Spring 6-18-2016

1888 August 1 - 1890 August 1, Reichert with Corrected 1890 Report of Spanish-Mexican Land Grants, Surveyor General's Report to Governor of California

REPORT

OF THE

SURVEYOR-GENERAL

OF THE

STATE OF CALIFORNIA

From August 1, 1888, to August 1, 1890.

SACRAMENTO
STATE OFFICE,
J. D. YOUNG, SUPT. STATE PRINTING
1890.

REPORT.

STATE OF CALIFORNIA, OFFICE OF SURVEYOR-GENERAL,
SACRAMENTO, August 1, 1890.

To his Excellency, R. W. Waterman, *Governor of California:*

DEAR SIR: In accordance with the requirements of the law relating to the duties of the Surveyor-General, I have the honor to submit the following report of the transactions of this office from August 1, 1888, to August 1, 1890.

THEO. REICHERT,
Surveyor-General, and ex officio Register of State Land Office.

AREA OF THE STATE OF CALIFORNIA.

The following statement, the latest procurable, furnished by the United States Surveyor-General for California in 1882, shows that the estimated area of the State of California is 100,500,000 acres, apportioned as follows:

Subdivision.	Area – Acres.
Agricultural and mineral lands surveyed to June 30, 1882	61,887,392
Agricultural and mineral lands unsurveyed	26,211,501
Private grants patented	8,383,375
Private grants not settled	341,650
Indian military reservations	318,631
Lakes, islands, bays, and navigable rivers	1,531,700
Swamp and overflowed lands surveyed	1,635,227
Swamp and overflowed lands unsurveyed	85,524
Salt marsh and tide lands around San Francisco Bay	100,000
Salt marsh and tide lands around Humboldt Bay	5,000
Total	100,500,000

GENERAL OFFICE BUSINESS.

Applications to purchase School lands in the following districts have been received and filed, as follows:

Districts.	From Aug.1, 1880, to Aug. 1, 1882.	From Aug.1, 1882, to Aug. 1, 1884.	From Aug.1, 1884, to Aug. 1, 1886.	From Aug.1, 1886, to Aug. 1, 1888.	From Aug.1, 1888, to Aug. 1, 1890.
	Acres.	Acres.	Acres.	Acres.	Acres.
Los Angeles	18,346.24	64,059.36	118,575.92	983,510.31	466,951.95
Visalia	9,900.00	16,200.00	122,992.58	285,325.28	136,562.78
Stockton	14,023.17	13,500.37	29,024.04	127,466.11	166,351.63
San Francisco	40,137.15	84,906.64	118,575.92	403,400.52	312,943.01
Sacramento	4,563.88	17,968.98	29,228.56	77,936.92	94,183.93
Bodie, now Independence	6,398.18	9,119.92	11,569.90	370,299.31	291,162.68
Marysville	11,843.54	13,614.29	12,885.42	58,301.22	67,751.86
Susanville	15,676.83	9,027.84	36,794.43	457,540.52	440,083.97
Shasta	3,763.30	33,303.36	38,354.05	331,102.83	480,218.22
Humboldt	4,736.29	30,398.50	36,203.36	68,480.02	97,660.24
For swamp and overflowed lands	28,138.80	196,677.58	153,361.79	148,543.54	62,348.29
Totals	157,527.38	488,766.84	707,565.97	3,312,406.58	2,616,218.56

Approvals of applications have been made as follows:

	From Aug.1, 1880, to Aug. 1, 1882.	From Aug.1, 1882, to Aug. 1, 1884.	From Aug.1, 1884, to Aug. 1, 1886.	From Aug.1, 1886, to Aug. 1, 1888.	From Aug.1, 1888, to Aug. 1, 1890.
	Acres.	Acres.	Acres.	Acres.	Acres.
For school lands, covering.....	75,503.36	210,865.53	350,881.11	781,395.17	919,770.47
For swamp and overflowed and tide lands, covering.....	21,406.39	71,423.73	154,375.37	34,186.43	48,355.87
Totals.....	96,549.75	282,289.26	505,256.48	815,581.60	968,126.34

CERTIFICATES OF PURCHASE ISSUED.

From August 1, 1880, to August 1, 1882:

Grant.	Number of certificates.	Acres.
Sixteenth and Thirty-sixth Sections	256	51,645.17
Five hundred thousand acres.....	7	2,800.00
Swamp and overflowed lands.....	41	10,812.59
Totals.....	304	65,257.76

From August 1, 1882, to August 1, 1884:

Grant.	Number of certificates.	Acres.
Sixteenth and Thirty-sixth Sections	881	179,295.36
Five hundred thousand acres.....	22	6,646.42
Swamp and overflowed lands.....	131	56,458.05
Totals.....	1,034	242,399.83

From August 1, 1884, to August 1, 1886:

Grant.	Number of certificates.	Acres.
Sixteenth and Thirty-sixth Sections	1,246	274,530.91
Five hundred thousand acres	2	360.00
Swamp and overflowed lands	328	129,893.69
Tide lands	14	4,217.78
Totals	1,590	409,002.38

From August 1, 1886, to August 1, 1888:

Grant.	Number of certificates.	Acres.
Sixteenth and Thirty-sixth Sections	1,373	487,523.44
Swamp and overflowed lands	131	37,987.91
Tide lands	18	2,411.11
Totals	1,522	527,922.46

From August 1, 1888, to August 1, 1890:

Grant.	Number of certificates.	Acres.
Sixteenth and Thirty-sixth Sections	1,182	442,460.54
Five hundred thousand acres	6	1,402.75
Swamp and overflowed lands	155	41,714.50
Tide lands	8	687.69
Totals	1,351	486,265.48

PATENTS ISSUED.

From August 1, 1880, to August 1, 1882:

Grant.	Number of Patents.	Acres.
Sixteenth and Thirty-sixth Sections	311	114,447.29
Five hundred thousand acres	55	16,804.57
Seventy-two sections (Seminary)	1	160.00
Swamp and overflowed lands	178	72,689.12
Tide lands	3	546.63
Totals	548	204,647.61

From August 1, 1882, to August 1, 1884:

Grant.	Number of Patents.	Acres.
Sixteenth and Thirty-sixth Sections	790	219,852.22
Five hundred thousand acres	82	35,790.11
Swamp and overflowed lands	161	82,124.58
Salt marsh and tide lands	11	1,769.58
Totals	1,044	339,536.49

From August 1, 1884, to August 1, 1886:

Grant.	Number of Patents.	Acres.
Sixteenth and Thirty-sixth Sections	506	117,567.00
Five hundred thousand acres	35	9,544.51
Swamp and overflowed lands	175	78,028.78
Tide lands	4	968.12
Totals	720	206,108.41

From August 1, 1886, to August 1, 1888:

Grant.	Number of Patents.	Acres.
Sixteenth and Thirty-sixth Sections	701	220,825.87
Five hundred thousand acres	35	9,319.89
Seventy-two sections (Seminary)	1	320.00
Ten sections (Public Buildings)	1	160.00
Swamp and overflowed lands	270	95,934.96
Tide lands	12	626.84
Totals	1,020	327,187.56

From August 1, 1888, to August 1, 1890:

Grant.	Number of Patents.	Acres.
Sixteenth and Thirty-sixth Sections	709	223,128.68
Five hundred thousand acres	30	6,233.58
Swamp and overflowed lands	154	55,713.52
Tide lands	23	2,205.77
Totals	916	287,281.55

LANDS LISTED TO THE STATE.

From August 1, 1888, to August 1, 1890, the following amounts of land have been listed to the State of California by the United States:

Grant.	Acres.
Indemnity (lieu) lands	19,410.18
Swamp lands	9,406.07
Internal improvements (500,000 acres) Grant	5,612.73
Agricultural College Grant	1,220.82
Seminary Lands	1,154.07
Public Building Grant	320.78
Total	37,124.65

CONTESTED LAND CASES.

From August 1, 1888, to August 1, 1890, one hundred and ninety-two proferts were issued from the office of the Surveyor-General.

SWAMP LAND DISTRICTS.

From August 1, 1888, to August 1, 1890, Swamp Land Districts were formed and reported to this office as follows:

No. of District.	County.	Date of Filing.
515	Siskiyou	August 2, 1888
516	Lassen	August 23, 1888
517	Lassen	August 23, 1888
518	Kern	January 10, 1889
519	Kern	January 11, 1889
520	Lassen	April 1, 1889
521	Butte	May 14, 1899
522	Colusa	May 24, 1889
523	Humboldt	June 3, 1889
524 (consolidating Nos. 110, 209, and 302)	San Joaquin	November 11, 1889
525	Plumas	November 12, 1889
526	Lassen	November 26, 1889
527	Yolo	April 25, 1890
528	Lake	July 17, 1890

Since August 1, 1888, and up to August 1, 1890, evidence of complete reclamation, or the expenditure of $2 per acre on works of reclamation, were received from County Boards of Supervisors for the following described Swamp Land Districts, and the proper statements in relation thereto have been sent to the County Treasurers:

No. of Dist.	County.	Area – Acres.	Amount of Purchase Money Reported to County Treasurers.	Remarks.
515	Siskiyou	640.00	$170 92	Complete.
516	Lassen	390.43	88 86	Complete.
519	Kern	16,535.19	3,475 05	$2 per acre expended.
520	Lassen	160.00	74 80	Complete.
473	Mendocino	1,080.00	302 40	$2 per acre expended.
501	Solano	11,879.27	8,208 64	$2 per acre expended.
143	San Diego	532.72	257 48	$2 per acre expended.
523	Humboldt	2,262.12	1,137 43	$2 per acre expended.
527	Yolo	5,946.01	6,416 58	$2 per acre expended.
525	Plumas	400.00	201 38	Complete.
Totals		39,825.74	$20,333 54	

FEES.

Amount of fees collected by Surveyor-General and paid into the State Treasury from August 1, 1888, to August 1, 1890:

1888 -	August	$1,958 00
	September	2,151 00
	October	1,872 00
	November	1,655 50
	December	1,949 50
1889 -	January	2,111 00
	February	2,894 00
	March	2,101 50
	April	1,011 50
	May	1,804 00
	June	507 00
	July	772 50
	August	603 50
	September	734 50
	October	641 00
	November	709 00
	December	681 00
1890 -	January	525 50
	February	741 00
	March	382 00
	April	555 50
	May	447 00
	June	404 00
	July	405 00
	Total	$27,616 50

Amount of deposits received by Surveyor-General under Acts of March 20, 1889, to August 1, 1890, and paid into the State Treasury:

1889 -	March	$800 00
	April	(All returned to depositors.)
	May (from twentieth)	660 00
	June	1,380 00
	July	2,020 00
	August	1,860 00
	September	2,380 00
	October	1,740 00
	November	2,180 00
	December	2,260 00
1890 -	January	1,540 00
	February	2,260 00
	March	1,260 00
	April	1,720 00
	May	1,320 00
	June	1,260 00
	July	1,340 00
	Total	$25,980 00

Amount of fees collected by Register State Land Office and paid into the State Treasury, from August 1, 1888, to August 1, 1890:

1888 -	August	$162 00
	September	117 00
	October	144 00
	November	80 50
	December	157 50
1889 -	January	1,311 00
	February	201 00
	March	137 50
	April	312 00
	May	153 00
	June	785 00
	July	150 00
	August	120 50
	September	120 00
	October	147 00
	November	138 00
	December	129 00
1890 -	January	849 00
	February	699 00
	March	141 00
	April	288 00
	May	132 00
	June	546 00
	July	207 00
	Total	$7,225 50

Amount of fees collected by Register of State Land Office and paid to Secretary of State from August 1, 1888, to August 1, 1890:

1888 -	August	$116 00
	September	78 00
	October	95 00
	November	50 00
	December	117 00
1889 -	January	136 00
	February	107 00
	March	89 00
	April	94 00
	May	70 00
	June	79 00
	July	106 00
	August	59 00
	September	76 00
	October	74 00
	November	58 00
	December	151 00
1890 -	January	63 00
	February	71 00
	March	85 00
	April	96 00
	May	78 00

June	60 00
July	68 00
Total	$2,076 00

Amount fees, Surveyor-General's office	$27,616 50
Amount deposits, Surveyor-General's office	25,980 00
Amount fees, Register of State Land Office	7,225 50
Amount fees collected by Register of State Land Office for Secretary of State	2,076 00
Total	$62,898 00

More than seven thousand letters have been received and answered, and $15,627 have been returned to applicants or their attorneys.

In May, 1890, complete Delinquent Lists were sent to the District Attorneys of each county in the State where there were delinquent purchasers of State School Lands.

DELINQUENT INTEREST ON STATE LANDS.

Suits in foreclosure, instituted because of the non-payment of the annual interest due on State lands, are extremely expensive legal proceedings, and long experience has demonstrated that such suits invariably result in loss rather than benefit to the interest of the State. If the lands are of value, the delinquent interest is always paid, even though it often amounts to as much as the principal. On the other hand, when the lands revert to the State they are found to be of no value whatever, and the State suffers the loss of the expense of the suit in foreclosure.

I would recommend that some action be taken by the next Legislature, amending the present law relative to this matter, and make different provision for the payment of the costs in foreclosure suits, as the present law is unsatisfactory to the State departments having to do with the matter, and to parties in interest who do the work, without knowing whether or not their bills will ever be paid.

This is an important matter, and should receive careful attention from the Legislature.

NATIONAL PARKS IN CALIFORNIA.

By recent Acts of Congress seventy-six (76) square miles, or nearly fifty thousand (50,000) acres of land in Tulare County were withdrawn from settlement, occupancy, or sale under the laws of pleasure ground for the benefit and enjoyment of the people.

Also, a tract of land comprising forty-two (42) townships, covering an area of about fifteen hundred (1,500) square miles, being approximately nine hundred and sixty thousand (960,000) acres, situated in Tuolumne, Mariposa, and Mono Counties, was set apart as a public park to be called "The Yosemite National Park."

Some action should be taken by the Legislature relative to the State lands embraced in these reservations.

AN ACT

To provide for the applications for purchase of sixteenth and thirty-sixth sections, and to regulate the application for purchase of such sections, and requiring a deposit to accompany all applications for purchase of the same.

[Approved March 20, 1889]

The People of the State of California, represented in Senate and Assembly, do enact as follows:

SECTION 1. Every application to purchase any portion of the sixteenth and thirty-sixth sections shall be accompanied by a deposit of twenty dollars, in addition to the fee for filing now required by law, for which the Surveyor-General shall give the applicant a receipt, which receipt shall be accepted by the County Treasurer in part payment of the purchase price of said land. If the applicant shall abandon or forfeit his said application, or shall fail to make proper proof as to the character of the said land, or as to his residence thereon, within the time allowed by law, or if his application shall be rejected by reason of any false statement in the affidavit herein contained, the twenty dollars thus paid shall go to the State School Fund. If it is found that the Surveyor-General erred in receiving the application, or that the State cannot make a good title to the land, then the applicant, or his assigns, may surrender to the Surveyor-General the said receipt and receive in exchange therefore a certificate showing the amount so paid, and the reason why the application could not be approved or perfected, and the Controller, upon the surrender to him of the said Surveyor-General's certificate, shall issue to the applicant, or his assigns, a warrant for the said amount.

SEC. 2. Any number of filings on any section of land is hereby permitted and allowed under the provisions of this Act. Should the first filing be abandoned by the applicant, the next filing on such section, in order, shall have the same right as if it had been the first filing.

SEC. 3. The moneys received by the Surveyor-General, under the provisions of this Act, except the moneys forfeited under section one, shall be paid to the State Treasurer at the close of each month, and must be placed in a fund to be called "School Land Deposit Fund," to the credit of the county in which the lands applied for are situated. When any moneys are placed in the "School Deposit Fund" to the credit of a county, the Controller, at the next settlement with the Controller by the Treasurer of such county, must draw his warrant upon the State Treasurer for the amount in the fund to the credit of the county; *provided*, that the direction herein to the Controller is exempted from the operations of section six hundred and seventy-two of the Political Code.

Referring to the Act of March 20, 1889, would state that in my opinion it has resulted in much good to the State.

No person who desires to enter school lands "for their own use and benefit" objects to making the required deposit of $20, which can afterward be applied as part payment on the land, and the result of the law has been to defer speculators from "tying up" a large number of sections for the small sum of $10 per year, simply holding same for speculation, and thus prevent legitimate purchasers, and in many cases actual settlers, from entering the lands without first purchasing the abandonment of such speculator; and, in many cases, "agents" have compelled homeseekers to pay them a large bonus for an invalid claim rather than be put to the annoyance and expense of a suit at law. In a word, I consider it a good law and its practical workings beneficial to the State and bona fide purchasers of school lands.

FIVE HUNDRED THOUSAND-ACRE GRANT.

Owing to the complicated condition of this grant, I found it necessary to go to Washington, D. C., and lay the matter of the State's claim before the Department of the Interior, in order to secure an adjustment between the State and the United States.

I succeeded in securing the listing to the State of 5,612 $^{78}/_{100}$ acres of land in said grant, thus enabling many parties to obtain patents from the State for their lands, which, in some cases, had been paid for in full years ago, but for which patents could not issue, as the land had not been certified to the State. (Sec. 3521, Political Code.)

The expense of my trip, paid by the State ($420 50), was fully compensated to the State by the settlement of these claims.

The adjustment practically closes the grant, there being only a few claims which have not as yet reached final determination.

STATE BOUNDARY LINE.

AN ACT TO PROVIDE FOR THE CORRECTION AND ESTABLISHMENT OF A PORTION OF THE EASTERN BOUNDARY LINE OF THE STATE OF CALIFORNIA, AND TO APPROPRIATE MONEY THEREFORE.

[Approved February 26, 1889.]

The People of the State of California, represented in Senate and Assembly, do enact as follows:

SECTION 1. The Surveyor-General of this State is hereby authorized and directed to correct and establish that portion of the eastern boundary line of the State of California, southeastward from Lake Tahoe; that is to say, southeastward from the intersection of the thirty-ninth degree of north latitude with the one hundred and twentieth degree of longitude west of Greenwich; *provided*, the whole cost of the work shall not exceed the sum of five thousand dollars; *and provided further*, that the work be completed within one year after the passage of this Act.

SEC. 2. The Surveyor-General of this State is hereby empowered to employ such assistance and purchase such material as may be necessary to carry out the provisions of this Act. The Surveyor-General shall certify to the State Board of Examiners the correctness of all accounts for assistance rendered, and for materials furnished to him to carry out the provisions of this Act; who shall, if found correct, approve the same, and order their payment out of the fund created by this Act.

SEC. 3. It shall be the duty of the Surveyor-General, under the provisions of this Act, to first correct and establish said boundary line southeastward from the point of intersection of the thirty-ninth degree of north latitude with the one hundred and twentieth degree of longitude west from Greenwich, and there to mark with stakes in mounds of stones the said line as so corrected and established. The Surveyor-General shall cause three copies of the maps and field notes of such survey to be prepared, and shall attach his certificate to each copy, setting forth that each map and accompanying field notes is a correct and true copy of the original survey made by him, one of which shall be sent to the Department of the Interior at Washington, with a copy of this law; one copy shall be filed in the office of the Secretary of State and one copy retained in the office of the Surveyor-General; and such line or any part thereof, when corrected and marked as provided in this Act, shall thereafter be regarded as the legally established eastern boundary line of the State of California, when confirmed by the United States Government, from the points of intersection hereinbefore set forth; and the record of said boundary line, as corrected and established by this Act, and confirmed as hereinbefore provided, shall be recognized and admitted in all the Courts of this State as conclusive evidence that such line is the true boundary line of that portion of the eastern boundary line of this State as this Act corrects and establishes.

SEC. 4. The Surveyor-General shall enter upon the discharge of the duties enjoyed by the provisions of this Act on or before the first day of June, eighteen hundred and eighty-nine next, and shall complete the survey as soon thereafter as practicable, and shall, within sixty days after completion of the

work, cause to be made out the copies and field notes, and file and forward them as provided by this Act. He shall make to the next Legislature a full and detailed report of the manner in which the said survey and work has been made, the cost, in items, of the same, and the manner in which he has expended the funds placed in his hands by the provisions of this Act; and he shall pay into the State Treasury any of such funds which may be unexpended after the completion of said survey and work.

