

We have thus obtained from reliable sources, a fair account of the soil, situation and climate of California, with the exception of that portion of the new State lying to the southward and eastward of the Sierra Nevada and the Coast Range, and between those mountains and the Colorado. This district is believed by experienced Californians to be mostly desert; at least, so much of it as lies upon the usual emigrant trail from the Colorado to San Diego, and that which is further north, in the neighborhood of Frémont's explorations, is known to be of such a character. Elsewhere, however, in the large valley between the two great ranges of the coast and the Sierra Nevada, and in the small lateral valleys that pierce their rugged sides in every direction, are the *arable* lands of California. In a previous part of this notice we have shown that the present boundaries of the State give to her 155,550 square miles of superficial area, or 99,552,000 square acres, exclusive of islands adjacent to the coast. If it be granted that one half of California is covered with mountains and that one fourth is a desert waste, we have still one fourth, or 24,888,000 square acres of arable land left for productive purposes. Messieurs Gwin, Frémont, Wright and Gilbert, in their Memorial already cited, do not hesitate to assert, that, after all due allowances, *three-fifths* of the whole territory, embraced in the State of California, will never be susceptible of cultivation or useful to man. This would leave, as the remaining two-fifths, 62,220 square miles, or 39,820,000 square acres, constituting the total valuable *agricultural and grazing* district, and distributed at intervals over the whole surface within the actual boundaries.¹

Such are some of the substantial elements of self-reliance and independence possessed by the new State, exclusive of her precious metallic deposits. The genial soil is well adapted for the growth of those grains which are suitable for European or North American emigrants. Wheat, barley, rye and oats grow abundantly, as well as potatoes, turnips, onions, and all the roots known to our gardeners and farmers. Oats, of the species cultivated in the Atlantic States, are annually *self-sown* on all the plains and hills along the coast, and as far inland as the sea-breeze has a marked influence on the climate. This fact indicates that similar grains may be raised in the same region without resorting to *irrigation*. Apples, pears and peaches may be brought to great perfection under skilful culture. The grape, too, received much attention in former days at the missions and among the villagers, who produced an excellent fruit, the

¹ See Debates on the California Convention: Appendix p. xx.

wine of which was abundant and delicious. The fine natural grasses and oats of California, aided greatly in satisfying and perpetuating the nomadic *vaquero* or herdsman, who was the type of the region before the cession to the United States; and it is calculated that the *grazing* grounds in the State are extensive enough to produce many thousand more cattle than will be required annually, for the vast increase of population.

Notwithstanding the union of California with her sister States, and her favorable position for commercial purposes, it is scarcely probable that she would so soon have assumed almost a national rank, had not a mechanic, named James W. Marshall, who was employed during the latter part of February, 1848, in building a saw mill for Captain John A. Sutter on the south branch of the American Fork or Rio de los Americanos, discovered certain pieces of gold glistening at the bottom of the sluice. In a few days fragments to the amount of one hundred and fifty dollars were removed from the water; and as the news spread among the settlers all over the region, farms, workshops, professions and homes were deserted to explore the promised Dorado.

The results of this accidental discovery are already known all over the world. California has become a centre of attraction for population, wealth and trade. The grand auriferous region which has thus far been examined and partially drained of its deposits, is between four and five hundred miles long, and from forty to fifty broad, following the windings of the Sierra Nevada. New discoveries will doubtless enlarge this area, but the present recognized limits are the hills and lesser ranges rising from the eastern border of the Sacramento and San Joaquin plain, and extending fifty or sixty miles eastward, until they reach an elevation of nearly four thousand feet, where they mingle with the main ridge of the Sierra Nevada. The numerous springs, originating in the snows and rains of the mountain summits, pour down their rugged sides, cutting deep channels or *barrancas* through the *talcose slate*, and even down to the *quartz* of which the *foot hills* are formed. The streams, in creating these gorge-like channels, have come in contact with the quartz containing gold, and, by constant attrition, have cut or ground the metal into fine flakes, scales and dust. The precious deposit is, accordingly, found among the sand and gravel of the river beds at those places where the swiftness of the current reduces it in the dry season to narrow limits, or when the streams may be damed and turned. In other places auriferous quartz has

