THE
IVES EXPEDITION
OF 1858

IMPERIAL IRRIGATION DISTRICT
The history of the Imperial and Coachella Valleys and that of the Colorado River are inextricably interwoven. Without the waters of this mighty river, the valleys as we know them today would not exist. Before the dams and the canals could be built, before the land could be changed from desert to verdant garden, the course of the Colorado had to be charted and its tributaries explored. Most of those who carried out this work are now largely forgotten. It is in an attempt to keep their names alive, and as a reminder to those who today enjoy the fruits of their labor, that the Imperial Irrigation District has undertaken the printing of this booklet.

COVER

Close to noon Monday, January 11, 1858, while the garrison watched from the wharf and the Indians from the nearby hill, Lt. Joseph C. Ices and his U.S. Army expedition set out in the steamer Explorer to trace the course of the Colorado River upstream.

Two months later the vessel reached the lower end of Black Canyon, the limit of navigation. Lt. Ices continued overland through unexplored country to Fort Defiance in the eastern part of present-day Arizona. Only late in the spring did he again reach Fort Yuma.

Chimney Peak (now known as Picacho Peak), shown in the background to the right of the flag on the Explorer, is located in the bend of the river on the California side above Imperial Dam. It is not visible or accessible by road from the dam area but can be reached by vehicle by following the Bard Road out of Winterhaven, California. Actual driving distance from Winterhaven is approximately 18 miles.
THE IVES EXPEDITION

The brief facts of the case are that Lieutenant Joseph C. Ives, Corps of Topographic Engineers, United States Army, with his small steamboat, the "Explorer," left the mouth of the Colorado on December 31, 1857 (I-38), and reached the lower end of Black Canyon, near the site of the present Hoover Dam, on March 8, 1858 (I-50), a distance of approximately 420 miles in 68 days, or six miles per day. He rightly concluded that this was the head of navigation for his vessel and then went by rowboat upstream through Black Canyon and past the mouth of Virgin River (I-87). He returned to the "Explorer" and on or about March 13 (I-88) started back downstream. Those are the bare essentials. Let us see what brought about the expedition, whether or not it was the first one, what were the problems and conflicts, and what became of the participants.

Following the discovery of gold in California in 1849, there was a stream of emigrants pouring westward into that state, many of them coming by the southern route which crossed the Colorado River near the present site of Yuma, which was first known as Arizona City. One of the persons who crossed here was a Dr. Able B. Lincoln of New York and Illinois (IV-139) who saw the possibilities of a good income in a ferry at that site, so he stayed there and built one. It was, without question, a financial success. That was recognized by another traveler, a renegade from Tennessee named John Glanton and his band of cutthroats, who also stopped and invited themselves at pistol point into the ferry business with Dr. Lincoln. A bit of hijacking, or muscling-in, we would call it. These men treated the Yuma Indians so terribly that on April 23, 1850, while Glanton and most of his men were sleeping off a hangover, the Indians attacked and killed almost the entire party, including the good Dr. Lincoln. Three of the men escaped to San Diego to tell the story. The story told was not the whole truth, but was sufficient to raise public opinion in California to the point of revenge on the Yuma Indians and a desire to protect the emigrants crossing the river at that point. The Governor of California (the state government was apparently organized and acting prior to California's admission as a state, which did not occur until September 9) ordered his Quartermaster General, one Joseph C. Morehead, to organize a force and go to Yuma. Nothing was said about funds for the expedition, so Morehead raised his force, and supplied it with written promises to pay on the part of the State of California. Even this took considerable time, and the General and his 142 men did not arrive at the Yuma crossing until September, 1850.
In the meantime, an able-bodied seaman in San Francisco who had read of the Glanton massacre and of the terrific ferry profits, decided to form a company and go to Yuma. This was George Alonzo Johnson, born in Palatine Bridge, New York, on August 27, 1824 (V-31). He and his party arrived at Yuma crossing August 10, 1850. With firm determination and a show of force, Johnson kept peace with the Yuma Indians, constructed and operated his ferry. At least, he got along well until Morehead arrived and started killing Indians. Morehead had so many troubles with the Indians, with his own troops, and with lack of supplies that he and his force withdrew to the coast in November much to the pleasure of George Johnson. By this time, the federal government had taken action and Major Samuel P. Heintzelman marched from the West Coast to Yuma. In fact, as he and his troops were going east they passed Morehead and his troops going west (V-29). As a matter of interest, the Morehead War cost the State of California some $76,000 and almost wrecked the treasury before the state could get on its financial feet. Heintzelman arrived on December 1, 1850, and established Fort Yuma on the hill on the north side of the narrows where the Indian school now stands. But even this was short-lived. The Fort was abandoned one year later due to lack of a dependable method of supply. Soldiers have to eat. By this time Mr. Johnson had become somewhat dissatisfied with the financial returns on his ferry, and sold out to his partner, Louis J. F. Jaeger, who operated the ferry there for many years and was known to one and all as Don Diego. Johnson went into a deal with the Army’s Quartermaster General in California (not General Morehead) to provide steamer service which could supply Fort Yuma by water. With this encouragement and after a survey of the delta by Lt. George H. Derby, Major Heintzelman again activated Fort Yuma in February 1852, and on December 3, 1852, the steamer “Uncle Sam” arrived from the mouth of the river with supplies. It was the custom to bring supplies from San Francisco by oceangoing vessel to the head of the Gulf of California and transship the supplies to a shallow-draft river steamer. The “Uncle Sam” did not last very long and was superseded by the “General Jessup” and the “Colorado,” all owned by Captain George Alonzo Johnson.