SEC. 5. The sum of five thousand dollars is hereby appropriated and set apart out of the General Fund of this State to carry out the provisions of this Act.

SEC. 6. The Controller is hereby directed to draw his warrant on the Treasurer, in favor of the Surveyor-General, payable out of the said five thousand dollars so appropriated and set apart, for the sum of one thousand dollars, to pay the contingent expenses of the survey and work required by this Act, and the Treasurer is directed to pay the same. The Controller is also hereby directed to draw his warrant, payable out of the balance of said five thousand dollars so appropriated and set apart, in favor of such person or persons as the State Board of Examiners may certify have claims under the provisions of this Act, and the Treasurer is hereby directed to pay the same.

SEC. 7. All the property purchased for this survey and work, and remaining on hand at its completion, shall be sold at public auction under direction of the Surveyor-General, and the proceeds thereof paid into the State Treasury.

SEC. 8. It is hereby made the duty of the Governor to forward a copy of this Act to the Governor of Nevada, and with it a request that the Governor of that State appoint some suitable person or persons of and for that State, to accompany and act in conjunction with the Surveyor-General of this State in correcting and establishing said eastern boundary: *provided*, that the State of Nevada shall pay all expenses of such person or persons so appointed.

SEC. 9. All Acts or parts of Acts inconsistent with the provisions of this Act are hereby repealed.

SEC. 10. This Act shall take effect on and after its passage.

In order to carry out the provisions of the Act of February 26, 1889, "for the correction and establishment of a portion of the eastern boundary line of the State of California," etc., on May 7, 1889, I made the following appointments and issued the instructions contained therein:

C.E. GRUNSKY, *and* WM. MINTO, *Civil Engineers*:

GENTLEMEN: Whereas, the last Legislature of this State passed an Act for the correction and establishment of a portion of the eastern boundary line of this State (see Statutes 1889, page 38, also copy of said Act, inclosed herewith), and in order to carry out the intent of said Act, you are hereby appointed to make such surveys as you may deem necessary and act under the following instructions:

In making the survey of the State boundary line southeastward from Lake Tahoe, you will, so far as practicable, make the latitude and longitude as established by the United States Coast and Geodetic Survey the basis of your work. Connect your triangulation system, which will be necessary to fix the point at which the State boundary line intersects the southeastern shore of Lake Tahoe, with the United States Coast and Geodetic Survey Station at Round Top, and with other points if convenient, and determine the error, if any there be, in the position of the State boundary line at Lake Tahoe. Should you find that the boundary line, as marked in the field by A. W. von Schmidt, in 1873, varies to any considerable extent from the intended position of the State boundary, you will then proceed to the point where the boundary line intersects Colorado River, and by proper connection with the nearest available point at which latitude and longitude have already been determined, you will establish its geographical position, and make the same the basis of the necessary calculation of the azimuth of the State boundary line southeastward from Lake Tahoe.

When this is done, you will proceed with the survey of the boundary line in conformity with the law above cited.

You will consult with Prof. Geo. Davidson for advice concerning methods to pursue in using and connecting with the work of the United States Coast and Geodetic Survey.

You will keep an accurate account of all expenses which are chargeable against the appropriation named in the Act, and when practical, take receipts for all sums of money expended by you on this work.

Your compensation shall be $20 per day each and necessary expenses while engaged in field operations.

When the work is completed, you will make a full report to this office.

I am, gentlemen, respectfully, your obedient servant,

THEO. REICHERT,
Surveyor-General.

Their report will be found on pages 14-40.

The total expense of making this survey and all work connected therewith was $4,876 33, for all of which vouchers have been filed and all claims paid.

Respectfully submitted.

THEO. REICHERT,
Surveyor-General and ex officio Register State Land Office.

REPORT OF THE CIVIL ENGINEERS ON THE STATE BOUNDARY LINE.

To Hon. THEO. REICHERT, *Surveyor-General of California:*

DEAR SIR: The boundary of the State of California, as defined in the Constitution of California of 1849, and in that of 1879, is as follows: "Commencing at the point of intersection of the forty-second degree of north latitude with one hundred and twentieth degree of longitude west from Greenwich, and running south on the line of said one hundred and twentieth degree of west longitude until it intersects the thirty-ninth degree of north latitude; thence running in a straight line, in a southeasterly direction, to the River Colorado, at a point where it intersects the thirty-fifth degree of north latitude; thence down the middle of the channel of said river to the boundary line between the United States and Mexico, as established by the treaty of May thirtieth, one thousand eight hundred and forty-eight; thence running west and along said boundary line to the Pacific Ocean, and extending therein three English miles; thence running in a northwesterly direction, and following the Pacific Coast to the forty-second degree of north latitude; thence on the line of said forty-second degree of north latitude to the place of beginning. Also including all the islands, harbors, and bays along and adjacent to the coast."

Astronomical observations and surveys were at various times made for the purpose of establishing the position of the eastern boundary of California at certain points, before an appropriation was made by Congress for a continuous survey of this part of the boundary line of the State.

As early as 1863 Butler Ives, representing Nevada, and J. F. Houghton, representing California, made a survey of the State line from Lake Bigler (Tahoe) to the northeast corner of California. Granite monuments were at this time set on the southern and northern shores of Lake Bigler.

About the same time Lieutenant Ives made a determination of the point where the line southeastward from Lake Bigler intersects the Colorado River, and established the longitude of this point approximately at 114° 36' 00" west from Greenwich.

D. G. Majors, about 1868, set a monument at the supposed intersection of the 42nd degree of north latitude with the 120th degree of longitude west from Greenwich.

Col. Robert Williamson, about 1868, set a monument supposed to be on the State boundary, near Verdi, some twenty miles north of Lake Bigler.

A continuous survey of the eastern boundary of California, from the northeast corner of the State to the Colorado River, was commenced in 1872, in which year the general appropriation bill placed $41,250 at the disposal of the Department of the Interior for this work. A. W. von Schmidt was placed in charge of this survey, and it was completed in 1873. The most important astronomical work – the determination of the latitude and longitude at Verdi – was intrusted to Prof. George Davidson, now in charge of the U. S. Coast and Geodetic Survey on the Pacific Coast.

The accuracy of Professor Davidson's work in connection with the von Schmidt boundary survey is attested to by the fact that the final latitude and longitude observations, made in 1889 under the direction of the U. S. Coast and Geodetic Survey, by Assistants R. A. Mar and C. H. Sinclair, for use in connection with this report, established results practically identical with those of the earlier work. The survey of that portion of the eastern boundary of California north of Lake Bigler was made by A. W. von Schmidt in 1872, and the line southeastward, from the lake to the Colorado River, was surveyed by him in 1873.

The random line, with which he reached Colorado River, intersected the 35th degree of north latitude about three miles too far east, and it is presumed that the monuments set on this random line were all changed to the position of the boundary line, at that time supposed by von Schmidt to be the correct line.

The initial point of the von Schmidt survey was the observatory station occupied by Prof. George Davidson at Verdi in 1872. From this point the position of the 120th degree of longitude west from Greenwich was established, and thence the meridian line was extended northward to the 42nd degree of north latitude, and southward to Lake Bigler. The accuracy of the work along this part of the boundary of the State has never before been brought into question, but the results of our work, as hereinafter shown, indicate that, although the point near Verdi was correctly established, the line marked by monuments as the boundary is one thousand six hundred and nine feet too far west at the northern shore of the lake.

The point of intersection of the 120th degree of longitude west from Greenwich with the 39th degree of north latitude lies in Lake Bigler, about three miles from the southern shore. It was therefore necessary for von Schmidt to establish the point, where the line southeastward from this point in the lake intersects the lake shore, by triangulation. This was done, and the granite monument there set, as well as a large cottonwood post, at two hundred and eleven miles from Oregon, was found well preserved in June of last year. It was, however, learned from a resident of that vicinity, that the granite monument had, several years ago, been restored to a vertical position, after it had been nearly knocked out of place by some accident. That its position has not been materially changed was easily verified by us by connection with the bearing trees that are still standing.

No trouble was experienced in retracing the line of survey southeastward from the lake. We found the granite monument at the old Carson-Placerville road; also the mile stake at the post two hundred and twelve miles from the Oregon boundary. We also found the eight-inch pine tree marked on N. W. side, "O., 212 m. 53 ch. 21 lks.;" N. E. side, "Nev."; S. W. side, "Cal."; S. E. side, "1873"; still occupying the identical spot where, according to the von Schmidt field notes, he also set a cast-iron monument bearing the same lettering, and which tree was further identified as occupying the spot which the field notes assign to an iron monument by the bearing trees referred to in the notes, as follows:

Large fir tree, 40 inches diam., distant 88 links, bears N. 14° E., marked "B. T., Nev."

Another fir tree, 30 inches diam., distant 71 links, bears S. 80° W., marked "B. T., Cal."

A small fir, 12 inches diam., distant 68 links, bears S. 2° 15' W., marked "B. T., Cal."

For the purpose of our triangulation work a signal was established at a point one foot southwest of the line of the von Schmidt survey, and forty-one feet northwest of the point where the iron monument should stand. This point is below referred to as point K.

On State Line Point at the northern lake shore we found the points referred to by von Schmidt as follows: At one hundred and ninety-one miles from the Oregon boundary a cast-iron monument, "eight feet long, twelve inches square at bottom, six inches square at top, two feet in the ground, set in with rock. Marked monument with raised letters cast thereon, as follows: N. side, 'Oregon, 191 miles'; W. side, 'California'; E. side, 'Nevada'; S. side, '1872; longitude, 120° west of Greenwich. A. W. von Schmidt, U. S. Astronomer and Surveyor.'"

At 3.50 chains farther south on the shore of the lake a pine tree twenty-four inches in diameter, marked on the N. side "O., 191 miles 3.50 chains"; W. side, "Cal."; E. side, "Nev."; S. side, "1872. L., 120°."

Between this tree and the cast-iron monument on the same line we found a cut-granite monument tree feet high, marked "Cal." on its west side, "Nev." on the east side, and "1872" (changed from 1863) on the south side.

The iron monument and the granite post are well preserved. The pine at the water's edge is also standing. The granite post is the same block of stone which was set by Surveyor-General Houghton in 1863, but it has originally been set a point about three quarters of a mile farther west than that at which it now stands. The original figures 1863 have been changed to 1872. At the iron monument, above described, on State Line Point, a signal (H) was erected, in order that the position of this point might be determined by triangulation, and a definite determination of its latitude and longitude might be made in connection with our work southeastward form the lake.

At our request the Superintendent of the U. S. Coast and Geodetic Survey, through the courtesy of the Pacific Coast branch of this department, placed at our disposal the result of the triangulation work in California. It was found necessary, in order to insure the greatest possible accuracy for our work on the State line survey, to base all our latitude and longitude calculations on the latitude and longitude of the two primary triangulation stations of the U. S. Coast and Geodetic Survey, Mounts Lola and Round Top, of which the former is a peak about nine thousand two hundred and eighty feet high, some twenty miles northwest of Lake Bigler, while the latter is a still more prominent peak, ten thousand four hundred feet high, about nineteen miles south of the lake.

These points are fifty-six miles apart, and afford a most excellent base line for a system of triangles near the lake. In June of last year these points were occupied, but owing to unfavorable atmospheric conditions no satisfactory results were obtained, and it became necessary to await the purification of the atmosphere by the first storm of October to accomplish what could not be done while the haze and smoke of the summer months interfered with the measurement of angles.

The azimuth of the line southeastward from Lake Bigler could not be determined without better information than that afforded by old surveys of the longitude of the point at which the 35th degree of north latitude intersects Colorado River, or rather the center of the river channel as it existed at the time that the von Schmidt survey was made.

Following the instructions contained on our letter of appointment, application was therefore made to the Superintendent of the U. S. Coast and Geodetic Survey to establish the latitude and longitude of some point near The Needles. This, as also the verification of latitude and longitude near Verdi, was promptly done by the assistants of the department already named, and he meridian line at the astronomical station near The Needles was also carefully marked by them.

By means of a base line and a system of triangles the 35th degree of latitude was established in September, 1889, by William Minto, and connections were made with several of the reference points near the river, marked by von Schmidt in 1873. The longitude of the terminal point of the line southeastward from Lake Bigler, in the channel of Colorado River, as the river channel must have been in 1873, was found to be 114° 38' 45".30. The river in 1889 was two miles farther east, but this recent position of the river channel should have no bearing upon the establishment of the terminal point of the line southeastward from Lake Bigler, although such a considerable change of the river from its former bed throws doubt upon the correct position of the boundary of California along the river near the 35th degree of north latitude.

Thus, in determining the boundary southward from the 35th degree, the question arises, should the channel of 1873 be followed, or should the southeasterly course of the boundary line from the north be extended to an intersection with the present river channel?

The boundary of California, from a point on the 39th degree of north latitude to a certain point on the 35th degree of latitude, is defined as a straight line. Without entering into a discussion of the properties of the line which traced on the earth's surface will most nearly conform to the requirement that the line be straight, it will suffice to consider the line between the two points a geodetic line, each element of which is a part of a great circle, and which, moreover, is the shortest line between the two points.

The azimuth of this line could not be computed until the latitude and longitude of its terminal points were determined. The longitude of the Colorado River end of the line was not known until September, 1889, and it was then found that the tables required in making a sufficiently accurate determination of this azimuth were not available without sending to Washington for them. It was not advisable, however, to delay our triangulation work at the lake, consequently it became necessary to mark in the field a random line with an approximate azimuth, and to leave the completion of the field work, and correction of all monuments to the true position of the boundary line, until the spring of 1890.

The field work was completed on June twenty-second of this year.

In carrying out the work, as above indicated, triangulation stations and signals were established near Lake Bigler as follows:

A. *Mt. Lola, Lat. 39° 25' 53".34.
Long. 120° 21' 55".50.
C. *Round Top, Lat. 33° 39' 43".64.
Long. 120° 00' 05".00.
B. Rose Knuckle.
D. Freel's Peak.
E. Rubicon Point.
F. Observatory Point.
G. Deadman's Point.
H. State Line Point, Iron Monument.
I. Folsom Knob.
J. Bdy. Monument, S. E. lake shore.
K. Point near pine at 212 m. 53 chs.

In the quadrilateral ABCD, all angles, except the one from B to C at D, were measured. In each case four sets of six angles were measured, and the final result is based on the four readings of the two verniers, each representing the aggregate of twenty-four single angles:

Station.	Observer.	Measured Angle.			Corrected for Station Error.			Spherical Excess and Error.	Plane Angle.		
	Triangle ABC.										
A	C. E. Grunsky.....	40°	20'	15".0	40°	20'	11".9	-2".6	40°	20'	09".3
B	L. H. Taylor.....	119	34	43. 7	119	34	40.2	-2 .7	119	34	37.5
C	Wm. Minto.....	20	05	15 .0	20	05	15 .8	-2 .6	20	05	13 .2
	Triangle ADC.										
A	C. E. Grunsky.....	11	57	11 .6	11	57	10 .8	-1 .0	11	57	09 .8
D	L. H. Taylor.....	125	46	45 .6	125	46	45 .6	-1 .0	125	46	44 .6
C	Wm. Minto.....	42	16	07 .5	42	16	06 .6	-1 .0	42	16	05 .6
	Triangle ABD.										
A	C. E. Grunsky.....	28	23	04 .5	28	23	01 .1	-1 .1	28	23	00 .0
B	L. H. Taylor.....	130	19	39 .4	130	19	32 .1	-1 .1	130	19	31 .0
D	L. H. Taylor.....	21	17	30 .0	21	17	30 .0	-1 .0	21	17	29 .0
	Triangle BDC.										
B	L. H. Taylor.....	10	44	50 .0	10	44	51 .9	+0 .6	10	44	52 .5
D	By addition.....	147	04	15 .6	147	04	15 .6	+0 .6	147	04	16 .2
C	Wm. Minto.....	22	10	50 .0	22	10	50 .8	+0 .5	22	10	51 .3

The distance from Mt. Lola to Round Top is 91038.53 metres (log. 91038.53=4.9592252).*

By a system of approximation, without recourse to the method of least squares, it was found that the distance from Rose Knuckle to Freel's Peak (B to D) is 47064.2 metres (log. BD=4.6726901).

In the quadrilateral BDEF, the angles of two of the four triangles were measured and one angle in a third triangle. In each case two sets of six angles each were taken. A set of six being six angles with the telescope direct and six angles with telescope

* See Rep. of U. S. Coast and Geodetic Survey, 1885, Appendix No. 9, page 467.

reversed. In each case one set was measured from right to left and the other from left to right:

Station.	Observer.	Measured Angle.			Correction.	Plane Angle.		
	Triangle BED.							
B	L. H. Taylor	25°	42'	22".5	+1".0	25°	42'	23".5
E	L. H. Taylor	117	04	48 .8	+0 .8	117	04	48 .0
D	L. H. Taylor	37	12	47 .5	+1 .0	27	12	48 .5
	Triangle BFD.							
B	Not measured					50	44	25 .2
F	Not measured					115	12	14 .0
D	Not measured					14	03	20 .8
	Triangle BFE.							
B	By difference	25	02	01 .9	-0 .2	25	02	01 .7
F	Wm. Minto	140	21	55 .0	-0 .3	140	21	54 .7
E	By difference	14	36	04 .6	-1 .0	14	36	03 .6
	Triangle DEF.							
D	L. H. Taylor	23	09	31 .9	-4 .2	23	09	27 .7
E	L. H. Taylor	131	40	53 .4	-1 .8	131	40	51 .6
F	Wm. Minto	25	09	45 .0	-4 .3	25	09	40 .7

In this set of triangles we have already determined BD=47064.2 metres and log. BD=4.6726901. by solving the foregoing triangles it is found that the line E to F, Rubicon Point to Observatory Point, has a length of 21206.9 metres (log. EF=4.3264778).

In the remaining triangles, forming a part of our Lake Bigler triangulation system, angles were measured as follows, each result being based on two sets of four angles each:

Station.	Observer.	Measured Angle.			Correction.	Plane Angle.		
	Triangle EGF.							
E	L. H. Taylor	44°	14'	59"	-8."	44°	14'	51"
G	C. E. Grunsky	79	15	52	-9.	79	15	43
F	Wm. Minto	56	29	34	-8.	56	29	26
	Triangle EIG.							
E	L. H. Taylor	50	30	11	0	50	30	11
I	L. H. Taylor	84	38	26	0	84	38	26
G	C. E. Grunsky	44	51	23	0	44	51	23
	Triangle FHG.							
F	Wm. Minto	61	33	04	-4.	61	33	00
H	Wm. Minto	83	07	03	-3.	83	07	00
G	C. E. Grunsky	35	20	03	-3.	35	20	00
	Triangle EIJ.							
E	L. H. Taylor	13	07	45	+4.	13	07	49
I	L. H. Taylor	93	06	40	+4.	93	06	44
J	L. H. Taylor	73	45	23	+4.	73	45	27

	Triangle IJK.							
I	Wm. Minto.....	22	06	10	.....	*22	06	10
J	Wm. Minto.....	128	50	13	.....	128	50	13
K	By difference.....					29	03	37

In these quadrilaterals and triangles, ordinary methods of calculation established the lengths of triangle sides, and these in turn are made the basis of the calculation of the distances CH and CJ. With due regard to the corrections due to spherical excess, the azimuths of the lines C to H and C to J could then be determined, and the latitude and longitude of the two points H and J were established.

The lengths of triangle sides were found to be as follows:

**AC = 91038.5 metres; log. AC = 4.9592251.
BD = 47064.2 metres; log. BD = 4.6726901.
AD = 75480.2 metres; log. AD = 4.8778330.
AB = 35950.0 metres; log. AB = 4.5556995.
CD = 23241.5 metres; log. CD = 4.3662642.
EF = 21206.9 metres; log. EF = 4.3264755.
CB = 67752.3 metres; log. CB = 4.8309242.
BE = 31967.8 metres; log. BE = 4.5047122.
DE = 22928.0 metres; log. DE = 4.3603660.
BF = 12633.2 metres; log. BF = 4.1015143.
DF = 40275.8 metres; log. DF = 4.6050442.
EG = 17997.3 metres; log. EG = 4.2552069.
FG = 15061.0 metres; log. FG = 4.1778532.
EI = 12749.8 metres; log. EI = 4.1055034.
FH = 8773.5 metres; log. FH = 3.9431723.
CH = 62152.3 metres; log. CH = 4.7934574.
EJ = 13260.2 metres; log. EJ = 4.1225516.
CJ = 33007.9 metres; log. CJ = 4.5186181.
GH = 13338.3 metres; log. GH = 4.1250989.
GI = 13948.7 metres; log. GI = 4.1445348.

