator.

Page Eight

PNEUMATIC PIPE DREDGE. Lee's Ferry Camp.

The dredging head of the pipe is far down below the bed of the river, from which point it is lifting sand and gravel, rich in gold. The dredge discharges the material raised onto a screen which takes off the larger pebbles and coarse sand, the finer material and all the gold passing into the Amalgamator where the gold is recovered.



Page Nine



DURING THE FLOOD. Lee's Ferry Camp.

This photo gives a slight idea of the height to which the Colorado river rose during the October flood. Before the flood, the power plant was over twenty-five feet higher than the river. It will be seen that the river is almost on a level with the boilers, one of which was hauled to higher ground just before the river started to fall.

Page Ten

A. P. C. FREIGHT WAGON CROSSING LITTLE COLORADO RIVER.

Owing to shifting quicksands, the crossing of the Little Colorado is always a grave source of danger. By taking machinery and supplies via Marysvale, Utah, instead of via Flagstaff, Arizona, this dangerous spot is avoided.

Largely due to the abandoning of the Flagstaff route by the A. P. C., the Cocanino County authorities are now constructing a steel bridge across the Little Colorado.



Page Eleven



SHOEING OXEN.

While freighting heavy loads across the desert, it is sometimes advisable to take a day off to give the animals a rest and see that they are all properly shod.

Page Twelve

A. P. C. FREIGHTING OUTFIT.

Three five-yoke teams of oxen (30 animals) are hitched together to pull a heavy wagon across the treacherous Little Colorado river.



Page Thirteen



TESTING FERRY-BOAT.

The old ferry-boat at Lee's Ferry was a rather frail affair. Before crossing with the first boilers taken to the Camp, a number of horses (the combined weight of which were known to equal that of one of the boilers) were taken across in one load. This demonstrated that the ferry could carry the boiler, but with a very slight margin to spare.

Page Fourteen

A CRITICAL MOMENT.

It is one thing for a boat to carry a maximum load in still water, but an entirely different thing to carry such a load across a big river with a four-mile current.

By the time a boiler has been shipped two thousand miles on a railroad, and hauled two hundred miles into a desert where it is required for business, and the work of a whole camp depends on it, it becomes practically worth its weight in gold. There was, therefore, some excuse if the hearts of a few of the spectators beat faster than usual when the ferry, with its precious load, swung into the swiftly moving stream.



Page Fifteen



WARM CREEK COAL MINE.

Coal from this mine, which is situated on Warm Creek, (a dry river bed), is being hauled thirteen miles down the creek bed to its junction with the Colorado river. There the big river steamer is nearing completion, and when it is ready to run, the coal, which is being stored nearby, will be carried forty miles down the river to Lee's Ferry, where the plants are ready to start operating day and night as soon as they can be supplied with fuel.

Page Sixteen

FORTY FEET OF COAL.

Situated on Warm Creek, a few miles above the present coal mine, three large veins of coal converge till they are separated one from the other by only a few feet of intervening material. Combined, these veins present a solid breast of coal over forty feet thick. An electrical power plant installed here, would have only twenty-one miles to string its wires to deliver power to the Lee's Ferry Camp.

One of the veins, twenty feet thick, is shown in the photograph. The feet of the lowest of the three men are resting on the bottom of the vein. The head of the uppermost man is touching the roof of the vein. All between is solid coal of excellent quality.



Page Seventeen



COTTONWOOD CAMP.

Cottonwood Camp is situated on Warm Creek, midway between the coal mine and the coaling station on the Colorado river. It is headquarters for the Warm Creek freighting outfits. The roads made from Lee's Ferry and Pahreah, terminate at this camp.

Page Eighteen

BUILDING RIVER STEAMER.

The most convenient point for a ship yard for building boats, barges and dredges, is at the junction of Warm Creek and the Colorado river. Here, also, the coal is being stored for shipment to Lee's Ferry.

In the photograph, taken Oct. 28, just enough of the ribs of the hull of the river steamer had been set up to give an idea of its size and outline. It should certainly be running on the river by Christmas Day. A large force of men are engaged in its construction.



Page Nineteen



ON THE COLORADO RIVER.

On several occasions, supplies for Lee's Ferry Camp have been floated down the Colorado river from the mouth of Warm Creek. The voyage, which is one of the most weird imaginable, is not without its excitements. Between the two places, the river runs through a box canyon, the sides of which rise sheer from the water to a height of fifteen hundred feet. There are a number of rich gold-bearing bars along this part of the river on which a landing can always be made. The bars belong to the A. P. C.