cropped out on the surface of the hills, mountains or gorges, and been worn and smoothed by the action of water. In these positions the gold still remains entire in pieces of all shapes and sizes, from a single grain to lumps weighing several pounds. *Placeres*, or gold locations of this latter character, are styled "the dry diggings," in contradistinction to the "washings" of the streams, and are spread over large valleys which appear to have been subjected to the violent action of water. In the dry diggings the operation of extracting metal is performed by the hand alone or with a pickaxe, hammer and knife; but the fine dust or scale-gold of the river bottoms is rescued from the earth by washing the whole mass in common tin pans, or vessels of every kind that can be substituted. The gyratory motion given to these primitive implements, removes the finest portions of soil; gravel is taken out by the hand, and the gold is left in the vessel united with a black ferruginous sand not unlike that used at the writing desk. This residuum is left on a board or cloth to dry, when the sand is blown off either by the mouth or a common bellows, leaving the gold whose gravity retains it on the board. Much of the very finest gold is, however, lost with the sand in this rude process. Vast numbers of rough machines resembling cradles, are also used in the business. The rocking of the cradle answers to the gyration of the pan, and as the mud, water and sand escape from one end of the machine through a series of small cross-bars, the coarser particles of gold are retained in the instrument. On the head of the cradle is a common sieve, upon which the auriferous earth is placed; water is then poured on it, and as soon as the machine is set in motion, the gold, sand and dust are carried into the body of the cradle, while the gravel is rejected.

But many experienced Californians do not look to the *placeres* or common gold diggings and washings for the continuation of that prosperity to which they gave birth. For its permanence they rely on the *mines*, whose development has but just commenced. This species of mineral riches lies in that region where the *auriferous quartz* has been discovered of nearly uniform richness, from the 40th to the 35th degree of latitude, upon the waters of the Feather river, and on the American, the Mokelumne, the Mariposa, and the desert upon the south-eastern borders of California, east of the Sierra Nevada. In all these localities, within a range of three hundred and fifty miles, it is already known to exist, and the strongest analogy would carry it through the remaining distance. An assay of the *ore* of the Mariposa *mines*, now worked with a Chilian mill, afforded an average yield from washing, of forty cents per pound

avoirdupois; and afterwards, by the fine process, produced eighty cents to the pound additional; making one dollar and twenty cents per pound as the average. Other assays exhibit results from *ores* in various sections of California, ranging from twenty-five cents to five dollars per pound, and that, too, in specimens where no gold is visible to the naked eye. Rocks examined even within two miles of San Francisco, have yielded gold to the amount of ten cents per pound. The result at the Mariposa mine has been at the rate of two thousand five hundred dollars for every ton!

These facts, stated upon grave authority, may be regarded as positive information applicable to the whole extent of the *gold producing quartz*. If we apply the results of the working of a British mining company,—The San Juan del Rey,—in Brazil, to these assays and conclusions, we may estimate the consequences upon the destiny of California and of the world. The work of this British company has increased annually for twenty years, and its last report dates on the 1st of March, 1850. In this it is stated that 69,000 tons of *ore* were *crushed* and the gold extracted therefrom;—applying this to the average yield of the *mines* in California, the result would be *over one hundred and seventy millions of dollars!*¹

Various speculations have been made as to the gross numerical summary of all these discoveries and labors in a broiling sun, in icy streams and under all kinds of privations; yet no definite accuracy can be attained. During the earlier enterprises, California was a country without law or restraint, for, all men, bent upon the single selfish task of greedily gathering gold, resolved society completely into its original elements. Out of the municipalities and villages there were no associations except in small bodies for mutual labor and protection. Severe and certain punishment secured the latter; but it may be reasonably supposed that the collection of statistics was not a duty willingly undertaken by such absorbed individuals. Accordingly, we are not enabled to present more than proximate calculations of the wealth given and promised by California to the human race.