The azimuth from C to H is found to be 179° 37' 31".3; and the azimuth from C to J is 187° 30' 21".6.

The latitude and longitude of C (Mt. Round Top) being known, a determination of the latitude and longitude of the two boundary monuments at H and J, respectively, was made in the usual way, as prescribed by the U. S. Coast and Geodetic Survey, with the following result:

H. Iron bdy. monument on State Line Point –
Latitude 39° 13' 19".30.
Longitude 120° 00' 20".45.

J. Granite bdy. monument on southeast lake shore –
Latitude 38° 57' 25".06.
Longitude 119° 57' 05".90.

---

*Doubtful.
** From U. S. Coast and Geodetic Survey. The distance between two primary triangulation stations.

The azimuth of the State boundary line, southeastward from the intersection of the 39th degree of north latitude with the 120th degree of longitude, is 311° 19' 36".99. (See appended letter of Chas. A. Schott.)

The longitude of the State line in latitude 38° 57' 25".06, by calculation with this azimuth, is 119° 56' 14".33; whereas, the von Schmidt boundary monument in this latitude has a longitude of 119° 57' 05".90, as above noted, and is, therefore, 51".57, or four thousand and seventy-three and three tenths feet, west of the correct position of the boundary line point having the same latitude.

The fact was thus verified that the State boundary southeastward from Lake Bigler is incorrectly marked in the field, and that the boundary line monuments should be moved about three quarters of a mile farther east. But this is not all. The boundary line monuments on the northern shore of the lake are not in longitude 120° west of Greenwich, but in longitude 120° 00' 20".45. (The iron monument on the State line Point, Station H, is in latitude 39° 13' 19".30 and in longitude 120° 00' 20".45, as above noted.) They are 20".45, or one thousand six hundred and nine feet, too far west, and do not properly mark the boundary between California and Nevada.

Having, as above set forth, ascertained the longitude of a point on the State line in the same latitude as the granite monument on the southeastern lake shore, the survey was continued from this granite monument, as follows:

N. 89° 59' 43".79 E.

2,465 feet, cross old stage road Carson to Placerville N. E. and S. W.

4,073.3 feet to a point (J') on State boundary line in the same latitude as the granite monument on the lake shore (J).

Set a pine post, 50 inches by 5 inches by 5 inches, marked "CAL." on S. W. face, "NEV." on N. E. face, and "4 m. 39.64 chs." on N. W. face, from which a pine tree, 30 inches in diameter, marked "B. T.," bears N. 71° E., 101 feet distant; a pine stump, 48 inches diameter, bears N. 74 ½° W., 19 feet distant. Made a stone mound around post. Thence on the boundary line with an azimuth of 131° 21' 58".94 toward Lake Tahoe.

19.10 chains, old stage road Carson to Placerville; course N. E.

69.66 chains, small creek from the east.

70.46 chains, to shore of Lake Tahoe, bearing north and south.

Set a tamarack post, 50 inches by 6 inches by 6 inches, marked "CAL." on S. W. face, "NEV." on N. E. face, and "3 m. 49 chs." (distance from point O in lake) on N. W. face, from which:

A pitch pine, 28 inches diameter, bears N. 3 ¾° W., 41 feet distant; marked "B. T."

A pitch pine, 44 inches diameter, bears S. 28 ½° E., 62 feet distant, marked "B. T."

A post set by U. S. G. surveyors, marked "B. M. No. 2, 3169 T. 7," bears N. 22 ¼° W., 79.1 feet distant.

From the point J', which point is on the State boundary line, and 4 miles 39.64 chains distant from the point O in the lake, where the 39th parallel of north latitude is intersected by the 120th degree of longitude west from Greenwich, the survey of the State boundary line was continued in the direction toward the intersection of the 35th parallel of latitude with Colorado River, as follows:

With the same azimuth above noted for this point, azimuth 311° 21' 58".94, ascending steep mountain bearing N. E. and S. W., and noting all distances as though measured from the above named point O in Lake Tahoe.

6 miles 20.80 chains, crest of mountain, course west; thence along S. W. slope of timbered mountain.

6 miles 59.00 chains, cross sag in mountain ridge bearing N. and S., and along east slope of mountain.

7 miles 43.50 chains, spur sloping N. E., descent abrupt, broken, and precipitous. East slope of Sierra Nevada.

Set a flag on spur and from a point on line at the foot of the mountain, in west side of Carson Valley, measure at right angles to N. E. 93.40 chains to a point at which included angle between base and flag on spur is 74° 44'.

Log. tang. 74° 44'.....	10.5639267
Log. base 93° 40'.....	1.9703469
Log. dist. from flag to W. end of base.....	12.5342736

Dist from flag to W. end of base, 342.20 chains.

11 miles 65.70 chains, west end of base, or point in Carson Valley. At western edge of same set a pine post, 50 inches by 5 inches by 5 inches, marked "CAL." on S. W. face, "NEV." on N. E. face, and "11 m. 66 chs." on N. W. face.

Made a stone mound around post.

This point is in lat. 38° 53' 12".37; long. 119° 50' 06".99; and the azimuth of the State boundary line is here 311° 25' 49".72.

13 miles 11.00 chains, Dilucki's, 95 feet to left.

13 miles 17.97 chains, road from Carson to Woodford's; course S. 25° E.

13 miles 53.90 chains, same road; course N. E.

13 miles 70.40 chains, set a cedar post, 55 inches by 7 inches by 5 inches, marked "CAL." on the S. W. face, "NEV." on N. E. face, and "13 m. 70 chains" on N. W. face.

Made mound of stone and earth around post with pits to N. E. and S. W.

Sprague's barn bears N. 38° W., 5 chains distant.

A small house (Sprague's) bears N. 55° W., 8.50 chains distant.14 miles 50.40 chains, von Schmidt's granite monument, marked on N. W. face "O., 221 m. 76 chs.", is at right angles to the S. W., and 2,748.7 feet distant.

15 miles 6.00 chains, set a trap rock, 25 inches by 12 inches by 12 inches, marked "C." on S. W. face, and "N." on N. E. face.

Made a stone mound around the same.

Baldwin's house bears S. 15 ½° E., 8 chains distant.

15 miles 10.30 chains, Carson and Woodford road, course S. W.

15 miles 55.00 chains, Tillman's house, to right about 20 chains.

16 miles 64.00 chains, set a granite stone, 20 inches by 12 inches by 7 inches, marked "C." on S. W. face, "N." on N. E. face.

Made a stone mound around the same.

Joe Dilucki's house bears S. 38° 50' 05".40, longitude 119° 45' 57".84; and the azimuth of the State boundary line at this point is 311° 28' 26".06.

16 miles 77 chains, West Fork of Carson River, 30 feet wide, runs N. 20° E. Beyond which this survey could not be extended owing to lack of the necessary funds.

Referring to the survey made in September, 1889, by William Minto, assisted by L. H. Taylor, at Colorado River, for the purpose of ascertaining with precision the longitude of the point where the center line of Colorado River was intersected at the time of the von Schmidt survey, in 1873, by the 35th degree of north latitude, Mr. Minto reports as follows:

"The work of determining the longitude of the intersection of the middle of Colorado River with the 35th degree of north latitude was very much simplified by the action of the U. S. Coast and Geodetic Survey. Prof. George Davidson, in charge of that work on the Pacific Coast, having, for the purpose of facilitating our observations, sent Assistants Mar and Sinclair to determine the latitude and longitude of The Needles, on the Atlantic and Pacific Railroad, at a date considerably earlier than had been intended, and at a very unfavorable as well as uncomfortable season in that climate. The point thus established is about ten miles south of the 35th degree of north latitude, and, according to the results kindly furnished by Professor Davidson, is in latitude 34° 50' 18".17, and longitude 114° 36' 11".04 west from Greenwich.

"Messrs. Mar and Sinclair also marked the meridian line from their longitude pier to a point on the mesa on the south, and about three hundred metres distant.

"In September, 1889, the Coast and Geodetic Survey Station thus established was connected by a system of triangulation with the monuments established by Col. A. W. von Schmidt on the 35th parallel of north latitude, as determined by him in running the State boundary in 1873. The von Schmidt monuments found standing were the two posts designated in his field notes as being on the line of the 35th degree of latitude – one on the bluff west of the river, and 20.76 chains west of his intersection of the middle of the river by the said parallel of latitude and the other 23.00 chains farther west; both in mounds of stone and earth, and marked as described in his field notes. There is also a stone marked as the notes describe it – "L. 35° N. – in the mound around the most easterly post.

"The cast-iron boundary monument, which is described in the von Schmidt field notes, no longer stands in its original position. That it was moved appears from the certified copy of a letter from W. A. Sailsbury to the Surveyor-General of Nevada, of which a copy is appended to this report. It is now apparently a little north of its original location.

"The triangulation work was carried up on the west side of the Colorado River, the difficulty of making frequent crossings of the stream with the facilities at our disposal rendering it impracticable to extend the triangulation work across the river.

"The meridian line of the Coast and Geodetic Survey Station was extended from the longitude pier north to the southwest bank of the Colorado River, crossing the Atlantic and Pacific Railroad near the eastern end of a tangent extending northwesterly.

Along this straight stretch of railroad a base line, 3,449.98 feet long (1,051.56 metres), was measured, and a system of nine triangles was marked out, connecting this base line with the post set by von Schmidt on the west bank of Colorado River, on his supposed 35th parallel of north latitude.

"The distance from the longitude pier to the intersection of the meridian line with the south rail of the railroad was carefully measured, giving an average result of 1,035.8 feet (315.8 metres).

"The stations were lettered as indicated on the maps accompanying this report.

"Angles were measured and corrected as follows:

Station.	Measured Angle.			Corrected Angle.			Station.	Measured Angle.			Corrected Angle.		
Triangle ABC.							*Triangle BCD.*						
A	59°	59'	40"	59°	59'	43"	B	66°	41'	50"	66°	41'	48"
B	71	24	00	71	24	04	C	81	35	30	81	35	28
C	48	36	10	48	10	13	D	31	42	45	31	42	44
Triangle CDE.							*Triangle DEF.*						
C	40	07	00	40	06	54	D	49	59	00	49	58	57
D	95	43	20	95	43	12	E	89	42	00	89	41	56
E	44	10	00	44	09	54	F	40	19	10	40	19	07
Triangle EFG.							*Triangle GFI.*						
E	68	35	00	68	35	03	G	41	47	00	41	46	57
F	78	25	20	71	25	24	F	115	06	40	115	06	36
G	39	59	30	38	59	33	I	23	06	30	23	06	27
Triangle GHI.							*Triangle HIJ.*						
G	26	20	00	26	19	57	H	121	45	00	121	45	03
H	105	52	20	104	52	16	I	26	17	13	26	17	15
I	48	47	50	48	47	47	J	31	57	40	31	57	40
Triangle IJN.							*Triangle OMN.*						
I	67	03	20	67	03	23	O	28	15	00	28	15	00
J	86	32	30	86	32	34	M	80	58	00	80	58	00
N	26	24	00	26	24	03	N	70	47	00	70	47	00
Triangle NPO.							*Triangle OJN.*						
N	13	08	50	13	08	50	O	24	22	00	24	22	00
P				70	31	35	J				12	49	00
O	96	19	35	96	19	35	N	142	49	00	142	49	00

"Station X is the U. S. Coast and Geodetic Survey Station, Needles. (Longitude Pier.)

"Station A is the east end of the base.

"Station C is the west end of the base.

"Station B is in the meridian through A.

"Station M is von Schmidt's post on supposed 35th parallel.

"Station N is von Schmidt's post on supposed 35th parallel.

"Station Q is iron boundary monument (present position).

"Station L is von Schmidt's intersection of supposed 35th parallel with Colorado River.

"Station L' is the intersection of the 35th degree of the latitude and the middle of Colorado River, as the river was found by von Schmidt in 1873.

"Station P is the flagstaff on Camp Mojave.

"Station O is a point near the flagstaff.

"By a solution of the foregoing triangles the following results were obtained:

Measured AC = 1051.56 metres, and XA = 315.8 metres.

Log. AC = 3.0218341.	Log. AB = 2.9202788.
Log. BC = 2.9826393.	Log. CD = 3.2249829.
Log. BD = 3.2572460.	Log. DE = 3.1910244.
Log. CE = 3.3797524.	Log. EF = 3.2642375.
Log. DF = 3.3800888.	Log. FG = 3.4251665.
Log. FI = 3.6550468.	Log. GI = 3.7882599.
Log. HI = 3.4500271.	Log. GH = 3.6795074.
Log. IJ = 3.6558778.	Log. HJ = 3.3725645.
Log. JN = 3.9720686.	Log. IN = 4.0070702.
Log. NQ = 2.984725.	Log. NP = 3.725521.
Log. NO = 3.702591.	Log. JO = 4.137868.

Log. OP = 3.085068, or OP = 1,216.4 metres.

"The line OP was measured as a check on this work, and was found to be 1,215.8 metres long.

"The reductions to latitude and longitude were made according to the U. S. Coast and Geodetic Survey methods, and the detail of the reduction work is omitted.

"Station N was found to be in the latitude 35° 00' 23".39, and in longitude 114° 39' 23.61, and the terminal point of L of the Schmidt boundary survey of 1873 is in latitude 35° 00' 23".39, and in longitude 114° 39' 07".08.

"Incidentally the latitude and longitude of the flagstaff at Camp Mojave was also established by this work, as follows: Latitude 35° 02' 39".22, and longitude 114° 37' 14".48.

"As nearly as could be determined form the von Schmidt surveys of 1873, Colorado River from L to L' had a southeasterly course, and this course, as nearly as it could be determined, was made the basis of the computation of the longitude of the intersection of the 35th degree of latitude with the center line of Colorado River in its position of 1873. The latitude 35° 00' 23".39, and longitude 114° 39' 07".08 of the point L, with an azimuth 322° 32' 25".65 from L to L', the latitude of L' being 35°00' 00", established the longitude of L' at 114° 38' 45".30, and the distance from L to L' was found to be 907.97 metres.

"The boundary line from Lake Bigler southeastward to Colorado River must, therefore, connect a point in latitude 39° 00' 00", longitude 120° 00' 00", with a point at Colorado River in latitude 35° 00' 00" and longitude 114° 38' 45".30.

"From Colonel von Schmidt it was learned before the above field work was undertaken that he was directed by the department in authority to make the center line of the Colorado River, as he found it in 1873, the objective point of his survey, and not the river as it might have been at the date of the admission of California. It was for this reason that L' was established as above noted. The correct azimuth of the boundary line northwestward from the point L' is 134° 33' 09".29, and this line, which the above work indicates as the correct position of the State boundary, passes about four hundred and fourteen feet to the southwest of the von Schmidt terminal point L.

"The iron monument O now stands in latitude 35° 00' 52".91 and longitude 114° 39' 36".14, and is one thousand two hundred and sixty-four feet due east of the correct position of the State line.

"The field work at Colorado River was done under somewhat unfavorable conditions. The heat was intense, except for two days, when there was a heavy north wind, filling the air with dust and sand. Transportation facilities were particularly unsatisfactory. Acknowledgements in connection with this work are due to Captain Bowman, commanding at Camp Mojave, who placed the Government boat at our disposal and kindly rendered us all the assistance in his power. We are also under obligations to Mr. W. S. Hancock, Master Mechanic of Atlantic and Pacific Railroad at The Needles, and to Messrs. Monahan and Murphy, of the same place, for assistance and courtesies extended."

As soon as the results of the work at Colorado River became available, a calculation of the azimuth and length of the line from the point in Lake Bigler to Colorado River was made, at our request, and for our use, by Chas. A. Schott, of the U. S. Coast and Geodetic Survey, and reported by him as follows, under date of January 6, 1890:

Azimuth from Lake Bigler end of line to the Colorado River end, 311° 19' 36".99. Distance, 651,056 metres = 404.551 miles.

Azimuth from the Colorado River end of the line to the Lake Bigler end, 134° 33' 09".29.

The limited appropriation available for the purpose of making the State line survey, precluded the possibility of marking more than a few miles of the line southeastward from the lake with stakes in mounds of stones. This work could not be extended farther than across the western portion of Carson Valley, as shown by the notes above recorded and the map accompanying this report.

Three copies each of two maps are filed herewith, and made a part of this report, as follows:

Sheet No. 1. – "State boundary survey. Map of the boundary line of California near Lake Bigler, showing position of the U. S. Coast and Geodetic Survey primary stations, Lola and Round Top, and the triangulation work of June and October, 1889, also the boundary line as surveyed and marked in the field by A. W. von Schmidt in 1872 and 1873, and the position of the boundary line southeastward from the lake, as surveyed by C. E. Grunsky and William Minto in 1889 and 1890, under instructions from Theo. Reichert, State Surveyor-General."

Sheet No. 2. – "State boundary survey. Map of the boundary line of California at the intersection of the 35th degree of north latitude with Colorado River, showing position of the U. S. Coast and Geodetic Survey station, Needles, and the triangulation work of William Minto in September, 1889, done under instructions from Theo. Reichert, State Surveyor-General."

We append to this report:

1. Letter of appointment and instructions.
2. Latitude and longitude determination at Verdi, by Chas. A. Schott.
3. Azimuth and length of State boundary line, Lake Tahoe to Colorado River. Letter of Chas. A. Schott.
4. The iron monument at Colorado River. Letter of W. H. Sailsbury.

5. A. W. von Schmidt survey, 1872 and 1873. Extracts from field notes.

We have to thank Superintendent T. C. Mendenhall, of the U. S. Coast and Geodetic Survey, for the kind assistance rendered us, and especially are our thanks due to Prof. George Davidson, in charge of the Pacific Coast division of this department, for advice and prompt response to our requests for reliable data.

We have also to acknowledge courtesies extended by Gov. C. C. Stevenson, of Nevada, and the interest taken in our work by Hon. Cyrus Coleman, of Markleeville, Alpine County, and to thank him for assistance rendered while the station Round Top was first occupied in June, 1889.

Our field work was completed, as far as possible, in November, 1889, but it was necessary to set temporary monuments on a random line, because the correct line could not be marked in the field until the computation memoranda were received from Washington late in January of this year, at which time the great depth of snow on the Sierra Nevada precluded the possibility of reaching the line at those points where permanent monuments have since been set.

Our work could not, therefore, be completed until after the melting of the snow in June, 1890, and it was not therefore possible to transmit the result of our work at an earlier date.

We have also to state that no outfit was purchased for use on the survey. Tents were kindly furnished us by Adjutant-General R. H. Orton, and all necessary instruments were furnished by us and our assistants. There is not property in our hands to be sold for the benefit of the State, as provided in the law authorizing this survey.

Respectfully submitted.

C. E. GRUNSKY,
WM. MINTO,
In charge of Survey.

SAN FRANCISCO, July 22, 1890.

LETTER OF APPOINTMENT AND INSTRUCTIONS.

OFFICE SURVEYOR-GENERAL, SACRAMENTO, May 7, 1889.

C. E. GRUNSKY *and* WILLIAM MINTO, *Civil Engineers:*

GENTLEMEN: Whereas, the Legislature of this State passed an Act to provide for the correction and establishment of a portion of the eastern boundary line of this State (see Statutes 1889, page 38, also a copy of said Act inclosed herewith), and in order to carry out the intent of said Act, you are hereby appointed to make such surveys as you may deem necessary, and act under the following instructions:

I making the survey of the State boundary line southeastward from Lake Tahoe you will, so far as practicable, make the latitude and longitude as established by the U. S. Coast and Geodetic Survey the basis of your work. Connect your triangulation system, which will be necessary to fix the point at which the State boundary line intersects the southeastern shore of Lake Tahoe, with the U. S. Coast and Geodetic Survey station at Round Top, and with other U. S. Coast and Geodetic stations if convenient, and determine the error, if any there be, in the position of the State boundary line at Lake Tahoe. Should you find that the boundary line, as marked in the field by A. W. von Schmidt in 1873, varies to any considerable extent from the intended position of the State boundary, you will then proceed to the point where the boundary line intersects Colorado River, and by proper connection with the nearest available point at which latitude and longitude have already been determined, you will establish its geographical position and make the same the basis of the necessary calculation of the azimuth of the State boundary line southeastward from Lake Tahoe.