BRIGHAM YOUNG AND THE MORMONS

Also, at this time there were other events taking place many miles away which would have effect on the Colorado River. The Mormons under Brigham Young had sought religious and political freedom by settling in the valley of the Great Salt Lake in 1846. It was then Mexican territory, but the Treaty of Guadalupe Hidalgo in 1848 made Utah a part of the United States. The Mormons had created the state of “Deseret.” Congress ignored this state and in
September 1850 created the Territory of Utah. However, President Millard Fillmore, with a master stroke of diplomacy, appointed Brigham Young as governor and he took oath of office as such on February 3, 1851. Other territorial officials were mostly Mormon, and the few United States officials who were sent there were not made welcome. They withdrew to Washington, D.C., or back to the old home town, with reports, while in part true and in part false, definitely not favorable to Mormons. Hence, by 1855 Brigham Young and the Mormons were a political issue in the East. They were discussed long and loud on the floors of Congress and in the eastern press. So, when James Buchanan took office as President of the United States in March, 1857, he had to do something about it. He sent a new governor to Utah, one Alfred Cummings of Georgia, supported by a regiment of infantry. Upon hearing of this federal intention, Brigham Young issued a defiant statement that he would resist with all force at his disposal and, if overcome, would evacuate Salt Lake City and burn everything to the ground. On November 4, 1857, Colonel Albert Sidney Johnston arrived in southwestern Wyoming and assumed command of the infantry regiment which was accompanying Governor Cummings. Supply to this regiment across half the width of the nation in wintertime was going to be most difficult. Supply from the south, and particularly by the Colorado River, would be most advantageous. Such was the situation in the late fall of 1857.