Mr. King supposes, in his report, that during the first season there were not more than 5,000 employed in collecting gold, and that their average gain was one thousand dollars each, or an aggregate of five millions. But, in the season of 1849, the number of explorers increased by the vast influx from every quarter of the

¹ See Senator Frémont's speech. Debates in Senate of U. States on Friday, 20th September, 1850.

world. In July, it was judged that 15,000 foreigners were in the *placers*; and, by the labors of all classes united, the report calculates that the round sum of forty millions was realized during 1848 and 1849, of which *one-half was probably taken from the country by foreign adventurers*. Of the forty millions, twenty are estimated to have been gathered from the northern rivers principally, or from those emptying into the Sacramento. The southern rivers, or those voided into the San Joaquin, were, up to that period, comparatively unvisited, and continued so until towards the season's close. There is one river which, from reported discoveries, though not flowing into the great valley west of the Sierra Nevada, is as rich in gold as any other. This is the Trinity, which rises west of the Sacramento's sources, and discharges into the Pacific not far from the fortieth degree of latitude.

As commerce began to reassert her orderly sway in the ports of California, and as gold became again subservient to the true wants of man, more attention was paid to the collection of statistics relative to production and export. The mint of the United States has also enabled us to reach accurate partial results within a more recent period. By a table furnished to Mr. Hunt for publication in his *Merchants' Magazine*, of November, 1850, it appears that the gold dust shipped on the Pacific Mail Steamers, from 11th April, 1849, to June 1st, 1850, was \$13,329,388; while the following were the receipts at our mints:

RECEIPTS OF CALIFORNIA GOLD AT THE N. ORLEANS AND PHILADELPHIA MINTS.			
Year, &c.	At N. Orleans.	At Philadelphia.	Total.
In 1848		\$44,177	\$44,177
Jan. 1st to Aug. 31st 1849	175,918	1,740,620	1,916,538
Aug. 31st to Jan. 1st 1850	489,162	3,740,810	4,229,972
Jan. 1st to Feb. 28th "	938,050	2,974,393	3,912,443
To March 31st "	365,869	1,296,321	1,662,190
March 31st to May 1st "	298,130	1,813,002	2,111,132
May 1st to July 31st "	317,181	6,740,677	7,157,858
Total,	\$2,584,310	\$18,350,000	\$20,934,310

Of this vast total receipt at the two great mints of the country \$17,000,000 were delivered in ten months, being at the rate of more than \$20,000,000 yearly. Since January last, the receipts have been at the rate of \$26,000,000, per annum, and for the last quarter, at the rate of \$32,000,000 per annum, showing a constantly augmenting ratio. Mr. Edelman, accountant of the Philadelphia mint, has prepared an essay to answer the repeated enquiries respecting the general character of California gold and its value by the ounce

troy. It appears from his calculations that seven-eighths of all the deposits made at his mint from the commencement of the business until April 1850, exhibit a variation in quality of only fifty-cents per ounce troy, the fineness averaging between 873½ thousandths and 898½ thousandths. The general fineness of nearly all the gold brought to the mint is 886 thousandths; the flat spangles of the rivers, which bear a small proportion to the mass, averaging 895 thousandths. The alloy detected in this gold is wholly silver tinged with a small quantity of iron, and the removal of the iron, dirt or sand in melting occasions usually a loss in weight of about 3¼ per cent. If the grains have been cleansed by the magnet the loss is reduced to about 2½ per cent., but if they are wet or dampened the loss may raise to even higher than 4 per cent. California gold is regarded as consisting of 995 parts gold and silver in every 1000 parts by weight, which renders it necessary to separate these metals before converting them into coin, for, according to law, the standard national gold is so constituted, that, in 1000 parts by weight, 900 shall be pure gold, and 100 an alloy, compounded of copper and silver.

If the confident representations of travellers, miners, laborers and scientific men are to be heeded, the California *placers* and mines will continue to yield an increasing ratio of precious metal; but time alone can disclose the degree in which their products will be multiplied. Should they reach \$100,000,000 annually—and they may surpass that amount—the yearly addition to the gold of Europe and America, will be 6⅔ per cent. on \$1,800,000,000, which is the estimated amount of that metal in those two quarters of the globe. This vast sum more than doubles the past contributions of American mines during the period of their greatest productiveness.¹