When this is done, you will proceed with the survey of the boundary line in conformity of law above cited. You will consult with Prof. Geo. Davidson for advice concerning methods to pursue in using and connecting with the work of the U. S. Coast and Geodetic Survey. You will keep an accurate account of all expenses which are chargeable against the appropriation named in the Act, and, when practical, take receipts for all sums of money expended by you on this work.

Your compensation will be $20 per day each, and necessary expenses while engaged in field operations.

When the work is completed you will make a full report to this office.

I am, gentlemen, respectfully, your obedient servant,

THEO. REICHERT,
Surveyor-General.

LATITUDE AND LONGITUDE DETERMINATION OF VERDI.

EXTRACT FROM A REPORT OF CHAS. A. SCHOTT, ASSISTANT IN CHARGE OF COMPUTING DIVISION U. S. COAST AND GEODETIC SURVEY.

Comparison of results for longitude in 1872, by George Davidson and S. R. Throckmorton, with the results of longitude in 1889, by C. H. Sinclair and R. A. Mar.

According to letter of C. H. Sinclair, the old triangular station Verdi Bluff is 246.51 metres south of transit, and 106.63 metres east of transit, hence:

Latitude of Verdi Bluff.....	39° 31' 05".11
246.51 metres.....	7.993
Latitude of transit 1889.....	39° 31' 13".103
Longitude of Verdi Bluff.....	119° 58' 46".81
106.63 metres.....	4.464
Longitude of transit 1889.....	119° 58' 51".274
or,	$7^h\ 59^m\ 55^s.418$

From the Sinclair and Mar determination of 1889:

Longitude difference – Sacramento and Verdi....	$0^h\ 6^m\ 02^s.874$
Longitude of Sacramento.....	8 05 58 .29
Longitude of Verdi.....	$7^h\ 59^m\ 55^s.416$
or,	119° 58' 51".240

Showing an almost perfect accord.

AZIMUTH AND LENGTH OF STATE BOUNDARY LINE, LAKE TAHOE TO COLORADO RIVER.

———

COMPUTING DIVISION, COAST AND GEODETIC SURVEY,
January 6, 1890.

Mr. B. A. COLONNA, *Assistant in charge Office and Topography:*

DEAR SIR: In response to the accompanying letter of Mr. Minto, of December 19, 1889, and referred to me, I have made the desired computation and find the azimuth of the line from Lake Tahoe end to the Colorado River end, 311° 19' 36".99, according to the data given. In the absence of a definition of the line between the two given positions, I took it to be a geodetic line, *i.e.*, the shortest distance between the terminal points.

As it was but little more trouble to compute also the opposite azimuth – the distance and azimuth for the two elliptic plane arcs – I give them also, viz:

Azimuth and geodetic line from the Colorado River end to the Lake Tahoe end, 134° 33' 09".29; distance between the termini, 651,056 metres, or 404.551 statute miles. Azimuth of elliptic arc at Tahoe end, 311° 19' 36".21, and azimuth of elliptic arc at Colorado River end, 134° 33' 08".56. *Vide* accompanying computation.

The two plane arcs when widest apart (about the middle of the line, say when two hundred miles out from either end) gap nearly 1.8 metres, or about six feet; here the geodetic passes about midway between them; it nowhere touches either arc; in fact it has not even the first element in common with them at the end points. A line of alignment touches the arcs at the termini, but it, like the geodetic, is a tortuous line. All of these connecting lines mentioned are practically of equal length, as it would take a magnifying glass to see the difference.

Yours respectfully,

CHAS. A. SCHOTT,
Assistant in charge Computing Division.

THE IRON MONUMENT AT COLORADO RIVER.

CORRESPONDENCE SHOWING THAT IT NO LONGER STANDS IN ITS ORIGINAL POSITION.

FORT MOJAVE, ARIZONA TERRITORY, March 17, 1890.

To Hon. SURVEYOR-GENERAL *of the State of Nevada:*

SIR: As the iron corner post between the State of Nevada and the State of California was washed over the bluff into the river by the last overflow of the Colorado River, and would surely have been lost in the next overflow, I went to work and hired ten Mojave Indians to get it out of the water and to dig a wagon road up to the bluff, and with my team hauled it up, and reset it again still farther back from the river, so it is safe now from an overflow.

As I have been at considerable expense and trouble to replace it, you will please do me the favor to write and let me know how to proceed in getting pay from the State for my trouble, and oblige yours, etc.,

W. H. SAILSBURY.

NOTE. – The above letter is contained in the report of the Surveyor-General and State Land Register of the State of Nevada for the years 1877 and 1878.

J. E. JONES,
Surveyor-General and State Land Register.

A. W. VON SCHMIDT SURVEY OF 1872 AND 1873.

EXTRACTS FROM FIELD NOTES.

Field notes and description of the monument established by me for the northeast corner of the State of California.

Having ascertained, from actual survey and measurement, that the 120th degree of longitude, as established by David G. Majors, U. S. Astronomer and Surveyor, at the 42nd degree of north latitude, for the northeast corner of the State of California, at a distance of one hundred miles due south from said corner, viz.: at north latitude 40° 33' 03", fell 3 miles 24 chains 51 links to the west of my flag line brought up from a point at Crystal Peak, which point I established by telegraph as the 120th degree of longitude west from Greenwich, I concluded to adopt my own line as the correct longitude.

I therefore made calculations for convergence of meridians between north latitude 40° 33' 03" and north latitude 42°, and found the convergency for the difference of latitude 1° 26' 57" to be 5 chains 78 links.

From Major's corner I therefore ran east, var. 18° 37' east, 264 chains 51 links, less 5 chains 78 links, convergency of meridians in 100 miles, equal to 258 chains 73 links, or 3 miles 18 chains 73 links, at which point I established a large stone monument for the northeast corner of the State of California.

This monument is set in a core of juniper trees on the south bank of Twelve-Mile Creek, 1° 20' south of edge of bluff, and a sketch thereof is here given.

The monument consists of a post 8 feet long and 8 inches square, marked on the north side, "O. Lat. 42 deg.;" east side, "Nevada;" south side, "1872. Longitude 120 deg.;" west side, "California." This post is solidly built into a stone mound 6 ½ feet high with 8-foot base, and projects 3 feet from the mound.

Deposited a charred block 8 inches by 4 inches square, marked on its four sides, respectively, "Nevada," "California," "Long. 120°," "Lat. 42"

No pits, too rocky. At the half height of the mound four large stones are inserted, the one facing to the south marked "1872. A. W. von Schmidt. Long. 120°, Lat. 42°;" one facing west marked "C;" one facing to the north marked "O;" and the other, facing to the east, marked "N."

BEARINGS.

A juniper tree, 32 inches diam., bears N. 53 45' E., distant 80 links; marked tree "B. T., NEV."

A juniper tree, 12 inches diam., bears N. 85° 35' E., distant 94 links; marked tree "B. T., NEV."

A juniper tree, 12 inches diam., bears S. 53° 20' E., distant 62 links; marked tree "B. T. NEV."

A juniper tree, 40 inches diam., bears S. 70° W., distant 78 links; marked tree "B. T., CAL."

A juniper tree, 22 inches diam., bears N. 38° 30' W., distant 35 links; marked tree "B. T., CAL."

Large single rock on summit of Mount Bidwell bears S. 75° 05' W.

South on 191st Mile.

Var. 16° 30' East.

Ascend from post.

Chains.

4.00 Top of ascent and on ridge.

19.00 Descend east slope of mountain.

40.57 Cross trail, course east and west.

80.00 Set a cast-iron monument of the following dimensions, viz.: 8 feet long, 12 inches square at the bottom, and 6 inches square at the top; 2 feet in the ground, and set in with rock. Marked monument with raised letters, cast thereon as follows, viz.: on north side, "Oregon, 191 miles"; on west side, "California"; on east side, "Nevada"; and on south side "1872. Longitude 120° west of Greenwich. A. W. von Schmidt, U. S. Astronomer and Surveyor."

Deposited charred black marked "C. N."

Dug a circular trench around monument, 8 feet in diam. And 14 inches wide, throwing the earth out form the monument.

Made pits as per instructions. From which –

A pine tree, 30 inches diam., bears N. 66° 40' W., distant 1 chain 20 links; marked tree "B. T., CAL."

High pointed peak west of Lake Tahoe bears S. 57° 45' W.

A large pine tree, 32 inches diam., bears S. 60° 30' W., distant 70 links; marked tree "B. T., CAL."

Blazed line throughout mile.

South on 192nd Mile.

Var. 16° 15' East.

3.50 To a pine tree, 24 inches diameter, on the north edge of Lake Tahoe. Marked tree on north side, "O. 191 miles 3.50 chains"; west side, "CAL."; east side, "NEV."; and west side, "1872. L. 120°."

The shores of the lake bear off east and west; a point, or reef of rocks, 15 chains west of this point, makes out a short distance into the lake, and is the division between Agate and Crystal Bays (so called).

The lake shore being at 191 miles 3 chains 50 links, and the intersection of the line with the 39th degree of north latitude being 206 miles 78 chains 45 links south of the initial point at the 42nd degree of north latitude, the remaining

portion of this line, namely, 15 miles 74 chains 95 links, falls into Lake Tahoe.

About three quarters of Lake Tahoe is in the State of California, and one quarter in the State of Nevada.

I proceeded to the field on the fifteenth of April, 1873, and continued the survey of the eastern boundary of the State of California, commencing at the 191st mile-post, set near the northerly shore of Lake Tahoe.

At the 191st mile-post, or monument, I took the following bearings:

Cave Rock, east side of Lake Tahoe, bears S. 14° 24' E.

High Peak, south end of lake, bears S. 12° 52' E.

High Rock Peak, west side of Lake Tahoe, bears S. 22° 52' W.

High Peak, west side of Lake Valley, bears S. 12° 46' W.

From the 191st mile-post I ran north on the 120th degree of west longitude.

Var. 16° 30' E.

North. Chs.	Lks.	
6	70	To a point or elevation 200 feet above the level of the waters of the lake, which point I established as a fire signal station for triangulating across Lake Tahoe.

I also set up a large signal flag on top of a high mountain 13 chains due south on the 187th mile-post, to be used as a back sight in conjunction with the fire signal station.

From fire signal station at 191st mile-post I sighted a line due south on the 120th meridian, and found the same passed over a sharp mountain peak a long distance south of the south end of the lake, and also over a small snow patch on an open space between two trees on a small hill near the southerly shore.

Having procured the services of the steamer "Truckee," I proceeded across the lake in a direct line toward my objects on the southern end.

The day was very favorable for my operations, there was scarcely any current and not a breath of air stirring, so that I was enabled to keep my fore and back sights constantly in line.

On reaching the southern shore of the lake I set up a flag at point of landing.

I next proceeded to take observation of polaris on its greatest eastern elongation on the night of April 18, 1873, by field transit. Local mean time, $5^h\ 11^m\ 35^s$ a.m.; latitude, 38° 56' 47".

Log. Cos. Decl. 88° 37' 53" =	8.37814
Log. Cos. Lat. 38° 56' 36" =	9.89085
Log. Sin. azimuth =	8.48729
Azimuth = 1° 45' 35".6	
Obs. by needle =	14° 41' 30".0
E. E. + A. =	1° 45' 35".6
	16° 27' 56".6 = Var. east.

Having laid off the true meridian, I proceeded to observe my fire signals and flag at the northerly end of the lake, and found that by moving my position at the south end of the lake, two chains to the west from the flag set up at the point of landing, I was on the true 120th meridian.

I continued these observations for three days and nights in succession, using flag signals by day and fire signals by night, until I became satisfied I was on the true meridian as brought down from Verdi, where it has been established by telegraph, namely: the 120th degree of longitude west from Greenwich.

Finding the southerly shore of the lake at the 120th degree of west longitude to be wet, low, and swampy, unfit for an observatory station, I concluded to locate that place on higher ground, and at a more convenient place of access.

For this purpose, I therefore ran a line from the 120th degree of west longitude east on a course N. 89° 58' 30" E., 77 chains and 55 links; thence north 13 chains and 25 links, where I set up blocks, mounted the meridian telescope and zenith sector thereon, and, after carefully adjusting the same, proceeded to take a series of observations for both latitude and longitude.

This Astronomical Station No. 1 is 77 chains 55 links east of the 120th degree of west longitude, or 120° 00' 00".0

Less	1' 04".7
Longitude =	119° 58' 55".3

The latitude being 38° 56' 45", difference in time, $0^h\ 00^m\ 04^s.32$. (See astronomical observations and notes of Station No. 1.)

I then proceeded to run the necessary base line for the purpose of triangulating the distance across Lake Tahoe, field notes of which are as follows, viz.:

Commenced at point on 120th degree of west longitude, at south end of Lake Tahoe, from which point –

Top of Cave Rock bears N. 22° 52' E.

High peak bears S. 51° 08' E.

High rock peak, west side of lake, bears N. 63° 41' W.

High peak, Lake Valley, bears S. 64° 30' W.

Butte Peak bears N. 43° 13' E.

The shore of the lake bears off S. W., then turns to the N. W.

On the east side of line, the shore bears off N. E. for 10 chains, thence a little north of east.

To the south, low timber for the distance of a mile, then dense pine timber.

Land has but little rise for 4 or 5 miles, where the mountains rise abruptly to the N. E. and N. W.

From this point I ran due east, at right angles to the 120th degree of west longitude.

Var. 16° 24' E.

East. Chs.	Lks.	
63	13	Across marsh, enter pine timber.
77	84	Due south of observatory station; distant 13 chains 25 links.
80	60	From which –
		Rowland's Hall, south gable of house, bears N. 35° 13' W.
		Mr. Caldwell's house and store bears N. 3° 05' E.
88	80	From which –
		Mr. Rowland's house bears N. 52° 55' W.
		Mr. Caldwell's house bears N. 16° 39' W.
102	00	Rowland's Hall bears N. 66° 37' W.
		Caldwell's house bears N. 41° 26' W.
170	00	To wet meadow, sand.
178	00	To little water and flat.
189	00	Across same, fine grass.
218	52	From which –
		Included angle on fire signal, on north end of Lake Tahoe, is 82° 04'.

Nat. Tan. 82° 04' =	7.1759437
Multiplied by base, 218 chs. 52 lks. =	218.52
	143518874
	358797185
	574075496
	71759437
	143518874
	1568.087217324

Divided by 80 = 19 miles 48 chains 9 links, the distance from fire signal at north end of lake to point of triangulation at south end of lake.

	M.	Chs.	Lks.
Total distance triangulation.....	19	48	09
Less distance from fire signal station to 191st mile-post		6	70
Making.....	19	41	39

Equal to 1,561 chains 39 links.

The distance from 39° of north latitude to latitude 38° 56' 45" on the 120th degree of west longitude is 39° 00' 00"

Less.....38 56 45

00° 03' 15"

3' 15" = 298 chains 89 links = 3 miles 58 chains 89 links.

Recapitulation

	Chs.	Lks.
Chained distance from 42nd degree north latitude to 191st mile-post	15,380	00
Distance across lake from 191st mile-post to point of triangulation.....	1,561	39
Total from 42nd degree north latitude to point of triangulation	16,841	39
Deduct distance of observatory station (latitude 38° 56' 45") N. of base line...	13	25
	16,828	41
Deduct difference between latitude 39° and latitude 38° 56'45" north (3' 15").	298	89
Total from 42nd degree to 39th degree north latitude.....	16,529	25

Equal to 206 miles 49 chains 25 links, the distance to the intersection of the 39th degree of north latitude with the 120th degree of longitude west from Greenwich.

	M.	Chs.	Lks.
Calculated distance between the 42nd and 39th degree N. latitude is....	206	78	44 ½
Measured distance.....	206	49	25
Difference.....	000	29	19 ½

I next proceeded to lay off azimuth of transit line, running in a southeasterly direction, from the 39th degree of north latitude, where it intersects the 120th degree of west longitude in Lake Tahoe, to where the 35th degree of west latitude intersects the middle of the channel of the Colorado River.

To do this it was necessary to know the longitude at the terminus of the Colorado River.

There being no telegraph facilities at that point, I concluded, for the time being, to assume the longitude of that place as determined by Lieutenant Ives in 1863 (which was kingly furnished me by the late State Surveyor-General of California, J. F. Houghton, who had previously run this line south to the White Mountains), to run a line to Ives Point, then establish the intersection of the 35th degree of north latitude with the middle of the channel of the Colorado River, by a series of my own observations, correct my line back, should I find error in longitude, and mark and establish the true line in the field, all of which was done.

Longitude at the intersection of the 35th degree of north latitude with the middle of the channel of the Colorado River, as established by myself, is 114° 37' 58".50. Ives' longitude for that point, 114° 36' 00". The computations of both azimuth lines are herewith accompanying and referred to.

The initial point at the 39th degree of latitude falling in Lake Tahoe, where I could not set an instrument, it became necessary to find the azimuth line at some point on the line southeasterly thereof.

I therefore ran a line from the intersection of longitude 120° 00' 00" with north latitude 38° 56' 45", at the south end of the lake, on a course N. 89° 58' 30" E., a distance of 7,536 yards, or 342 chains 54 ½ links, to a point on the azimuth line, which is 10,005 yards, or 454 chains 77.3 links, or 5 miles 54 chains 77 links, on the course S. 48° 45' 09" E. from the intersection of the 120th degree of longitude west from Greenwich, which point is at latitude 38° 56' 45" north, and longitude 119° 55' 13".6, as per accompanying azimuth calculations.

At this point I set up temporary post.

Thence ran towards Lake Tahoe, N. 48° 51' 59" W., 1 mile 57 chains 14 links, to the lake shore; the remaining distance to the initial corner in Lake Tahoe being 3 miles 77 chains 63 links.

At the lake shore I set a cut-granite monument, 10 ½ inches square at the base, 8 ½ inches at the top, 6 feet long, 2 feet in the ground; marked same with cut letters on N. W side, "O. 210 miles 76 chains 07 links"; S. E. side, "1873"; N. E. side, "NEV."; and S. W. side, "CAL."

Deposited charred block marked "C.N."; made mound of stone 8 feet diam., 3 feet high. From which –

A pine tree, 48 inches diam., distant 47 links, bears S. 63° 03' W.; marked tree "B.T., CAL."

Another pine tree 30 inches diam., distant 174 links, bears S. 22° 45' W.; marked tree, "B.T., CAL."

A large pine tree 6 feet diam., distant 1 chain 54 links, bears N. 54° E; marked tree, "B.T., NEV."

The line runs to the S. W. of Mr. Lapham's wharf.

The lake shore bears off N. and S.; a high rocky mountain peak bears N. 77° 45' W.

Having completed all the requisite observations at Lake Tahoe, I next proceeded on my line south to the Colorado.

On 211th Mile.

Azimuth S. 48° 43' 05" E.; var. 16° 38' 42" E.

Chs.	Lks.	
80	00	Set a cottonwood post 10 inches square, 8 feet long, marked same on N. W. side, "O. 211 miles."; N. E. side, "NEV."; S. W. side, "CAL."; and S. E. side, "1873." Post set in low, wet ground; no mound.

On 212th Mile.

Azimuth S. 48° 42' 34" E.; var. 16° 38' 42" E.