“EXPLORER” BUILT IN PHILADELPHIA

Captain George Alonzo Johnson, owner and operator of steamboats, had made an arrangement with Jefferson Davis, Secretary of War under President Franklin Pierce, through the good offices of California Senator Weller (V-61), whereby some $70,000 was set aside in the military budget for exploration of the Colorado River to be performed with one of Johnson's boats. Johnson had given a figure of $3,500 per month for rental of one of his steamers for this purpose. Along in the summer of 1857, Johnson heard that John B. Floyd, now Secretary of War under President Buchanan, had authorized Lieutenant Joseph Christmas Ives of the Army's Topographic Engineers, to make such an exploration and to build a boat with which to do it. Ives, incidentally, was married to a niece of the Secretary of War. She was one of the Semmes family of Louisiana. Ives had been born in New York in 1828, on December 25 judging from his middle name, appointed to the military academy from Connecticut, from which he graduated in 1852. So, a firm of ship-builders in Philadelphia built the good ship “Explorer” in sections. She was 54 feet long (1-36). It was assembled and tried out on the Delaware River, then disassembled, loaded aboard ship, and sent to Panama where it was unloaded, transported over the Isthmus, put
on another ship for San Francisco where it was again trans-loaded to another freighter, the "Monterey," and brought down the coast of California around Cape San Lucas and up to the mouth of the Colorado River in company with Lieutenant Ives and a portion of his party. At Robinson's Landing, Lieutenant Ives had the "Explorer" unloaded and assembled. There was some question as to whether or not the connecting seams were strong enough to stand the vibration of the three-ton boiler, so four rather large timbers were bolted on the bottom of the vessel, requiring 60 holes to be drilled by hand in the steel hull. These timbers required that much more depth of water in floating the vessel and later caused a great deal of trouble in navigation.

NAVIGATION AND "PLUMP" INDIANS

As any good engineer would, Ives had read everything he could get his hands on relative to the problems before him. Lieutenant Ives also knew something of the river from personal experience, as he had been with Lieutenant A. W. Whipple in his reconnaissance for a railroad along the 35th Parallel and had followed the Colorado River from the mouth of the Bill Williams to the vicinity of what is now Needles in 1854. Ives states in his report that the purpose of the Ives Expedition was to determine navigability of the Colorado for the purpose of supplying army garrisons in New Mexico and Utah Territories.

Before the "Explorer" was launched and ready to go, Captain George Alonzo Johnson came downstream with two river steamers and visited Lieutenant Ives. Ives even borrowed from Captain Johnson his best pilot, Captain D. C. Robinson, for whom Robinson's Landing was named. Johnson also brought with him several Cocopah Indians, both men and women, and Ives reports that the women, clad only in a skirt, were "not ill favored although running a little to embonpoint." I reached for the dictionary on that one, and found that it is a French word, pronounced "an-bon-pwan," which means plump. A present day lieutenant would have said, "Not bad, but a little on the hefty side." The "Explorer" was launched and started upstream on December 31, 1857. Meanwhile, Captain Johnson, whose blood was somewhat near the boiling point, had returned to Fort Yuma with the determination of running the river first. Lieutenant William A. Winder was commanding Fort Yuma at the time and Johnson asked him for a military escort. Hence it was that Lieutenant James L. White with 15 enlisted men and a mountain howitzer went with Captain Johnson. Also with them was another individual, now famous in southwest history, and that was Pauline Weaver, the trapper. He had been christened Powell Weaver and came to New Mexico in
1832 where his name was Hispanized to Paulino and later Anglicized to Pauline. This party left Yuma on the steamer “General Jessup” on December 31, 1857, the same date on which Lieutenant Ives left Robinson’s Landing. The “General Jessup” was 105 feet long, 30 feet wide, drew 23 inches of water and could carry 50 tons of freight. This steamer went to Eldorado Canyon somewhere above the present site of Davis Dam, and on its return at Beale’s Crossing just above the 35th Parallel where the Nevada-California boundary meets the Colorado River, they met Lieutenant Edward F. Beale with a caravan that included 60 cavalymen and 12 camels and ferried that party across the river on January 22, 1858 (V-91). Further downstream the “General Jessup” had trouble and sank near Picacho, and the party walked home the remaining 30 miles. Johnson’s round trip took 30 days. Assuming 20 days upstream and 320 miles, he made 16 miles per day which proves that you can do a lot better if you don’t have boards on your bottom.

Now comes a point of controversy. Lieutenant White wrote a report of this expedition which Johnson later claimed that Ives kept pigeonholed for many years so that Ives could receive credit for having made the first expedition.