· Page Twenty

AFTER THE FLOOD.

At one of the San Juan camps the flood left ten feet of sand over a piece of land that was supposed to be comfortably above high water mark. A tool house on this land, although still intact, was found buried to the eves in sand.

Page Twenty-one



TESTING FOR GOLD VALUES.

A convenient and accurate method of determining the gold values in the material of which the big placers are formed, is to run samples of the material, weighing at least twenty pounds each, through a small portable Amalgamator. The Amalgamator is then cleaned up, the gold recovered from the mercury, and the resulting bullion weighed.

Although thousands of tests of this kind have been made, there has never been a blank sample found. The gold is always present, and the amount actually recovered invariably runs over fifty cents per cubic yard.

Page Twenty-two

PREHISTORIC RUINS.

About fifty miles from the San Juan mines and a few miles off the road to Red Lake, there are a number of interesting prehistoric ruins. One of them, which is still in an excellent state of preservation, contains 150 perfect rooms, and is situated inside an immense cave some 600 feet wide at its opening. An ascent of the cliff, necessary to explore the ruins, is only made with difficulty, but is well worth while. Mr. C. H. Spencer, discoverer of the big placers, is also the actual discoverer of the ruins.



Page Twenty-three



INSPECTING THE CAVE RUINS,

When Mr. Spencer discovered the big cave ruins, some years ago, he found a mummy sealed in a chamber in one of the side walls. The mummy has since been removed by government investigators, to whom the discovery was reported.

It is impossible to place an age on these ruins, or to determine by what race they were built. Broken pottery, stone axes, etc., are lying around in profusion in the dust of centuries. Many of the logs used in construction were cut with stone axes. Scientific investigators say they may be 4,000 years old, or they may be 50,000 years old. Who knows! Anyhow, they are well worth visiting.

Page Twenty-four

EXPLORING GRAND CANYON.

The central figure (in shirt-sleeves) is Mr. Kalb, the older of two brothers who are making a hazardous voyage down the Colorado river for the purpose of taking photographs and moving pictures of their journey.

The photo was taken at the bottom of the Grand Canyon of Arizona, where Mr. Kalb was discovered repairing one of the two boats used in making his trip. A few days before, the Kalb brothers had visited the shipyard at Warm Creek and spent a day and a half at the Lee's Ferry Camp. It was an interesting and unexpected way of obtaining the latest camp news.



Page Twenty-five



FARM AT PAHREAH.

This view of the Pahreah farm and camp was taken on the gold-bearing deposits about 250 feet above the level of the farm. Across the Pahreah river, the deposits can be seen rising to great heights. The coloring in the deposits is wonderful. They contain every color of the rainbow and almost every combination of colors.

Page Twenty-six

MINING AT PAHREAH.

Water for mining operations at Pahreah is pumped from a small reservoir which is kept filled by a gravity ditch that taps the Pahreah river about a mile and a half above the farm.

The photograph shows the pumping plant close to the reservoir, the pipe that conveys water up the gold-bearing deposit to the sprinkling system, (shown on another page), and the sluice that carries the material to the Amalgamating house after the material is dissolved and washed down by the spray.



Page Twenty-seven



PAHREAH PUMPING PLANT.

The mine at Pahreah is unusually well situated so far as its fuel is concerned. There is a seven foot vein of coal just four miles away, and one four-horse team finds no difficulty in keeping the pumping plant well supplied with coal. The present plant has a capacity of 2,000 to 2,500 cubic yards of material in twenty-four hours.

Page Twenty-eight

PAHREAH AMALGAMATING PLANT.

This is a closer view of the flumes and sluices at Pahreah. The method of screening is shown, and the Amalgamating plant can be seen at the lower end of the sluice.



Page Twenty-nine



PAHREAH SPRINKLING SYSTEM.

Just to the right of the center of the photograph, close to the sky-line, the spray of the sprinkling system can be seen. It requires practically the whole width of the photograph to show the great hole that has been made with this sprinkler. The material as it melts, is suspended in water along with its infinitesimal particles of gold, and enters the sluice which begins at the center of the foreground of the picture.

Page Thirty

PANNING FOR GOLD.

The background of this photograph, which was taken while recent visitors to the big placers were panning their samples, gives an excellent idea of the peculiar appearance of the gold-bearing material found at the big placers. Every rain carries away thousands of cubic yards, leaving this typical smooth rounded appearance to the deposit. Yet take a pick to this material, and it is as hard as flint. Curious placer dirt, is it not?



Page Thirty-one