Chs.	Lks.	
27	48	Enter window of Mr. Lapham's house.
28	63	Through house porch. Set wooden monument 8 inches square, 6 feet long, marked on N. E. side, "NEV."; S. W. side, "CAL."
30	02	Set cut stone granite monument on southeast side of road leading to Carson and Virginia Cities. Monument 10 ½ inches square at base, 8 ½ inches square at top, and 6 feet long, set 2 feet in the ground. Marked same, N. W. side, "O. 211 miles 30 chains"; N. E. side, "NEV."; S. W. side, "CAL."; and S. E. side, "1873."
		From which –
		Large pine tree 50 inches in diam., distant 40 links, bears N. 52° E.; marked tree, "B.T., NEV."
		Another pine tree 24 inches diam., distant 1 chain 70 links, bears S. 36° 15' W.; marked tree, "B.T., CAL."
30	84	To corral fence N. E. and S. W. road; same course.
35	00	Cross corral fence, bears S. 50° E.
37	25	Pass 5 links N. E. of large pine tree 5 feet diam.; marked tree, "B.T., CAL."
50	00	Commence ascending mountain; foothills bear off N. E. and S. W.
70	10	Pass between the pines, each 3 links from line; that to the S. W., 30 inches diam., marked "CAL."; that to the N. E., 14 inches diam., marked "NEV."
80	00	Set pine post 6 inches square, 7 feet long; marked same on N. W. side, "O. 212 miles"; N. E. side, "NEV."; S. W. side, "CAL."; and S. E. side, "1873"; made mound of stones 6 feet diam., 3 feet high. Deposited charred block marked "C. N." Made pits as per instructions.
		From which –
		A spruce tree, 12 inches diam., bears N. 71° 45' E., distant 26 links; marked tree, "B.T., NEV."
		A pine tree bears S. 54° W., distant 92 links, 14 inches diam., marked tree "B.T., CAL."
		A pine tree, 26 inches diam., distant 77 links, bears S. 26° 15' E.; marked tree "B.T., NEV."
		This mile runs through fine pine timber, with some spruce; soil sandy. Last one mile containing considerable quantity of granite bowlders. Land sloping to the N. W. blazed line through timber.

On 213th Mile.

Azimuth S. 48° 42' 03" E.; var. 16° 38' E.

Chs.	Lks.	
13	00	Ascend gently.
30	00	Ascend steep mountain.
53	21	To point on Lat. 38° 56' 45", brought up from 120th degree of west longitude, where I perpetuated Observatory Station No. 1 by setting up cast-iron monument 8 feet long, 12 inches square at base, 6 inches at top, 2 feet in the ground, in rock mound 8 feet diam., 4 feet high. Raised letters case on monument, as follows: N. W. side, "O. 212 miles 53 chains"; N. E. side, "NEV."; S. W. side, "CAL."; and S. E. side, "Lat. 38° 56' 45", Long. 119° 55' 13". 1873. A. W. von Schmidt, U. S. Astronomer and Surveyor." Also marked pine tree, 8 inches diam., on N. W. side, "O. 212 miles 53 chains 21 links"; N. E. side, "NEV."; S. W. side "CAL."; and S. E. side, "1873." Large fir tree, 46 inches diam., distant 88 links, bears N. 14° E.; marked tree "B. T., CAL." Another fir tree, 30 inches diam., distant 71 links, bears S. 80° W.; marked tree "B. T., CAL." Small fir tree, 12 inches diam., distant 68 links, bears S. 2° 15' W.; marked tree "B. T., CAL." This point is very prominent. The monument can be plainly seen.
80	00	Set pine post, 6 inches by 6 inches square, 7 feet long; marked same, N. W. side, "O. 213 miles"; N. E. side, "NEV."; S. W. side, "CAL."; and S. E. side, "1873." Made mound of earth and stone 6 feet diam., 3 feet high. Deposited charred block marked "C. N.," and made pits as per instructions. Blazed line throughout.

On 610th Mile.

Azimuth S. 45° 31' 59" E.; mag. var. 14° 47' E.

Chs.	Lks.	
80	00	Set cottonwood post, 6 feet by 6 inches by 6 inches, deposited charred block, and made mound of stone and earth 6 feet diam., and 3 feet high. Black Peak bears S. 52° 38' W.; flagstaff, Camp Mojave, N. 75° 00' E.; my observatory station on random line, N. 79 ¼° E. Land slopes toward the east.

On 611th Mile.

Azimuth S. 45° 31' 22" E.; mag. var. 14° 45' E.

Chs.	Lks.	
80	00	Set cottonwood post, 6 feet by 6 inches by 6 inches, marked "O. 611 miles." Made mound of stone and earth 6 feet diameter and 3 feet high. Black Peak bears S. 62° 05' W.; flagstaff, Camp Mojave, bears N. 59° 15' E.; my observatory station bears N. 54° 15' E.

On 612th Mile.

Azimuth S. 45° 31' 06" E.; mag. var. 14° 45' E.

Chs.	Lks.	
22	37	Set cottonwood post, 6 feet by six inches by 6 inches, on a prominent point, marked "O. 611 m. 22 chs." Made a large mound 8 feet diameter, 3 feet high. My observatory station bears N. 51° 30' E.; flagstaff, Camp Mojave, bears N. 53° 15' E.; Sharp Peak, east of Colorado River, S. 87° 25' E.; Great Thumb bears S. 80° 50' E.
59	87	To point selected for perpetuating Astronomical Station No. 5 on the Colorado River, and as witness to corner in same. Set cast-iron monument 6 inches square at top, 12 inches square at base, 6 feet long, 2 feet in ground, with raised letters cast thereon, viz.: N. W. side, "O. 611 miles, 59 chains"; N. E. side, "NEV."; S. W. side, "CAL."; S. E. side, "1873. A. W. von Schmidt, U. S. Astronomer and Surveyor, witness to corner in river." Deposited charred block; made mound of stone 8 feet diameter and 4 feet high. Twenty (20) links from this monument, on the line to the southeast, I set a cottonwood post, 6 feet by 7 inches by 7 inches, marked "O. 611 miles 60 chains, etc.," from which flagstaff, Camp Mojave, bears N. 44° 30' E.; my observatory station bears N. 39° 43' E.; Black Peak bears N. 69° 10' W.; High Peak bears N. 59° 09' W. These two monuments are on a conspicuous point, with a view to durability, and are witnesses to the intersection of latitude 35° north with longitude 114° 37' 53".5, at the middle of the channel of the Colorado River.
63	67	To right bank of the Colorado River, which at this point has a course S. 21 ½° E. At a distance of 30 chains down stream it bears off S. 52° 30' E. for about a mile; thence runs southerly. The remaining portion of the line, to wit: 41.29 chains to latitude 35° N., is in the river.

On 613th Mile.

Chs. Lks.

29 96 To the intersection of north latitude 35° with middle of the channel of the Colorado River, at longitude 114° 37' 53".5 west from Greenwich.

From north latitude 39° to the center of the channel of the Colorado River, at latitude 35°, the total measured distance is 405 miles 26.52 chains; calculated distance is 405 miles 5.73 chains; difference, 20.79 chains.

Total distance from Oregon to the Colorado River is 612 miles 24.96 chains.

Field Notes Connecting my Random Line with True Line at the Colorado River.

I found my observatory station on random line on right bank of the Colorado River to be in latitude 35° 01' 53".43 north, longitude 114° 36' 45".45 west from Greenwich. From which –

Flagstaff, Camp Mojave, bears N. 59° 15' E.; Sharp Peak, east of Colorado River, bears N. 79° 50' E.; Black Peak bears S. 60° 30' W.; Rock, on straight edge on low mountain, bears N. 66° 19' W.; Great Thumb bears S. 73° 40' E.

From this point to reach latitude 35° N. at a point due south the difference is 0° 01' 53".43 = 173.75 chains. I therefore ran as follows:

West 17.46 chains; thence
South 20.28 chains to shore of Colorado River; thence
West 14.93 chains; thence
South 10.13 chains to river; thence
West 52.32 chains; thence
South 30.33 chains to river; thence
West 29.86 chains to a slough; thence
34.55 chains across slough; thence
44.13 chains to bluff; thence
South 113.01 chains to 35th degree north latitude.

Making the total from observatory station on random line, southing, 173.75 chains; westing, 128.74 chains.

At this point set a cottonwood post, 6 feet by 6 inches by 6 inches, marked on N. side, "1873"; S. side, "Lat. 35°"; E. side, "von Schmidt, U. S. Sur." Made mound of earth and stone 6 feet by 3 feet.

Flagstaff, Camp Mojave, bears N. 41° 41' E.; observatory station bears 36° 30' E.; Black Peak bears S. 72° 30' W.; High Peak, same range, bears N. 55° 18' W.

I then ran –

East on 35th degree north latitude east 23 chains to point selected for triangulating across Colorado River, at which point I set cottonwood post, 7 feet by 7 inches by 7 inches, marked on N. side, "1873"; S. side, "Lat. 35°"; E. side, "von Schmidt, U. S. Survey."

Made monument of stone 8 feet diam., 3 feet high; set a stone, 9 feet by 18 inches by 18 inches, on mound by side of post. Marked stone, "Lat. 35° - 1873,

U. S." Also deposited stone in mound, 5 inches square 12 inches long," marked "Lat. 35°." From which flagstaff, Camp Mojave, bears N. 38° 02' E.; my observatory station bears N. 29° 31' E.; a sharp-pointed rock east of Colorado River bears N. 89° 10' E.; Great Thumb bears S. 84° 40' E. This point and mound are on a prominent point, and can be seen from the river, and from all sides.

I then sent flag across the river and placed it on line on left bank. Then ran a base of 13 chains 85 links to the south.

Included angle on flag on left bank of river was 69° 01'.

Nat. tang. 69° 01' = 2.6073558
13.85
130367790
208588464
78220674
26073558
36.111877830

Distance from point of triangulation to opposite bank of river, 36.11 chains.

From point of triangulation I then ran east on latitude 35°; measuring from post there set:

East 24.00 chains to bluff, gravelly bank of river.
28.40 chains to right bank of river; course S. E.

Distance triangulated.....	36.11 chains.
Deduct distance measured from post to bank.....	5.40 chains.
Width of river.....	30.71 chains.
One half of which is.....	15.355 chains.

43.75 ½ chains to the center of the Colorado River, in latitude 35° north, which point is 84.985 chains west of my observatory station on random line. Making the longitude at intersection of 35th degree north latitude with middle of the Colorado River, 114° 37' 53".5.

Having established that point, I next proceed to get my line out of the river, which I did in the following manner:

The flag remaining on the 35th degree north latitude, on left bank of river, I proceeded up stream on the right bank until I reach a point on line with the flag on left bank of river, having the same azimuth as my true line. From this point I ran a base at right angles to my true line to the S. W. 4 chains. Included angle on flag 86° 43'.

Nat. tang. 86° 43' = 17.431385 X 4 = 69.725540.

Distance triangulated.....	69.72 chains.
Continue northerly on same azimuth, parallel to true line.....	12.87 chains.
Making total distance from flag.....	82.59 chains.

I then ran –

West parallel to 35th degree of latitude, 15.35 ½ chains (being half width of river), to true line and to post set for O., 611 miles 22.37 chains.

	M.	Chs.
Oregon to this point.....	611	22.37
From this point to 35th degree of latitude and middle of river.....	1	2.59
Total distance.....	612	24.96

Corrected Report of Spanish and Mexican Grants in California,

COMPLETE TO AUGUST 1, 1890.

GRANTS OF LAND IN CALIFORNIA MADE BY SPANISH OR MEXICAN AUTHORITIES.

No. on Gen'l L. O. Map.	NAME OF GRANT.	Confirmee.	Area.	Condition of Title.	Where Located.
124	Acalanes	Elam Brown	3,328.95	Patented May 18, 1858	Contra Costa
67	Agua Caliente, part of	C. P. Stone	212.25	Patented May 7, 1880	Sonoma.
67	Agua Caliente, part of	M. G. Vallejo	1,864.23	Patented June 12, 1880	Sonoma.
67	Agua Caliente, part of	T. M. Leavenworth	591.87	Patented May 7, 1880	Sonoma.
67	Agua Caliente, part of	Joseph Hooker	550.86	Patented June 9, 1866	Sonoma.
136	Agua Caliente, part of	F. Higuera	9,563.87	Patented April 17, 1858	Alameda.
521	Agua Hedionda	J. M. Marron	13,311.01	Patented December 12, 1872	San Diego.
206	Agua Puerco y las Trancas	Rodriguez & Alviso	4,421.52	Patented March 1, 1867	Santa Cruz.
13	Aguas Frias	S. Todd	26,761.40	Patented July 19, 1860	Butte and Colusa.
437	Agua de la Centinella	B. Abila	2,219.26	Patented August 23, 1872	Los Angeles.
282	Aguajito	G. Tapia	3,322.56	Patented March 19, 1868	Monterey.
282	Aguajito	M. Villagrana	44.32	Not surveyed. Sent for patent August 26, 1882	Santa Cruz.
468	Alamitos, Los	A. Stearns	28,027.17	Patented August 29, 1874	Los Angeles.
358	Alamos, Los	J. A. de la Guerra	48,803.38	Patented September 12, 1872	Santa Barbara.
346	Alamos (Los) y Agua Caliente	A. Olevara et al	26,626.23	Patented November 9, 1866	Kern.
265	Alisal, El	B. Bernal	5,941.12	Patented August 9, 1866	Monterey.
267	Alisal, El	M. T. de la G. Hartnell	2,971.26	Patented February 12, 1882	Monterey.
216	Aptos	Rafael Castro	6,685.91	Patented April 23, 1860	Santa Cruz.
242	Aromitas Las y Agua Caliente	F. A. McDougall et al	8,659.69	Patented March 17, 1862	San Benito and Santa Cruz
224	Animas, Las	Heirs of J. M. Sanchez	26,518.68	Patented March 15, 1873	Santa Clara.
133	Arroyo de la Alameda	J. de J. Vallejo	17,705.38	Patented January 1, 1858	Alameda.
540	Arroyo de la Laguna	J. & S. Williams	4,418.10	Patented February 20, 1882	Santa Cruz.
115	Arroyo de las Nueces y Bolbones	Heirs of J. S. de Pacheco	17,782.48	Patented April 18, 1866	Contra Costa.
169	Arroyo de los Pilarcitos or Miramontes.	J. C. Miramontes	4,424.11	Patented February 20, 1882	San Mateo.
214	Arroyo del Rodeo	Hames & Daubenbass	1,473.07	Patented May 3, 1882	Santa Cruz.
9	Arroyo Chico	John Bidwell	22,214.47	Patented April 4, 1860	Butte.
----	Arroyo de San Antonio	T. B. Valentine	13,316.00	Sold as public land but settled by issuance of Valentine scrip	Sonoma.
339	Arroyo Grande	F. Branch	4,437.29	Patented April 10, 1867	San Luis Obispo.
297	Arroyo Seco	J. de la Torre	16,523.35	Patented June 30, 1859	Monterey.
99	Arroyo Seco	Andros Pico	48,857.52	Patented August 29, 1863	Amador, Sac'to, and San Joaquin.
318	Assuncion	P. Estrada	39,224.81	Patented March 22, 1866	San Luis Obispo.
317	Atascadero	H. Haight	4,348.23	Patented June 18, 1860	San Luis Obispo.

233	Ausaymas y San Felipe	F. P. Pacheco	35,504.34	Patented April 19, 1859	San Benito and Santa Clara.
455	Azusa	A. Duarte	6,595.62	Patented June 6, 1878	Los Angeles.
456	Azusa	Henry Dalton	4,431.47	Patented May 29, 1876	Los Angeles.
434	Ballona, La	A. Machado et al	13,919.90	Patented December 8, 1873	Los Angeles.
3	Barranca (La) Colorada	W. B. Ide	17,707.49	Patented July 3, 1860	Tehama.
35	Baulinas, Las	G. Briones	8,911.34	Patented January 9, 1866	Marin.
29	Blucher	Heirs of S. Smith	26,759.42	Patented June 19, 1858	Marin and Sonoma.
539	Boca de Santa Monica	Ysidro Reys et al	6,656.93	Patented July 21, 1882	Los Angeles.
125	Boca de la Cañada del Pinole	M. M. Valencia	13,316.26	Patented November 30, 1878	Contra Costa.
502	Boca de la Playa	E. Vejar	6,607.37	Patented March 1, 1879	Los Angeles.
27	Bodega	M. T. Curtis et al	35,487.53	Patented April 18, 1859	Sonoma.
18	Boga	T. O. Larkin	22,184.66	Patented October 5, 1865	Butte and Sutter.
469	Bolsa Chica, La	J. Ruiz	8,107.46	Patented May 7, 1874	Los Angeles.
245	Bolsa Nueva y Moro Cojo	M. A. P. Castro et al	30,901.34	Patented November 20, 1873	Monterey.
352	Bolsa del Chamisal	L. T. Burton	14,335.22	Patented August 27, 1867	San Luis Obispo.
252	Bolsa de Excarpinas	S. Espinosa	6,415.96	Patented September 26, 1876	Monterey.
221	Bolsa de San Cayetano	J. de J. Vallejo	8,896.43	Patented February 14, 1865	Monterey.
231	Bolsa de San Felipe	F. P. Pacheco	6,794.76	Patented January 14, 1871	San Benito.
220	Bolsa del Pajaro	S. Rodriguez	5,496.50	Patented January 4, 1860	Santa Cruz.
254	Bolsa del Portrero y Moro Cojo, or La Sagrada Familia	J. B. R. Cooper	6,915.77	Patented December 19, 1859	Monterey.
471	Bolsas, Las, one undivided one half	R. Yorba et al	33,460.04	Patented June 19, 1874	Los Angeles.
471	Bolsas, Las, one undivided one half	Maria C. Nieto	"	Patented August 27, 1877	"
7	Bosquejo	P. Lassen	22,206.27	January 10, 1862	Butte and Tehama.
518	Buena Vista	J. Machado	2,288.00	Before Com. Gen'l Land Office	San Diego.
274	Buena Vista	Malarin, att'y for Estrada	7,725.56	Patented September 15, 1869	Monterey.
150	Buri Buri	J. de la Cruz Sanchez et al	14,639.19	Patented October 17, 1872	San Mateo.
191	Butano	M. Rodriguez	4,438.67	Patented April 30, 1866	San Mateo.
429	Brea, La	A. J. Rocha et al	4,439.07	Patented April 15, 1873	Los Angeles.
63	Cabeza de Santa Rosa, part of	Julo Carillo	4,500.42	Patented July 16, 1866	Sonoma.
63	Cabeza de Santa Rosa, part of	F. Carrillo de Castro	336.19	Patented August 25, 1881	Sonoma.
63	Cabeza de Santa Rosa, part of	Jas. Eldridge	1,667.68	Patented January 5, 1880	Sonoma.
63	Cabeza de Santa Rosa, part of	John Hendley	640.14	Patented December 9, 1879	Sonoma.
63	Cabeza de Santa Rosa, part of	J. de J. Mallagh	256.16	Patented December 11, 1879	Sonoma.
63	Cabeza de Santa Rosa, part of	J. R. Meyer et al	1,484.82	Patented April 9, 1879	Sonoma.
425	Cahuenga	D. W. Alexander et al	388.34	Patented August 2, 1872	Los Angeles.
534	Cajon, El	Thos. W. Sutherland, guardian, etc	48,799.85	Patented April 6, 1876	San Diego.
407	Calleguas	Gabriel Ruiz	9,998.29	Patented March 22, 1866	Ventura.
543	Camaritas, Las	Ferdinand Vassault	18.57	Patented December, 1882	San Francisco.
100	Campo de los Franceses	C. M. Weber	48,747.03	Patented March 18, 1861	San Joaquin.
414	Cañada, La	J. R. Scott et al	5,832.10	Patented August 1, 1866	Los Angeles.
84	Cañada de Capay	Jasper O'Farrell et al	40,078.58	Patented February 16, 1865	Yolo.
193	Cañada de los Capitancillos	Guadalupe Mining Comp'y	1,109.67	Patented September 20, 1871	Santa Clara.