Lieutenant White had been born in New York, but moved to Florida, was appointed to the U.S. Military Academy from that state, graduated in 1853 and assigned to artillery. He had been on various Indian chasing missions in Florida and Washington Territory. His report had considerable to say about activities of the Mormons and the Mohave Indians. He also had something to say about the quality of the country: “The soil is no more than sufficient for the uses of the Indians now inhabiting them. They are satisfied with their lands, and are extremely jealous of any encroachment upon them, knowing well that they would be overburdened by any considerable increase in population. No country less desirable for white, and yet so well adapted to Indians, can anywhere else be found.”

FORT YUMA

Ives mentions that Lieutenant Winder had sent Lieutenant White upstream on a steamboat with Captain Johnson to investigate Mormon rumors (I-44), and also of meeting the “General Jessup” with Captain Johnson and Lieutenant White as they were going downstream and he was going up (I-56).

There is so much fascinating background material to this story that one can hardly put in, in 30 minutes’ time, many of the interesting details of the voyage itself. However, I will read a few
This map was drawn from data contained in the original report of the Ives Expedition of 1858. It shows the route followed by Lt. Ives and his party in the paddle-wheel steamer "Explorer" from the mouth of the Colorado River to the lower end of Black Canyon, which proved to be the head of navigation for the vessel.

The dotted line leading north-eastward from Beale's Crossing traces Lt. Ives' further travels overland with men and mules in search of a river crossing whereby supplies could be transported across the Colorado to army garrisons in Utah Territory.

Lt. Ives concluded his explorations at the military post of Fort Defiance, without finding a crossing, and returned to San Francisco by way of El Paso and Fort Yuma.

Also shown on the map, as a broken line, is the trail forged by Lt. A. W. Whipple, accompanied by Lt. Ives, in 1853-54. Purpose of this earlier expedition was to ascertain the feasibility of a railroad route along the 35th Parallel.

Final resting place of the wreckage of the river steamer "Explorer" is shown toward the lower left corner of the map.
so that you can enjoy the language of the day as well as the incidents themselves:

Page 41 — "FORT YUMA, January 5. — Day before yesterday, after making fifteen miles, a broad bar was encountered, over which the boat was gradually worked. The water above was shallow, and the current swift. The steamer lost her steerage way, and her head swung round with a good deal of force, and slid some distance upon the highest part of the bar. An anchor was carried out, but it came home. Another was placed at a greater distance, but it too failed to hold. There being no trees near by, a long line was then taken to a snag on the opposite side of the river. After heaving upon this for nearly half an hour the boat was loosened, and her head almost turned up stream, but just then the snag broke, and she swung back harder than ever. Night fell while she was fast aground."

BLACK CANYON

Page 53 — "The Yumas have been constantly encountered since we have been in this valley. They collect in knots upon the banks to watch us pass, and their appearance is invariably the precursor of trouble. Whether their villages are near places where the river is most easily forded, or whether they select for points of view the spots where they know we will meet with detention, we cannot tell; but the coincidence between their presence and a bad bar is so unfailing that Mr. Carroll considers it a sufficient reason to slow down the engine when he sees them collected upon the bank."

Page 62—"Mr. Mollhausen has enlisted the services of the children to procure zoological specimens, and has obtained, at the cost of a few strings of beads, several varieties of pouched mice and lizards. They think he eats them, and are delighted that his eccentric appetite can be gratified with so much ease and profit to themselves."

And at the entrance to Black Canyon, some 60 miles farther than Johnson and White had gone, we read on:

Page 81 — "The Black mountains were piled overhead in grand confusion, and through a narrow gateway flanked by walls many hundreds of feet in height, rising perpendicularly out of the water, the Colorado emerged from the bowels of the range.