Gold, however, is not the only important mineral element of California's wealth. Her *quicksilver* mines are believed to be numerous, extensive and valuable. The *cinnabar ore* which produces the quicksilver, lies near the surface, is easily procured and is represented to be remarkably productive. The mine of New Almaden is a few miles from the coast, midway between San Francisco and Monterey, and in one of the ridges of the Sierra Azul. The mouth of this mine is a few yards from the summit of the highest hill that has been found to contain quicksilver, and is about 1,200 feet above the neighboring plain and not much more above the ocean. Its ore-bed seems to be embraced in a greenish talcose rock. By a very rude

¹ Article by the Hon. Professor Tucker, *Hunt's Magazine*, July, 1850, p. 25:—See Appendix No. 2.

apparatus the yield on the spot was found to be over fifty per cent. Mr. Charles M. Wetherill of Philadelphia, an accomplished chemist, found the percentage of mercury to be 60, in 123 grains which were submitted to him; and 45 in another parcel containing 61½ grains. Cinnabar ore has been found in about twenty other places within a few miles of this valuable location.

It is asserted that there are extensive veins of silver, iron and copper in California; but there is no information sufficiently accurate to justify a statement of their existence or value.

The commerce of California has of course flourished in proportion to her population and wealth. The aggregate of duties paid on foreign merchandize at San Francisco from the 12th of November 1849 to the 31st of May 1850, was \$755,974. At the date of the information there were in the harbor 623 sailing vessels, 12 steamers; and 140 sail vessels and 8 steamers at Sacramento City, Stockton and other places up the rivers. Of this total of 783 vessels, 120 were foreign and 663 American. The amount of tonnage at San Francisco, was 1,020,476, and 100,000 in towns and cities on the Sacramento and San Joaquin; but of this large sum 800,000 tons at least were unemployed.

The singular history of the unprecedented rise in the value of merchandize or the necessaries of life in California after the discovery of gold, is a chapter full of surprising and fantastical incidents, but our narrowing space denies us the tempting privilege of recounting it in this volume.

In all these calculations and estimates we must occasionally approach the dangerous domain of speculation, and in this category must we also place most of our information respecting the population and towns of California. Population is of course constantly augmenting under these great temptations for the rapid accumulation of fortune; yet with society in such a transition state, the true ratios or numbers of actual increase cannot be accurately obtained.

According to Baron Humboldt the population of Upper California consisted in 1802, of 7,945 males and 7,617 females, or, 15,562 individuals attached to the eighteen missions. All other classes whether whites, mestizos, or mixed castes, either in the Presidios or in the service of the Monks, were estimated at 1,300. This calculation would make the whole population, at that time, exclusive of wild Indians, 16,862. In 1831, the number of missions had increased to twenty-one, and their Indian neophytes were 18,683; all other classes in the garrisons and among the free settlers

amounted to 4,342, making a total of 23,045; nor is it probable that this number was much augmented until after the cession and subsequent discoveries. At present it is quite impossible to calculate closely the wild Indians of miserable, debased tribes found in the mountains, whose numbers are variously stated by travellers and writers at 100,000, and 300,000. In the memorial of the California Representatives, already cited, the population on the 1st of January, 1849 is stated at 13,000 Californians, (which is probably too low a number,) 8,000 Americans, and 5,000 foreigners, or 26,000, in all. From that date to the 11th April, the arrivals from sea and by land were judged to be 8,000, while, according to the Harbor Masters' Record at San Francisco, 22,069 Americans and 7,000 foreigners arrived there from sea, between the 12th of April and the 31st of December 1849. Of these 28,269 were males, and only 800 women! In addition to the immigration by sea at this single port, it may be presumed that not less than 1,000 individuals landed elsewhere in California during the same period. By Santa Fé and the Gila nearly 8,000 entered the country. From Mexico 6,000 or 8,000 were supposed to have come, though only about 2,000 remained in the territory. Adding to these amounts 3,000 deserting sailors, and computing the overland immigration at 25,000, we have 107,000 inhabitants in California on the 1st of January 1850. It would probably not be unsafe to add fifty thousand for the immigration of the current year, so as to give the new State at least 150,000 citizens in January 1851.

As gold and people increased so miraculously, the tents and encampments of the adventurers gave place to houses and towns whose materials and construction were almost as frail. When the precious metal became abundant, *land* of course quickly grew into speculative importance and value. Men who disliked the toil of draining gold from the rivers or digging it among rocks, resorted to the *easier mines* of their own ingenuity, and, obtaining titles to advantageous locations near the great rivers, or, on important bays and straits, laid out magnificent plans for the gorgeous cities of the Pacific Empire. The list of some of these "Cities," given in a note at the bottom of the page, comprises the leading locations north of San Francisco and on the routes to the principal *placers*.¹ Some of these towns,

¹ Frémont, a town laid out by Jonas Spect, on the west bank of the Sacramento river, opposite the mouth of Feather river; Vernon, east bank of the Feather river, at its confluence with the Sacramento; Boston, on the north bank of the Rio Americano, a few miles above its confluence with the Sacramento; Sacramento City, on the site of the celebrated Sutter's Fort: Sutter City, on the east bank of the Sacra-

and probably many more, will prosper permanently because they are admirably situated to aid in the development of the interior of the great valley of the Sacramento and San Joaquin. If this valley is to be annually deluged and converted into a lake, as it was last year during the rainy season, the *agricultural* prosperity of California must be seriously affected, and the rising cities will probably suffer with it, unless the *placeras* and the *mines* shall continue to pour their bountiful supplies into the hands of all who seek them.

The old Spanish and Mexican towns and villages, will in all likelihood continue to assert their importance. The chief of these are the ancient Presidences or Presidios of San Francisco, Monterey, Santa Barbara and San Diego. In all of these, Europeans and Americans are already establishing themselves as residents who desire to make California their permanent home. The old *pueblos* of Los Angeles, situated about eight miles from the mission site of San Gabriel;—of San José about fifteen or twenty leagues from the bay of San Francisco, near Santa Clara;—and of Branciforte about a mile from the mission of Santa Cruz, and a mile and a half from the bay of Monterey,—are still in existence, and having been built on well selected sites, may flourish long after the fragile castles erected in the golden region have passed away like the scenery of a drama. The Monks, every where, possessed an instinctive sagacity for nestling in the best locations, and time will doubtless do justice to their discretion in California.

The increased value of land of course indicated to our government the necessity of promptly examining the titles of property in California; and accordingly, Mr. W. Carey Jones, a lawyer accomplished in the Civil and Spanish laws, was despatched thither by the authorities in Washington, to examine the grants from the Spanish and Mexican governments. His full, learned, and satisfactory report has been published by congress, and declares that

mento, a few miles below Sacramento City; Webster, on the east bank of Sacramento river, nine miles below Sacramento City; Suisun, on the west bank of the Rio Sacramento, 80 miles from San Francisco; Tuolumne City, at the head of navigation of the Tuolumne river; Stanislaus, on the north bank of the Stanislaus river; Stockton, situated on a slough, or sloughs, which contain the back waters formed by the junction of the Sacramento and San Joaquin; New York upon the Pacific, located at the mouth of the San Joaquin; Benecia, on the Straits of Carquinez, 35 miles from the ocean; Martinez, opposite Benecia; Napa, on the banks of the Napa creek, 40 miles north of San Francisco; Sonoma, in the valley of the same name, three miles from the Sonoma creek; St. Louis, on the Sonoma creek; San Rafael, on the north side of the Bay of San Francisco; Saucelito, on the Bay of San Francisco, at the entrance of the harbor.

these grants are mostly perfect titles, or have unquestionably the same *equity* as those that are perfect.¹

All the grants of land in California, except *pueblo* or village lots and some grants north of the bay of San Francisco, subsequent to the independence of Mexico, and after the establishment of that government in California, were made by the different political governors. These personages possessed the exclusive faculty of making grants of eleven leagues, or *sitios* to *individuals*, which were valid when sanctioned by the Territorial Deputation; but colonization grants to *Empresarios* or contractors, required the sanction of the Supreme National Authorities.

The supposition, usually entertained, that the mission lands were grants held as the actual fee-simple property of the church, or of the mission establishments as corporations, is entirely erroneous. All the missions in Upper California, established under the direction of the Spanish Viceroyal Government and partly at its expense, never had any other right than that of occupation and use, the whole property being either resumable or otherwise disposable, at the will of the crown or its representatives. The right of the Supreme Powers to remodel these establishments at pleasure, and convert them into towns and villages, subject to the known policy and law which governed settlements of that kind, was a fundamental principle controlling them from the beginning.

After the secularization of the missions the principal part of the church lands were cut off by private grants. Some of them still retain a portion of their original territory, but others have been converted either into villages and subsequently granted in the usual form in lots to individuals and heads of families, or have become private property. A few are either absolutely at our government's disposal now, or, being rented at present for a term of years, will become so when the tenant's contracts expire.

The gold of California is a modern disclosure, though, probably, it is not altogether a modern discovery. There are documents in existence which show that it was known to the Mexican government; and, as far back as 1790, a certain Captain Shelvocke obtained in one of the ports, a black mould which appeared to be mingled with golden dust. Specimens of California gold were exhibited privately by the authorities in the city of Mexico not long before the late war; and a memoir prepared by the congressional representative, imparts the fact that it had been taken in consider-

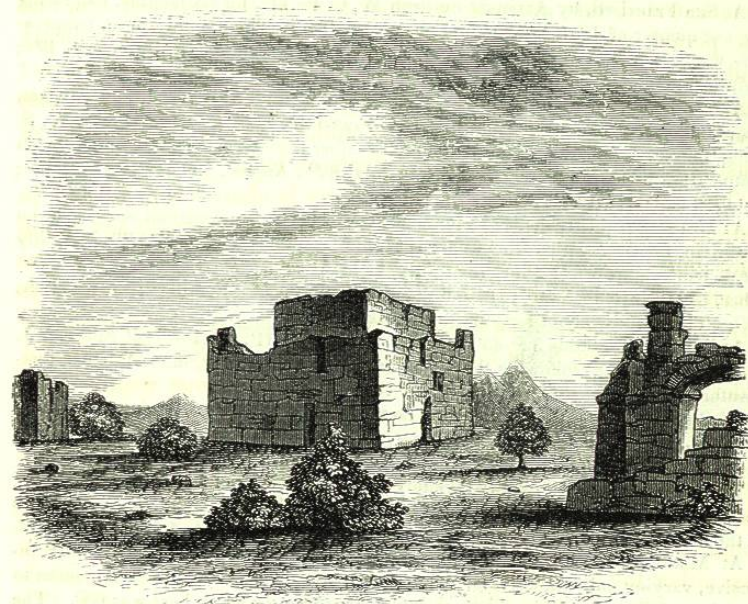
¹ Report upon the land titles of California by W. Carey Jones—Washington 1850.

able quantities from *placers* in the neighborhood of Los Angeles. It is very likely that the rulers of the Mexican Republic were not anxious to add to the allurements which were already enticing our people to her distant province, and silence was therefore preserved in relation to its mineral wealth.

California has, at least, illustrated one great moral truth which the avaricious world required to be taught. When men were starving though weighed down with gold,—when all the necessaries of life rose to twice, thrice, tenfold, and even fifty or a hundred times their value in the Atlantic States,—that distant province demonstrated the intrinsic worthlessness of the coveted ore, and the permanent value of every thing produced by genuine industry and labor. It is to be hoped, therefore, that the new State will not degenerate into a mere mining country, or be forever a prey to that feverish excitement in the pursuit of sudden wealth which is fed or frustrated by the contemptible accidents of luck.

The rapid development of the country is almost unparalleled in national history; and now that a substantial government and union with our confederacy are secured, it remains to be seen how the social problem of California will be solved, and whether it possesses any other elements than those of gold and men for the creation of a great maritime State on the shores of the Pacific. Wonderful order has been preserved in spite of the anomalous condition of the immigrants; yet refined woman must be content to cast her lot in that remote but romantic region, and, by her benign influence, soften, enlighten, and regulate a society which is formed almost exclusively of men. In the course of time steam will open rapid communications with the east, and travellers will not be compelled to pass either the desert or those more southern regions where the mouldering ruins of Casas Grandes denote the ancient seat of Indian civilization. The iron bands of railways, the metallic wires of the telegraph, and the gold of California will then bind the whole grand empire of the west in a union, which social sympathies, commercial interests, national policy, and a glorious history will make everlasting.

THE END.



RUINS OF A CASA GRANDE.