151	Cañada de Guadalupe la Visitacion y Rodeo Viejo	H. R. Payson	5,473.47	Patented December 15, 1865	San Francisco and San Mateo.
152	Cañada de Guadalupe y Rodeo Viejo	Wm. Pierce	942.93	Patented September 22, 1865	San Francisco and San Mateo.
40	Cañada de Herera	Heirs of D. Sais	6,658.45	Patented June 26, 1876	Marin.
52	Cañada de Jonive	J. O. Farrell	10,786.51	Patented February 18, 1858	Sonoma.
181	Cañada de Pala	J. J. de Bernal et al	15,714.10	Patented March 9, 1863	Santa Clara.
51	Cañada de Pogolimi	M. A. Cazares	8,780.81	Patented November 3, 1858	Sonoma.
168	Cañada de Raymundo	Greer & Coppinger	12,545.10	Patented July 19, 1859	San Mateo.
377	Cañada de Salsipuedes	John Keys	6,656.21	Patented February 18, 1874	Santa Barbara.
197	Cañada de San Felipe y Las Animas	C. M. Weber	8,787.80	Patented August 9, 1866	Santa Clara.
391	Cañada de San Miguelito	J. F. de Rodriguez et al	8,877.04	Patented June 15, 1871	Ventura.
513	Cañada de San Vicente y Mesa del Padre Barrona	Domingo Yorba	13,316.13	Patented November 17, 1873	San Diego.
170	Cañada de Verde y Arroyo de la Purisima	J. A. Alviso	8,905.58	Patented December 15, 1865	San Mateo.
389	Cañada del Corral	J. D. Ortega	8,875.76	Patented May 30, 1866	Santa Barbara.
----	Cañada del Corte de Madera	Thurn & Carpenter	3,565.91	Patented June 13, 1882	San Mateo.
114	Cañada del Hambre y las Bolsas	Theodora Soto	13,353.95	Patented December 31, 1866	Contra Costa.
208	Cañada del Rincon en el Rio de San Lorenzo de Santa Cruz	Pedro Sansevain	5,826.86	Patented June 4, 1858	Santa Cruz.
243	Cañada de la Carpenteria	Heirs of J. Soto	2,236.13	Patented October 10, 1873	Monterey.
283	Cañada de la Segunda	F. M. Haight	4,366.80	Patented February 4, 1859	Monterey.
498	Cañada de los Alisos	J. Serrano	10,668.81	Patented June 27, 1871	Los Angeles.
109	Cañada de los Baqueros	Livermore & Noriega	17,760.00	Patented November 22, 1889	Alameda and Contra Costa
535	Cañada de los Coches	A. Lestrada	28.39	Patented April 2, 1873	San Diego.
----	Cañada de los Nogales	J. M. Aguilar	1,199.56	Patented May 4, 1882	Los Angeles.
331	Cañada de los Osos and Pecho y Islay	John Wilson	32,430.76	Patented September 23, 1869	San Luis Obispo.
363	Cañada de los Pinos, or College Rancho	Bishop J. S. Alemany	35,499.37	Patented February 28, 1861	Santa Barbara.
390	Cañada Larga ó Verde	J. Alvarado	6,659.04	Patented March 26, 1873	Ventura.
475	Cañada de Santa Ana	B. Yorba	13,328.53	Patented July 21, 1866	Los Angeles and San Bernardino.
8	Capay	J. Soto	44,388.17	Patented August 18, 1859	Colusa and Tehama.
194	Capitancillos, Los	Charles Fossatt	3,360.48	Patented February 3, 1865	Santa Clara.
209	Carbonera, La	William Bocle	2,224.79	Patented July 7, 1873	Santa Cruz.
79	Carne, Humana	Heirs of Edward A. Bale	17,962.22	Patented September 4, 1879	Napa.
224	Carneros, Los	Daniel Littlejohn	4,482.38	Patented August 9, 1866	Monterey.
246	Carneros, Los	F. A. McDougall et al	1,628.70	Patented March 17, 1862	Monterey and San Benito.
57	Caslamayomi	Wm. Forbes	26,788.36	Patented December 18, 1874	Sonoma.
355	Casmalia	A. Olivera	8,841.21	Patented July 30, 1863	Santa Barbara.
345	Castec	J. M. Covarrubias	22,178.28	Patented November 27, 1866	Kern.
82	Catacula	J. B. Chiles	8,545.72	Patented April 22, 1865	Napa.
78	Caymus	George C. Yount	11,886.63	Patented April 3, 1863	Napa.
467	Cerritos, Los	Juan Temple	27,054.36	Patented December 7, 1867	Los Angeles.

536	Chamisal, El	Heirs of Felipe Vasquez	2,737.44	Patented March 20, 1877	Monterey.
89	Chimiles	Gordon & Coombs	17,762.44	Patented December 19, 1860	Napa.
314	Cholame	E. E. White	26,621.82	Patented April 1, 1865	Monterey and San Luis Obispo.
328	Chorro, El	Juan Wilson	3,166.99	Patented March 29, 1861	San Luis Obispo.
270	Chualar	M. Malarin, executor, etc	8,889.68	Patented October 31, 1872	Monterey.
250	Cienega de Gabilan	J. D. Carr	48,780.72	Patented October 15, 1867	San Benito and Monterey.
268	Cienega de los Paicines	A. Castro et al	8,917.52	Patented September 23, 1869	San Benito.
436	Cienega ó Paso de la Tijera	T. Sanchez et al	4,219.34	Patented May 22, 1873	Los Angeles.
428	Cienegas, Las	J. Abila et al	4,439.05	Patented June 15, 1871	Los Angeles.
383	Cieneguitas, Las	A. Carrillo	28.15	In Court on title	Santa Barbara.
296	Coches, Los	M. J. Soberanes	8,794.02	Sent for patent Dec. 27, 1883	Monterey.
186	Coches, Los	A. Suñol et al	2,219.34	Patented December 31, 1857	Santa Clara.
59	Collayomi	Ritchie & Forbes	8,241.74	Patented January 5, 1863	Lake.
17	Colus	C. D. Semple	8,876.02	Patented July 23, 1869	Colusa.
408	Conejo, El	J. de la G. y Noriega	48,571.56	Patented January 8, 1873	Los Angeles and Ventura.
337	Corral de Piedra	J. M. Villavicencio	30,911.20	Patented October 29, 1867	San Luis Obispo.
362	Corral de Quati	M. A. de la G. y Lataillade	13,322.29	Patented August 7, 1876	Santa Barbara.
190	Corral de Tierra	H. D. McCobb	4,434.77	Patented January 21, 1876	Monterey.
165	Corral de Tierra	Heirs of F. G. Palomeres	7,766.35	Patented April 7, 1866	San Mateo.
166	Corral de Tierra	Tiburcio Vasquez	4,436.18	Patented January 6, 1873	San Mateo.
219	Corralitos, Ranchos de los	Heirs of José Amesti	15,440.02	Patented February 28, 1861	Santa Cruz.
173	Corte de Madera, El	M. Martinez	13,316.05	Patented June 19, 1858	San Mateo and Santa Clara.
47	Corte Madera de Novato	Juan Martin	8,878.82	Patented May 23, 1863	Marin.
42	Corte Madera del Presidio	Heirs of John Read	7,845.12	Patented February 25, 1885	Marin.
84	Consumnes	Heirs of W. E. P. Hartnell	26,605.37	Patented April 29, 1869	Sacramento.
65	Cotate	T. S. Page	17,238.60	Patented February 18, 1858	Sonoma.
472	Coyotes, Los	Andres Pico et al	48,806.17	Patented March 9, 1875	Los Angeles.
----	Cruces, Las	Migual Cordero et al	8,888.00	Patented July 7, 1883	Santa Barbara.
538	Cuca, or El Portero	M. J. de los Angeles	2,174.25	Patented July 22, 1879	San Diego.
479	Cucamonga	L. V. Prudhomme	13,045.20	Patented December 9, 1872	San Bernardino.
341	Cuyama	M. A. de la G. y Lataillade	22,193.21	Patented July 20, 1877	San Luis Obispo.
342	Cuyama	Heris of C. Lataillade	48,827.50	Patented January 10, 1879	San Luis Obispo.
512	Cuyamaca	Augustin Olivera	35,501.32	Patented December 19, 1874	San Diego.
381	Dos Pueblos, Los	N. A. Den	15,534.76	Patented February 23, 1877	Santa Barbara.
411	Encino, El	V. de la Osa et al	4,460.73	Patented January 8, 1873	Los Angeles.
409	Escorpion, El	Urbano et al	1,109.65	Patented December 11, 1876	Los Angeles.
142	Embarcadero de Santa Clara	B. Bernal	179.60	Final decree not entered	Santa Clara.
522	Encenitos, Los	Andres Ybarra	4,431.03	Patented April 18, 1871	San Diego.
269	Encinal y Buena Esperanza	D. Spence	13,391.64	Patented May 23, 1862	Monterey.
74	Entre Napa, part of	P. D. Bailey	400.57	Before Surveyor-General	Napa.
74	Entre Napa, part of	N. Coombs	80.48	Patented June 9, 1866	Napa.
74	Entre Napa, part of	J. Green	2,051.04	Patented April 1, 1881	Napa.
74	Entre Napa, part of	M. F. de Higuara	877.53	Patented November 4, 1879	Napa.

74	Entre Napa, part of	Ralph L. Kilburn	403.96	Before Surveyor-General	Napa.
74	Entre Napa, part of	Jos. Mount et al	40.00	Before Surveyor-General	Napa.
----	Entre Napa, part of	Mount & Cottrell	1,103.68	Before Surveyor-General	Napa.
74	Entre Napa, part of	John Patchett	69.88	Before Surveyor-General	Napa.
74	Entre Napa, part of	J. P. Thompson	307.05	Before Surveyor-General	Napa.
74	Entre Napa, part of	J. P. Walker	62.07	Before Surveyor-General	Napa.
74	Entre Napa, part of	Edward Wilson	335.28	Patented April 8, 1881	Napa.
74	Entre Napa, part of, or Los Carneros	Charles E. Hart	360.00	No decree filed	Napa.
74	Entre Napa, part of, or Rincon de los Carneros	Julius Martin	2,557.68	Patented April 8, 1858	Napa.
14	Esquon	Samuel Neal	22,193.78	Patented April 4, 1860	Butte.
28	Estero Americano	Jasper O'Farrell	8,849.13	Patented February 3, 1858	Sonoma.
10	Farwell Rancho	James Williams et al	22,193.93	Patented July 1, 1863	Butte.
426	Feliz, Los	M. Y. Berdugo	6,647.46	Patented April 18, 1871	Los Angeles.
167	Feliz	D. Feliz	4,448.27	Patented June 21, 1873	San Mateo.
15	Fernandez	D. Z. Fernandez et al	17,805.84	Patented October 14, 1867	Butte.
4	Flores, Las	Wm. G. Chard	13,315.58	Patented September 19, 1859	Tehama.
253	Gatos, Los, or Santa Rita	D. Perez et al	4,424.46	Patented April 4, 1870	Monterey.
25	German	Chas. Meyer et al	17,580.01	Patented July 30, 1872	Sonoma.
382	Goleta, La	Daniel Hill	4,426.10	Patented March 10, 1865	Santa Barbara.
406	Guadalasca	Ysabel Yorba	30,593.85	Patented September 1, 1873	Ventura.
353	Guadalupe	D. Olivera et al	43,681.85	Patented March 1, 1870	Santa Barbara and San Luis Obispo.
273	Guadalupe y Llanitos de los Correos	M. Malarin, executor, etc	8,858.44	Patented June 29, 1865	Monterey.
515	Guejito	G. W. Hamley	13,298.59	Patented May 24, 1866	San Diego.
58	Guenoc	Ritchie & Forbes	21,220.03	Patented May 22, 1865	Lake.
66	Guillicos, Los	Juan Wilson	18,833.86	Patented June 16, 1886	Sonoma.
519	Guajome	A. Solma et al	2,219.41	Patented September 7, 1871	San Diego.
462	Habra, La	Andres Pico et al	6,698.57	Patented December 4, 1872	Los Angeles.
19	Honcut	Chas. Covillaud et al	31,079.96	Patented March 9, 1863	Yuba.
340	Huasna	I. J. Sparks	22,152.99	Patented January 23, 1879	San Luis Obispo.
182	Huecos, Los	Roland & Hornsby	39,950.92	Patented May 13, 1876	Santa Clara.
315	Huer-huero	F. Branch	15,684.95	Patented August 9, 1866	San Luis Obispo.
421	Huerta de Cuati	V. Reid	128.26	Patented June 30, 1859	Los Angeles.
330	Huerta de Romualdo or El Churro	Juan Wilson	117.13	Patented April 13, 1871	San Luis Obispo.
72	Huichica	J. P. Leese	18,704.04	Patented August 3, 1859	Sonoma and Napa.
404	Island of Santa Cruz	Andres Castillero	52,760.33	Patented March 21, 1867	Santa Barbara.
527	Island of San Diego	Peachy & Aspinwall	4,185.46	Patented June 11, 1869	San Diego.
470	Island of Santa Catalina	J. M. Covarrubias	45,820.43	Patented April 10, 1867	Los Angeles.
405	Island of Santa Rosa	M. C. de Jones et al	62,696.49	Patented October 3, 1871	Santa Barbara.
11	Jacinto	Wm. M. McKee	35,487.52	Patented September 19, 1859	Colusa.
531	Jamacha	A. Lorenzana	8,881.16	Patented April 11, 1871	San Diego.
541	Jamul	Heirs of H. S. Burton	8,926.22	Patented October 26, 1876	San Diego.
356	Jesus Maria	L. P. Burton et al	42,184.93	Patented September 7, 1871	Santa Barbara.
22	Jimeno	Larkin & Missroon	48,854.26	Patented July 18, 1862	Colusa and Yolo.

21	Johnson Rancho	Wm. Johnson	22,197.31	Patented August 3, 1857	Yuba.
80	Jota, La	Geo. C. Yount	4,453.84	Patented December 18, 1857	Napa.
113	Juntas, Las	Heirs of Wm. Welch	13,292.82	Patented July 22, 1870	Contra Costa.
241	Juristac	J. L. Sargent et al	4,540.44	Patented November 13, 1871	Santa Clara.
483	Jurupa, part of	A. Sterns	33,819.11	Patented May 23, 1879	San Bernardino.
482	Jurupa, part of	L. Rubideau	6,749.99	Patented December 8, 1876	San Bernardino.
69	Lac	J. P. Leese	176.58	Patented August 6, 1872	Sonoma.
360	Laguna, La	O. Gutierrez	48,703.91	Patented May 17, 1867	Santa Barbara.
495	Laguna, La	A. Sterns	13,338.84	Patented September 3, 1872	San Diego.
332	Laguna	Bishop J. S. Alemany	4,157.02	Patented February 4, 1859	San Luis Obispo.
217	Laguna de las Calabazas	F. Hernandez et al	2,304.75	Patented December 8, 1868	Santa Cruz.
163	Laguna de la Merced	J. de Haro et al	2,219.33	Patented September 10, 1872	San Francisco and San Mateo.
123	Laguna de los Palos Colorados	J. Moraga et al	13,316.25	Patented August 10, 1878	Contra Costa.
30	Laguna de San Antonio	B. Bojorquez	24,903.42	Patented November 21, 1871	Marin and Sonoma.
301	Laguna de Tache	M. Castro	48,800.62	Patented March 6, 1866	Fresno.
276	Laguna Seca	C. M. de Munras	2,179.50	Patented November 24, 1865	Monterey.
196	Laguna Seca	L. C. Bull et al	19,972.92	Patented November 24, 1865	Santa Clara.
16	Larkin's Children's Ranch	F. Larkin et al	44,364.22	Patented December 18, 1857	Colusa.
289	Laureles, Los	J. M. & J. de M. Boronda	6,624.99	Patented August 9, 1866	Monterey.
285	Laureles, Los	L. Ransom	718.23	Patented April 18, 1871	Monterey.
347	Liebre, La	J. M. Flores	48,799.59	Patented June 21, 1875	Kern and Los Angeles.
266	Llano de Buena Vista	D. Spence	8,446.23	Patented January 4, 1860	Monterey.
12	Llano Seco	C. J. Brenham et al	17,767.17	Patented June 18, 1860	Butte.
64	Llano de Santa Rosa	J. Carrillo	13,316.03	Patented November 27, 1865	Sonoma.
230	Llano del Tequesquite	V. Sanchez et al	16,016.30	Patented December 29, 1871	San Benito.
81	Locoallomi	Heirs of Juliam Pope, dec'd	8,872.79	Patented March 17, 1862	Napa.
366	Lomas de la Purification	Augustin Janseus	13,341.38	Patented April 18, 1871	Santa Barbara.
499	Lomas de Santiago	Theodocio Yorba	47,226.81	Patented February 1, 1868	Los Angeles.
239	Lomerias Muertas	V. Sanchez et al	6,659.91	Patented August 9, 1866	San Benito.
374	Lompoc	J. & J. A. Carrillo	42,085.44	Patented November 3, 1873	Santa Barbara.
427	Los Angeles City Lands	City of Los Angeles	17,172.37	Pat'd Aug. 4, '75, and Aug. 9, '66	Los Angeles.
----	Los Angeles County, lot near San Pedro, in	Temple & Alexander	1.77	Before Surveyor-General	Los Angeles.
60	Mallacomes or Moristal	Cook & Ingalls	2,559.94	Patented February 18, 1859	Sonoma.
61	Mallacomes or Moristal y Plan de Agua Caliente, part of	J. S. Berryessa	17,742.72	Patented July 10, 1873	Sonoma and Napa.
----	Mare Island	G. W. P. Bissell et al	5,527.22	Final decree not entered	Solano.
104	Mariposas, Las	J. C. Fremont	44,386.83	Patented February 19, 1856	Mariposa.
111	Medanos, Los	J. D. Stevenson	8,858.83	Patented October 8, 1872	Contra Costa.
110	Meganos, Los	Alice Marsh	13,316.00	Patented August 19, 1867	Contra Costa.
443	Merced, La	F. P. F. Temple et al	2,363.75	Patented February 13, 1872	Los Angeles.
212	Mesa de Ojo de Agua	T. W. Russell	54.36	Not approved by Com. G. L. O	Santa Cruz.
138	Milpitas	Heirs of J. M. Alviso	4,457.66	Patented June 30, 1871	Santa Clara.
307	Milpitas	Ygnacio Pastor	43,280.90	Patented February 18, 1875	Monterey.