"A rapid, a hundred yards below the mouth of the canyon, created a short detention, and a strong head of steam was put on to make the ascent. After passing the crest the current became slack, the soundings were unusually favorable, and we were shooting swiftly past the
entrance, eagerly gazing into the mysterious depths beyond, when the Explorer, with a stunning crash, brought up abruptly and instantaneously against a sunken rock. For a second the impression was that the canyon had fallen in. The concussion was so violent that the men near the bow were thrown overboard; the doctor, Mr. Mollhausen, and myself, having been seated in front of the upper deck, were precipitated head foremost into the bottom of the boat; the fireman, who was pitching a log into the fire, went half-way in with it; the boiler was thrown out of place; the steam pipe doubled up, the wheel-house torn away; and it was expected that the boat would fill and sink instantly by all but Mr. Carroll, who was looking for an explosion from the injured steam pipes. Finding, after a few moments had passed, that she still floated, Captain Robinson had a line taken into the skiff, and the steamer was towed alongside a gravelly spit a little below; it was then ascertained that the stem of the boat, where the iron flanges of the two bow sections were joined, had struck fair upon the rock, and that, although the flanges were torn away, no hole had been made, and the hull was uninjured. The other damages were such as a day or two of labor could repair."

Ives then took three men in the skiff and went on upstream through Black Canyon with much pulling and hauling of the skiff to get past various rapids. He found the mouth of the Virgin River (I-87) and was disappointed that it was so small and so choked with vegetation. He had hoped to find a navigable stream. He returned to the "Explorer" and started downstream. At a point in Eldorado Canyon he sent a party overland to the north and west to make sure that a supply route could be established between the river and the Mormon trail at Las Vegas. The party returned with a favorable report (I-89).

THE "BUCKSKIN APOSTLE"

Brigham Young had also foreseen that federal troops in Utah Territory might be supplied by way of the Colorado River and had sent a party of men southward headed by Jacob Hamblin, later to become famous as the "Buckskin Apostle." These men were sent as missionaries to the Mohave Indians, but it is a bit difficult to determine where spiritual zeal ended and military intelligence began. The "Explorer" was tied up on the west bank of the river and Hamblin sent one of his men across to interview Lieutenant Ives (I-88). He was given food and a blanket on which he slept overnight and Ives probably never knew that Jacob Hamblin and the remainder of the party spent a restless night in the bushes on the east side of the river not knowing until morning whether their brother had been received in good faith, imprisoned or executed (V-114).
The “Explorer” again moved downstream and stopped at Beale’s Crossing. Here Lieutenant Ives had conversation with Chief Cairook of the Mohaves to find that the Mormons had not had heavy influence on the Indians. Ives was still determined to find out if there was a crossing of the Colorado farther east whereby supplies could be transported into Utah Territory, so he split his command in half, sending the “Explorer” back down to Fort Yuma with Captain Robinson, whereupon he took off overland to the east. He discussed possible river crossings with all the Indians he met and made two unsuccessful stabs to the north in search of a crossing. On one of these he visited the Havasupai in the bottom of Cataract Canyon. Several times on this journey his men and mules were very short of food and of water. It was at his Camp 74, ninety-three miles north-west of the present site of Flagstaff, near a point now on the maps as Frazier Well, that he was moved to write in his journal the words for which he is most often quoted: “Our reconnoitering parties have now been out in all directions, and everywhere have been headed off by impassable obstacles. The positions of the main watercourses have been determined with considerable accuracy. The region last explored is, of course, altogether valueless. It can be approached only from the south, and after entering it there is nothing to do but leave. Ours has been the first and will doubtless be the last, party of whites to visit this profitless locality. It seems intended by nature that the Colorado River, along the greater portion of its lonely and majestic way, shall be forever unvisited and undisturbed.” (I-I10).

**RIVER NAVIGATION**

He visited the Hopi village of Oraibe and other nearby pueblos and made his second stab northward in that vicinity, but found no approach to the Colorado River. He went on eastward to the military post of Fort Defiance, where his party continued eastward to Fort Leavenworth, and Ives went south to El Paso where he caught a stage back to Fort Yuma to pick up his reports and dispose of the “Explorer,” probably to Captain Johnson, thence to San Francisco where he caught a steamer to New York, thence to Washington where he wrote the final draft of his report (I-131).

His report included some recommendations regarding the future navigation of the Colorado. They were as follows: “With a boat of proper construction the Colorado can be navigated without trouble, at all seasons of the year, between the head of the Gulf of California, and the mouth of Black Canyon. The most essential conditions in regard to the boat are as follows:
1st. That she should not draw more than twelve inches when light.