281	Mission Carmelo	Bishop J. S. Alemany	9.00	Patented October 19, 1859	Monterey.
----	Mission Dolores, lot in	Candelario Valencia	1.78	Patented December 16, 1882	San Francisco.
----	Mission Dolores, lot in	Elizabeth de Zaldo	.45	Sent up for patent Aug. 26, 1882	San Francisco.
161	Mission Dolores, two tracts at	Bishop J. S. Alemany	8.54	Patented March 3, 1858	San Francisco.
156	Mission Dolores, lot in	F. DeHaro	2.04	Before Surveyor-General	San Francisco.
157	Mission Dolores, lot in	F. DeHaro	.44	Sent up for patent Aug. 21, 1885	San Francisco.
----	Mission Dolores, lot in	E. & J. R. Valencia	.50	Rejected	San Francisco.
160	Mission Dolores, suerte in	Heirs of F. G. Palomares	28.41	Patented April 1, 1870	San Francisco.
158	Mission Dolores, suerte in	C. S. de Bernal et al	5.86	Patented June 13, 1882	San Francisco.
372	Mission la Purisima	J. R. Malo	14,735.76	Patented October 12, 1882	Santa Barbara.
373	Mission Purisima de la	Bishop J. S. Alemany	14.04	Patented January 24, 1874	Santa Barbara.
308	Mission San Antonio	Bishop J. S. Alemany	33.19	Patented May 31, 1862	Monterey.
392	Mission San Buenaventura	Bishop J. S. Alemany	36.27	Patented May 23, 1862	Ventura.
393	Mission San Buenaventura, lot in	Fernando Tico	28.90	Patented June 9, 1866	Ventura.
396	Mission (Ex) San Buenaventura	M. A. R. de Poli	48,822.91	Patented August 24, 1874	Ventura.
533	Mission San Diego	Bishop J. S. Alemany	22.21	Patented May 23, 1862	San Diego.
532	Mission (Ex) San Diego	S. Arguello	58,875.38	Patented September 1, 1876	San Diego.
412	Mission San Fernando	Bishop J. S. Alemany	76.94	Patented May 31, 1864	Los Angeles.
410	Mission (Ex) San Fernando	E. de Celis	116,858.46	Patented January 8, 1873	Los Angeles.
448	Mission San Gabriel	Bishop J. S. Alemany	190.69	Patented November 19, 1859	Los Angeles.
----	Mission San Gabriel, lot near	R. Valenzuela et al	23.63	Patented December 4, 1875	Los Angeles.
135	Mission San José	Bishop J. S. Alemany	28.33	Patented March 3, 1858	Alameda.
240	Mission San Juan Bautista	Bishop J. S. Alemany	55.23	Patented November 19, 1859	San Benito.
503	Mission San Juan Capistrano	Bishop J. S. Alemany	44.40	Patented March 18, 1865	Los Angeles.
504	Mission San Juan Capistrano, tract near	S. Rios	7.09	Patented March 1, 1879	Los Angeles.
----	Mission San Luis Obispo	Bishop J. S. Alemany	52.72	Patented September 2, 1859	San Luis Obispo.
333	Mission San Luis Obispo, lot in	Juan Wilson	1.00	In Court on title	San Luis Obispo.
521	Mission (Ex) San Luis Rey	Bishop J. S. Alemany	53.39	Patented March 18, 1865	San Diego.
313	Mission San Miguel	Bishop J. S. Alemany	33.97	Patented September 2, 1859	Monterey.
43	Mission San Rafael	Bishop J. S. Alemany	6.48	Patented October 19, 1859	Marin.
384	Mission Santa Barbara	Bishop J. S. Alemany	283.13	Patented March 18, 1865	Santa Barbara.
188	Mission Santa Clara	Bishop J. S. Alemany	19.95	Patented March 3, 1865	Santa Clara.
----	Mission Santa Clara, lot near	F. Arce	10.00	No decree on file	Santa Clara.
210	Mission Santa Cruz	Bishop J. S. Alemany	16.94	Patented September 2, 1859	Santa Cruz.
368	Mission Santa Ynez	Bishop J. S. Alemany	17.35	Patented May 23, 1862	Santa Barbara.
295	Mission Soledad	Bishop J. S. Alemany	34.47	Patented November 19, 1859	Monterey.
294	Mission (Ex) Soledad	F. Soberanes	8,899.82	Patented May 18, 1874	Monterey.
70	Mission Sonoma	Bishop J. S. Alemany	14.20	Patented May 31, 1862	Sonoma.
376	Mission Vieja de la Purisima	J. & J. Carillo	4,413.60	Patented November 7, 1873	Santa Barbara.
496	Mission Vieja, or La Paz	Juan Forster	46,432.65	Patented August 6, 1866	Los Angeles.
53	Molinos, Los	J. B. R. Cooper	17,892.42	Patented April 3, 1853	Sonoma.
506	Monserate	Y. M. Alvarado	13,322.90	Patented July 17, 1872	San Diego.
112	Monte del Diablo	S. Pacheco	17,921.54	Patented March 19, 1859	Contra Costa.
----	Monterey County, tract in	Heirs of T. Blanco	44.99	Patented November 28, 1881	Monterey.

----	Monterey County, tract in.....	Rufina Castro.....	33.47	Patented March 18, 1885.....	Monterey.
262	Monterey County, tract in.....	Henry Cocks.....	1,106.03	Patented August 8, 1870.....	Monterey.
258	Monterey County, tract in.....	Simeon Castro.....	112.83	Patented July 30, 1867.....	Monterey.
284	Monterey County, tract in.....	James Meadows.....	4,591.71	Patented August 9, 1866.....	Monterey.
256	Monterey County, city lands.....	City of Monterey.....	30,865.55	Sent for patent July 26, 1890.....	Monterey.
325	Moro y Cayucos.....	J. McKinley.....	8,045.49	Patented January 19, 1878.....	San Luis Obispo.
26	Muniz.....	M. Torres.....	17,760.75	Patented February 4, 1860.....	Sonoma.
480	Muscupiabe.....	M. White.....	30,144.88	Patented June 22, 1872.....	San Bernardino.
528	Nacion, De la.....	John Forster.....	26,631.94	Patented February 27, 1866.....	San Diego.
263	Nacional.....	Vincente Cantua.....	6,633.29	Patented April 7, 1866.....	Monterey.
76	Napa, part of.....	S. Vallejo.....	3,178.93	Patented June 9, 1866.....	Napa.
76	Napa, part of.....	Lyman Bartlett.....	679.52	Patented June 9, 1866.....	Napa.
76	Napa, part of.....	A. L. Boggs.....	320.55	Patented May 11, 1877.....	Napa.
76	Napa, part of.....	L. W. Boggs.....	679.66	Sent up December 7, 1880.....	Napa.
76	Napa, part of.....	J. E. Brown.....	647.47	Before Com. Gen'l Land Office.....	Napa.
76	Napa, part of.....	L. D. Brown.....	640.00	No decree filed.....	Napa.
76	Napa, part of.....	Nathan Coombs.....	325.42	Patented March 25, 1873.....	Napa.
76	Napa, part of.....	G. N. Cornwall.....	600.00	No decree filed.....	Napa.
76	Napa, part of.....	A. Farley.....	89.42	Before Surveyor-General.....	Napa.
76	Napa, part of.....	O. H. Frank.....	8,365.37	Sent up for patent Nov., 1890.....	Napa.
76	Napa, part of.....	J. M. Harbin.....	664.88	Sent up for patent Dec. 11, 1882.....	Napa.
76	Napa, part of.....	Hart & McGarry.....	470.14	Before Surveyor-General.....	Napa.
76	Napa, part of.....	Johnson Horrell.....	459.99	Before Surveyor-General.....	Napa.
76	Napa, part of.....	H. Ingraham.....	74.00	No decree filed.....	Napa.
76	Napa, part of.....	Wm. Keely.....	45.84	Before Surveyor-General.....	Napa.
76	Napa, part of.....	Eben Knight.....	100.00	.....	Napa.
76	Napa, part of.....	H. G. Langley.....	680.10	Before Surveyor-General.....	Napa.
76	Napa, part of.....	John Love.....	100.80	Before Surveyor-General.....	Napa.
76	Napa, part of.....	B. McCoombs.....	140.37	Before Surveyor-General.....	Napa.
76	Napa, part of.....	Hannah McCoombs.....	100.79	Before Surveyor-General.....	Napa.
76	Napa, part of.....	J. R. McCoombs.....	485.60	.....	Napa.
76	Napa, part of.....	Ann McDonald et al.....	283.19	Before Surveyor-General.....	Napa.
76	Napa, part of.....	James McNeil.....	450.00	No decree filed.....	Napa.
76	Napa, part of.....	W. H. Osborne.....	259.51	Patented June 9, 1866.....	Napa.
76	Napa, part of.....	A. A. Ritchie.....	150.35	Before Surveyor-General.....	Napa.
76	Napa, part of.....	J. K. Rose.....	594.83	Patented June 9, 1866.....	Napa.
76	Napa, part of.....	J. P. Thompson.....	604.68	Patented June 3, 1880.....	Napa.
76	Napa, part of.....	John Truebody.....	769.58	Sent for patent Dec. 6, 1881.....	Napa.
76	Napa, part of.....	Ogden & Wise.....	637.11	.....	Napa.
251	Natividad, La.....	Ramona Burton et al.....	8,642.21	Patented October 1, 1874.....	Monterey.
20	New Helvetia.....	John A. Sutter.....	48,839.30	Patented June 20, 1866.....	Yuba, Sutter, and Sacramento.
32	Nicasio, part of.....	James Black.....	9,478.82	Patented November 1, 1861.....	Marin.
32	Nicasio, part of.....	B. R. Buckelew.....	8,695.27	Patented November 1, 1861.....	Marin.
32	Nicasio, part of.....	Frink & Reynolds.....	7,598.10	Patented November 1, 1861.....	Marin.

32	Nicasio, part of	H. W. Halleck	30,848.35	Patented November 1, 1861	Marin.
501	Niguil, El	Juan Abila et al	13,316.01	Patented April 5, 1873	Los Angeles.
351	Nipomo	Wm. G. Dana	37,887.91	Patented December 14, 1868	San Luis Obispo.
278	Noche Buena	J. & J. de Monomany	4,411.56	Patented October 7, 1862	Monterey.
459	Nogales, Los	Maria de J. Garcia et al	1,003.67	Patented June 29, 1882	Los Angeles.
367	Nojoqui	Ray Mondo Carillo	13,284.50	Patented September 11, 1869	Santa Barbara.
46	Novato	Assignees of Simmons	8,870.62	Patented April 10, 1866	Marin.
379	Nuestra Señora del Refugio	A. M. Ortega et al	26,529.30	Patented July 28, 1866	Santa Barbara
389	Ojai	Fernando Tico	17,716.83	Patented December 22, 1870	Ventura.
311	Ojitos, Los	M. Soberanes	8,900.17	Patented April 18, 1871	Monterey.
199	Ojo de Agua de al Coche	M. J. C. Murphy	8,927.10	Patented January 4, 1860	Santa Clara.
159	Ojo de Agua de Figueroa	Miranda et al	1.77	Patented April 28, 1877	San Francisco.
48	Olompali	Camilo Ynitia	8,877.48	Patented December 18, 1862	Marin.
95	Omochumnes	Catherine Sheldon et al	18,661.86	Patented July 1, 1870	Sacramento.
105	Orestimba	Sebastian Nunez	26,668.39	Patented July 30, 1863	Stanislaus and Merced.
529	Otay	M. Estudillo	6,657.98	Patented January 20, 1872	San Diego.
530	Otay or Janal	V. Dominguez et al	4,437.16	Patented June 13, 1872	San Diego.
180	Pala	E. White et al	4,454.08	Patented October 8, 1866	Santa Clara.
439	Palos Verdes, Los	J. L. Sepulveda et al	31,629.43	Patented June 22, 1880	Los Angeles.
235	Panocha de San Juan y Los Carrisalitos	Ursua & Romo	22,175.34	Patented July 30, 1867	Merced.
282	Paraje de Sanchez	C. Lugo et al	6,584.32	Patented August 9, 1866	Monterey.
96	Paso, Rancho del	Samuel Norris	44,371.42	Patented May 4, 1858	Sacramento.
465	Paso de Bartolo, part of	B. Guirado	875.99	Patented September 27, 1867	Los Angeles.
465	Paso de Bartolo, part of	Joaquin Sepulveda	207.79	Patented March 17, 1881	Los Angeles.
464	Paso de Bartolo	Pio Pico et al	8,991.22	Patented August 5, 1881	Los Angeles.
320	Paso de Robles	P. Rios	25,993.18	Patented July 12, 1886	San Luis Obispo.
144	Pastoria de las Borregas	Martin Murphy, Jr.	4,894.35	Patented December 15, 1865	Santa Clara.
144	Pastoria de las Borregas	Mariano Castro	4,172.13	Patented September 17, 1881	Santa Clara.
490	Pauba	Luis Vignes	26,597.96	Patented January 19, 1860	San Diego.
507	Pauma	J. A. Serrano et al	13,309.60	Patented August 29, 1871	San Diego.
525	Penasquitos, Los	F. M. Ruiz	8,486.01	Patented April 13, 1876	San Diego.
107	Pescadero, El	Hiram Grimes et al	35,446.06	Patented January 18, 1858	Stanislaus and San Joaquin.
280	Pescadero, El	D. Jacks	4,426.46	Patented February 19, 1868	Monterey.
108	Pescadero, El	Pico & Nagle	35,546.39	Patented March 10, 1865	San Joaquin and Alameda.
49	Petaluma	M. G. Vallejo	66,622.17	Patented November 19, 1874	Sonoma.
321	Piedra Blanca	J. J. Pico	48,805.59	Patented October 9, 1876	San Luis Obispo.
126	Pinole, El	M. A. M. de Richardson	17,760.64	Patented August 22, 1868	Contra Costa.
310	Piojo	Heirs of Joaquin Soto	13,329.28	Patented April 30, 1866	Monterey.
336	Pismo	I. J. Sparks	8,838.89	Patented November 16, 1866	San Luis Obispo.
312	Pleyto	W. S. Johnson et al	13,299.27	Patented March 7, 1872	Monterey.
227	Polka, La	M. J. C. Murphy	4,168.78	Patented March 3, 1860	Santa Clara.
401	Posas, Las	J. de la G. y Noriega	26,623.36	Patented January 18, 1881	Ventura.
120	Positas, Las	Livermore & Noriega	8,880.00	Patented May 25, 1872	Alameda.

385	Positas (Las) y La Calera	M. C. de Jones	3,281.70	Patented June 10, 1870	Santa Barbara.
145	Posolmi	Lopez Ynigo et al	1,695.90	Patented January 18, 1881	Santa Clara.
298	Posa de los Ositos	Carols Espinosa	16,938.98	Patented June 29, 1865	Monterey.
----	Portero de la Mission Vieja de San Gabriel	Valenzuela et al	95.95	Before Surveyor-General	Los Angeles.
134	Portero de los Cerritos	Pacheco & Alviso	10,610.26	Patented February 21, 1886	Alameda.
446	Portero de Felipe Lugo	Morillo & Romero	2,042.81	Patented June 15, 1871	Los Angeles.
286	Portero de San Carols	J. Gutierrez et al	4,306.98	Patented June 9, 1862	Monterey.
329	Portero de San Luis Obispo	M. C. Boronda	3,506.33	Patented July 1, 1870	San Luis Obispo.
178	Portero de Santa Clara	R. F. Stockton	1,939.03	Patented December 30, 1861	Santa Clara.
494	Portero of San Juan Capistrano	Juan Forster	1,167.74	Patented June 30, 1866	Los Angeles.
213	Portero y Rincon de San Pedro de Reglado	T. W. Russell	91.53	Sent for patent October 5, 1885	Santa Cruz.
445	Portero Grande	J. M. Sanchez	4,431.95	Patented July 19, 1859	Los Angeles.
537	Prietos (Los) y Najalayegua	José Dominguez	48,728.67	Patented February 19, 1875	Santa Barbara.
2	Primer Cañon ó Rio de los Berrendos	J. F. Dye	26,637.11	Patented February 28, 1871	Tehama.
419	Prospero Tract	R. Valenzuela et al	23.63	Patented December 4, 1875	Los Angeles.
424	Providentia	D. W. Alexander et al	4,064.33	Patented August 6, 1872	Los Angeles.
542	Pueblo, Lot No. 6	Pedro Chaboya	366.29	Patented June 21, 1876	Santa Clara.
460	Punte, La	Workman & Roland	48,790.55	Patented April 19, 1867	Los Angeles.
106	Puerto, Rancho del	Reed & Wade	13,340.39	Patented August 15, 1864	Stanislaus.
148	Pulgas, Las	M. de la S. O. de Arguello et al	35,240.47	Patented October 2, 1857	San Mateo.
279	Punta de Pinos	H. De Graw et al	2,666.51	Patented November 19, 1880	Monterey.
41	Punta de Quentin	R. R. Bucklew	8,877.44	Patented April 10, 1866	Marin.
375	Punta de la Concepcion	A. Carillo	24,992.04	Patented June 10, 1880	Santa Barbara.
354	Punta de la Laguna	L. Arellanes et al	26,648.42	Patented October 2, 1873	S. Barbara and S. Luis Obispo.
34	Punta de Los Reyes (Sobrante)	Andrew Randall	48,189.34	Patented June 4, 1860	Marin.
33	Punta de Los Reyes	Andrew Randall	8,877.68	Patented June 4, 1860	Marin.
205	Punta de Año Nuevo	Heirs of Simeon Castro	17,753.15	Patented December 3, 1857	San Mateo.
175	Purisima (La) Concepcion	Juana Briones	4,438.94	Patented August 15, 1871	Santa Clara.
83	Putas, Las	M. A. Higuera de Berryessa et al	35,515.82	Patented January 5, 1863	Solano.
88	Putos, Los	J. M. Vaca & J. F. Peña	44,383.78	Patented June 4, 1858	Solano.
187	Quito	M. Alvisu et al	13,309.85	Patented May 14, 1866	Santa Clara.
85	Quesesosi	Wm. Gordon	8,894.49	Patented February 4, 1860	Yolo.
102	Rancheria del Rio Estanislao	Rico & Gastro	48,886.64	Patented January 31, 1863	Stanislaus and Calaveras.
236	Real de los Aguilas	F. A. M. McDougal et al	31,052.18	Patented September 23, 1869	San Benito.
207	Refugio	F. & J. Bolcoff	12,147.12	Patented February 4, 1860	Santa Cruz.
476	Rincon, El	Bernardo Yorba	4,431.47	Patented November 14, 1879	San Bernardino.
387	Rincon, El	Teodoro Arellanes	4,459.63	Patented November 22, 1872	Santa Barbara.
56	Rincon de Musulacon	Johnson Horrell et al	8,866.89	Patented June 9, 1866	Sonoma.
146	Rincon de San Francisquito	T. E. & S. Robles	8,418.21	Patented February 19, 1868	Santa Clara.
261	Rincon de Sanjon	J. E. Boronda	2,229.70	Patented July 13, 1860	Monterey.

516	Rincon del Diablo	Heirs of Juan B. Alvarado	12,653.77	Patented May 3, 1872	San Diego.
461	Rincon de la Brea	G. Ybarra	4,452.59	Patented November 14, 1864	Los Angeles.
272	Rincon de la Punta del Monte	Teodoro Gonzales	15,218.62	Patented November 28, 1866	Monterey.
255	Rincon de las Salinas	Rafael Estrada	2,220.02	Patented March 1, 1881	Monterey.
153	Rincon de las Salinas y Potrero Viejo	Heirs of J. C. Bernal	4,446.40	Patented December 31, 1857	San Francisco and San Mateo.
435	Rincon de los Bueyes	F. Higuera et al	3,127.89	Patented August 27, 1872	Los Angeles.
241	Rincon de los Esteros	Rafael Alviso et al	2,200.19	Patented July 29, 1872	Santa Clara.
140	Rincon de los Esteros	F. Berryessa et al	1,844.54	Patented July 28, 1873	Santa Clara.
139	Rincon de los Esteros	E. E. White	2,308.17	Patented May 23, 1862	Santa Clara.
192	Rinconada de los Gatos	Hernandez & Peralta	6,631.44	Patented March 19, 1860	Santa Clara.
147	Rinconada del Arroya de San Francisquito	Heirs of M. A. Mesa	2,229.84	Patented July 26, 1872	Santa Clara.
86	Rio Jesus Maria	J. M. Harbin et al	26,637.42	Patented July 3, 1858	Yolo.
403	Rio de Santa Clara	Valentin Cota et al	44,883.30	Patented September 5, 1872	Ventura.
98	Rio de los Americanos	J. L. Folsom	35,521.36	Patented November 4, 1864	Sacramento.
6	Rio de los Molinos	A. G. Toomes	22,172.46	Patented December 3, 1858	Tehama.
87	Rio de los Putos	Wm. Wolfskill	17,754.73	Patented December 18, 1858	Yolo and Solano.
50	Roblar de la Miseria	Daniel Wright et al	16,887.45	Patented January 18, 1858	Sonoma.
----	Russell Tract	T. W. Russell	145.89	Before Surveyor-General	Santa Cruz.
257	Salinas, Las	Heirs of G. Espinoza	4,413.81	Patented March 26, 1867	Monterey.
223	Salsipuedes	James Blair et al	31,201.37	Patented March 2, 1861	Santa Cruz and Santa Clara.
219	San Andres	Guadalupe Castro et al	8,911.53	Patented January 31, 1876	Santa Cruz.
130	San Antonio, part of	Ygnacio Peralta	9,416.66	Patented February 3, 1858	Alameda.
129	San Antonio, part of	A. M. Peralta	15,206.59	Patented June 25, 1874	Alameda.
128	San Antonio, part of	V. & D. Peralta	18,848.98	Patented February 10, 1877	Alameda.
442	San Antonio	A. M. Lugo	29,513.35	Patented July 20, 1866	Los Angeles.
176	San Antonio	E. Mesa et al	4,440.31	Patented August 6, 1866	Santa Clara.
----	San Antonio, part of	Wm. A. Dana et al	3,541.80	Patented December 18, 1857	Santa Clara.
190	San Antonio or Pescadero	J. J. Gonzales	3,282.32	Patented June 7, 1866	San Mateo.
413	San Antonio, or Rodeo de las Aguas	M. R. Valdez	4,449.31	Patented June 27, 1871	Los Angeles.
202	San Augustin	J. L. Majors	4,436.78	Patented July 25, 1866	Santa Cruz.
304	San Benito	James Watson	6,671.08	Patented September 6, 1869	Monterey.
303	San Bernabe	Henry Cocks	13,296.98	Patented March 27, 1873	Monterey.
326	San Bernardo	Vincente Cane	4,379.42	Patented April 1, 1865	San Luis Obispo.
524	San Bernardo	M. A. Snook	17,763.07	Patented November 17, 1874	San Diego.
306	San Bernardo	M. Sobranes	13,345.65	Patented March 9, 1874	Monterey.
481	San Bernardino	J. de C. Lugo et al	35,509.41	Patented November 24, 1865	San Bernardino.
1	San Buenaventura	P. B. Reading	26,632.09	Patented January 17, 1857	Shasta.
369	San Carols de Jonata	J. Carrillo et al	26,634.31	Patented December 2, 1872	Santa Barbara.
526	San Diego, pueblo land	City of San Diego	47,323.08	Patented April 10, 1874	San Diego.
523	San Dieguito	J. L. Osuna et al	8,824.71	Patented April 18, 1871	San Diego.
343	San Emidio	Francisco Dominguez	17,709.79	Patented April 10, 1866	Kern.
399	San Francisco	Jacoba Feliz et al	48,611.88	Patented February 12, 1875	Ventura and Los Angeles.

155	San Francisco, pueblo land	City of San Francisco	12,643.44	Patented June 20, 1884	San Francisco.
----	San Francisco, tract in	Sherreback	120.00	Before Surveyor-General	San Francisco.
162	San Francisco, two lots in	J. P. Leese et al	3.38	Patented March 3, 1858	San Francisco.
226	San Francisco de las Llagas	J. & M. Murphy	22,283.24	Patented March 19, 1868	Santa Clara.
174	San Francisquito	M. C. V. de Rodriguez	1,471.00	Patented June 8, 1868	Santa Clara.
287	San Francisquito	José Abrego et al	8,813.50	Patented June 8, 1862	Monterey.
447	San Francisquito	Henry Dalton	8,893.62	Patented May 30, 1867	Los Angeles.
----	San Gabriel, tract near	Juan Silva	22.90	Before Surveyor-General	Los Angeles.
449	San Gabriel, tract near	H. P. Dorsey	22.90	Before Surveyor-General	Los Angeles.
420	San Gabriel, tract near	Michael White	78.23	Patented August 26, 1871	Los Angeles.
417	San Gabriel, tract near	José Ledesma	22.21	Patented June 20, 1871	Los Angeles.
416	San Gabriel, tract near	J. P. de J. Courtney	49.29	Patented June 20, 1871	Los Angeles.
450	San Gabriel, tract near	Francisco Sales	19.43	Patented June 20, 1871	Los Angeles.
451	San Gabriel, tract near	Simeon (Indian)	30.45	Patented December 27, 1876	Los Angeles.
452	San Gabriel, two tracts near	Daniel Sexton	227.78	Patented May 16, 1871	Los Angeles.
418	"	"	"	"	"
453	San Gabriel, tract near	José Domingo	22.34	Patented August 23, 1871	Los Angeles.
39	San Geronimo	J. W. Revere	8,701.00	Patented April 4, 1860	Marin.
324	San Geronimo	R. Villavicencio	8,893.35	Patented July 10, 1876	San Luis Obispo.
171	San Gregorio	M. C. V. de Rodriguez	13,344.15	Patented February 19, 1861	San Mateo.
172	San Gregorio	Salvador Castro	4,439.31	Patented February 19, 1861	San Mateo.
489	San Jacinto	Heirs of J. A. Estudillo	35,503.03	Patented January 17, 1880	San Diego.
488	San Jacinto y San Gorgonio, tract between	L. Rubideau	4,439.57	Patented August 13, 1872	San Bernardino.
487	San Jacinto Nuevo y Portero	T. W. Sutherland, guardian	48,861.10	Patented January 9, 1883	San Bernardino and San Diego.
500	San Joaquin	José Sepulveda	48,803.16	Patented September 19, 1867	Los Angeles.
232	San Joaquin	C. Cervantes	7,424.69	Patented January 6, 1874	San Benito.
458	San José	Dalton, Palomares & Vejar	22,340.41	Patented January 20, 1875	Los Angeles.
457	San José, addition to	Dalton, Palomares & Vejar	4,430.64	Patented December 4, 1875	Los Angeles.
45	San José	Ygnacio Pacheco	6,659.25	Patented January 14, 1861	Marin.
179	San José, pueblo lands	City of San José	55,891.77	Patented June 4, 1884	Santa Clara.
431	San José de Buenos Ayres	B. D. Wilson	4,438.69	Patented July 5, 1866	Los Angeles.
----	San José y Sur Chiquito	José Castro	8,876.00	In Court on title	Monterey.
509	San José del Valle	J. J. Warner	26,688.93	Patented January 16, 1880	San Diego.
97	San Juan	Hiram Grimes	19,982.70	Patented July 9, 1860	Sacramento.
185	San Juan Bautista	J. A. Narvaez	8,879.54	Patented December 1, 1865	Santa Clara.
247	San Juan Bautista, tract near Mission of	M. Larios	4,493.00	Patented August 8, 1870	San Benito.
248	San Juan Bautista, tract near Mission of	P. Breen	401.25	Patented January 22, 1877	San Benito.
473	San Juan Cajon de Santa Ana	J. P. Ontiveros	35,970.92	Patented May 21, 1877	Los Angeles.
378	San Julian	J. de la G. y Noriega	48,221.68	Patented September 29, 1873	Santa Barbara.
238	San Justo	F. P. Pacheco	34,619.65	Patented December 6, 1865	San Benito.
131	San Leandro	J. J. Estudillo	6,829.58	Patented July 15, 1863	Alameda.

300	San Lorenzo	Rafael Sanchez	48,285.95	Patented December 22, 1870	Monterey and San Benito.
299	San Lorenzo	F. Soberanez	21,884.38	Patented July 28, 1866	Monterey.
302	San Lorenzo	Heirs of A. Randall	22,264.47	Patented June 4, 1870	Monterey.
132	San Lorenzo	Barbara Sota et al	6,685.85	Patented April 14, 1877	Alameda.
122	San Lorenzo	Guillermo Castro	26,722.52	Patented February 14, 1865	Alameda.
305	San Lucas	James McKinley	8,874.72	Patented February 23, 1882	Monterey.
234	San Luis Gonzaga	J. P. Pacheco	48,821.43	Patented May 16, 1871	Santa Clara and Merced.
----	San Luis Obispo, lot near	J. M. Bonilla	3.85	Sent up for patent Aug. 26, 1882	San Luis Obispo.
327	San Luisito	Guadalupe Cantua	4,389.56	Patented May 18, 1860	San Luis Obispo.
364	San Marcos.	N. A. Den et al	35,573.10	Patented September 6, 1869	Santa Barbara.
149	San Mateo.	Ex'rs of W. D. M. Howard	6,438.80	Patented November 18, 1857	San Mateo.
154	San Miguel	J. de J. Noe.	4,443.38	Patented March 30, 1857	San Francisco and San Mateo.
394	San Miguel	Olivas & Lorenzana	4,693.91	Patented March 21, 1873	Ventura.
62	San Miguel	Heirs of M. West	6,663.23	Patented June 29, 1865	Sonoma.
335	San Miguelito	Marianna Gonzales	22,135.89	Patented August 8, 1867	Monterey.
309	San Miguelito	Miguel Avila	14,198.20	Patented February 23, 1877	San Luis Obispo.
127	San Pablo	J. Y. Castro.	17,938.59	Patented January 31, 1878	Contra Costa.
422	San Pasqual	B. D. Wilson	708.57	Patented February 12, 1881	Los Angeles.
415	San Pasqual	Manuel Garfias	13,693.93	Patented April 3, 1863	Los Angeles.
----	San Pasqual, 2,000 varas near	Juan Gallardo	700.00	Not surveyed	Los Angeles.
440	San Pedro	M. Dominguez et al	43,119.13	Patented December 18, 1858	Los Angeles.
164	San Pedro	F. Sanchez	8,926.46	Patented November 8, 1870	San Mateo.
----	San Pedro	G. O. Chapman et al	4,438.00	In Court on title	Santa Barbara.
44	San Pedro, Santa Margarita y Las Gallinas.	Timothy Murphy	21,678.69	Patented February 21, 1866	Marin.
423	San Rafael	Julio Berdugo et al	36,403.32	Patented January 28, 1882	Los Angeles.
118	San Ramon	J. M. Amador	16,516.95	Patented March 18, 1865	Contra Costa and Alameda
117	San Ramon	Leo. Norris	4,450.94	Patented July 3, 1882	Contra Costa.
116	San Ramon	H. W. Carpentier	8,917.36	Patented April 7, 1866	Contra Costa.
322	San Simeon	J. M. Gomez	4,468.81	Patented April 7, 1865	San Luis Obispo.
293	San Vicente	C. Munrass et al	19,979.01	Patented June 29, 1865	Monterey.
195	San Vicente	M. Z. B. Berryessa et al	4,438.36	Patented June 24, 1868	Santa Clara.
204	San Vicente	B. A. Escamilla	10,802.60	Patented May 6, 1870	Santa Cruz.
432	San Vicente y Santa Monica	R. Sepulveda	30,259.65	Patented July 23, 1881	Los Angeles.
228	San Ysidro	John Gilroy et al	4,460.67	Patented September 27, 1867	Santa Clara.
229	San Ysidro	Quintin Ortega	4,438.65	Patented October 22, 1868	Santa Clara.
24	Sanel	Fernando Feliz	17,754.38	Patented December 18, 1860	Mendocino.
93	Sanjon de los Moquelumnos	Heirs of A. Chabolla	35,508.14	Patented May 30, 1865	San Joaquin and Sacramento.
198	Sanjon de Santa Rita	F. Soberanes	48,823.84	Patented November 20, 1862	Fresno and Merced.
388	Santa Ana	C. Avala et al	21,522.04	Patented December 22, 1870	Ventura.
477	Santa Ana del Chino	M. M. Williams et al	22,234.20	Patented February 15, 1869	San Bernardino.
478	Santa Ana del Chino, addition	M. M. Williams et al	13,366.16	Patented April 29, 1869	San Bernardino.
237	Santa Ana y Quien Sabe	Manuel Larios et al	48,822.60	Patented May 1, 1860	San Benito.

454	Santa Anita.	Henry Dalton	13,319.06	Patented August 9, 1866	Los Angeles.
386	Santa Barbara, pueblo	City of Santa Barbara	17,826.17	Patented May 31, 1872	Santa Barbara.
177	Santa Clara, tract near.	J. Enright	710.14	Patented May 1, 1866.	Santa Clara.
189	Santa Clara, two tracts near	M. S. Bennett	358.51	Patented July 19, 1871	Santa Clara.
402	Santa Clara del Norte	Juan Sanchez	13,988.91	Patented November 5, 1869	Ventura.
334	Santa Fe, Ranchito de	V. Linares	165.76	Patented August 19, 1866	San Luis Obispo.
463	Santa Gertrudes, part of	T. S. Colima	3,696.23	Patented July 17, 1877	Los Angeles.
466	Santa Gertrudes, part of	McFarland & Downey	17,602.01	Patented August 19, 1870	Los Angeles.
338	Santa Manuela	F. Z. Branch	16,954.83	Patented August 22, 1868	San Luis Obispo.
316	Santa Margarita	Joaquin Estrada	17,734.94	Patented August 9, 1861	San Luis Obispo.
505	Santa Margarita y Las Flores	Pio Pico et al	133,440.78	Patented March 28, 1879	San Diego.
395	Santa Paula y Saticoy	J. P. Davidson	17,773.33	Patented July 15, 1872	Ventura.
119	Santa Rita	Yountz, administrator	8,894.01	Patented March 18, 1865	Alameda.
371	Santa Rita	J. R. Malo	13,316.05	Patented June 25, 1875	Santa Barbara.
323	Santa Rosa	Julian Estrada	13,183.62	Patented March 18, 1865	San Luis Obispo.
370	Santa Rosa	M. J. O. de Cota et al	15,525.55	Patented March 30, 1872	Santa Barbara.
493	Santa Rosa	Juan Moreno	47,815.10	Patented October 10, 1872	San Diego.
184	Santa Theresa	Augustin Bernal	9,647.13	Patented March 8, 1867	Santa Clara.
319	Santa Ysabel	Francisco Arce	17,774.12	Patented May 21, 1866	San Luis Obispo.
510	Santa Ysabel	J. J. Ortega et al	17,719.40	Patented May 14, 1872	San Diego.
474	Santiago de Santa Ana	B. Yorba et al	78,941.49	Patented December 21, 1883	Los Angeles.
36	Saucelito	W. A. Richardson	19,571.92	Patented August 7, 1879	Marin.
277	Saucito	Wilson et al	2,211.65	Patented October 7, 1862	Monterey.
5	Saucos	R. H. Thomas	22,212.21	Patented October 14, 1857	Tehama.
264	Sausal	J. P. Leese	10,241.88	Patented September 2, 1859	Monterey.
438	Sausal Redondo	A. I. Abila	22,458.94	Patented March 22, 1875	Los Angeles.
397	Sespe	T. W. Moore et al	8,880.81	Patented March 14, 1872	Ventura.
215	Shoquel	Martina Castro	1,668.03	Patented March 19, 1860	Santa Cruz.
201	Shoquel Augmentation	Martina Castro	32,702.41	Patented March 19, 1860	Santa Cruz.
485	Sierra, La	Bernardo Yorba	17,768.89	Patented February 4, 1875	San Bernardino.
484	Sierra, La	Vicenta Sepulveda	17,774.19	Patented April 28, 1877	San Bernardino.
400	Simi	J. de la G. y Noriega	113,009.21	Patented June 29, 1865	Los Angeles and Ventura.
348	Sisquoc	J. B. Huie et al	35,485.90	Patented August 24, 1866	S. Luis Obispo and Santa Barbara.
----	Sobrante, El	J. J. and V. Castro	20,565.42	Patented August 11, 1883	Contra Costa.
486	Sobrante de San Jacinto	M. de R. de Aguirre	48,847.28	Patented October 25, 1867	San Bernardino.
225	Solis	R. Castro et al	8,875.46	Patented January 18, 1859	Santa Clara.
63	Sonoma, pueblo	City of Sonoma	6,063.95	Patented March 31, 1880	Sonoma.
71	Sonoma City, lot in	M. G. Vallejo	3.81	Patented April 30, 1866	Sonoma.
54	Sotoyome	Heirs of H. D. Fitch	48,836.51	Patented April 3, 1858	Sonoma.
31	Soulajule, part of	G. N. Cornwall	919.18	Patented January 18, 1879	Marin.
31	Soulajule, part of	L. D. Watkins	1,446.79	Patented January 18, 1879	Marin.
31	Soulajule, part of	M. F. Gormley	2,266.25	Patented January 18, 1879	Marin.
31	Soulajule, part of	P. J. Vasquez	3,774.20	Patented January 18, 1879	Marin.
31	Soulajule, part of	J. S. Brackett	2,492.19	Patented January 18, 1879	Marin.

350	Suey, Rancho de	R. C. de Wilson	48,834.27	Patented August 10, 1865	Santa Barbara and S. Luis Obispo.
91	Suisun	A. A. Richie	17,754.73	Patented January 17, 1857	Solano.
----	Suisun, part of	J. H. Fine	482.19	Patented December 16, 1882	Solano.
288	Sur, El	J. B. R. Cooper	8,949.06	Patented May 18, 1866	Monterey.
441	Tajauta	E. Abila	3,559.86	Patented January 8, 1873	Los Angeles.
344	Tejon, El	Aguirre & Del Valle	97,616.78	Patented May 9, 1863	Kern.
398	Temescal	R. de la Cuesta	13,339.07	Patented September 13, 1871	Ventura and Los Angeles.
491	Temecula	Luis Vignes	26,608.94	Patented January 18, 1860	San Diego.
492	Temecula, lands in valley of	P. Apis	2,233.42	Patented January 8, 1873	San Diego.
349	Tepusquet	A. M. Cota et al	8,900.75	Patented February 23, 1871	S. Luis Obispo and Santa Barbara.
365	Tequepis	A. M. Villa	8,919.00	Patented July 24, 1869	Santa Barbara.
101	Thompson's Rancho	A. B. Thompson	35,532.80	Patented May 18, 1858	San Joaquin and Stanislaus.
359	Timaquaic	Wm. D. Foxen	8,874.60	Patented June 28, 1872	Santa Barbara.
357	Todos Santos y San Antonio	Heirs of W. E. P. Hartnell	20,772.17	Patented December 20, 1876	Santa Barbara.
90	Tolenas	J. F. Armijo	13,315.93	Patented October 12, 1868	Solano.
38	Tomales y Baulenes	Rafael Garcia	9,467.77	Patented October 15, 1883	Marin.
37	Tomales y Baulenes	Bethuel Phelps	13,644.66	Patented February 27, 1866	Marin.
433	Topanga Malibu Sequit	M. Keller	13,315.70	Patented August 29, 1872	Los Angeles.
275	Toro, El	Charles Walters	5,668.41	Patented October 7, 1862	Monterey.
497	Trabuco	Juan Forster	22,184.47	Patented August 6, 1866	Los Angeles.
211	Tres Ojos de Agua	Nicolas Dodero	176.03	Patented June 7, 1866	Santa Cruz.
259	Tucho, El	David Jacks	399.57	Patented July 30, 1867	Monterey.
113	Tujunga	D. W. Alexander et al	6,660.71	Patented October 19, 1874	Los Angeles.
291	Tularcitos	Heirs of R. Gomez	26,581.34	Patented March 12, 1866	Monterey.
137	Tularcitos, Las	José Higuera	4,394.35	Patented July 8, 1870	Santa Clara.
75	Tulucay	C. Juarez	8,865.58	Patented January 31, 1861	Napa.
260	Two Suertes	Gregory & Williams	37.69	Patented June 20, 1872	Monterey.
55	Tzabaco	Heirs of J. G. Piña	15,439.32	Patented November 19, 1859	Sonoma.
143	Ulistac	Heirs of J. D. Hoppe	2,217.09	Patented October 12, 1868	Santa Clara.
92	Ulpinos, Los	John Bidwell	17,726.43	Patented August 9, 1866	Solano.
200	Uvas, Las	M. J. C. Murphy	11,079.93	Patented February 18, 1860	Santa Clara.
517	Vallecitos de San Marcos	Lorenzo Soto	8,975.17	Patented March 1, 1883	San Diego.
514	Valle de Pamo or Santa Maria	J. T. Ortega et al	17,708.85	Patented July 30, 1872	San Diego.
511	Valle de San Felipe	Juan Forster	9,972.08	Patented August 6, 1866	San Diego.
121	Valle de San José	Suñol & Bernal	48,435.92	Patented March 15, 1865	Alameda.
508	Valle de San José	S. de la Portilla	17,634.06	Patented January 10, 1880	San Diego.
222	Vega del Rio del Pajaro	F. A. McDougall et al	4,310.29	Patented January 18, 1864	Monterey.
249	Vergeles, Los	James Stokes	8,759.82	Patented April 3, 1875	Monterey and San Benito.
545	Virgenes, Las	M. A. Machado	8,885.04	Patented September 5, 1883	Los Angeles.
77	Yajome	Salvador Vallejo	6,652.58	Patented September 16, 1864	Napa.
183	Yerba Buena or Socayre	Antonio Chabolla	24,331.69	Patented January 3, 1859	Santa Clara.
23	Yokaya	C. Juarez	35,541.33	Patented March 8, 1867	Mendocino.

361	Zaca, La.....	M. A. de la G. y Lataillade.....	4,458.10	Patented August 23, 1876.....	Santa Barbara.
271	Zanjones.....	M. Malarin, executor.....	6,714.49	Patented August 9, 1866.....	Monterey.
203	Zayanta.....	Isaac Graham et al.....	2,658.21	Patented August 19, 1870.....	Santa Cruz.