2nd. That the boiler should be of large capacity and the engines of great power.

3rd. That she should have a large stern-wheel.

4th. That the bottom should be perfectly flat and smooth.

5th. That the hull should be divided by water-tight bulkheads."

(I-hydro-12)

He went on to estimate that the expenses of operating, including amortization over a six-year period, would amount to approximately $30 per ton of freight hauled. According to the best available records, Captain Johnson, at that time, was probably charging a little less.

In the meantime, a Mormon war did not develop. Brigham Young graciously received an old friend, Major Van Vliet, who was sent as an advance party. He later received Governor Cummings, but not graciously, and it is questionable whether or not Mr. Cummings ever actually acted as governor. Young later allowed Albert Sidney Johnston and his regiment of infantry to enter the valley without bloodshed and to camp south of Salt Lake City. The behavior of Johnston’s troops did not create any good will with the Mormons, but through the diplomacy of those two great gentlemen, Brigham Young and Albert Sidney Johnston, peace prevailed. Greater events took care of the situation when the Civil War started and troops were withdrawn from Utah.

ARMY SUPPLY ROUTE

The Colorado River was later used as a main supply route for Army posts in Arizona and New Mexico but Captain George Alonzo Johnson’s boats were the ones that carried the troops and the rations. These boats supplied Fort Yuma and Fort Mohave which was founded in 1859, and loaded supplies at Ehrenberg, founded in 1866, where supplies were moved east by wagon train to Fort Whipple, Fort Apache, Camp Grant and others. Joseph C. Ives became one of the engineers on design and construction of the Washington Monument, returning to California in 1860 to help run the Nevada boundary. He resigned in December 1861 to become a Colonel in the Confederate Army where he did some engineering work but spent most of the war as a personal aide to the Confederate President. His wife was a gifted hostess and their home in Richmond was the social headquarters for all friends of Jefferson Davis. Ives’ brother-in-law, Rafael Semmes, gained some notoriety as a Confederate admiral or Confederate
pirate, depending on which side you were on. Joseph Christmas Ives died in New York City in 1868 at the age of 40. Lieutenant James L. White became a lieutenant colonel of ordnance and artillery in the Confederate army and died in 1894 (V-52). Pauline Weaver, trapper, mountain man, army scout, died on the Verde River in 1867, was buried in three places: Fort Lincoln, Arizona; Presidio of San Francisco; and finally in 1929 at Prescott, Arizona (V-83). Major Samuel P. Heintzelman became a major general and corps commander in the Union army, died in 1880. Captain George Alonzo Johnson gave up steamboating, married a girl from a well-to-do Spanish family in San Diego and became a prominent and prosperous rancher in San Diego County, where he died in 1903.

The last member of the party to be identified is the good ship "Explorer." She was used in river trade but probably as a barge with the engine removed. She slipped her anchorage at Pilot Knob one night in the early 1860's and disappeared. A survey party in 1930 found the remains of a vessel on dry ground far from the river 15 miles southwest of San Luis, Sonora. Godfrey Sikes, author of "Colorado Delta," identified the hull. (See photograph in "Colorado Delta").
ACKNOWLEDGEMENT

The written material in this book was taken from a paper presented by C. C. Tabor, former manager of the Imperial Irrigation District's Operations Services Department, at the Colorado River Water Users Association convention in Las Vegas, Nevada, on December 6, 1957.

Mr. Tabor's presentation came on the 100th anniversary of the first exploration by boat of the lower Colorado River and he read many books to gather information regarding this exploration. He found that not all authors agreed on certain details, or that they drew the same conclusions from the same details. However, he sifted, absorbed and condensed all available information on the subject so that his paper was as close to facts as could be obtained at that time.

Throughout his paper he supports statements with reference sources shown in parenthesis by roman and arabic numerals. The roman symbol identifies the references listed below and the arabic, the page on which it will be found in the reference. The references:


