ANNUAL REPORT

OF THE

SURVEYOR-GENERAL of CALIFORNIA

FOR

THE YEAR 1863.

[O. M. CLAYES, STATE PRINTER.

ANNUAL REPORT.

SURVEYOR GENERAL'S OFFICE,
Sacramento, November 20th, 1863.

To His Excellency,
LELAND STANFORD,
Governor of California:

SIR: - In compliance with the requirements of the law defining the duties of this office, I have the honor to submit for your consideration the following report for the year ending November twentieth, eighteen hundred and sixty-three.

I am, very respectfully,

Your obedient servant,

J. F. HOUGHTON,
Surveyor-General and Register of State Land Office.

REPORT.

STATE LANDS.

This subject is one of such general importance to a very large number of our citizens who have, under the various Acts of our Legislature, become purchasers of the State, that anything which tends to enlighten them upon the nature of the title which they have derived, or are to derive, and how soon that title will be placed beyond peradventure and all possible contingency, is possessed of more than common interest.

This fact has induced me to place this subject in the foreground in this report, and to review it somewhat at length. The fact, that thirteen years have elapsed since the Swamp and Overflowed Lands, and ten years since the School, Seminary, and Public Building Lands were donated to the State, and to this day not a single acre has the State received a patent for, of itself speaks of a fault somewhere.

This fault lies partly with the State authorities for their remissness in not early taking the proper steps to have them certified to the State. But, that the fault is not all chargeable to the State, I propose to show in this report, and in order to do so, I beg leave to direct your attention to the following circular letter, addressed by the honorable Commissioner of the General Land Office, at Washington, to the Registers of the several United States Land Offices in this State, for their guidance in the selection of School Lands under the Act of Congress of March third, eighteen hundred and fifty-three:

[Circular applicable to Selections for School Purposes in California.]

GENERAL LAND OFFICE,
August 21st, 1862.

GENTLEMEN: - The object of this circular letter is to secure uniformity of action in making selections for School purposes under the following Acts of Congress:

The sixth section of the Act of March third, eighteen hundred and fifty-three, entitled an Act to provide for the survey of the Public Lands in California, the granting of pre-emption rights therein, and for other purposes, grants to the State of California sections sixteen and thirty-six in each township for School purposes; and the seventh section of the same Act provides: "That when any settlement, by the erection of a dwelling-house, or the cultivation of any portion of the land, shall be made upon the sixteenth and thirty-sixth sections before the same shall have been surveyed, or where such sections may be reserved for public uses or taken by private claims, other land shall be selected by the proper authorities of the State in lieu thereof, agreeably to the provisions of the Act of Congress, approved the twentieth of May, eighteen hundred and twenty-six, entitled an Act to appropriate lands for the support of Schools in certain

townships not before provided for, and which shall be subject to approval by the Secretary of the Interior." (See Statutes at large, Vol. X, pp. 246, 247.)

The Act of the twenty-sixth of February, eighteen hundred and fifty-nine, (United States Statutes at large, volume XI, page three hundred and eighty-five,) provides "That where settlements, with a view of pre-emption, have been made before the survey of the lands in the field, which shall have been found to have been made on sections sixteen and thirty-six, said sections shall be subject to the pre-emption claim of such settler; and if they or either of them shall have been reserved or pledged for the use of Schools or Colleges in the State or Territory in which the lands lie, other lands of like quantity, are hereby appropriated in lieu of such as may be patented to pre-emptors; and other lands are also hereby appropriated to compensate deficiencies for School purposes where said sections sixteen and thirty-six are fractional in quantity, or where one or both are wanting by reason of the township being fractional, or from any natural cause whatever; *provided*, that the lands appropriated by this section shall be selected and appropriated in accordance with the principles of adjustment and the provisions of the Act of Congress of May twentieth, eighteen hundred and twenty-six, entitled an Act to appropriate lands for the support of Schools in certain townships not before provided for."

Under the provisions of the foregoing Acts of Congress, where either of said sections sixteen and thirty-six, or any part thereof, has been sold or otherwise disposed of, the State will be entitled, in lieu of the land so disposed of, to an equal amount of other land, as contiguous to the School sections as may be.

The selections must be made of agricultural – not mineral – lands, as contiguous to the School sections "as may be," and in legal subdivisions, according to the approved official township plats of the public surveys on file in the Register's office at the time the selections are filed.

The School Selecting Agent should file in our office an authenticated copy of his letter of appointment, or other satisfactory evidence of his official character.

Under the provisions of the aforesaid Act of eighteen hundred and fifty-nine, where said sections sixteen and thirty-six are fractional in quantity, or where either of them are wanting by reason of the township being fractional, or from any natural cause whatever, the State will be entitled to other lands as indemnity for such deficiencies, to be selected and appropriated in accordance with the principles of adjustment and the provisions of the Act of congress of May twentieth, eighteen hundred and twenty-six, viz: For each fractional township containing a greater quantity of Public Land than three quarters of an entire township, that is – more than seventeen thousand two hundred and eighty acres, the State will be entitled to two sections, or twelve hundred and eighty acres.

For each fractional township containing a greater quantity of Public Land than one half and not more than three quarters of a township, that is – more than eleven thousand five hundred and twenty acres, and less than seventeen thousand two hundred and eighty acres, the State will be entitled to one and a half sections, or nine hundred and sixty acres.

For each fractional township containing a greater quantity of Public Land than one quarter and less than one half of a township, that is – more than five thousand

seven hundred and sixty acres, and less than eleven thousand five hundred and twenty acres, the State will be entitled to one section, or six hundred and forty acres.

For each fractional township containing a greater quantity of Public Land than one entire section and less than one quarter of a township, that is – more than six hundred and forty acres, and less than five thousand seven hundred and sixty acres, the State will be entitled to a half section, or three hundred and twenty acres.

The law directs that the selections shall be made by the Secretary of the Interior, and the following rules are prescribed for your government:

First – When the lands have not been offered at public sale, the selections are to be made prior to said sale. The School Agents may recommend the selections, and it may be proper for you to give notice to such Agents, that prior to a certain day, to be fixed by you, recommendations will be received from them for School selections for certain townships, which townships will be specially designated in said notice. You will bear in mind, however, that no expense whatever will be incurred in the publication of such notice. If the School authorities, after service of notice, should fail to make any recommendations, you will report your own selections.

Second – The quantity of School Lands selected for any township is to be located within the limits of such township, provided a sufficient quantity of good agricultural land exists therein. If you are satisfied that a sufficient quantity of good land cannot be found therein, the selection is to be made in the nearest adjacent township wherein good land exists.

Third – Where a portion of section sixteen or thirty-six exists in a township, an additional quantity only is to be selected as will, with the existing portions of said selections, make up the full quantity to which the township is entitled under the law.

Fourth – The selections of a section, three quarters of a section, or a half section, for any one township, are to be made in one body of land, if practicable; if not, in separate “quarter sections.” A less quantity than one quarter section is not to be taken. Fractional sections are to be excluded, except in cases where a portion of section sixteen or thirty-six exists in the township, and a selection has to be made of the balance of the quantity of land to which such township is entitled, and where the quantity cannot be located on a quarter or a half-quarter section; in such cases only may fractional sections be taken according to the legal subdivisions, to make up the deficiency in quantity as nearly as practicable.

Fifth – In those townships and fractional townships fronting on bayous, river, lakes, or water courses, wherein the regular mode of surveying may have been departed from under the authority of law, and where a portion of the land consists of lots fronting on such bayou, river, lake, or water course, and running back for quantity, and where there has been irregularity in numbering the sections, in such cases, where sections sixteen and thirty-six happens to fall on one of the small lots on the water courses, or a section containing less than the proportional quantity of School Land to which such township is legally entitled, such lot Number Sixteen or Thirty-six should be reported by you in your abstract of proposed selections, and in addition thereto so much of the section, whatever its number may be, as covers the ground which Number Sixteen or Thirty-six would have covered had the township been regularly numbered, as will make the complements of School Land to which such township is entitled.

Sixth – Fractional townships, created by Indian Reservations, are not to be understood as coming within the meaning of the Act, as when the township is completed it will then have its proper School Land.

Seventh – When a township falls *wholly* within the limits of a private claim, there is no Public Land, and no grant for School purposes, in said township; nor is the State entitled under any law to indemnity for the School sections which would otherwise exist in said township, any more than they would be if the township were entirely covered by a lake or navigable stream, and no selections are to be made in such cases; nor will the State be entitled to indemnity for sections sixteen and thirty-six which may fall on mineral land.

Eighth – The selections under this Act, as well as under the Act of eighteen hundred and fifty-three, must be made in legal subdivisions, according to the official township plats of the public surveys on file in the local office at the time the selections are made or recommended to be made.

Ninth – The law allows selections to be made of surveyed lands, whether offered or unoffered, but no selection is admissible upon any land to which a pre-emption or other valid claim shall be legally established; nor on any land which is or may be reserved from sale by any law of Congress, or proclamation of the President of the United States; nor upon any tract which is reserved or withdrawn from market for any purpose whatever; nor upon any mineral land. It is therefore necessary that the Agent of the State, in making the selections, should make such careful preliminary examinations as will enable him to select lands to which there may exist no valid claim by pre-emption or otherwise, which are not mineral, and to avoid embarrassment and delay consequent upon such conflicts, you will also examine the plats, records, and files of your office, and see that the selections are in all respects free from objections, and will certify that they are free from conflicts before the lists are reported to this office.

Herewith you will receive forms to be used for selections under the respective Acts. The forms for selections under the Acts of eighteen hundred and fifty-three and eighteen hundred and fifty-nine require the date to be given when the list is filed in your office, being the date when the same takes effect, and that it be certified and signed by the Locating Agent of the State, and certified by you as to the correctness of the same, before reporting to this office.

The form for *proposed* selections, under the Acts of eighteen hundred and fifty-nine and eighteen hundred and twenty-six, must also be certified by you, and if recommended by the State authorities, that fact should also be stated thereon.

The list of selections under the respective Acts should bear a regular out *separate and distinct series of numbers* from Number One.

The tracts selected should be distinctly entered in lead pencil on your Tract Books, and on the township plats, and be withheld from sale until you are officially advised of their approval or rejection by the Secretary of the Interior.

When advised of the approval of such selections you will proceed at once to enter the same permanently, in red ink, in your Tract Books and on your township plats, and opposite the entry in the Tract Books you will note the date of the approval, making reference by its date to the letter from this office advising you of such approval.

In case of the rejection of a proposed selection, you will not fail to remove, by India rubber, the pencil marks on the township plats, and make entry of the facts in your Tract Books.

You will retain a record of all lists reported to this office, and when approved you will note the fact thereon and refer to the date of the letter communicating such advice.

Applications for the selection of School Lands by the State can only be received and filed by you where the land is surveyed and the official township plats on file in your office.

The State authorities will have no right to sell or dispose of any of the lands selected until they shall have been furnished with certified lists of the approval by the Secretary of the Interior.

You will acknowledge the receipt of this circular.

Very respectfully,

Your obedient servant,

J. M. EDWARDS;
Commissioner.

REGISTER AND RECEIVER LAND OFFICE, Marysville, California.

It will be observed that some parts of this letter are directly in conflict with the laws of donation and with the laws of this State providing for the sale of such lands. The honorable Commissioner says: “The law directs that the selections shall be made by the Secretary of the Interior,” while the wording of the Act, as will be seen by section seven, is as follows: “Where any settlement, by the erection of a dwelling house, or the cultivation of any portion of the land, shall be made upon the sixteenth and thirty-sixth sections before the same shall be surveyed, or where such sections may be reserved for public uses, or taken by private claims, other land shall be selected *by the proper authorities of the state in lieu thereof*, agreeably to the provisions of the Act of Congress, approved May twentieth, eighteen hundred and twenty-six, and which shall be subject to approval by the Secretary of the Interior;” which last named Act regulates the quantity which shall be selected for townships which are fractional – said selections being made from lands in the same district in which said fractional township is situated.

The honorable Commissioner further says: “Where a township falls wholly within the limits of a private claim, there is no Public Land and no grant for School purposes in said township, nor is the State entitled to indemnity for the School sections which would otherwise exist in such township any more than they would if said township were entirely covered by a lake or navigable stream.”

A careful consideration of the Act of Congress of March third, eighteen hundred and fifty-three, has not only failed to convince me of the correctness of the above conclusion of the Commissioner, but has fully satisfied me that he is wrong, as will be seen by reading section seven of the Act as quoted above; nor can I think the honorable Commissioner, in making such decision, was imbued with the spirit of the Government – which has become a part of the settled and most cherished policy of our country – to assist in the support of Public Schools in every township in the land. This policy is

manifested in various Acts of Congress from the year seventeen hundred and eighty-five to the present time.

Between the years seventeen hundred and eighty-five and eighteen hundred and forty-eight, section sixteen, in every township of every State or Territory organized between those dates, was granted to the State or Territory for the support of Public Schools, and in all cases where said section sixteen was covered by a private claim, or had been taken for public use, other lands were granted in lieu thereof.

The Act of Congress of March second, eighteen hundred and seven, providing for the disposal of the Public Lands south of the State of Tennessee, made provision that whenever section sixteen fell upon lands which had already been granted by any Act of Congress, or within any *British Grant,* the Secretary of the Treasury should locate another section in lieu thereof for the use of Schools.

The Act of April eighteenth, eighteen hundred and eighteen, to enable the people of the Illinois Territory to form a Constitution and State Government, etc., also, the Act of March third, eighteen hundred and nineteen, giving the same privileges to the people of Alabama Territory, both authorize the selection of other lands in lieu of section sixteen, when, form any cause, such section has been disposed of.

Within the limits of the State of Indiana, at the time of her admission into the Union, there existed a large tract of land, covering entire townships, known as Clark's Grant; yet Congress, by Act approved May seventh, eighteen hundred and twenty-two, authorized the Register of the United Land Office at Brookville to select for School purposes other land in lieu of such sixteenth sections as were covered by said grant. A similar provision was made in regard to the Vincennes donation. A similar provision was made upon admission of Missouri into the Union, within whose borders existed large grants.

The Act of May twentieth, eighteen hundred and twenty-six, is very particular in its provisions, that not only every whole township not before provided for shall have its section of land, but that every fractional township shall have its proper proportion of land for the support of Common Schools.

The Act of May twentieth, eighteen hundred and thirty, to authorize the selection of certain School Lands in the Territory of Arkansas, provides that: "Whenever section sixteen in said Territory, either wholly or in part, is now or may hereafter be included in private claims held by titles confirmed or legally declared valid, other lands equivalent thereto may be selected."

Previous to the admission of the State of Ohio into the Union, a large portion of that State belonged to the State of Connecticut, commonly known as the "Connecticut Western Reserve," provided that "the President of the United States is hereby authorized and required to reserve from sale out of any Public Lands that have been heretofore offered for sale, and that remain unsold, in the State of Ohio, a quantity of land, which, together with the lands heretofore granted for the support of schools in said Connecticut Western Reserve, shall be equal to one thirty-sixth part of said Western Reserve, and the same shall be vested in said State for the support of Schools in said Western Reserve."

A similar Act was approved June eighteenth, eighteen hundred and forty-four, in favor of the Territories of Florida, Iowa, and Wisconsin, in which were grants covering

entire townships, providing for the selection of other lands in lieu of section sixteen, whenever covered by such grants, or in any way disposed of.

The Act of February fourteenth, eighteen hundred and forty-eight, admitting Oregon into the Union, provides: “That sections sixteen and thirty-six in every township of Public Lands in said State, and where such sections, or any part thereof, have been sold or otherwise disposed of, other lands equivalent thereto shall be granted to said State for the use of Schools; and since that date every State admitted into the Union has received for the benefit of its Public Schools sections sixteen and thirty-six in every township within its limits.

Various other Acts might be quoted from, showing conclusively that no policy of the Government has been more firmly established or more strictly followed, than that of allowing to every State a section, and since eighteen hundred and forty-eight two sections of land, for the use of Schools in every township in the state, and of placing these donations past all and every contingency, by providing that in every instance where such sections have been taken by private claims or for public uses, other land equal in quantity shall be selected for such.

The Act of March third, eighteen hundred and fifty-three under which our State claims its one-eighteenth portion of every township in the State is, if possible, more positive, more positive and definite than any other enactment upon this subject. None of the Acts previously referred to make a positive and immediate grant of these sections to the State, but section six of the Act of March third, eighteen hundred and fifty-three, reads as follows:

“And be it further enacted, That all the Public Lands in the State of California, whether surveyed or unsurveyed, with the exception of sections sixteen and thirty-six, *which shall be, and hereby are,* granted to the State for the purposes of Public Schools, in each township, and with the exception of lands appropriated under authority of this Act, or reserved by competent authority, and excepting also the lands claimed under any foreign grant or title, and the mineral lands, shall be subject to the pre-emption laws of the fourth of September, eighteen hundred and forty-one,” etc.

I desire particular attention to the words *“shall be, and hereby are,”* as they occur in this section, and also the words in the seventh section, before quoted, providing that when either of these sections have been taken by private claims or for public uses, *“other land shall be selected by the proper authorities of the State in lieu thereof.”*

It seems very clear to me, that this wording made the grant positive and immediate, requiring only on the part of the State the selection of these sections, or land in lieu thereof, and notice to the local Agents of the United States of such selections, to vest in the State a full and perfect title.

In regard to the right of the State to select unsurveyed lands in part satisfaction of the School Land grants, I will simply refer to the decision of our Supreme Court in the case of Doll v. Meador, 16 Cal. 315, in which Chief Justice Field, delivering the unanimous opinion of the Bench, referring to the Act of Congress of September fourth, eighteen hundred and forty-one, granting to every new State upon admission into the Union five hundred thousand acres for purposes of internal improvement, and which Act

does not define so clearly the rights of the State as does the Act of March third, eighteen hundred and fifty-three, uses the following language, viz:

"It is to be observed that with reference to the States referred to in the first section of the Act, the selections and locations are to be made after the lands of the United States in those States respectively have been surveyed according to existing laws. But with reference to the new States, the time of selection and location is not designated. The concluding words of the grant to them, providing that the land is 'to be selected and located as aforesaid,' refer, as we conceive only to the manner and form of the selection and the quantity which the several parcels mush embrace. Conformity in the locations with the sectional divisions and subdivisions is required to preserve intact the general system of surveys adopted by the Federal Government, and to prevent the inconvenience which would ensue form any departure therefrom. When, therefore, any location is made by the State previous to the survey of the United States, it must be subject to change, if subsequently, upon the survey being made, it be found to want conformity with the lines of such survey."

And in a supplemental decision made in the same case, Chief Justice Field says, "The Act of September fourth, eighteen hundred and forty-one, does, as we stated, require the locations of the State to be made conformably to sectional divisions and subdivisions, but does not require the State to postpone the selections until the survey of the United States." Notwithstanding the clear and explicit wording of the Act, the honorable Commissioner decides, as before quoted, that where an entire township is covered by a grant, we are entitled to no lands in lieu of the sixteenth and thirty-sixth sections so covered; that selections must be made by the Secretary of the Interior, and that no lands can be selected until surveyed by the United States.

Again, the Commissioner of the General Land Office, in a communication to United States Surveyor-General Beale, dated October, eighteen hundred and sixty-three, giving instructions in regard to lists of Swamp and Overflowed Lands belonging to the State to be forwarded to the Land Office at Washington, uses the following language:

"You should exclude form your lists all tracts which may have been reserved or in any manner disposed of by the Government, or upon which there may exist *inchoate rights,* either under the *pre-emption, homestead,* or other laws of the United States. In a word, you should report only vacant and unencumbered tracts."

The pre-emption laws we never extended to California until the Act of March third, eighteen hundred and fifty-three, and the homestead law went into effect on the first of January, eighteen hundred and sixty-three; while, by the Act of September twenty-eighth, eighteen hundred and fifty, all the "Swamp and Overflowed" Lands remaining unsold at the date of the Act were granted to the State – three years before the pre-emption laws were extended to this State, and thirteen years before the Homestead Act went into operation; yet the honorable Commissioner, entirely disregarding the rights of the State, instructs the United States Surveyor-General for

California to permit locations of pre-emptions and homesteads upon lands which, by positive congressional enactment, belong to the State.

Other cases occur in which the State has selected and sold unsurveyed lands in part satisfaction of the five hundred thousand acre grant, and in lieu of the sixteenth and thirty-sixth sections covered by grants, which selections the Commissioner has decided to have been improperly made, and subject to pre-emption. While this difference continues, injury must result to both classes of claimants, and a fruitful ground of quarrel and litigation be presented.

I would strongly urge that our delegation in Congress be requested to prepare and press to its passage such a bill as is indicated by the joint resolutions of the Senate and Assembly, adopted April twenty-fourth, eighteen hundred and sixty-three, and which is subjoined:

"WHEREAS, The State of California, through her officers properly authorized by law, has made selections of land from the public domain in part satisfaction of the various donations made to the State by Acts of Congress; and, whereas, the State has made sales of the lands so selected to purchasers, in good faith, received whole or partial payments therefore, and has issued certificates of purchase or patents to such purchasers for the land so selected, thereby pledging her honor to the procurement of good and sufficient titles to the same; and, whereas, the honorable Commissioner of the General Land Office at Washington, giving a different construction to some of the said laws of donation from that entertained by the authorities of the State, has decided many of such selections to have been improperly made; be it, therefore –

"Resolved, By the Senate, the Assembly concurring, that our Senators and Representatives in Congress are hereby requested to procure the passage of a law which shall provide that wherever the proper authorities of a State have in good faith selected any portion of the public domain in part satisfaction of any grant made to the State by any Act of Congress, and have sold the same in good faith, the said selections shall be confirmed to the State; and the State hereby pledges herself that if, upon final investigation and decision, it shall appear that the State has selected any lands to which she is not entitled, she shall pay into the Sub-Treasury of the United States at San Francisco, to the credit of the United States, the sum of one dollar and twenty-five cents for each and every acre of land so determined to have been improperly selected.

"Resolved, That a copy of these resolutions be immediately sent by the State Register, under his seal, to the honorable Secretary of the Interior, and one copy to the honorable Commissioner of the General Land Office at Washington."

In compliance with the last resolution, copies of these resolutions, duly authenticated by signature and seal of the Secretary of State, were sent under the seal of the Register of the State Land Office, separately, to the honorable Secretary of the Interior and to the honorable Commissioner of the General Land Office at Washington, accompanied, in each case, by the following communication from this office:

STATE LAND OFFICE,
Sacramento, Cal., May, 1863.

To the Honorables the Secretary of the Interior and the Commissioner of the General Land Office, Washington, D. C.:

GENTLEMEN: - I have the honor to transmit herewith a series of resolutions passed by the Legislature of this State, upon my suggestion, at its session just concluded, which I propose to make a basis of settlement of all questions of difference between the United States and State authorities in regard to the several donations of land made by different Acts of Congress to this State.

The most important matter in this connection is a difference between the honorable Commissioner of the General Land Office and the State authorities in the construction of the Act of March third, eighteen hundred and fifty-three, so far as relates to the donation of the sixteenth and thirty-sixth sections in each township for School purposes.

Section six of the said Act reads as follows: *"And be it further enacted,* That all the Public Lands in the State of California, whether surveyed or unsurveyed, *with the exception of sections sixteen and thirty-six, which shall be,* AND HEREBY ARE, *granted to the State for the purposes of Public Schools, in each township,* and except, etc., are subject to pre-emption, etc."

Section seven of the same Act provides: "That where any settlement, by the erection of a dwelling house, or the cultivation of any portion of the land, shall be made upon the sixteenth and thirty-sixth sections, before the same shall be surveyed, or where any such sections may be reserved for public uses, or taken by private claims, other lands shall be selected *by the proper authorities of the State in lieu thereof,"* agreeably to the provisions of the Act of Congress, approved on the twentieth day of May, eighteen hundred and twenty-six, entitled an Act to appropriate lands for the support of Schools in certain townships and fractional townships not before provided for, and which shall be subject to approval by the Secretary of the Interior.

This last named law of May, eighteen hundred and twenty-six, simply regulates the quantity which shall be given to each fractional township, according to the quantity of land in said fractional townships.

The Legislature of this State, after a careful consideration of the Act of donation, regarded it as an absolute, present grant, requiring on their part, if the lands had been surveyed either by the United States or State authority, no action whatever to vest in the State complete and perfect title to every sixteenth and thirty-sixth section of every township in the State, except when the same had been reserved, settled upon, or taken by private claims, in which case it was only necessary for the *proper authorities of the State* to select other lands in lieu thereof upon any surveyed or unsurveyed lands, and give notice of all such selections to the Register of the United States Land Office for the district in which the lands were situated, to vest in the State the same complete and perfect title.

The Legislature of the State, in accordance with the above views, have passed laws providing for the sale of said lands, but in no case have they sold any of those lands, or given notice to the local Register of their selection of such lands in part

satisfaction of the grant, until the following affidavits have been subscribed and sworn to before a proper officer and filed with the State Locating Agent: Location No -----. State of California, ----- Land District. County of -----. I, ----- of ----- County, State of California, being duly sworn, depose and say, that I am an applicant for the purchase and location of the above described lands; and that to the best of my knowledge and belief there is no valid claim existing upon the land so described adverse to the claim I hold and apply to be located, and that there is no improvement of any description on said land other than my own.

Witness my hand,

-----.

Sworn and subscribed to before me,
This ----- day of ----- A. D. 186 -----.

-----.

-----.

We, ----- and -----, of ----- County, State of California, being duly sworn, each for himself deposes and says, that he is acquainted with the lands described in the above application, and sought to be located by the above named -----; that there is no valid claim existing upon the land so described adverse to the claim above made, to the best of his knowledge and belief; and that he neither has no expects to have any interest, directly or indirectly, in the claim so desired to be located by said -----.

Witness our hands,

-----.

Sworn to and subscribed before me,
This ----- day of -----, A. D. 186 -----.

-----.

-----.

These affidavits have been required in all cases of sales and selections of these lands, in order to protect the rights of settlers and to guard against frauds, the object of the State being to select in good faith only such lands as were absolutely vacant, and to which there could be no possible claim.

Under the laws above referred to the State has selected under this grant, and sold to purchasers in good faith, about one hundred and fifty thousand acres of land in lieu of sixteenth and thirty-sixth sections, granted or otherwise disposed of, upon lands which have not been surveyed by authority of the United States, but which have been surveyed by State authority, and which selections the honorable Commissioner of the General Land Office has decided to have been improperly made, for want of the United States survey.

This decision has very naturally created much alarm and apprehension on the part of all purchasers from the State, and has placed the Sate in a very unpleasant position with regard to all these purchasers, who have in good faith made partial or full payments and received certificates of purchase, and promises of full and complete title at a future day, when the land shall have been certified to the State; and the State has,

by the passage of the accompanying resolutions, given them further assurance of protection and eventual title.

I cannot but regard the proposition contained in these resolutions – in view of the fact that the Supreme Court of this State has, in the case of Doll v. Meador, affirmed the right of the State to make selections of unsurveyed lands in part satisfaction of the five hundred thousand acre grant, and in view of the fact of the honorable Commissioner's decision, that all selections of land before the survey by authority of the United States have been improperly made and are void, and in view of the fact, that in consequence of this decision the titles of all these purchasers are in a confused and uncertain condition, and that no lands have been so selected upon which any claim whatever existed at the time of selection – as being but an act of justice to the United States and the purchasers.

It is now over ten years since this grant was made, and nearly thirteen years since the Swamp and Overflowed Lands were granted to the State, and not a single acre of any class of land has been confirmed or patented to us. I would be much pleased to know, at your earliest convenience, if the plan suggested in these resolutions meets your approval, and if you will co-operate with our delegation in Congress at its next session to procure the passage of such a law as is therein proposed, or of some law which shall protect at the same time the honor of the State, the purchaser in his title, and the Treasury of the Nation.

The honorable Commissioner of the General Land Office has, I am informed, instructed the Registers of the different United States Land Offices in this State that when an entire township is covered by a Mexican grant the State will not be entitled to any land in lieu of the sixteenth and thirty-sixth sections of he said township. A careful examination of all the laws which have been passed by Congress in regard to the support of Common Schools has convinced me that this opinion of the honorable Commissioner is not sustained by the Act of donation, which provides (see section seven) that where such sections may be reserved for public uses, or taken by private claims, (in which would be classed Mexican grants,) other land shall be selected by the proper authorities of the State in lieu thereof. Nor is it sustained by the general policy of the Government, which seems to have been, even up to the time of the passage of the Act of August fourteenth, eighteen hundred and forty-eight, to establish the Territorial Government of Oregon, to give one thirty-sixth part of all the Public Land in every new State perpetually for the support of Common Schools. In support of which view, I beg leave to refer you to the Act of May seventh, eighteen hundred and twenty-two, providing for the selection of lands in the State of Indiana for School purposes, equal to one thirty-sixth part of the reservation commonly known as Clark's Grant.

Also, to the Act of June nineteenth, eighteen hundred and thirty-four, providing for the selection of lands in lieu of School Lands covered by the "Connecticut Western Reserve" equal to one thirty-sixth part of that reserve.

Other Acts of Congress have provided for the selection of other lands in lieu of sixteenth sections covered by grants, in the States of Missouri, Tennessee, Indiana, Arkansas, Iowa, Florida, and other States and Territories. It has also been provided that when that section falls within a bay, lake, or navigable stream, or upon lands not suitable for cultivation, other lands could be selected in lieu thereof; showing conclusively the intention of Congress to provide for the support of Schools in every

township, by a donation of one thirty-sixth portion of the whole area of any State or Territory. Since the Act of August fourteenth, eighteen hundred and forty-eight, organizing the Territory of Oregon, the thirty-sixth section has been added to the sixteenth, giving one eighteenth portion of the area of each State or Territory thereafter organized, and applied specifically to the State of California by the act of March third, eighteen hundred and fifty-three.

By this Act the State authorities claim the right to the sixteenth and thirty-sixth sections in the mineral districts, no reservation being made by the grant of these sections, as will be seen by a careful reading of the Act; the only reservation being the right of pre-emption upon mineral lands. The State has made no selection or sale of any of these sections, or passed any law allowing their sale, and will, I presume, await a final decision of such right before doing so.

In consequence of the large amount of lands reserved from sale as mineral lands, the large amount covered by Mexican grants, and in consequence of the delaying of the Government surveys, the State is restricted to narrow limits in the selection of her School Lands, and does not enjoy the privileges which are accorded to all other States; and, as a natural consequence, our School Fund does not provide the liberal support which Congress has always contemplated.

The State authorities have in the same manner made selections, amounting to about fifty thousand acres, upon unsurveyed lands, in part satisfaction of the grant of five hundred thousand acres, which are, by the decision of the honorable Commissioner, placed in the same condition as the lands taken in lieu of the sixteenth and thirty-sixth sections.

By an Act of Congress approved September twenty-eighth, eighteen hundred and fifty, entitled an Act to enable the State of Arkansas and other States to reclaim the Swamp Lands within their limits, the provisions of which Act were, by section four, extended to each of the other States of the Union, there was granted to the State of California “all those Swamp and Overflowed Lands, made unfit thereby for cultivation,” which remained unsold at the date of the passage of the Act, and by instructions from the Commissioner of the General Land Office to the United States Surveyor-General of California, dated December thirteenth, eighteen hundred and fifty-nine, forms of affidavits were prescribed to prove the character of the land, which were to be procured by the authorities of the State, and reported to the United States Surveyor-General.

The State authorities have taken great pains to obtain correct and reliable affidavits of the character of theses lands at the date of the grant, and have run the segregation lines between them and the uplands in the greater portion of the State, and have filed original affidavits, proving the swampy character of all land embraced within the lines of the segregation, as run by their Surveyors, with the United States Surveyor-General at San Francisco, and requested that officer to report the same to the Department, in order that the land might at once be certified to the State by the General Government.

I inclose herewith the blank form of affidavit obtained by the State authorities for all lands claimed under this grant, so far as surveys have been made.

The Surveyor-General reports that in consequence of the very limited and reduced clerical force in his office he has not time to examine and report the affidavits and lands embraced therein to the Land Office at Washington.

The State Legislature, in eighteen hundred and fifty-five, passed and Act providing for the sale of the Swamp Lands, and form that time to this date has disposed of nearly seven hundred thousand acres of these lands, and ever since the passage of the Act our enterprizing citizens have been engaged in works of reclamation in various parts of the State, by constructions of levees and drains, and by stopping the mouths of sloughs, and other methods, rendering fit for cultivation considerable tracts of land which were before worthless marshes, and destroying thus all evidence of the original character of the land. They are still engaged in such works of reclamation, and I respectfully submit that the affidavits, which have been procured by the State authorities with so much care; time, and expense, are the best and most reliable evidence of the character of the lands at the date of the grant of eighteen hundred and fifty which it is possible to procure and that they should be taken as conclusive evidence of the character of the land; and it is to be hoped that the United States Surveyor-General will be instructed to employ the services of one Clerk, whose entire duty it shall be to examine the segregation affidavits furnished by the State authorities, until the whole are examined and the Surveyor-General reports the same to the Department at Washington, to be certified to the State.

The whole object of the State is to have selections and sales confirmed, and to transfer the contest for title from the purchaser to the State, and if it shall finally appear that the State has disposed of lands to which she was not entitled, it is proposed to pay to the United States the same price per acre that would be paid if the lands had been sold to individuals.

The Congressional delegation from this State will be fully informed upon all the subjects relating to this important matter, and your co-operation with them for the purposes indicated in the resolutions (a certified copy of which is herewith submitted) is respectfully requested.

I have the honor to be, gentlemen,

Very respectfully,

Your obedient servant,

J. F. HOUGHTON,
Register of State Land Office.

Which communications, I regret to say, has never been answered by either the Secretary of the Interior or Commissioner of the Land Office.

The advantages that would arise form the passage of such an Act are obvious. The State would be able to give good titles in all cases, so that no purchaser need ever feel apprehensive of being disturbed by parties claiming to hold under another title. It would be for the advantage of the General Government also; for it is plain that she would receive more for the lands than if sold in her usual manner. I regard this as the most important and urgent question connected with the Public Lands of the State, and have therefore presented it first.

TITLES TO STATE LANDS.

Immediately after assuming the duties of this office in January, eighteen hundred and sixty-two, being aware that the State never had received patents for any land embraced in the various grants from the General Government, I first made an examination of the steps which had been taken by the State to perfect the title to its Swamp and Overflowed Lands, and after consultation with Honorable E. F. Beale, United States Surveyor-General for California, learning that no evidence of the character of such lands, other than the segregation maps, had ever been furnished the Department, I immediately commenced the preparation of certified copies of all the original segregation affidavits which were on file in this office, and as early as June of the same year a larger portion of them were forwarded to him, and the balance as fast as they could be prepared.

Upon his representation to the Department that the above named certified copies were on file in his office, notice was received form the Commissioner that the original affidavits must be forwarded to Washington, in order that the Department might judge of their correctness.

On the thirtieth of January, eighteen hundred and sixty-three, I received from Colonel Beale the package of certified copies, which I still retain in this office, and on the same day I forwarded to him the original affidavits, which were by him forwarded, with the required lists, to the Department.

These original affidavits had been procured by the County Surveyors making the segregations, under instructions from the Board of Swamp Land Commissioners, whose duty it was, under the Act approved May thirteenth, eighteen hundred and sixty-one, creating said Board, to take general charge of the segregation and reclamation of all the Swamp and Overflowed Lands within the State, and to furnish the County Surveyors with blank affidavits of the form required by the Commissioner of the General Land Office.

During the year eighteen hundred and sixty-one, segregation surveys were made of nearly one million acres of such land, accompanied by affidavits as required by the Commissioner, except no affidavit was made when the Deputy United States Surveyor or his Assistants could not be found, stating that fact as a reason why the affidavits were made by other parties. The honorable Commissioner regards this last named affidavit as essential, and therefore returned the originals to United States Surveyor-General Beale, for this correction, who has forwarded them to this office.

I have notified the Board of Swamp Land Commissioners of the facts in the case, and they have promised to procure the required affidavits. When they are furnished me I shall renew my efforts to secure to the State, as speedily as the workings of the General Land Office will permit, patents for all the Swamp and Overflowed Lands which she is entitled to.

In regard to perfecting titles to the School, Seminary, and Public Building Lands, no other steps have been taken than those contained in the joint resolutions of April twenty-fourth and the usual notice to the local United States Register of State selections, which last, in due time of the Land Office at Washington, is supposed to bring patents to all lands decided to be properly selected, and for all not so deeded we must look to Congressional aid, or the proper decision of our legal tribunals.

STATE LAND LAWS.

In the last Annual Report reference was made to the defective operation of the laws regulating the business of the State Land Office, an the duties of the county officers in connection with it, and several suggestions were made with a view to the inauguration of a better system.

On the twenty-seventh of April an Act was approved, which went into effect sixty days thereafter, and which has since that time strictly governed the business of the office, and generally been complied with by the county officers. A great general improvement has been observed, and it is believed that the simple order of business as now arranged will soon be understood and closely followed by all of them.

There are, however, some few particulars in which experience of the practical working of the law has shown that slight amendments may be advantageously made. The twentieth section of the Act prescribes the manner of giving notice to delinquent purchasers before commencing action for the annulment of certificates of purchase. This now requires that publication shall be made in some newspaper published in the county or if there is no paper so published, by posting upon the door of the County Court House. This method is costly, and as there was no appropriation out of which the cost of publication could be paid, the requisite notices have not been given. The alternative is that the notice by posting should be made the only method, or that money should be set apart to defray the cost of carrying out the present plan. The former is preferred on the ground of efficiency as well as economy, and is strongly recommended.

The twenty-eighth section requires that all parties desiring to purchase land from the State shall take the oath of allegiance therein prescribed. The evident propriety of requiring this need hardly be alluded to; but the twenty-ninth section prescribes the manner of taking and transmitting, etc., and is open to many objections. It is cumbrous, attended with expense and trouble to purchasers, and so liable from its complexity to be misunderstood by the county officers that there has scarcely been and instance, up to the present time, in which it has not been necessary to return the papers, often more than once, before they could be obtained in the shape which the Act seems to require.

It is recommended that the twenty-ninth section be altogether repealed, and the twenty-eighth section amended so as to require merely that the oath of allegiance as therein prescribed, and properly authenticated, shall accompany all applications for State Lands, and that no location or survey shall be approved by the Surveyor-General until such affidavit is filed in his office.

DISPOSITION OF THE PUBLIC DOMAIN.

The financial report of the General Land Office at Washington fully proves the fact that the Public Lands have ceased to be a source of revenue to the National Treasury.

For a long series of years past it has cost more to survey the Public Lands, and maintain the offices necessary for their sale, than the entire amount derived from such sales, and when we take into consideration the donation by the last Congress of lands for the purpose of an Agricultural College for every State in the Union, and the large amount of bounty land warrants which will soon be issued to honorably discharged soldiers, all of which is subject to location, it is easy to see that this difficulty will increase, and that the revenue form this source will rapidly decrease. Already the appropriations for surveys have been reduced, in consequence of the small revenue derived, to such a degree that in our own State our population is far in advance of the surveys, for which they are exceedingly anxious in order that they may perfect their titles.

The facts above set forth have, for a long time past, engaged the serious attention of your present Surveyor-General, and I here desire to give the rough outline of a plan by which the Public Lands of the United States may become a source of revenue, and, at the same time, obviate the conflicts which have already arisen and will continue to arise from the fact that there are two sources of title to the Public Lands.

In our own State, as in nearly all States in which there are Public Lands, there is a State Surveyor-General, and in each county a County Surveyor, who is more or less under his direction, and in each Land District a State Locating Agent, also, a State Land Office, through which all the lands donated by Congress are disposed of.

If, instead of the present expensive manner of carrying out the system of public surveys and sales of Public Lands which has been adopted by the United States, the General Government would make each State the Agent for the management, survey, and sale of all the Public Lands within its limits, subject to such restrictions as Congress may see fit to impose, requiring the States to allow the selection of homesteads, the location of bounty land warrants, pre-emption rights, working of mineral lands, and all other privileges now allowed by law, limiting, if it pleases, the price at which it should be sold, and the amount to any one purchaser, requiring the State to pay into the Treasury of the United States a certain per centage of the sales of such lands say ten per cent of the amount of the sales of such lands as have not already been surveyed by the United States, and say twenty per cent of sales of all such as have been so surveyed the whole difficulty would be obviated. The Public Lands, instead of being a drain upon the National Treasury, would become a source of positive revenue. Conflicts which now arise between individuals deriving title from the two sources would be entirely obviated. The readiness with which all disputes or contests could be settled by reference to an officer close at hand, the readiness with which testimony could be obtained to decide such contests, would make justice much more certain and speedy, and titles which, under the present system, are often compelled to wait a generation for the public survey, and perhaps five years more for completion, would be ready in a few months under the excellent system adopted in the laws of our own State for the disposal of its

Public Lands donated by Congress. The General Government would not relinquish its proprietorship, while every settler would be benefited.

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MINERAL LANDS.

It is difficult to determine what disposition should be made by Government of the mineral lands. That at some time in the future they should be sold, seems to be the general opinion among those most conversant with the subject. But when, and how?

The lands containing lead ore reserved by the United State Government in Illinois, Wisconsin, and Iowa, were at different periods worked under three systems. The last was commonly known as the "leasing system," under which a greater or lesser amount of land was leased for one year to the miner. The lease could be renewed if desired, or cancelled if the lessee preferred to abandon the ground upon the failure of the prospect. The regular subdivisions of the public surveys were not adhered to when the main purpose of including a certain lead required a departure of them. In places where many veins were struck lying quite near together, the mining lots took every form, and nothing was required but that surveys carefully made should define the dividing lines. Every one who wished could obtain a lease, and the revenue was expected to arise from a certain percentage paid by each lessee out of the mineral taken from the ground. For a time there was some difficulty growing out of a question of the right of the Government to these lands, in view of the Act of eighteen hundred and thirty-four for their sale; but a decision of the Supreme Court of the United States having determined it, the system was carried on for more than two years, under as favorable circumstances as possible. The experiment of raising any revenue from mines may be said to have been fairly tried. There was no further opposition, and all seemed to be done in conformity with the law; but the amount collected was very small, and it was evident that some radical difficulty existed. The policy of the relation of landlord and tenant being kept up between our Government and its citizens was also much disputed, and when the Act of Congress directing the sale was passed, there were few who did not recognize the wisdom of so disposing of the whole subject. In the Summer of eighteen hundred and forty-seven the sales were completed. There was no difficulty experienced in adjusting the claims, notwithstanding their want of conformity to the lines of the public surveys. Neighborhood or township meetings were called, and individuals were appointed to buy the lands as offered at the public sale, and provision was made for the immediate conveyance by them of each lot to its claimant.

These facts are alluded to as suggestive, and because the question of the disposal of the mineral lands at the present time is attracting attention in official quarters. If it should become a question for Congressional action, the State should be prepared to indicate such a course as would best protect the interests of its large mining population. Should it be determined to dispose of these mineral lands, I am satisfied that, as in the case of other lands, it would be better that the State should act as the Agent of the General Government. Having a better knowledge of the wants and interests of the mining population than the authorities at Washington can have, her

officers would be much more likely to adopt the best measures for the protection of those interests.

This new proposition for the disposal of the Public Lands will doubtless meet with opposition until the subject can be fully understood; but from the facility with which every argument that can be urged against it can be met and answered, I am satisfied that it will prevail over all opposition if it can be brought to enlightened discussion.

I would suggest that the importance of this subject be urged upon our Congressional delegation, for such action as will tend to bring about the desired result.

The amount of land which has become the property of the Ste under the various grants is as follows:

Description.	Acres.
Grant of sixteenth and thirty-sixth sections, about ……	6,755,200
Grant of Swamp Lands, about ……..	1,500,000
Grant for Internal Improvement……..	500,000
Grant for Seminary of Learning……	46,080
Grant for Public Buildings……...	6,400
Add Grant for an Agricultural College ……..	8,807,680
Add Grant for an Agricultural College ……..	125,000
Total……..	8,932,480

To this amount must be added the Tide Lands belonging to the State by virtue of her sovereignty, but their quantity cannot, for obvious reasons, be accurately know.

Up to the date of the present report, these lands have been disposed of as follows:

SCHOOL LANDS.

GRANT OFFICE HUNDRED THOUSAND ACRES.

Description.	Acres.
Sold under School Land Warrants prior to the passage of the Act of April 28, 1858……..	237,760.00
Sold for cash since that time ……..…...	261,197.83
Total……..	498,957.83

Leaving a balance of one thousand and forty-two and seventeen one-hundredths acres, which is reserved as a margin to correct errors in the final adjustment of the grant.

One re-location, of two hundred and ninety-two and thirty nine one-hundredths acres, has been made since the date of the last report, and patents have been issued for six thousand nine hundred and fourteen and three one-hundredths acres.

GRANT OF SIXTEENTH AND THIRTY-SIXTH SECTIONS.

Amount Located upon Sixteenth and Thirty-Sixth Sections Proper.

Districts.		Acres.
Stockton, surveyed……	19,137.31	
Stockton, unsurveyed……	4,640.00	
		23,777.31
Marysville, surveyed……..	18,238.77	
Marysville, unsurveyed……..	3,117.00	
		21,355.77
Humboldt, surveyed……...	3,630.46	
Humboldt, unsurveyed……..	1,240.00	
		4,870.46
San Francisco, surveyed……..	1,440.00	
San Francisco, unsurveyed……..	9,460.00	
		10,900.00
Visalia, surveyed……..		2,950.68
Los Angeles, unsurveyed……		200.00
		64,054.22
Locations unapproved in above Districts……		7,305.84
Total located……		71,360.06

The amount of sales of these lands by the Boards of Supervisors, under the Act of April twenty-sixth eighteen hundred and fifty-eight, so far as reported to this office, is eighteen thousand seven hundred and twenty acres.

LANDS TAKEN IN LIEU OF THE SIXTEENTH AND THIRTY-SIXTH SECTIONS RESERVED OR DISPOSED OF BY THE UNITED STATES.

Districts.		Acres.
Stockton, surveyed……	19,140.00	
Stockton, unsurveyed……	32,732.92	
Stockton, contested…… . ……...	926.39	
		52,799.31
Marysville, approved, surveyed……	32,734.61	
Marysville, approved , unsurveyed……..	3,608.50	
Marysville, unapproved, surveyed……...	1,900.00	
Marysville, unapproved, unsurveyed……..	1,121.08	
		39,364.19
Humboldt, approved, surveyed……	10,533.64	
Humboldt, approved, unsurveyed……	7,600.00	
Humboldt, unapproved, unsurveyed……...	320.00	
Humboldt, contested……	1,115.20	
		19,568.84
San Francisco, approved, surveyed……	13,140.00	
San Francisco, approved, unsurveyed……...	159,180.0 0	
San Francisco, unapproved, surveyed……...	15,160.00	
San Francisco, unapproved, unsurveyed……...	14,440.00	
San Francisco, contested…….. ……... ..	7,167.86	
		209,087.86
Visalia, approved, surveyed……...		2,640.00
Los Angeles, approved, surveyed……		4,468.40
Total……..		327,928.60
Add Sixteenth and Thirty-Sixth Sections proper……		71,360.06
Total amount applied for under this grant……		399,288.66

SEMINARY LANDS.

GRANT OF SEVENTY-TWO SECTIONS.

Location.		Acres.
Amount of grant……		46,080.00
Total located at date of last Report……	39,646.82	
Located this year in Marysville District……	2,560.00	
Located this year in Stockton District……	320.00	
		42,526.82
Balance unsold……		3,553.18

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PUBLIC BUILDING LANDS.

GRANT OF TEN SECTIONS.

Location.		Acres.
Amount of grant……		6,400.00
Total located at date of last Report……	5,298.82	
Located this year in Stockton District…..……..	320.00	
		5,618.82
Balance unsold……		781.18

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STATE SCHOOL LAND WARRANTS

Located under the Act of April 23rd, 1858.

Location.		Acres.
Located at date of last Report……		17,612.00
Located this year in Marysville District……	4,160.00	
Located this year in Stockton District…..……..	640.00	
		4,800.00
Total to date of this Report……		22,412.00

STATE SCHOOL LAND WARRANTS

Located upon Unsurveyed Lands, under the Act of April 18th, 1859.

Location.	Acres.
Located at date of last Report……	57,760.00
Located since date of last Report……..	3,840.00
Total to date of this Report…….	61,600.00

SWAMP LANDS.

Description.		Acres.
Sold by the State at date of last Report……		654,743.00
Sold by the State since date of last Report……		33,025.42
Total to date of this Report…….		687,768.42
Sold during the past year……	33,025.42	
Applied for during the past year, but the surveys not yet Approved……	9,268.66	
Total taken up during the year……...		42,294.08

Of which amount ten thousand six hundred and eighty-five and twenty one-hundredths acres are embraced in re-surveys of forfeited lands.

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TIDE LANDS.

Description.		Acres.
Total sold by the State to date of last report……		2,768.32
Sold this year in Solano County……..	93.28	
Sold this year in Santa Barbara County……	643.76	
Sold this year in San Francisco County……	226.68	
		963.72
Total at date of this report…….		3,732.04

STATE LAND FUNDS.

The following tables show the amounts paid to the several County Treasurers as principal and interest upon purchases of the various classes of lands. They are made up from the books of the Controller, because they only show the condition of the available Fund. There is still, as there has always been, a wide difference between these amounts and those shown to have been paid by purchasers according to the books and of the State Land Office. This is due, in part, to the defalcation of some of the County Treasurers, and in part to the confusion of the various Funds by those officers, who, under the operation of the old Act, which offered no means for correcting the error, often credited one Fund with moneys belonging to another. This practice continued, of course, until the present law went into effect, on the twenty-seventh of June last. Since that time there can have been no error of this sort, for no mistake can occur that will not be detected in the Land Office, where the apportionment is certified before that Fund is credited.

It would require the services of a competent Clerk for many months to make up from the original returns to the Controller, after correcting them by the books of the Land Office, a full statement showing the true condition of each Fund, but it would well repay the cost of its preparation. If permitted to expend for extra clerical services, as formerly was the case, the fees received for certificates of purchase and patents, the Register could, perhaps, in the next annual report present this correct statement. If it is as important as I conceive it to be that the Funds belonging to the Schools, Seminary, and Public Buildings, should be rightly apportioned, I would respectfully suggest that the above recommendation be acted upon.

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SCHOOL LANDS.

To date of last report – principal……..	$127,487 92	
Since date of last report – principal..……	35,511 05	
Total to date……		$162,998 97
To date of last report -- interest…..……..……	$124,712 81	
Since date of last report – interest……	39,012 48	
Total to date……		163,725 29

SEMINARY LANDS.

To date of last report……..	$6,534 97	
Since date of last report…….	2,465 93	
Total to date……		$9,000 90

PUBLIC BUILDING LANDS.

To date of last report……..	$679 56	
Since date of last report…….	80 00	
Total to date……		$759 56

SWAMP AND OVERFLOWED AND TIDE LANDS.

To date of last report……	$312,536 57	
Since date of last report……..	19,822 64	
Total to date……..		$332,359 21

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STATEMENT

Of the expenditure of all Appropriations, (other than Salaries,) for the Offices of the Surveyor- General and Register of State Land Office, from the date of the last Report to the 1st *of December,* 1863.

For What Purpose Expended.	Amounts.
Office Rent……	$605 00
Postage and Expressage……	364 35
Porters of both offices, including arrears……..	413 34
Binding Books, and Contingent……	67 25
Purchase of Maps and Plats……..	55 00
Seal for Surveyor-General……	30 00
Safe for office……	400 00
Total……..	$1,934 94

J. F. HOUGHTON,
Surveyor-General and Register.

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Sworn to and subscribed, before me, this thirtieth day of November, eighteen hundred and sixty-three.

SAMUEL CROSS,
[SEAL] Notary Public, Sacramento County, Cal.

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The last part of the Surveyor-General's report consists of the statistical tables. It has very properly been made his duty to compile them. The value of such tables, when accurate, is universally acknowledged, and it is believed that every State has taken care to secure the collection and compilation of information of the most reliable character for its statistical reports. The authority attaching to tables so officially presented renders it imperative to neglect nothing that will tend to make them entirely trustworthy.

In March of each year the blanks to be used in collecting the information, and that for reporting them in a condensed form to the Surveyor-General, are distributed to the County Assessors, and in cases where the county has been divided into districts, the blanks have been sent to the Recorder for distribution, as the condensed report is made by him.

An examination of the previous tables, as well the present, will show that there is a defect in the system, and that the end sought is not attained. There are no means of securing correct returns, or perhaps any returns from the County Assessors. A few of these officers seem to appreciate the importance of these returns, and the sheets bear evidence of careful and intelligent labor; but very many evidently regard their preparation as a useless task, unnecessarily imposed, and appear to think that a few figures, seemingly set down almost at random, will suffice never reflecting what effect these careless, imperfect statements may have upon a report which is to be the source of all the knowledge we can have of the condition of the State.

When a return is incorrect or imperfect, its effect is to depreciate the county from which it comes. When any of those multitudes so constantly pouring into the State desire to select their place of abode, will they choose that county whose average yield per acre seems so very small, whose large fruit crop is valueless, whose vines are barren, or whose cattle give back nothing to the dairyman? Let it not be supposed that these people understand and appreciate these sources of information, and have been used to consult them; and when they have not done so directly, they have obtained advice based upon them. It should be remembered that these tables are compiled and published under authority of the State, and form part of its records; that as a part of the Appendix to the Journal of the Senate they go to other States and find place in their Libraries, that there, as the sole accessible and presumedly reliable authorities, they may be consulted and form the basis of published articles, which, widely circulated, may influence many minds.

Much labor is necessary in the preparation of these tables, and it is with regret that I add that I cannot commend them to public confidence. I have endeavored to amend evident errors, or supplied omissions; have stated average values when fuller statements from neighboring counties have given me the means of making them without great probable variation from the truth. Without this labor, the tables would be absolutely worthless; with it, they are only imperfect approximations; and surely, this is not what the law and the interests of the State demand. The only remedy I have to propose is the passage of an Act making the necessary appropriation and authorizing the payment of a premium to each County Assessor who shall present a full report at the required time.

REPORT OF THE SURVEYOR-GENERAL

UPON THE

Progress of the Eastern Boundary Survey

FOR

TO NOVEMBER 20, 1863.

COMMUNICATION.

SURVEYOR-GENERAL'S OFFICE,
Sacramento, November 20th, 1863.

To His Excellency,
LELAND STANFORD,
Governor of California:

SIR: - In compliance with the provisions of an Act entitled an Act to provide for surveying and establishing the Eastern Boundary of the State of California, approved April twenty-seventh, eighteen hundred and sixty-three, I have the honor to submit through you to the Legislature of the State the following report of the progress of the work.

I am, very respectfully,

Your obedient servant,

J. F. HOUGHTON,
Surveyor-General.

REPORT.

EASTERN BOUNDARY SURVEY.

By an Act of the Legislature, approved April twenty-seventh, eighteen hundred and sixty-three, it was made the duty of the Surveyor-General of the State to define and establish the entire Eastern Boundary Line of the State, by running, measuring, and marking a transit line between the point of intersection of the thirty-ninth parallel of north latitude, with the one hundred and twentieth degree of longitude west from Greenwich, near Lake Tahoe, (formerly Lake Bigler,) and the point where the thirty-fifth parallel of north latitude crosses the Colorado River, as the said points were established by Lieutenant Ives, Chief Astronomer of the United State Boundary Commission, appointed for that purpose, and by running and marking in the same manner all that part of said boundary lying between the first named point near Lake Tahoe and due north from said point to the southern boundary of Oregon.

The same Act also provided that the Governor should forward a copy of this Act to the Governor of Nevada Territory, with a request that he should appoint some suitable person or persons to act in conjunction with the Surveyor-General in defining and establishing said boundary.

In compliance with the request so made, his excellency Orion Clemens, then Acting-Governor of the Territory, appointed as such Commissioner Butler Ives, Esq., a gentleman whose mathematical education and large experience as a United States Surveyor peculiarly fitted him for the position.

It will be observed, that the small appropriation made for this survey – twenty-five thousand dollars, to run a boundary line six hundred and thirteen miles long, over a rugged, mountainous country, through several tribes of Indians not known to be friendly and, indeed, on both the northern and southern portions of the line committing frequent depredations and murders whenever opportunity presented, passing through dense forests, over almost unexplored and uninhabited deserts, with intervals of thirty, fifty, and eighty miles without water, requiring a large train of animals to pack this indispensable requisite to existence – could not have contemplated anything more than the Act expressed, simply “running and marking the boundary line” in the most expeditious and economical manner compatible with accuracy. It would have been extremely gratifying to me, could I have felt justified in procuring the services of a first-class Geologist, a Botanist, and a Naturalist, to examine and report upon the features relating to their respective professions of the country over which we passed, and I cannot but think that the State would have been richly repaid for the additional expenditure, had the Legislature authorized the employment of such services.

While the bill was pending, this matter was suggested to its friends by me, but at that time danger of a conflict of arms between the State and Territorial authorities, growing out of the question of jurisdiction of the Courts in Plumas and Mono Counties, was imminent, and they were fearful, if an appropriation was asked sufficient to make a survey of that class the bill would be defeated, and it was left at the sum named.

With the funds thus provided, on the first of May, four days after the approval of the Act, I engaged the services of Mr. John F. Kidder, an Engineer and Surveyor of

large experience, to assist in organizing and equipping a party to commence the work, ordering them to report of duty at Lake Tahoe, on the twentieth of May, or as near as possible to that date; and on the twenty-second of that month Mr. Kidder and party reported to me at the lake, and the work was commenced and continued without interruption to the Oregon line.

For the full particulars of the progress of the work, I refer you to the report of Mr. Kidder, Engineer in charge of party, and to the general notes of the country through which we passed, both of which are herewith submitted.

Immediately upon the passage of the Act above referred to, appreciating the importance of having the position of the initial point at Lake Tahoe definitely determined as a starting point, and anxious to avoid the delay and expense of establishing an observatory to determine longitude, I took the latitude and longitude of Lieutenant Ives' observatory, at the south end of Lake Tahoe, as determined by himself, making, myself, test observations for latitude, which agreed to seconds with those made by him. As no report has been published of his field work and computations, and as some doubt has been expressed as to whether Lieutenant Ives ever reduced his observations so as to determine the initial points at the lake and on the Colorado, I will here furnish the evidence I have been able to obtain, that they were so determined by himself.

While the bill providing for the survey was pending before the Legislature, through the courtesy of United States Surveyor-General E. F. Beale, Esq., the entire field notes, topographical maps, etc., connected with the observations of Lieutenant Ives, which were in his possession, were delivered to me for examination.

I found the notes of a long series of observations at his observatory near Lake Tahoe, extending over some months of time, with the latitude of the observatory, taken by sextant and sidereal clock, computed and carried out as North Latitude 38° 56' 47" 52.

Observations were made by myself, and the latitude computed, which differed only in seconds from that of Lieutenant Ives, and his results were used in the survey as correct.

A careful search for reduction of his observations for longitude resulted, as I had anticipated from what I knew of the circumstances under which the computation was made, in a failure to find them among his notes. In this apparent dilemma I applied to Mr. John F. Kidder, formerly Chief Clerk in the United States Surveyor-General's Office for Nevada Territory, to which office Lieutenant Ives furnished the longitude of the observatory before mentioned, under the following circumstances:

By an Act of the Territorial Legislature, approved November, eighteen hundred and sixty-one, the Governor was authorized to have the boundary line run from Lake Tahoe to below Esmeralda – the object being to determine the position of Aurora with reference to the boundary line.

In order to establish the initial point at Lake Tahoe, which was necessary before the work could proceed, Mr. Kidder placed himself in communication with Lieutenant Ives, then at work at his observatory in Lake Valley, who, in his answer, dated August twenty-eighth, eighteen hundred and sixty-one, says: "I trust our observations this week will give us our longitude with reference to San Francisco;" and fourteen days later he telegraphs from San Francisco, September eleventh, eighteen hundred and sixty-one, to Mr. Kidder, as follows: "Approximate longitude of station is seven hours, fifty nine

minutes and fifty-three seconds west of Greenwich;" all of which correspondence and telegrams are in my possession, on file in this office.

This result, reduced to distance, makes his observatory – the precise position of which is plainly marked by monuments still remaining – in longitude 119° 58' 15" west from Greenwich, or 0° 1' 45" east of the one hundred and twentieth meridian.

The initial point on the Colorado River is, by the Act of Congress admitting the State of California into the Union, where the thirty-fifth parallel crosses the Colorado, which is marked in three different places upon the topographical field books and maps accompanying Lieutenant Ives' survey, as 114° 36' west from Greenwich, at which place a monument was placed, distant about two miles form Fort Mojave.

The geographical position of the initial points thus determined, it became necessary to calculate the azimuth of a transit line or arc of a great circle connecting the two points. In order to secure a great degree of accuracy in this important part of the work, upon which depended the accuracy of the whole line, I submitted the problem of computing the azimuths of the line at every degree of latitude, also the distance on the line between parallels, to Professor J. E. Hilgard, in charge of the United States Coast Survey Office at Washington, and before the completion of that portion of the line between the lake and Oregon, I received from him a very satisfactory computation, the principal results of which are as follows:

DISTANCES BETWEEN PARALLELS.

35° and 36°.....	159,827 metres, or 174,782 yards.
36° and 37°.....	162,096 metres, or 177,263 yards.
37° and 38°.....	164,617 metres, or 180,020 yards.
38° and 39°.....	167,431 metres, or 183,098 yards.
35° and 36°.....	159,827 metres, or 174,782 yards.
Total length of line south.....	715,163 yards

Or, four hundred and six miles and six hundred and three yards.

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AZIMUTHS OF THE SOUTH LINE.

At 35°.....	134° 19' 26"
At 36°.....	133° 35' 15"
At 37°.....	132° 4' 10"
At 38°.....	131° 57' 55"
At 39°.....	131° 04' 15"

The azimuth is reckoned from the south by west.

I am under many obligations to Professor Hilgard for his promptness in forwarding these computations. Commissioner Ives and myself made the same computations by use of Lee's Formula, and were gratified to find our work verified on receipt of those of Mr. Hilgard, differing not materially from his computations, which were used in starting the line.

The latitude, longitude, and locality of Lieutenant Ives' Observatory being known, it was readily apparent that the initial point, at the intersection of the thirty-ninth degree of north latitude with the one hundred and twentieth meridian, fell within the lake about three and two thirds miles from the southern shore, being three miles twelve hundred and eleven yards north of the observatory.

It being impossible to set an instrument at the initial point, and the azimuth of the line being changeable with every advance, it became necessary to find another point upon the line upon which to establish our observatory, and set our altitude and azimuth instrument for establishing by observation the true meridian, and from which to compute the new azimuth and turn off the angle of the line.

For this purpose, by means of spherical trigonometry, the length of a line which should pass for the one hundred and twentieth meridian through the observatory point to the diagonal line was computed, together with the required azimuth, and at this point fifty-eight chains in a south-easterly direction from monument on the Kingsbury & McDonald road through Lake Valley, near Lapham's Station, the new observatory was established by setting firmly in the earth a large pine log, and mounting thereon our altitude and azimuth instrument, manufactured by Parkinson & Frodsham, of London, with twelve-inch horizontal circle reading to ten seconds, and sixteen-inch vertical circle reading to five seconds. Telescope, four feet focal length.

With this instrument observations were made every favorable night for nearly two weeks, the meridian correctly established, and the angle of the line, bearing at this point south 48° 52' 45" 26 east, was laid off and the line started for the Colorado. In order to secure a great degree of accuracy in running the southern portion of the line, which is one of the longest transit lines ever attempted to be run in the world – being from the Initial point in the lake to that on the Colorado River, four hundred and six miles six hundred and three yards – it was necessary to procure a very superior instrument; and after examining such as could be found in the State, I determined to send to New York for a straight line transit, made by Temple, of Boston, for R. E. Ricker, Esq., an eminent New York and Western Railroad Engineer, for the express purpose of running long straight lines with greater accuracy than is possible with ordinary instruments, there being but very few such in the United States.

A short time before the completion of that portion of the line lying north of the lake, this instrument, in itself a model of superior workmanship, and the only thing of the kind in the State, was delivered in good order a Sacramento at a total cost of three hundred and fifty dollars. The southern portion of the line, so far as run, has been run with this instrument, with positive instructions, which have in no case been departed from, to reverse the instrument and double centre for every foresight, to insure against the possibility of error in running an absolute straight line. Leaving the lake at its most south-easterly part, a trifle to the south and west of Lapham's Station, it crosses the Kingsbury & McDonald road through Lake Valley at a distance of about half a mile southerly from the station, and almost immediately commences the ascent of the high

granite range dividing Lake and Carson Valleys, being the eastern summit of the Sierras.

The line crosses these mountains obliquely, crossing numerous deep ravines, perpendicular granite precipices, and barren peaks, rendering progress very slow and difficult. It leaves Job's Peak and Bald Mountain, the highest peaks in the immediate vicinity, within the State, emerges from the mountains into the Valley of the West Carson, about a quarter of a mile west of Carey's Mill, passes on about two hundred and fifty yards north-east of Captain Smith's house, and soon after crosses the West Fork of the Carson River; thence over high hills to the East Fork of the Carson, crossing it about one mile above or south-west of Young's Bridge; thence over a mountainous country to the West Fork of Walker's River, which it crosses some six miles above or south-west of the house of Mr. Rissua, and a little more than a mile above Raymond's house; thence over the Walker River Mountains, sometimes called the Three Sisters, across the Valley of the Sweetwater, upon its western border; thence to the East Fork of Walker's River, crossing it about four miles above Marsh's Station, where the aurora Road crosses the river; thence over high mountains to Rough Creek, crossing it some three hundred yards below where the road from Aurora to the Big Meadows of the Walker's River crosses the same stream; thence on to Mount Braly, crossing it three miles twenty-seven chains and twenty-one one-hundredths south-west of the flagstaff in the Town of Aurora. At this point, having been constantly with the party from the time of leaving the lake, and having determined the most important question in connection with the position of the line, viz: the location of the Town of Aurora, I left for Sacramento to make up the Annual Report of the Surveyor-General, to report progress of the Boundary Survey, and attend to other business of the office accumulated during my absence. I gave directions to Mr. Kidder to connect the Survey with the United States Surveys in that vicinity, Mono Lake, Big Meadows, Bodie Mines, and other places of importance, while awaiting the arrival of supplies ordered from Sacramento, and to increase his party to twenty men, preparatory to entering upon the country below Aurora, inhabited by bands of Pi Ute and Owen's River Indians, one of the most numerous and hostile of which is commanded by that most desperate and treacherous of all Indians, Captain Joaquin Jim, and to push the work on as fast as accuracy would permit, in order to cross the White Mountains before the Winter's snows set in, which, if encountered before crossing, I feared would compel a suspension of operations for the season.

Once across them, and upon the desert beyond, I anticipated that the work might proceed more favorably in the Winter than in the Summer season, when, for very long distances, we could expect to find little or no water, which deficiency I expected the snows and rains of Winter to supply.

Leaving Mount Braly, near Aurora, the line passes over low, rolling hills, destitute of water for a distance of nearly thirty miles, without a spear of grass for our animals, supporting no vegetation except sage brush, piñon, and juniper, passing the Adobe Meadows, leaving them a few miles to the right of the line.

Up to this point the line had, form the commencement, progressed rapidly and without any serious interruption, but here the party encountered some five hundred Indians, of both sexes and all ages, numbering from two hundred to two hundred and fifty warriors, under command of the notorious Captain Joaquin Jim, before named, and another called Captain Tom. The Indians were collected about four miles east of the

eastern portion of the Adobe Meadows, for their annual feast and pine nut dances, and our line ran directly through their camp.

It was thought best, before running the line through their country, to hold a council with the Chiefs, and endeavor to make a treaty with them, or, at least, to explain to them the objects of the expedition, and learn how they were disposed towards us.

For this purpose, a few presents were made to the Chiefs, and long talks were had, which was interpreted by one of their own number, who spoke English, and, notwithstanding the assurances of the interpreter that all was right, indications were directly to the contrary, and a system of annoyances was kept up by them, showing that it was all wrong and anything but agreeable to them.

They would keep one hundred or more warriors, with one of their chiefs, in our camp all the time, insisting upon being fed, while the other Chief would accompany the party on the line with another body of warriors, objecting to our party taking arms on the line, and at night, would demand pay for their services as an escort.

In order to avoid these annoyances, knowing that when the feast and dances were over the Indians would disperse into small bands and scatter over the country from Walker Lake to the lower portion of the Owen's River Valley, and knowing also, that this would not occur so long as our party was in the vicinity, it was decided to move back to Aurora, and await their dispersal. Accordingly, the party packed up their equipments and the remnant of their provisions, and started for Aurora.

On the night of the twenty-ninth of October, while camped between the Adobe Meadows and Aurora, they encountered a violent snowstorm, accompanied by terrific wind and severe cold, continuing for thirty-six hours, which resulted in eight of the party being more or less frozen in feet, fingers and ears – one of them our Mexican cargador, so badly frozen in both feet that for a time surgeons at Aurora thought amputation of some portions would be necessary. By careful attention he has recovered without requiring such an operation, but yet remains in a feeble condition.

In consequence of this storm, which had rendered the White Mountains, only about twelve miles beyond where the work stopped, impassable, it was determined to abandon the survey for the season and take the train to Sacramento, to await the action of the Legislature and the return of Spring before resuming operations. All that portion of the party not required for making maps, writing up field work, and attending to the train, were dismissed at Aurora and Carson City, and the train came on to Sacramento, arriving on the thirteenth of November. Anticipating the possibility of being compelled to abandon the work by the setting in of Winter before the crossing of the White Mountains could be accomplished, I gave particular instructions to mark the exact centre of the line at every foresight after leaving Mount Braly, that it might be easily found whenever the work should be resumed, which has been done in such a manner that any of the party present can at once go to the spot and find the centre of both foresight and backsight to get the precise direction of the line.

It now remains for the Legislature to decide whether the work shall be resumed with the opening of Spring.

The location of the line cannot be absolutely correct until it is continued to the Colorado and corrected on the return, but so much care has been taken to have both the computations and the work of running the line approach absolute correctness, that it is confidently expected to strike the Colorado within from one to two miles of the initial

point, and allowing the greater error, the correction at Aurora would be less than half a mile, while the line is three and one third miles distant as now run, consequently, no possible correction could change its position with reference to the line.

The country through which the line runs, and which could be affected by any change required, with the exception of a few acres on the West Carson, and near the river bottoms crossed, is barren sage brush desert, volcanic rocks, or high mountains, valuable only for the precious metals they may contain and no mines were being worked which could be affected by any possible change.

The country beyond where the work was suspended, from the best information we can derive, is desert and barren mountains, for very long distances destitute of water, and for a considerable distance infested by Indians, which would require an escort for at least fifty miles at starting and if the intervals without water exceed thirty miles as we are informed they will, a train of camels will be required, in addition to the present train of mules, to pack water, as a train of mules could pack no more water than they would themselves require for a greater distance, while camels will endure for three days without water, and carry about three times the load of a mule. The uncertainty of the nature of the country, particularly with reference to water, renders it very difficult to form any correct estimate of the additional appropriation required to complete the work.

The original appropriation for the survey was twenty-five thousand dollars, of which there remained unexpended on the twentieth of November, as is shown by the annexed statement of expenditures, the sum of three thousand two hundred and seventy-eight dollars and one cent, and there remained on hand, of equipment and supplies, the value of four thousand four hundred and eighty-seven dollars, making a total of seven thousand seven hundred an sixty-five dollars and one cent, leaving as chargeable for actual cost of survey up to November twentieth, seventeen thousand two hundred and thirty-four dollars and ninety-nine cents – to which must be added the cost of making maps in triplicate, as required by the Act, the cost of replacing some of the monuments with cut stone, for which we could not delay the party while running the line, and small incidental items, which will increase this amount to about twenty thousand dollars. For this sum a trifle over half of the line, or three hundred and nine miles, has been run, embracing all that portion which is at all important to the State.

Under favorable circumstances, I am of opinion that a further appropriation of twenty thousand dollars would complete the line to the Colorado, make the corrections required on the return, erect more substantial monuments at points where most required, and prepare the necessary maps. It will be necessary for the Legislature, at the approaching session, to take some action upon this subject.

For a more definite and minute description of the country through which the line passes, you are referred to the descriptive notes and to the report of the Engineer in charge, both of which are herewith submitted. The location and description of the most important monuments on the line will be found under the appropriate head.

Barometric observations have been made at all points of interest from the lake to the point where the work was suspended on the southern line; but the short time allowed for making up this report after the arrival of the party, has prevented their reduction and publication at this time. They will be reduced and published in the final report of the Survey.

Similar observations were commenced upon the line north of the lake, but our only remaining barometer being broken during a violent gale of wind, which threw the tent in which it was hanging to the ground, they were necessarily suspended in consequence. Triangulations for distances were also made to all prominent points near the line, which, for want of time to compute them, cannot be given in this report.

In concluding this report, I desire to add my testimony to that furnished by the work they have accomplished to each and every member of the party, for the faithful and efficient discharge of every duty which has been assigned to them, and I think it is not too much to say that a better or more effective party for the duty required could not be found.

EXPENSES OF SURVEY.

For what Purpose Expended.		Amounts.
Labor account for May……..	$688 89	
Labor account for June…..……..	1,274 00	
Labor account for July..…….	1,740 50	
Labor account for August……..	1,233 32	
Labor account for September……...	1,450 00	
Labor account for October…….	1,750 00	
Labor account, November 1st to 20th……...	747 15	
Total account for labor to November 20th……..		$8,884 02
Surveyor-General's salary……..		2,000 00
Incidental……...		2,339 73
Subsistence and transportation…….		3,013 84
Equipment…….		5,484 40
Total to November 20th, 1863……..		$21,721 99
Deduct Equipment and Supplies on hand…….		4,487 00
Amount properly chargeable to Survey…..……..		$17,234 99

INVENTORY OF EQUIPMENT AND SUPPLIES ON HAND NOVEMBER 20, 1863.

Description.	Value.
One Tangent Transit Instrument ……..	$350 00
One Sextant and Artificial Horizon……	75 00
One Standard Ramrod Chain……	15 00
Two Surveying Chains……	12 00
One set Steel Tally Pins……	10 00
Three Opera Glasses……	75 00
One Aneroid Barometer……	20 00
Nineteen pairs extra Woolen Blankets……	150 00
Two Tents and fixtures……	30 00
One Sharp's Carbine and accountrements……	50 00
One Shot Gun……..	50 00
One Chest Medicines……	10 00
Provisions and Groceries……..	20 00
Camp Furniture……	15 00
Three Horses and twenty-five Mules, (Pack-Train and equipments)……..	3,400 00
Four Saddles and Bridles, (other than with train)……	60 00
Five Pistols, with accountrements……..	125 00
One Robe……..	15 00
Line Rods and Plummets……	5 00
Total……	$4,487 00

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EXPENDITURE OF FIVE THOUSAND DOLLARS

Placed in the hands of the Surveyor-General by the Act authorizing Boundary Survey.

For what Purpose Expended.	Amounts.
James M. Brown, expenses of train, Lake Bigler to Robinson's……..	$37 00
Kingsbury & Co., provisions, mule shoeing, and ranching……	71 29
Lewis Eland, escort……	60 00
W. Pharo, saddle……	25 00
James M. Brown, expenses to Susanville……	25 50
John Robinson, beef and milk……	24 59
Sundry persons, incidental……	94 75
James Phillips, blacksmithing……	11 00
James Phillips, services self and five men……	666 00
Carried forward……..	$1,015 13

For what Purpose Expended.	Amounts.
Brought forward……	$1,015 13
J. F. Kidder, incidental……	118 00
Lawrence & Houseworth, repairs Solar Compass……..	8 00
L. B. Richardson & Co., leather and canvas for train……	57 00
L. E. Crane, expenses to Susanville, and with train……...	57 75
John F. Kidder, freight……	75 00
Axsen & Jewell, provisions……	16 31
H. D. Torreyson, mule shoeing……..	22 00
H. D. Torreyson, camp furniture……	21 50
Millard & Bussard, hay and barley……	17 16
Kelly, Mott & Co., camp furniture……...	49 90
J. F. Kidder, surveying instruments and expenses of pack train……..	80 00
Whitney & Co., freight……	9 50
Thomas Hooper, services……...	17 50
Charles C. Rodgers, services……	17 50
Quanchi & Lossa, provisions……..	5 75
R. C. Clements, provisions……	3 50
Small & Burke, provisions……...	3 12 ½
J. F. Kidder, travelling expenses……	114 50
A. F. Rice, supplies……..	47 75
A. Wright, supplies…..……	5 00
J. F. Kidder, chains and camp furniture……	52 00
Torreyson & Smith, blacksmithing……	4 00
George M. Fall, freight……	16 52 ½
T. F. Flynn, horse……	41 50
P. F. Powers, provisions……	7 80
J. P. Pulsifer, use of sail boat……	15 00
A. H. Pray, ranching……	20 00
L. S. Story, horse……	275 00
John F. Kidder, provisions and supplies……..	92 56
J. M. Luther, ranching……..	28 59
L. E. Crane, supplies and expenses of pack train……..	121 44
Rhenis & Mitchell, medical attendance……	42 50
L. E. Crane, provisions……	36 00
John F. Kidder, stage fare, supplies, etc……..	63 95
Robison & Pearson, stabling mules……..	85 00
J. F. Kidder, supplies, Indian presents, etc……..	255 15
J. F. Kidder, freight, provisions, supplies, etc……..	212 67
J. S. Lawson, expenses of pack train, stage fare, etc……	257 46

J. F. Houghton, incidental……..	211 78
Total……..	$3,800 80
Appropriation……	5,000 00
Balance unexpended to date……	$1,199.20

PARTY, AS ORGANIZED FOR NORTHERN TRIP.

Name.	Position.
J. F. Houghton……	Surveyor-General……..
Butler Ives……..	Commissioner from Nevada Territory…
John F. Kidder……	Engineer in charge of Party……
James S. Lawson……..	Compassman……
L. E. Crane……	Clerk……
M. G. King……...	Topographer and Barometrician…….
Amos Bowman……...	Chainman……...
George M. Fall……...	Chainman……...
J. B. Guilford……..	Axeman……...
Andy Wright……	Cook……
Thomas Flynn……	Mayor Domo……..
James Brown……	Packer……
Bernado Guirsa……	Arriero……
Domingo Bevanco……	Arriero……

To which was added at Honey Lake, after the departure of Messrs King and Guilford:

James Phillips……	Blacksmith……..
Henry Arnold……..	Assistant on line, and Escort……...
Alexander Arnold……..	Assistant on line, and Escort…..……
Joseph Hale……	Assistant on line, and Escort……...
James Nichols……	Assistant on line, and Escort……...
Joseph Belknap……	Assistant on line, and Escort……...
Lewis Eland……	Escort……..
— Willie……...	Escort……..
— Shute……..	Escort……..
— Winters……...	Escort……..

PARTY, AS ORGANIZED FOR SOUTHERN TRIP.

J. F. Houghton	Surveyor-General
Butler Ives	Commissioner from Nevada Territory
John F. Kidder	Engineer in charge of party
James S. Lawson	Compassman and Topographer
L. E. Crane	Clerk
Amos Bowman	Barometrician
James M. Brown	Forward Rodman
Henry Goddard	Back Rodman
Eugene Sharon	Chainman
F. A. Hymers	Chainman
Hamilton Marton	Axeman
Phillip Diehl	Axeman
Henry Gaver	Cook
Bernado Guirsa	Cargador
Domingo Bevanco	Arriero
Vicente Sanchez	Arriero
Louis Pana	Arriero

To which was added at Aurora:

Frederick Durant	Assistant Rodman
Edward Clark	Assistant Rodman
James McCully	Axeman
B. F. McCready	Axeman
David Howard	Axeman

REPORT OF ENGINEER IN CHARGE OF PARTY.

REPORT.

Hon. J. F. Houghton, Surveyor-General
of the State of California, Sacramento:

Sir: - I have the honor to submit the following report of the survey of the Eastern Boundary of the State of California, from the initial point at Lake Bigler, northerly, to the forty-second parallel of latitude, which parallel constitutes the boundary line between California and Oregon.

On or about the first of May, eighteen hundred and sixty-three, I was instructed by you to organize a party and to purchase equipments necessary for said survey, and on the twenty-second of the same month I reported to you at Lake Bigler as in readiness to commence observations necessary to verify the initial point at head of Lake Bigler, as established by Lieutenant J. C. Ives, formerly Topographical Engineer, United States Army.

For the purpose of making said observations, a large altitude and azimuth instrument had been provided by you, and the full notes of Lieutenant Ives' observations obtained from Honorable E. F. Beale, United States Surveyor-General of California. My party at this time was organized as follows, viz:

John F. Kidder……	Engineer in Charge.
James S. Lawson……	Transit Man.
M. G. King ……..	Topographer and Barometrician.
L. E. Crane……..	Clerk.

Together with eight other persons, employed as chainmen, axemen, packers, etc. I had by your direction purchased a pack train of twenty-five animals.

The observations at Lake Bigler were made under your immediate supervision, and were witnessed by the Commissioner from NevadaTerritory, Butler Ives, Esq., and were found to coincide with those taken by Lieutenant Ives, making the longitude of the observatory 119° 58' 15" west from Greenwich, and the latitude 38° 56' 47" 52 north. The next step was to measure the distance west from the observatory to the one hundred and twentieth meridian, which was carefully done, but the point not falling in a favorable position to extend the line northwardly across Lake Bigler, it was deemed best to extend the line from the observatory to the north shore of the lake, and there offset to the one hundred and twentieth meridian. This was accomplished in the following manner: I sent Mr. Lawson, with two men, to the north end of the lake, having previously ascertained, approximately, the location of the line at that point, and directed him to show signal fires for two successive nights, moving the same (as he should be directed by means of signal fires on the right or left of the observatory) in a corresponding direction. On the night of June first, the signal fire of Mr. Lawson at the foot of the lake was plainly visible from the observatory, and was apparently not more than fifty feet from the line required. A signal was made him, which was immediately answered, but from a misunderstanding of the signals the observations of that night were declared to be a failure. On the next evening you personally directed the observations, the signals

were promptly made, as promptly answered, and the meridian of the observatory extended across the lake, the length of which at this point we ascertained, both by triangulation and latitude, to be about twenty and one half miles.

On the following day I proceeded with my party, accompanied by yourself and Mr. Ives, to the foot of the lake, arriving at Mr. Lawson's camp on the evening of the fourth of June, having camped on the third near Captain Pray's sawmill, where I separated my pack train, sending a portion with two men to Robinson's, in Long Valley, via Carson, the rest accompanying me.

On June fifth, measured line from offsett to the one hundred and twenty-fifth meridian – one mile, forty-two chains, and sixteen links. I had the misfortune to-day to lose one of the best pack mules, which fell over a precipice, breaking its back. In my opinion, neither of my packers were to blame in the matter.

We moved camp three miles further west, locating it near a beautiful bay, named by yourself Agate Bay. The following day was spent in meandering the shores, in order to obtain information necessary for the maps; observations were likewise made with the sextant by yourself, to ascertain the latitude, which was found to correspond with the distance obtained by triangulation.

June sixth, the line was fairly commenced from Lake Bigler north. After accompanying us some three miles, you returned to Sacramento, leaving explicit directions with me to spare no pains both as to the accuracy of the work, and economy and expedition in its prosecution, so far as was compatible with accuracy.

From the lake to the River Truckee, a distance of about fourteen miles, the surface of the country is rugged in the extreme, having heretofore been considered almost impracticable for men, and quite so for pack animals; we, however, experienced no further difficulty than in being compelled to build more than a mile of trail for our mules, and occasionally a pack animal or two would fall over the precipice, scattering cargoes in every direction, but fortunately being rescued without serious damage.

This portion of the country is covered with a heavy growth of timber, principally yellow pine and fir, and contains many quartz lodes or ledges which have been since ascertained to be rich in sulphurets of silver.

June fourteenth, the line was run across the Truckee, and on the eighteenth we crossed the Henness Pass Road, camping near Bull's Station. From thence to Long Valley, a distance of over six miles, the country is rolling and covered with yellow pine and mountain mahogany. The line crosses Long Valley one hundred and sixty-one links east of the western terminus of the fourth standard parallel of the United States Government surveys for the Territory of Nevada, a short distance east of the Antelope Ranch House, and twenty-five chains distant east from John Robinson's house. At this point, on the nineteenth of June, we joined the balance of our train, which had been camped here for some days. Here Mr. King, Topographer, decided to quit the party, owing to his fear of Indians. He was accompanied by two others, who had likewise determined to proceed no further. While camped here an accident unfortunately happened to the only barometer in the party, by which it was rendered perfectly useless; it had been fastened to one of the tent poles, when a sudden gust of wind upset the tent, throwing the barometer to the ground and breaking the tube.

From Long Valley to Honey Lake Valley, the line passing over a high dividing ridge, and twenty-four chains east of well marked peak, which we designated Boundary

Peak, descends into Honey Lake Valley about two miles west of a camping place known as Sage Fort, near a small stream.

At this place, as we had received information that a petty warfare was continually waged between the citizens of Honey Lake and the Indians, I deemed it best to send to Susanville for reinforcements, and in the course of two days had an addition to my party of six men, who furnished their own horses and equipments.

From Lake Bigler to this place the line had been thoroughly chained, but I deemed best from thence to the Oregon line to dispense with chaining, taking the latitude accurately every day, and triangulating to prominent objects. The line crosses Honey Lake Valley east of the lake, about eight miles and thirty-eight chains west of High Rock Spring, from thence over a barren volcanic country to Rush Creek, crossing said creek one quarter of a mile east of Rush Creek Station. Between High Rock Spring and Rush Creek, it crosses a small valley, hitherto undiscovered, and named by us Skedaddle Valley, from the following circumstance, viz: On first discovering it we found a number of Pi Utes, of the Smoke Creek Band, who seized their weapons and rushed to the rocks, apparently to give us a warm reception. We immediately signaled them, held a parley, and induced some four of them to visit our camp. I then thought it best, in company with one man, to visit the Indian encampment, leaving orders to retain the Indians in our camp until my return. Soon after arriving at one of their bough houses, where we found several more Indians, we were recalled by one of our men, who stated that those retained in camp had escaped, not heeding the weapons which were aimed at them, but not fired. I then deemed it best to move camp, that night, which was done, arriving at Mud Springs about twelve o'clock. Luckily, the line had been run nearly to Rush Creek that day. It was afterwards found by the soldiers who went there to hunt the Indians, that there must have been at least fifty camped at that point, and that they must have departed almost simultaneously with ourselves. I have consequently named the place Skedaddle Valley, thinking, however, that the victory was on our side, as we captured one gun from the enemy.

At Smoke Creek Barracks, four miles from Rush Creek, through the kindness of Lieutenant Tillinghast, in command at that point, I obtained the services of four soldiers – Eland, Shute, Winters, and Willie – to each of whom as well as to the Lieutenant, I wish to return my thanks, as well as those of the party, for their gentlemanly conduct and promptitude in acceding to my request.

From Rush Creek to Surprise Valley, the line was over high volcanic mountains, crossing Painter Valley and several grassy valleys, or rather ravines. Through Surprise Valley, so named by a party who supposed upon seeing it two years ago that they were the discoverers, the line seems almost to be naturally defined, that portion of the east side to the lakes, three in number, through two of which the line runs, being barren and destitute of vegetation, whilst on the westerly side it is covered with a rank growth of grass and clover, is well watered, and apparently susceptible of the highest degree of cultivation. The waters of the lakes above mentioned are alkaline, and it was stated by one of our party who had traveled on the Lassen Road (which road crosses the valley between the second and third lakes) in the year eighteen hundred and forty-nine, that no such lakes existed at that time. I have since heard this statement confirmed; however, the valley seems to have been but little explored previous to our visit, and I very much doubt if any white man had been the full length of the same. From Surprise

Valley, the line runs over a high rocky divide, descending to Crane Lake, and connecting with the forty-second parallel, where the same is naturally defined by a large creek, or stream, in a cañon with almost perpendicular sides of rock one hundred and fifty feet in depth. At this point, while taking observations for latitude, July the seventh, (our camp, with a large portion of our men, being some three miles distant,) we were suddenly surprised, by the appearance of some Indians of the Modoc tribe, who did not discover us until the shout of "Indians" was given. Apparently surprised, they retreated across the ravine or cañon, and built a signal fire, immediately answered by others, while we finished our observations; and after building a stone monument, (probably not as perfect as though we had been undisturbed,) retreated to camp – the Indians recrossing the cañon and building several more signal fires.

Upon arriving at camp a consultation was held, and, as we were not in a good location for defence, it was decided to move some miles further on our return. While engaged in packing, defiant shouts were heard, and Indians seen on the surrounding hills, their heads decorated with war plumes, and apparently anxious for a conflict. We, however, experienced no trouble, arriving at Smoke Creek July eleventh, where I dismissed the escort, and, with the balance of the party, arrived at Lake Bigler July twenty-fourth. I submit with this copy of the field notes descriptive of the line, the general features of the country, the number of monuments, the location of the same, etc. I have been unable to prepare the rough maps required by you, owing to the preparations necessary for the Southern survey.

In conclusion, my thanks are due to Acting-Governor Clemens of Nevada Territory, for his kindness in promptly giving me a requisition on the military authorities at Fort Churchill for a supply of Minié muskets and ammunition, thereby obviating the delay and expense attending the procuring of the same from the State of California.

I wish to bear testimony to the untiring exertions of Mr. Lawson, upon whom much of the labor of the expedition has devolved, and to whom too much credit cannot be given.

I have the honor to remain, very respectfully,

Your obedient servant,

JOHN F. KIDDER,
Engineer in charge of Survey.

FROM THE DESCRIPTIVE NOTES OF THE SURVEY.

NORTHERN LINE.

From the intersection of the thirty-ninth parallel of north latitude with the one hundred and twentieth meridian of west longitude to its north shore, for a distance of sixteen miles and thirty-six chains, the boundary line falls within and passes nearly through the center of Lake Tahoe.

This beautiful sheet of fresh water lies in a deep basin formed by a fork in the Sierras south of the lake and a high range of mountains on the north, running form the East Fork and nearly connecting with the West, leaving barely room for the Truckee River, which is the outlet.

This basin from summit to summit averages about twenty miles east and west, and forty miles north and south, and the mountain peaks of the ranges surrounding it have an elevation of one to four thousand feet above the level of the lake.

The lake is twenty miles long from north to south, and varies in width from eight to ten miles from east to west, and has an elevation of about six thousand three hundred feet above the level of the sea. Its surface comprises an area of about one hundred and fifty square miles. Its length upon the one hundred and twentieth meridian is twenty miles and thirty-one chains, and its greatest width ten miles and sixty chains. The longest straight line lying wholly within it, measures twenty-one miles and sixty-seven chains in a direction bearing north 19° west.

The average depth of twenty-one soundings taken on the one hundred and twentieth meridian, is nine hundred and thirty-four and twenty-four one-hundredths feet; that of twelve soundings, extending over a distance of twelve consecutive miles, exclusive of three on the north and six on the south shore, is fourteen hundred and twenty-four and six one-hundredths feet. The greatest depth reached was fifteen hundred and twenty-three feet. The deep soundings invariably show the bottom to be composed of a fine impalpable mud, except one made some three miles from the north shore, where the lead was bruised upon a rocky bottom at a depth of twelve hundred and forty-two feet. The shoal soundings gave a bottom of sand, or sand, gravel, and boulders. Its waters are pure and transparent, and abound in the finest quality of lake trout. Its outlet is the Truckee River, which at the point where it debouches from the lake has a capacity equal to a current four feet deep by sixty in width, moving at the rate of three miles per hour. It is fed by numerous streams from the surrounding mountains, many of whose highest peaks are covered with perpetual snow. Its shores for the greater part are bold and rocky, alternating with sand and shingle beaches in the more sheltered places.

Evidences are not wanting to prove that this lake once occupied a much greater portion of the valley in which it is situated than at present. Beaches of water-worn pebbles are found, ranging from the present waterline to a height of from forty to sixty feet above it.

The loose character of the rock forming the barrier at its outlet, through which the river has apparently deepened its channel, warrants such a conclusion. The country about the lake, both in the valley and upon the mountains, is covered with a moderately

heavy growth of timber of excellent quality for the manufacture of lumber, for which purpose several mills have already been erected. A more particular description of this timber will be given in another part of the report.

Perhaps one of the most remarkable features of this lake is the fact that its surface is never frozen, which, at its great altitude, surrounded by lofty mountains covered with snow, must be attributed to its great depth. The purity of its waters, the salubrity of the climate, and the boldness of the surrounding scenery, situated as it is upon the principal thoroughfare between California and the rich mineral region of Nevada, render it a favorite place of Summer resort to the people of both sections.

From the north shore of Lake Tahoe to the head of Long Valley, a distance of twenty-seven miles and fifty-six chains, at a point where the boundary line intersects the Fourth Standard Parallel of the United States Land Surveys, our line lay across the heavy range of the eastern summit of the Sierras, which here deflects from its more general north and south course east of the lake, and trends in a north-westerly direction, uniting with the western summit to the north and west of Dog Valley, in California.

This spur or summit is rough and broken, and is intersected by numerous deep and rocky cañons and ravines.

There is a heavy growth of timber upon these mountains, consisting of yellow and sugar pine, fir, cedar, juniper, hemlock, and mountain mahogany.

From the lake to Juniper Creek, a distance of fifteen miles, the formation is trachytic, and the ridges have an easterly and westerly trend, the highest of which has an elevation of about seven hundred feet above the lake, as ascertained by barometrical observations of the survey.

From Juniper Creek to Damnation Cañon the rock is talcose slate, with numerous quartz veins of great width and reputed richness in the precious metals. While the veins have a bearing in the main approximating to the meridian, the trend of the State is from north-east to south-west.

From the cañon above noted, which is on the twenty-sixth mile of the boundary from the angle in Lake Tahoe, and through which a considerable stream of water flows in a northwesterly direction to the Truckee, a few miles below, the trachyte again occurs and continues to thirty-eight chains on the thirty-first mile, where a large quartz vein is met with, and which probably occurs at or near the junction of the trachyte with granite, as the latter rock is soon after observed along the cañon of the Truckee, forming a portion of its walls and underlying the bed of the river.

The Truckee, from the point where it debouches from the lake to O'Neil's Station, on the Henness Pass Road, flows through a deep bold, rocky cañon, the lower portion of which, as has been stated, is composed of granite, while the higher peaks and mountains adjoining are trap, trachyte, etc.

There is a considerable valley on the Truckee, beginning at a point some eight or ten miles from the lake, and extending to within three or four miles of the boundary. It is in its course through this valley that the Truckee receives the outlets of Donner and Truckee Lakes, as also several smaller streams. This valley, which is of considerable extent, has received the same of Squaw Valley, and is attracting the attention of the public on account of the numerous quartz veins which have recently been found there, and which are believed to be rich in gold and silver, but principally the latter. Several town sites have been located and surveyed in the vicinity of the new mines, and all the

most valuable timber and ranch lands claimed. Of the real value of this as a mineral region, but little can be definitely determined in the present undeveloped state of the district. These mines are upon the slate formation described on the boundary line from Juniper Creek to Damnation Cañon. The surrounding country is heavily timbered, and the streams afford abundant power for mechanical purposes. Good meadow lands are abundant in the smaller valleys.

From the lower end of this valley to O'Neil's, the cañon of the Truckee is narrow and rugged, with but little or no bottoms. But at this latter point the river makes a sudden deflection to the eastward into the sage plains of the Great Basin, which course it holds for a distance of nearly thirty miles, when it again turns to the northward, and after passing through another deep cañon, is finally poured into Pyramid Lake, from which there is no outlet.

Some twelve miles below O'Neil's, are the Big Meadows, lying partly upon the Truckee and partly upon Steamboat Creek, the outlet of Washoe Lake, which finds its way into the river at this point.

From the Big Meadows, for some eight miles, the river runs through a rocky cañon, but of sufficient margin to admit the passage of a wagon or railroad secure from the influence of the river at any stage of its waters. It is through this cañon, in fact, and along this river, from the lower crossing to Squaw Valley, and from thence via Donner Lake through the Donner Pass to the Valley of the Sacramento, that the route of the Pacific Railroad is proposed to be located.

From the crossing of the Truckee, by the line to Ball's Station, the trachytic formation described south of the stream is found occurring again, but at the latter point gives place to a brecciated conglomerate, which continues to Dog Creek, the outlet of the waters of Dog Valley, on the fortieth mile.

At Ball's Station, which is situated on the Henness Pass Road from California to Nevada Territory, the mountains are comparatively low, and covered with a heavy growth of timber.

From Dog Valley Creek to the head of Long Valley, the formation is trap, changing to more recent volcanic lavas at the latter point.

From the forty-fourth to the forty-eighth mile, near the Antelope Ranch Station, on the Honey Lake and Washoe Road, the country is level, comprising a small basin-like valley, in the eastern portion of which a small alkali lake is situated. A large portion of this valley is occupied by meadow lands, and its formation undeterminable from the amount and character of the superficial accumulations.

From Antelope Ranch the line passes along the base of a range of granite mountains, which, beginning at a point about one mile north of the small alkali lake just described, at the head of Long Valley, continues east of and parallel with the boundary, to the end of the fifty-eighth mile. The western slope of this range is much broken by ravines which furrow its side. It is destitute of water, and only here and there do you find a stunted juniper bush, or a straggling nut pine.

From the fifty-eighth to the sixty-first mile we intersected Long Valley, leaving it again at the latter named distance, and continued across low hills and dry ravines for four miles, to the mouth of Dry Valley, on the sixty-fifth mile.

This valley is about three miles wide, and some fifteen miles long from east to west, abounding in wild rye in the bottom, and bunch grass upon the sides of the

surrounding hills. It is destitute of water, except upon the slopes of the hills on the south, where a few springs of good water are found. It opens into Long Valley, which from this point bears to the north-west into the Valley of Honey Lake, twelve or fifteen miles below.

Long Valley is about sixty miles in length, varying in width from one to five miles. The valley lies between the Sierras on the west, and the granite range already described upon the east, commencing in the mountains, near O'Neil's. In fact the water shed between this and the Valley of Truckee, is not more than two miles from the above named station.

During the wet season there is a small stream running its entire length, but at other times water is found only in deep holes, and is strongly alkaline. In its lower portion are numerous hot springs, the most celebrated of which are on the ranch of John Robinson, some twenty-five chains west of the line, near the end of the sixty-third mile. This valley contains a fair amount of agricultural lands, with fine meadows of native grass and clover. Snow seldom remains in the valley for any considerable length of time. The whole valley is settled and improved, and considerable stock is raised and kept in it.

The Honey Lake Road from Washoe passes nearly through its entire length, and about midway is the Beckwith Pass of the Sierras, opening from it into Sierra Valley, California, and through which runs the Beckwith Pass Road.

The valley in the lower portions is destitute of timber, but the Sierras on the west furnish an abundant supply of this important article, with sufficient water-power for its manufacture. The mountains upon the east have already been described as being destitute of both timber and water. This is true of their western slope, but upon their eastern slope there is some yellow pine, numerous springs, and several small streams, as also much excellent grass and a few native meadows. To the eastward, and between Long Valley and Pyramid Lake, are a succession of similar ranges with intervening valleys, the most inconsiderable of which is Winnemucca Valley, named from the celebrated Chief of the Pi Ute Indians.

As we have now fairly entered upon the desert plains of the Great American Basin, it may be well, at this point, to notice the leading characteristics of this singular country.

The end of the forty-third mile marks the limits of the tall pines and heavy forests of the Sierras, with their numerous springs and streams of the purest water. On the one hand and on the other are the dry arid plains of the Great Basin, with their vast extent of alkali deserts, their rough and timberless volcanic hills and lava covered plateaus, their numerous mineral and hot springs, destitute of the most part of anything that tends to impress the mind with that idea of pleasure and satisfaction which is imparted to it in a country covered with a verdant and luxuriant vegetation; and while it is confessed that its hills and mountains are filled with the precious metals in the most lavish abundance, the whole country appears as if the Creator had cursed the works of his own hand, until every feature bears the marks of harshness, sterility, and desolation.

It is a fact worthy of mention in a description of this region, that the piñon, (nut pine), *Pinus Edulus* of botanists, which is first met with among the low hills on the eastern slope of the Rocky Mountains, is nowhere found west of the Sierras, or even on their eastern slope, on the granitic formation of these mountains proper, although it is

sometimes met with upon spurs, from the more recent formation of the Great Basin, in close proximity to them.

This tree was not met with on the survey north of Honey Lake Valley, although the juniper (*J. Occidentalis*) was found as far north as the Oregon boundary, and Lieutenant Williamson mentions it as occurring upon the Klamath River, still further north.

From the end of the sixty-sixth mile to the seventy-fourth, we run over a high isolated mountain, between Long and Dry Valleys and Honey Lake Valley. This mountain has a granitic base, but the higher portions and summits are covered with basaltic peaks, which in some places approach to the columnar structure.

The most notable of these peaks is one described in the field notes of the survey by the name of Boundary Peak, from its close proximity to the line, and which readily serves to mark its position for a great distance.

The base of this mountain is dry, with a moderate growth of juniper, but above the granite there are several springs, and one or two small streams flowing down its northern slope, and while the juniper disappears in the vicinity of the basalt, its place is supplied by a most luxuriant growth of bunch grass which covers the summit.

From the seventy-fourth to the eighty-ninth mile we passed across the eastern portion of Honey Lake Valley, and, at the nearest point, about five miles from the lake.

This portion of the valley is a level alkaline plain or bottom, but a few feet above the lake at ordinary stages, and during the season of high water, is not unfrequently submerged, and it is even claimed that the waters of this lake are sometimes connected with those of Gwin and Pyramid Lakes, through the low pass upon the east of the former, which is not improbable, as this pass is but a portion of the same plain which we have been describing.

The entire length of Honey Lake Valley, in the level portion of it, is about sixty miles from east to west, and its width from north to south from fifteen to twenty miles.

The greater portion of this valley from the head of the lake eastward is dry and barren, and destitute of vegetation for the most part, except sage brush and greasewood. Numerous hot springs abound in some parts of this valley, especially upon the north side, and near the east end of the lake.

Near the Sierras on the west and south-west of the lake, as also on the Susan River, which empties into the lake on the north, are excellent agricultural lands, nearly all of which are under a high state of cultivation, largely remunerating their owners of the labor bestowed upon them. The mountains abound in heavy forests of excellent timber, and the streams from them afford sufficient power to operate mills, several having already been constructed, which are now manufacturing lumber and sending it to Humboldt and other portions of the country. Fine crops of wheat, corn, oats, and barley are produced, and vegetables of all kinds grow luxuriantly.

There are strong evidences that this valley, as also those of Pyramid and the Mud Lakes, if not others adjoining, have at some remote period formed in inland sea. Such evidences are found in the existence of coral reefs in these basins at an altitude much above the present level of the lakes.

At High Rock Spring occurs one of those singular formations, consisting of a reef some five hundred feet in length and thirty to forty feet in height. Other reefs of less extent occur in other parts of Honey Lake Valley. Among these, two varieties were

noted: *astrea ananis* and *syringapora romulosa*. These formations will be noted again in the description of Mono Lake and Valley, where they occur more abundantly, both in the lake, and on the shore at a great elevation above the water.

Honey Lake, so called from an excretion produced from a small insect, and popularly known as the “honey-dew,” is about twelve miles long by six to eight in width. Its waters are shallow and strongly alkaline. Upon one or two occasions its bed became nearly dry. A full and complete map of this valley will be furnished from such data as will give a correct idea of everything of importance connected with it.

From the eighty-ninth to the one hundred and forty-seventh mile, the country consists of plateaus, and is almost entirely of volcanic origin; it is quite destitute of timber, juniper *only* being found in small quantities, sometimes only a single individual or two being met with for ten or twelve miles; again, considerable quantities are found in more favorable localities, the most considerable of which is on the southern slope of the hills to the northward of Painter Valley, and a second body of some extent north of Big Cañon, on the one hundred and forty-second mile.

This plateau consists of volcanic lavas and scoria; sometimes occurring in horizontal layers of great thickness, sometimes broken up in rough and irregular masses of great height; again, the surface is strewn with boulders of scoria, and deep, yielding beds of ashes.

Numerous abrupt cañons traverse this plateau in every direction. The first considerable one is that of Smoke Creek, through which the Humboldt and Honey Lake Wagon Road passes, affording the most feasible and direct route between the two sections. This cañon opens to the east into the valley of the Mud Lakes. The road continues up it for only about six miles, when it leaves the main cañon to the right, and follows the cañon of Rush Creek, a branch of Smoke Creek, and from the head of this, passing a low divide, follows down other cañons to Honey Lake Valley.

There are several stations along this road, one near the line, which is noted in the field notes of the survey.

The second is that of Painter Valley and Creek, and which is some portions is from five to eight miles in width, forming a considerable valley, by the name above given, and across which the line passes for some distance; in some portions of this valley there is considerable grass, and a small stream of water. This valley opens through a narrow portion of the cañon into the same valley as that of Smoke Creek.

The third is a very deep cañon, on the one hundred and forty-second mile. This cañon is about one mile in width, and opens from the valley of the Mud Lakes westward into he Madelaine Plains, which lie to the west of the plateau, and between it and the Sierras.

These plains are of considerable extent, but as they were not visited by our party, a full description cannot be given here; they are believed, however, to consist of a dry and arid waste, covered with sage brush and wild rye, with no considerable interest attaching to them.

Throughout the plateau of which we have been speaking, water is found in considerable quantities, more than would at first be supposed judging from the general character of the country, and its occurrence here must be attributed mainly to the semi-stratificacion of the beds of lava which we have already described, and along the line of which most of the springs are found to originate.

To the east of this plateau, distant from four to eight miles, lies the great Valley of the Mud Lakes, which is too well known to need a description here. In a small cañon to the north of Deep Cañon a sandstone rock was observed, probably of the Devonian series, but even here the surface was covered with a cap of volcanic rock, and it is not improbable that this formation extends over a large portion of the plateau, and which is merely covered with this capping of volcanic rock. In the vicinity of vents, however, this and other formations have been much broken up and displaced by the igneous force.

From the one hundred and forty-seventh to the one hundred and eightieth mile, the line passes through the eastern portion of a large and fertile valley, named by parties who have visited it before, Surprise Valley, Nightingill Valley, etc. The former name has been adopted by the survey as an appropriate one, and which has become more familiar to the public than any other.

This valley is about fifty miles long, north and south, its width varying from ten to twelve miles from the base of the mountains, and twenty to twenty-five from their summits.

Three considerable lakes occupy a portion of this valley, designated as First, Second and Third Lake, counting from the southern part of the valley. The First and Second are connected by a narrow channel, some two miles in length. The Third is separated from the Second by a low sandy ridge, not more than three miles in width.

These lakes are fed by numerous streams from the mountains on the west of the valley, but as they have no outlet, the water is strongly impregnated with mineral substances, mostly alkaline. Their aggregate length cannot be far from forty miles. The valley upon the east side of the lakes is barren and alkaline, and the mountains for the most part destitute of water and timber, there being only a few hot springs, and a few scattering junipers.

But strangely in contrast with this sterility are the rich and fertile meadows of the western portion. On the east, you ride along a narrow bottom between the mountains and the lakes, into the soft sand and ashes of which your animal sinks at every step, not unfrequently falling at length, as he, too, suddenly strives to gain a surer footing by turning aside upon more inviting and often more treacherous ground. There is no grass, and only a stunted growth of the desert-loving sage brush and greasewood, from which even the rabbit and sage hen have fled.

If water is met with at all, it is hot and alkaline, and only at two or three points is there sufficient grass for a train of animals. But on the west, for more than sixty miles by the windings of the valley, your route is through extensive meadows of the finest grass and clover, growing with a luxuriance and profusion that appears almost tropical in its character. You force your animal with difficulty into the tangled mass of clover, grass, and peavine before you, and perhaps a few yards further on you are completely enveloped in the dense mass around, which often reaches above your head, even when mounted on horseback, and through which you find it difficult to direct your course without the aid of a compass – for these meadows often stretch away in unbroken line for many miles around you. Streams of the purest water come dancing down over beds of gravel from the mountains above, where their fountains leap forth from the regions of eternal snow.

Herds of antelope and deer are seen grazing in the rich pastures which these meadows afford, and flocks of sage hens are constantly whirring up before you. The

streams abound in fish, and furnish an abundant supply of water for agricultural and mechanical purposes.

The mountains are covered with a heavy forest of pine and fir, and all along their slopes to their very summits they are covered with grass.

The amount of arable land in this valley cannot fall much short of one hundred thousand acres. Good roads can readily be opened into it through several prominent passes, from all portions of the surrounding country – in fact, the old Lassen Immigrant Road passes through a portion of it. The timber on some portions of the mountains must be considerably nearer to the Humboldt mines than any other now known. In the southwestern part of this valley, at the base of a low volcanic mountain, and near the shore of the first lake, within the distance of some two miles, are not less than a hundred hot springs, while above, and but a short distance from them, is a small lake of pure, cold water.

The geological formation of this valley and adjoining mountains differs from any heretofore met with on the boundary. The mountains upon the south, as previously stated, are of volcanic origin; but those upon the west, and a portion of the eastern range, are stratified, showing the Devonian and Carboniferous series.

These formations have but little dip, and if they were not intersected by numerous fractures which have been much denuded by the elements, they would present the appearance of a high table mountain, such being their real structure, modified, as we have seen, by fractures and denudation.

The inclination of the strata is *from* the valley on either side, thus making this basin to rest upon an anticlinal axis. The summits of these mountains, as also their slopes, in many places, are strewn with volcanic seoria and ashes.

From the character of the formation above given, they could hardly be considered, even the absence of other evidences, as belonging to the Sierra Nevada range, although much doubt seems to exist in the mind of the public as to their true position.

I am inclined to regard them as a separate and distinct range, and would suggest that they be given an appropriate and distinguishing name.

From the one hundred and eightieth mile to the Oregon boundary, a distance of twenty-seven miles, the country is quite uniform in its physical features, and the character of its formation; the surface is rough and broken, with scattering juniper, and in the that portion around Crane Lake, which occurs on the two hundred and third mile, there is considerable grass, both in the small valleys and upon the surrounding hills.

Near the one hundred and eightieth mile is a considerable stream, flowing from the higher portions of the mountains east of Surprise Valley, but which loses itself in the foot hills nearer the Lake.

A considerable stream finds its way into Crane Lake from the west. This lake, which is some two or three miles long and one or two miles wide, has an outlet to the north-east, flowing into another stream near the Oregon State line. On the west side of the lake, at the mouth of the stream mentioned above, is a fine meadow, of limited extent.

At the termination of the line on the Oregon boundary, a considerable river, from the mountains on the west, flows through a deep rocky cañon to the eastward of the line for about two miles, and then bears to the northward as far as we could trace its course

with the eye; still further to the northward high table mountains are visible, probably a continuation of those on the west of Surprise Valley.

Looking to the north-east, a lone butte lifts its head far above the surrounding country; eastward, the country is rough and mountainous. Between Surprise Valley and Crane Lake the hills are smooth and rounded, and their surfaces covered with water-worn gravel. This portion has but little timber, but abounds in fine bunch grass.

This whole section, between the main ranges on either side, is of volcanic origin.

The entire region of country appears to be well adapted to stock raising, and would seem to invite an early and profitable settlement.

From Honey Lake to the Oregon line, there are but few indications of metallic deposits.

A few veins of jasper occur south of Deep Cañon, but gave no indications of metal. Obsidian is an abundant product of the country from Honey Lake to the Oregon line, and in one instance, a beautiful agate was found on the shore of Second Lake, in Surprise Valley. Cornelians occur in great quantities near the line, on the north shore of Lake Tahoe; the specimens, however, were generally small.

No other minerals worthy of note were observed on the northern trip.

FROM THE DESCRIPTIVE NOTES OF THE SURVEY.

SOUTHERN LINE.

From the intersection of the thirty-ninth parallel of north latitude with the one hundred and twentieth meridian of west longitude, the southern portion of the boundary line makes and angle with the meridian of 48° 56’ 45”, constantly varying in its bearing as it approaches the Colorado River in latitude 35° north and longitude 114° 36’ west, as determined by certain geodetic principles. Four miles and thirty-two chains of the line fall within the lake.

From the shore, which at this point is the most southeasterly portion of the lake, and which is here marked by a low, sandy beach for about one mile, the country is low and level, being but a few feet above the water; the soil consists of sand and gravel, and is terraced by what appears to have been former beaches of the lake.

This portion of Lake Valley is covered with a moderately heavy growth of timber, mostly yellow pine, while frequent intervals of low, wet marshes occur, surrounded by belts of Cembra pine (*Pinus Cembroides).* The Kingsbury & McDonald Wagon Road – (road from Placerville to Carson) – passes through this valley, crossing the line near Lapham’s Station. From this station another road follows along the lake shore to the Lake House, uniting with the main road again at Hawthorne’s, three miles from Yank’s Station. About one and a half miles from the line, on the road to Carson Valley, a new road diverges from the old at Friday’s Station, and passing along the shore of the lake for ten or twelve miles, crosses the summit of the mountains on the Johnson Pass, and descends through King’s Cañon to Carson City.

At the distance of about one mile from the lake, following the course of the line, the surface is broken by low benches and knobs of granite for about one mile further on, where the steep ascent of the eastern summit of the Sierra Nevadas commences. At six miles and a half the highest point of these mountains is reached, whence they descend abruptly to the eastward; while the summit or divide is not passed until the line reaches the eleventh mile.

The following data may serve to give an idea of the abrupt descent of these mountains on their eastern slope:

Job’s Peak, a high mountain situated directly in the eastern summit, is upwards of five thousand feet above Carson Valley at its base, and yet the entire descent is made in little less than two and a half miles in a direct line, being more than two thousand feet per mile. The foot of the mountains is reached on the fifteenth mile, and from this point a sage brush plain descends gradually to the west branch of Carson River, on the nineteenth mile.

The line crosses the Immigrant Road to California (Big Tree Route) near the house of Captain Smith, passing through his ranch, as also that of a Mr. Gibbs.

The Sierra Nevadas, as their name implies, are marked upon their outline by rough or serrated peaks, the higher ones being covered with snow throughout the greater portion of, and in many instances, the entire year. Owing to the friable character of the rock of which they are here composed, they present but few bold escarpments and high, spirelike peaks that form such distinguishing features in other portions of

these mountains. Their summits and slopes, as upon the north of Lake Tahoe, are covered with timber, with but little undergrowth, except in the more open places, where a dense, low growth of manzanita, mountain mahogany, and dwarf oak is found. Among the timber of these mountains, by far the greater and most valuable portion consists of pines, several species of which are found. The most considerable of these is the common "yellow" or pitch pine, (*Pinas Brachyptera*, also called *P. Ponderosa*,) which is met with in great abundance near the base and on the lower slopes of the mountains, as also in the valley about Lake Tahoe, and in the lower passes and benches near their summits.

What is probably another species of this pine occurs here, which has been described by Doctor Bigelow "as a large tree with a lighter colored bark than the *P. Brachyptera."* Lumbermen make a distinction between the trees, and they are probably distinct species; the difference in the external appearance of the two species is more marked in the older trees than in the young pines. The sugar pine (*P. Lambertina*) is found in small numbers in these mountains, usually at considerable heights above their base, as is also the fir, two species of which are found here – (*Picea Grandus and P. Nobiles*), and the white cedar, (*L. Decurreus*.) Upon the summits a dwarfed growth of pine occurs*, (Pinus Cembroides*,) which was noticed as occurring on the margin of the marshes in Lake Valley, but which here has a gnarled and stunted growth. Upon their northern sides and near their summits, almost in the region of perpetual snow, you find the Douglas spruce *(Abies Douglasie.*) Along the streams and in the vicinity of springs, aspen, (*Populus Tremuloides*,) alder, (*Algus Oregona*,) and willow, occur, with an occasional native meadow; and yet upon the whole, these mountains present a desolate and uninviting appearance, much of their surface, even among the timber, being covered with a course, arid sand, thus preventing the growth of the more delicate members of the vegetable kingdom, which, in favorable situations, give such rich and endless variety of flowers and velvet lawns.

These mountains are of igneous origin, consisting entirely, in this portion of them, of a coarse, friable, feldspathic granite, which undergoes a rapid disintegration by the elemental action even of such a climate as they possess. Owing to the general absence of rain, and the gradual melting of the snows, only a comparatively small portion of the disintegrated matter is borne down to the valleys, the greater portion remaining upon the surface. Sometimes, upon the steeper slopes, this sand moves slowly down by the force of gravity, like an Alpine glacier, until its progress is arrested by a less precipitous descent or some intervening object. The granite peculiar to these mountains is met with in low hills and detached knobs in a few places in Carson Valley, and also upon one or two occasions east of Carson River, but it soon gives place to a different formation.

At the base of the Sierras on the east – here, as at the head of Long Valley, on the northern trip – we leave the region of timber and enter the Great Basin, with its volcanic hills, alkali deserts, and sage brush plains. The West Branch of the Carson, which is crossed on the nineteenth mile, rises in the Sierras about twenty miles south of the line, and after uniting with the East Branch some six or eight miles below, flows through the entire length of Carson Valley. The West Branch is about fifty feet wide, and from one to two feet deep. Carson Valley is about thirty miles in length, exclusive of that portion above the line. The arable portion is about eight miles wide. It is settled,

and many fine ranches may be seen throughout its entire extent. The Aurora and Carson Road passes through it. Genoa and Mottsville are situated in this valley – one about three miles below, and the other about the same distance above the entrance of the Kingsbury Grade into it.

From the West to the East Carson the distance is four miles and twenty-four chains. This branch is somewhat larger than the western, and like it, rises in the Sierras, but from its source to within a few miles of its junction with the West Branch, it flows through a deep rocky cañon. From the East Carson to the West Walker the physical features of the country are similar to those between the forks of the Carson – in both cases consisting of low rough mountains and ridges, void of any features of prominent interest. The timber is piñon or nut pine, *(P. Edulus*,) described upon the northern trip, and which here grows more abundantly, and juniper, (*J. Pachyplaea*,) a variety differing somewhat from *Juniperus Occidentalis,* growing to a less height, more generally scrubby, with numerous trunks from the same root, or, what is more frequently the case, branching heavily near the ground. The nuts of the piñon are abundant in this section of country, also throughout the entire portion of country from Carson Valley to the White Mountains, and are eagerly sought after by Indians, who not unfrequently come from great distances to gather them for their winter food.

From the West to the East Carson, the formation is probably talcose slate, interspersed with numerous veins of quartz, of such vast extent that they appear to be by far the greater portion of the formation. The veins have a general bearing with the meridian. Between the East Carson and West Walker they are less numerous, and finally disappear upon approaching the latter stream. Following up the Carson, however, they extend into the Mogul and Silver Mountain Districts, and are here said to be rich in the precious metals. Serpentine was met with near the West Carson, while trachyte, augite, trap, chickstone, volcanic lavas, and finally, as the descent was made into the Valley of the West Walker, coal shales were found.

From the base of the mountains to the West Walker, a distance of four miles, the bottom is nearly level, and in that portion nearest the mountains are considerable meadows, in what is known as Alkali Valley. There is a small lake in the northern portion, from which the valley derives its name.

In the vicinity of the line are numerous springs; in some of them the water is pure and cold, while in others it is warm and slightly alkaline, and generally throughout the Great Basin, among the vast number of its thermal springs, but few are found that are not mineral – most frequently alkaline in character.

The Valley of the West Walker – that is, this portion of it, (for it is divided into numerous sections by ridges that traverse it, and through which the river finds its way in narrow, rocky cañons,) – is about thirty miles long, from north to south, and from eight to ten miles in width, from east to west. Above this, and lying at the foot of the Sierras, is another considerable valley, with a rich soil, and numerous streams from the mountains, which latter are covered with heavy forests of pine, fir, etc. Below, commencing at Wellington's Station, on the Esmeralda Road, and including that of Desert Creek, is another large and fertile valley, but destitute of timber, except the piñon and juniper of the surrounding hills, which is valuable for fuel only. Still farther down this branch, and near its confluence with the East Walker, occurs another valley, similar in character to the one just described. West of the valley, upon the line and among the mountains, is a

small valley, some seven miles in length and two in width. It is settled, and produces considerable hay. It is known as Slingert's Valley, from one of its pioneer settlers of that name.

From the West to the East Walker, exclusive of four miles from the former stream, a distance of twenty-four and one quarter miles, the country again becomes rough and mountainous, rising somewhat gradually for nine or ten miles over a succession of ridges, and then more abruptly, to a high spur from the Sierras. Three of the highest peaks in the spur are known as the Three Sisters. The southern, and highest of these, has an elevation of eleven thousand seven hundred and forty-two feet above the sea level. The line passes between the southern and middle of these peaks. These mountains, and also the lower hills at their base, are covered with a heavy growth of Juniper and piñon. Several small streams which have their source here flow eastward into the Walker. The formation in the lower portions of this spur appears to consist principally of shales of the carboniferous series, while in the higher portions metamorphic and trappean rocks occur, to which supersede more recent volcanic rocks and lavas as the approach is made to the cañon of the East Walker, on the sixty-second mile, which at this point is narrow and deep, but soon spreads out into a considerable valley, including that of the Sweet Water Creek, the principal one of those mentioned as having their sources in the mountains of the Three Sisters. A few miles above, at the confluence of and upon the principal tributaries of the East Walker, are the "Big Meadows." This valley, inclusive of the Meadows, which occupy about one third part of it, is some six miles wide by eighteen in length, exclusive of the mountain slopes. There are but few families at present in this valley, although it is estimated to contain a population of one hundred and fifty persons.

The mountains on the west contain several patches of excellent timber, and there are now in operation upon the streams in this vicinity four saw mills, with one lath and two shingle machines, which, with their present working capacity, will manufacture annually from four to five million feet of lumber, besides a large amount of lath and shingles. The products of these mills, as well as considerable quantities of hewn timber, find a ready market in Aurora at remunerative prices; but even at the present rate of consumption, the supply, owing to its limited extent, must become exhausted in a few years, when Aurora will be compelled to look to other sources for its supply of lumber. Fortunately for the prospective interests of that place, an extensive tract of timbered land is found to the south of Mono Lake, easy of access, and but little more remote than that of the Big Meadows. There is, however, a scarcity of water in the latter tract, and steam power will be required to operate the machinery necessary to its manufacture. It is estimated that about thirteen hundred tons of hay were cut from the Big Meadows this present season; this hay sells in Aurora at from sixty-five to one hundred dollars per ton. The climate of this valley is unfavorable to the production of vegetables, and even cereals are sometimes injured by frosts which not unfrequently occur here even during the summer months.

Numerous hot springs are met with at the foot of the mountains around this valley, some of the tufaceous formations of these springs are perhaps the most remarkable in the world. Mural shaped masses, from ten to twenty feet high are here formed from the mineral substances held in solution by the thermal waters of these springs, which are precipitated almost immediately upon their contact with the

atmosphere. The longitudinal axes of some of these walls are from one to five hundred feet in length, while the transverse ones are not more than ten feet; the summit is crowned with a semi-cylindrical roof, which gives to the whole more the appearance of the work of art than a mere accident of nature. Running through the longer axis of this wall is a fracture from four inches to a foot in width, over the walls of which the water flows producing this singular formation. Where the action of the water has ceased, along the line of the fracture, the opening has been filled by a deposit differing but little from its inclosing walls, save that it is finer, and more compact in its texture.

These springs are situated in a basin-shaped depression, and probably occupy the crater of an extinct volcano.

From the sources of the West Carson to Owen's Lake, and probably for a much greater distance south, the Sierras consist of a single range, broken by deep cañons, and thrown up in high, sharp, angular peaks, which latter feature has gained for them in many places the names of "Castle Peaks," "Castle Mountains," etc., from their many bold bastions, high, frowning walls, and overhanging towers, which are everywhere abundant, especially in that portion of them on the west of the "Meadows." The principal peaks have a general elevation of about ten or twelve thousand feet above the level of the sea, and are covered in the more sheltered places with a cap of perpetual snow.

A stunted growth of cembra pine is met with, even upon the loftiest peaks, when not actually covered with snow, but so dwarfed and gnarled in its appearance, that it is difficult to distinguish the branches from the roots of the recumbent tree. There is but little timber on the eastern slope of these mountains, and this occurs in small patches near their base.

The coarse, feldspatic granite which was observed near Lake Tahoe is here replaced by a hard, compact, porphyritic granite, which withstands the war of elements and the ravages of time, and lifts up its gigantic spires and battling walls in forms of wild sublimity and awful grandeur. Serpentine and sienite are found near the base of the mountains. To the south and on the east of the Meadows the country is of volcanic origin, and the hills are covered with a heavy growth of nut pine and juniper; compact lavas and trachyte are the more common forms of rock; an escarpment of sandstone appears near the Aurora Road, but no distinguishing features were observed sufficient to mark the period of its formation; near the southern portion of the valley are detached hills of breccia, probably of volcanic origin.

From the East Walker to the Valley of Mono Lake, on the eighty-fifth mile, the formation is the same as that described on the east of the Big Meadows. Granite, however, is met with on the sixty-seventh mile, in Castle Cañon, and to the south-west of the latter point is a high mountain of this formation. Quartz veins are numerous in this vicinity, both in the granite and adjoining metamorphic rocks. These veins are wide and extensive, but give only slight indications of mineral, except iron pyrites, which are very abundant in them. On the seventy-second mile is Rough Cañon, through which flows a small stream of water of the same name. A short distance above the point where the line crosses this cañon, the road from the Big Meadows to Aurora enters it, and following up it for some distance, passes over a plateau for a few miles, when it enters Bodie Cañon and descends it in the direction of Aurora.

Above and below the line in Rough Cañon are many veins of quartz; some of them below are claimed to be rich. Some eight miles above and south of the line in Bodie Cañon, on the seventy-sixth mile, are the Bodie Mines, which are being worked with a favorable prospect of their future wealth.

Some two or three miles below the line in the same cañon begin the quartz mills of the Esmeralda Mines, extending through a portion of this and Esmeralda Ravine to the town of Aurora.

Many of these mills are small and imperfect in their construction, having been built, it would appear, more with a view to test the quality of the rock than to work the ore from the mines; their richness having been satisfactorily determined, however, the erection of larger and better mills was commenced. Some of this latter class are now in operation, working to the entire satisfaction of both the owners and the miners, producing large yields from the better class of rock. There are in and about Aurora fourteen mills, all operated by steam; they contain in the aggregate one hundred and fifty stamps, with a crushing power of about two hundred tons per day.

Of the mines in this place much remains to be developed, but few claims having as yet been worked in such a manner or to an extent sufficient to prove their *real* value.

Of the wealth of this district, however, there are sufficient reasons for forming a favorable opinion; many of the lodes are undoubtedly rich in both silver and gold.

Much confusion and difficulty exists in regard to the identity and direction of the lodes, and, unhappily, much litigation is the result of these doubts.

The lodes are irregular and confined, and consequently must, in the present undeveloped state of mining operations, give rise to much confusion and needless expenditure.

A thorough system of mining, under the general superintendence of a skilful Engineer, combining both theory and practice, would aid much in the development of these mines.

From Bodie Creek to the Aurora Road, on the eightieth mile, the line passes across Mount Braly, leaving the Town of Aurora some three and one third miles in the Territory of Nevada.

From Castle Cañon to this point the country is rough and barren, but from this road to the end of the eighty-fourth mile the hills are covered with a heavy growth of nut pine and juniper. The entire formation is volcanic; trachyte, lava, and metamorphic rock abound.

From the eighty-fourth to the eighty-ninth mile the line passes across a portion of Mono Valley, which, from the base of the Sierras on the west to this point is about twenty-four miles in length, and varies in width from eight to fifteen miles. The greater portion of the valley unoccupied by the lake is a dry sandy plain covered with a thick growth of sage brush, with scattering junipers in the north-eastern portion.

Mono Lake lies at the foot of the Sierras on the east, and occupies the western portion of the valley. It is fourteen miles long from east to west, and its greatest width is nine and one half miles. There are two islands in this lake, apparently of recent volcanic origin, as will hereafter be shown.

The waters of this lake are alkaline, and teem with myriads of insects of a novel kind, while swarms of a peculiar kind of fly throng the shore or repose upon the rocks

beneath the water – for such are their habits that they sink beneath and emerge from the water as safety or appetite directs their movements.

It has been stated that the waters of this lake are alkaline, but such is the character of most of the lakes throughout the Great Basin. In the case before us, we have, as it were, a concentration of all the alkaline elements combined. Not even the Dead Sea of Palestine can surpass its waters in bitterness. A few streams of fresh water from the mountains feed it, but it has no outlet. The shore is low and uninteresting in its general appearance, and might be entirely so, were it not for a few important features connected with it. In the water, frequently rising ten or twelve feet above its surface, and all along the shore, as also for miles back from it, varying in elevation from the water line to hundreds of feet above it, are reefs of coral rock, the product of a species of infusiora now living and building up their stony habitations in the waters of this singular lake. The highest point at which these reefs were observed could not have been less than three hundred feet above the present level of the lake, and which must have been formed when this portion of the country was submerged. Whether the waters of the lake have subsided, or the whole country has been gradually lifted up to of the water, may be more a matter of speculation than interest, for in either case the evidences would be similar. But the coral reefs are not the only evidences of this change in the relative height of the land and water, for a succession of beaches in regular outline rise one above another as they recede from the shore, as distinct and traceable as the furrows in a plowed field, until they are marked upon the surrounding hills at a great height above the lake.

Upon the smaller of the two islands in the lake, which is the crater, apparently, of a recent volcano, the water line is marked at only about twenty-two feet above the lake, while the cone of the crater rises nearly three hundred feet above it. At this water line the lava is abruptly broken off, as if the molten mass had suddenly been cooled beneath the waves.

From the eighty-ninth mile to the foot of the White Mountains, the country is covered with a heavy growth of nut pine and juniper, destitute of grass, and without water. The whole extent is marked by a succession of ridges, having a northeast and southwest direction. The rock is volcanic lava. Among these hills, and some four miles from the line, in California, is a valley about twelve miles wide by fourteen in length, called Adobe Meadows. There is a small stream flowing into this valley from the southwest. In the eastern and northeastern portions are some small alkaline lakes. The road from Aurora to the settlements in Owens' River Valley passes through these meadows.

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MONUMENTS.

The first monument was set at thirty-seven chains on the seventeenth mile from the initial point in Lake Tahoe, and one chain from the shore of the lake; it is on the west side, and near the base of a high rocky point, marked on the map as Boundary Point.

By the shore it is about a quarter of a mile north from a small hot spring, near the edge of the lake, which has been called Juniper Spring, and about one mile east from what is known as Griffith's Place.

This monument consists of a cedar post, seven inches square by six feet in length, set in a pyramidal pile of stone, five feet square at its base and three feet in height.

From the post a fir tree, in diameter some fourteen inches, and seventy-two links distant, in the Territory of Nevada, marked with the letter “N” on a blaze two feet above the ground and facing the post, bears south 87° east; also, a yellow pine, in diameter about sixteen inches, and ninety-seven links distant, in the State of California, marked with the letter “C” on a blaze facing monument, and two feet above ground, bears south 13 ½° west.

At seventy-two chains and fifty links, on the twenty-fourth mile, a rock, some eighty feet in height and two hundred feet across at its base, occurs directly upon the line. This rock rises to a point, and the line crosses it at the most southeasterly portion where an instrument can be set upon it. A pine post, twelve inches square and six feet in length, was set five chains back from the right (south) bank of the Truckee River, some seven miles, by its course, above O’Neil’s. A conical mound of stone, three feet in height and five feet across at its base, was built around the post, from which a yellow pine, eighteen inches in diameter bears south 89° west, twenty-two links distant in California, and marked with a blaze facing the monument. A yellow pine, thirty-three inches in diameter, bears south 63 ¾° east, twenty-six links distant in the Territory of Nevada, and marked with a blaze as above. On the post are cut with a chisel the letters “C” and “N,” facing respectively California and Nevada.

At forty-six chains and twenty-two links on the thirty-eighth mile, a monument was built two chains and fifty-three links south of the Henness Pass Road. This monument stands upon a rocky point twenty or thirty feet above the road, on the south side, and consists of a pine post ten inches by ten inches square, and six feet long, set in a mound of stone six feet across at base and three feet high, from which a yellow pine tree, eighteen inches in diameter, bears south 42 ½° east, eighty-nine links distant in the Territory of Nevada, and marked with the letter “N” on a blaze facing monument, and a yellow pine tree, ten inches in diameter, bears south 66° west, ninety-eight links distant in the State of California, and marked with the letter “C” on blaze, etc., as above. This monument is about a mile and a quarter above O’ Neil’s, and about a quarter of a mile west by north from Bull’s Station.

At thirteen chains on the forty-fifth mile, the line crosses the Fourth Standard Parallel of the Government Surveys, one hundred and sixty-one links east of the corner to Townships Twenty and Twenty-One north, and Ranges seventeen and eighteen east of the Mount Diablo Base and Meridian. This corner is marked by a square stake set in a mound of stone, and is five miles west of Peavine Ranch, and near the timber.

At sixty-nine chains fifty links on the forty-eighth mile, four chains fifty links north of the Honey Lake and Washoe Road, a post six inches by six inches square, and six feet long, was set in a mound of stone for a monument. This monument is about midway between the Antelope ranch (Station) and the house of Robert Ferrington.

The next monument is at thirty-six chains fifty links on the sixty-second mile. It is a pine post, six inches by six inches square, and five feet long, in a mound of earth. This post is marked with the abbreviations “Cal.” and “Nev.,” on the sides facing California and Nevada respectively and on the third face with the abbreviation “Bound.,” for boundary. This monument is in a curve of an old road, and three chains fifty links

east of the new road through Long Valley, and is about three quarters of a mile, by the road, south from the house of John Robinson.

Twenty-four chains west of a point at thirty-six chains on the seventieth mile, is a high, dome-like peak, rising several hundred feet above the general summit of the mountain on which it occurs, and which from its prominence and proximity to the line has been called Boundary Peak. This peak can be seen for a long distance, and forms a conspicuous land mark by which the position of the boundary line may be readily determined at this point.

A mound of stone, eight feet in diameter at base and four feet high, was built at thirteen chains on the ninetieth mile. This mound is near the base of the low hills on the north of Honey Lake Valley, and bears north 23° 48' west, ninety-three chains sixty links from the very highest point or ledge of rock near High Rock Springs.

At forty-five chains sixty-three links, on the ninety-seventh mile, a small mound of stone was built, on the east side and near the top of a round hill, near the eastern point of a high spur from adjacent mountains, on the west of the line and north-east of Honey Lake.

At thirty-one chains seventy-five links, on the one hundred and eighth mile, a pine post, six by eight inches, and six feet long, was set in a mound of stone, and marked on one of its faces with the word "Boundary." It is twenty-six chains fifty links north of the road from Susanville to the Humboldt Mines, and stands upon a rocky point just above and to the north of Rush Creek Valley, and is visible from the Rush Creek Station. This point is about four miles above or west of Smoke Creek Barracks.

At forty-six chains, on the one hundred and twentieth mile, a small mound of stone was built on the summit of a volcanic hill.

At seventy-five chains forty-two links, on the one hundred and thirty-second mile, a stake was set in a mound of stone, on the summit of a hill north of and adjoining Painter Valley.

At twenty chains, on the one hundred and forty-sixth mile, a similar monument was built. This point is upon the plateau south of and about two and a half miles from the southern end of Surprise Valley.

At eighteen chains thirteen links, on the one hundred and eighty-sixth mile, a mound of stone was built on the summit of a ridge, bearing east and west on the highest part of the mountains, immediately east of the third lake in Surprise Valley.

The next monument was upon the southern boundary of the State of Oregon, being the intersection of the one hundred and twentieth meridian with the forty-second parallel of north latitude. This monument is placed upon the southerly side of a deep rocky cañon, through which flows a stream some fifty links in width, course east. The monument is a pile of loose stones, and, from causes heretofore mentioned, was but hastily erected. It is located six chains from the bank of the cañon, at a point where said cañon is intersected by a smaller one, through which flows the outlet from Crane Lake. From an examination of Fremont's report of the expedition of eighteen hundred and forty-three and eighteen hundred and forty-four, his party would seem to have camped at or near this point, on December twenty-sixth, eighteen hundred and forty-three, as his description of the country is very similar to that found by us, and his observation for latitude on that day showed his camp to have been located on the forty-second parallel.

The first monument on the southern portion of the line was set upon the lake shore at thirty-two chains sixty links, on the fifth mile, from the initial point in the lake; it consists of a hewed pine post eight inches square and eight feet long, set firmly in the ground.

This monument, the two following described, and the one upon the northern shore of the lake, are to be replaced by monuments of cut stone.

At fifty-one chains sixty links, and the fifth mile, another monument was set on the north side of the road leading from Lapham's Station to the Lake House, and about one half mile from the former station.

This monument is twelve inches square, fourteen feet long, and about nine feet above ground – painted white, and the words "California" and "Nevada" cut on the sides facing the State and Territory respectively.

On the east side of the Kingsbury & McDonald Road through Lake Valley, at seventy chains sixty links, on the fifth mile, a monument consisting of a pine post ten inches square and seven feet long, was set about half a mile from Lapham's Station.

At forty-eight chains ten links, on the sixth mile, was set firmly in the ground a large log, upon which was erected the Observatory of the Boundary Survey.

At sixty-seven chains twenty links, on the sixth mile, the boundary line intersects the township line of the Government Surveys one chain fifteen links west of the corner to Sections Thirty-Four and Thirty-Five, on the south boundary of Township Thirteen north, Range eighteen east of the Mount Diablo base and meridian.

A stake was set in mound of stone at forty-four chains fifty links, on the seventh mile, and on the summit of a high spur of the Sierras bearing south-west and north-east.

At seventy-six chains seventy links, on the sixteenth mile, a pine post ten inches square and seven feet long was set at the forks of the road, about a quarter of a mile north from the house of Captain Smith, at the head of Carson Valley, marked with the letters "C." and "N."

At fifteen chains fifty links, on the nineteenth mile, on the east bank of the West Branch of Carson River, a hewed pine post eight inches square and six feet long was set in a square pile of stone about three feet in height.

At fifty-two chains, on the twenty-third mile, a pine post ten inches square and seven feet long was set in a mound of stone on a high bank above the river bottom, on the south side of the East Branch of Carson River, and about one mile above Young's Crossing.

At sixty-six chains twenty-five links, on the thirty-fourth mile, a post five inches square and six feet long was set in a mound of stone near road at edge of Alkali Bottom, and about one half mile north of the house of William Humphrey.

At three chains eighty links, on the thirty-eighth mile, a post four inches square and six feet long was set on the east bank of the West Branch of Walker River, about one mile above the house of Harry Raymond.

At thirty-six chains forty-one links, on the forty-second mile, a mound of stone was built on the summit of a ridge bearing north-east and south-west.

At sixty-one chains thirty-eight links, on the forty-sixth mile, a mound of stone was built on the summit of a hill bearing north-east and south-west.

At sixty-seven chains eighty-eight links, on the fifty-second mile, a mound of stone was built near the summit of the Divide between the East and West Walker Rivers, between the middle and southern peaks of the Three Sisters.

At seventy-three links, on the fifty-fourth mile, and at thirty-three chains, on the same mile, stakes were set in mounds of stone for monuments.

At four chains twenty-five links, on the fifty-fifth mile, center-point of line was marked on top of stake beneath a mound of stone.

At thirty-seven chains seventy-five links, on the fifty-ninth mile, a pine post six inches square was set near road through the Sweetwater Valley, in mound of stone, and marked with the letters “C.” and “N.”

At nineteen chains fifty links, on the sixty-second mile, a post six inches square, and sixty feet long, was set in a mound of stone, near the road, and on the west bank of the East Branch of Walker River, and marked with the letters “C” and “N.”

At forty-five chains fifty links, on the seventy-second mile, at a point of rocks near the road and the forks of Rough Cañon Creek, a pine post four inches square was set in a mound of stone and marked with the letters “C” and “N.”

At sixteen chains, on the seventy-sixth mile, and on the road from Aurora to Big Meadows, and at twenty-seven chains on the same mile, and on the east side of the road from Aurora to the Bodie Mines, monuments, consisting of sawed pine posts, seven inches square, marked with the abbreviations “Cal.” and “Nev.,” and on a third face “Bound.,” were set in mounds of stone.

At seventy-one chains, on the eightieth mile, a pine post six inches square, and six feet long, and marked with the letters “C” and “N,” was set in a mound of stone on the west side of the road from Aurora to Monoville, east of Mount Braly.

At seventeen chains thirty links, on the eighty-ninth mile, a cedar post six inches square, and seven feet long, was set in a mound of stone on the east side and near the road leading from Aurora to Adobe Meadows and Owen’s River, etc. The above monument is in the alkali bottom of the Valley of Mono Lake.

At forty-four chains seventy-five links, on the one hundred and second mile, a stake was set in a mound of stone, on the summit of the ridge. Nine feet in advance of this point, a peg with a nail marking the centre-point of the line, was secured beneath a small mound of stone.

At forty-six chains on the one hundred and third mile the centre-point of the line was similarly secured.

At many intervening points between the monuments above described, are small mounds of stone, stakes, etc., which readily serve to point out the place and course of the line.

STATISTICAL TABLES.

TABLE OF STATISTICS

Compiled from the Official Reports of County Assessors, for the Year 1863*, returned to the Surveyor-General.*

COUNTIES.	Acres of Land enclosed.	Acres of Land cultivated.	WHEAT.		BARLEY.	
			Acres.	Bushels.	Acres.	Bushels.
Alameda	81,460	84,320	-	-	-	-
Amador	38,483	10,290	-	-	-	-
Butte	100,000	60,000	20,000	400,000	15,000	500,000
Calaveras	106,676	12,182	-	-	-	-
Colusa	107,000	43,000	17,530	-	19,000	-
Contra Costa	-	-	-	-	-	-
Del Norte	-	-	-	-	-	-
El Dorado	212,500	31,000	165	-	1,975	-
Fresno	-	-	-	-	-	-
Humboldt	15,036	4,419	973	29,055	109	4,375
Klamath	2,185	1,383	-	-	-	-
Lake	24,550	4,593	-	-	-	-
Los Angeles	-	-	-	-	-	-
Marin	121,274	10,808	3,057	122,280	680	27,200
Mariposa	9,538	2,572	-	-	300	9,000
Mendocino	95,500	50,400	-	-	-	-
Merced	18,417	15,000	1,530	25,840	3,750	75,090
Mono	-	-	-	-	-	-
Monterey	117,400	22,191	3,270	63,400	6,780	834,200
Napa	80,000	35,000	30,000	600,00	2,400	72,000
Nevada	-	-	-	-	-	-
Placer	136,976	21,100	4,509	71,048	2,950	49,874
Plumas	-	-	-	-	-	-
Sacramento	98,980	32,043	6,185	152,000	11,630	327,000
San Bernardino	20,000	15,000	-	-	-	-
San Diego	4,500	3,000	-	-	-	-
San Francisco	-	-	902	34,240	-	7,240
San Joaquin	263,400	175,000	60,000	600,000	70,800	566,400
San Luis Obispo	10,000	3,000	500	5,000	1,500	22,500

San Mateo……	120,200	35,000	12,250	238,250	3,260	96,800
Santa Barbara……..	4,500	1,500	50	1,200	50	2,000
Santa Clara……	380,000	165,000	77,000	1,250,000	20,000	400,000
Santa Cruz……	56,340	18,003	7,020	161,992	2,862	103,775
Shasta……	-	-	-	-	-	-
Sierra……..	12,300	700	-	-	18	1,000
Siskiyou……..	54,000	28,000	4,700	70,000	4,000	80,000
Solano……	360,582	82,828	-	-	-	-
Sonoma……..	193,161	47,794	-	-	-	-
Stanislaus……..	28,000	10,653	2,542	32,120	2,648	64,500
Sutter……..	84,300	25,700	-	105,600	-	160,000
Tehama……..	51,736	14,612	7,280	127,286	6,205	87,462
Trinity……..	8,457	2,534	100	2,500	156	3,000
Tulare……	25,000	10,225	-	-	-	-
Tuolumne……..	89,632	29,678	965	5,190	2,855	3,458
Yolo……	110,000	50,976	-	-	-	-
Yuba……	165,840	38,480	2,680	50,648	12,460	326,800
Totals……	3,407,923	1,197,984	263,208	4,147,649	191,388	3,833,674

TABLE OF STATISTICS – Continued.

COUNTIES.	OATS.		RYE.		CORN.		BUCKWHEAT.		PEAS.	
	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.
Alameda	-	-	-	-	-	-	-	-	-	-
Amador	-	-	-	-	-	-	-	-	-	-
Butte	500	1,800	100	4,000	400	10,000	-	-	-	-
Calaveras	-	-	-	-	-	-	-	-	-	-
Colusa	5,900	20,000	-	-	840	-	-	-	-	-
Contra Costa	-	-	-	-	-	-	-	-	-	-
Del Norte	-	-	-	-	-	-	-	-	-	-
El Dorado	2,100	-	-	-	-	-	-	-	-	-
Fresno	-	-	-	-	-	-	-	-	-	-
Humboldt	1,134	40,870	-	-	149	5,850	-	-	591	21,675
Klamath	-	-	-	-	-	-	-	-	-	-
Lake	-	-	-	-	-	-	-	-	-	-
Los Angeles	-	-	-	-	-	-	-	-	-	-
Marin	4,756	237,800	-	-	-	-	-	-	-	-
Mariposa	175	875	-	-	-	-	-	-	3	-
Mendocino	-	-	-	-	-	-	-	-	-	-
Merced	-	-	35	709	400	7,030	-	-	-	-
Mono	-	-	-	-	-	-	-	-	-	-
Monterey	300	7,500	-	-	200	4,000	45	900	250	5,000
Napa	825	24,700	30	600	600	-	25	-	25	-
Nevada	-	-	-	-	-	-	-	-	-	-
Placer	347	1,727	26	60	9	60	-	-	-	-
Plumas	-	-	-	-	-	-	-	-	-	-
Sacramento	536	17,733	5	114	281	4,925	-	-	-	-
San Bernardino	-	-	-	-	-	-	-	-	-	-
San Diego	-	-	-	-	-	-	-	-	-	-
San Francisco	80	1,600	-	-	-	-	-	-	-	600
San Joaquin	1,000	20,000	700	10,000	600	18,000	300	6,000	20	1,000
San Luis Obispo	200	4,000	-	-	2,000	80,000	-	-	1,000	30,000
San Mateo	6,000	240,000	-	-	-	-	-	-	50	1,000
Santa Barbara	-	-	-	-	150	2,400	-	-	-	-
Santa Clara	2,000	60,000	-	-	400	14,000	-	-	-	-
Santa Cruz	909	27,838	-	-	198	3,943	213	4,316	59	2,095

Shasta……	-	-	-	-	-	-	-	-	-	-
Sierra……..	-	-	-	-	-	-	-	-	-	-
Siskiyou……..	8,800	70,000	250	1,500	300	5,000	-	-	20	-
Solano……	-	-	-	-	-	-	-	-	-	-
Sonoma……..	-	-	-	-	-	-	-	-	-	-
Stanislaus……..	-	-	-	-	200	4,410	-	-	-	-
Sutter……..	-	-	-	-	-	1,600	-	-	-	-
Tehama……..	37	895	3	40	168	5,894	-	-	10	275
Trinity……..	50	1,500	-	-	40	1,000	-	-	5	125
Tulare……	-	-	-	-	-	-	-	-	-	-
Tuolumne……..	-	-	-	-	-	-	-	-	-	-
Yolo……	-	-	-	-	-	-	-	-	-	-
Yuba……	1,230	24,685	14	240	2,240	58,485	-	-	-	-
Totals……	36,879	803,523	1,163	17,263	9,355	226,579	583	11,216	2,033	61,770

TABLE OF STATISTICS – Continued.

COUNTIES.	BEANS.		POTATOES.		SWEET POTATOES.		ONIONS.		HAY.	
	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.	Acres.	Tons.
Alameda	-	-	-	-	-	-	-	-	-	-
Amador	-	-	-	-	-	-	-	-	-	-
Butte	-	-	-	-	-	-	-	-	10,000	12,000
Calaveras	-	-	-	-	-	-	-	-	-	-
Colusa	40	-	-	-	-	-	-	-	9,560	10,000
Contra Costa	-	-	-	-	-	-	-	-	-	-
Del Norte	-	-	-	-	-	-	-	-	-	-
El Dorado	-	-	-	-	-	-	-	-	5,100	6,000
Fresno	-	-	-	-	-	-	-	-	-	-
Humboldt	14	400	225	37,980	-	-	-	-	150	600
Klamath	-	-	-	-	-	-	-	-	-	-
Lake	-	-	-	-	-	-	-	-	-	-
Los Angeles	-	-	-	-	-	-	-	-	-	-
Marin	-	-	2,115	253,800	-	-	-	-	1,500	3,000
Mariposa	10		150	15,000	-	-	10	2,000	2,000	3,000
Mendocino	-	-	-	-						
Merced	93	1,300	210	6,700	25	900	-	-	1,430	1,720
Mono	-	-	-	-	-	-	-	-	-	-
Monterey	380	7,600	346	84,400	-	-	4	200	5,780	11,560
Napa	60	-	40	8,000	-	-	-	-	5,000	7,500
Nevada	-	-	-	-	-	-	-	-	-	-
Placer	-	-	92	14,006	-	-	-	-	6,481	5,608
Plumas	-	-	-	-	-	-	-	-	-	-
Sacramento	4	504	227	13,000	220	27,335	-	-	15,441	11,772
San Bernardino	-	-	-	-	-	-	-	-	-	-
San Diego	-	-	-	-	-	-	-	-	-	-
San Francisco	37	750	200	19,150	4	400	48	2,200	1,140	1,750
San Joaquin	25	1,700	1,250	125,000	20	2,500	100	8,000	40,000	42,000
San Luis Obispo	2,000	70,000	500	5,000	-	-	100	1,200	3,000	9,000
San Mateo	400	20,000	2,000	200,000	-	-	100	1,400	10,000	8,500
Santa Barbara	730	22,000	250	2,500	-	-	16	200	300	800
Santa Clara	100	2,500	650	64,000	-	-	-	-	20,000	30,000
Santa Cruz	1,697	33,589	550	77,299	-	-	6	190	3,450	6,440

Shasta……	-	-	-	-	-	-	-	-	-	-
Sierra……..	-	-	30	3,000	-	-	2	160	12,000	24,000
Siskiyou……..	30	-	350	7,000	-	-	-	-	9,900	19,800
Solano……	-	-	-	-	-	-	-	-	-	-
Sonoma……..	-	-	-	-	-	-	-	-	-	-
Stanislaus……..	-	-	10	2,000	-	-	-	-	3,000	2,500
Sutter……..	-	1,100	-	7,500	-	1,100	-	-	2,350	4,700
Tehama……..	62	849	62	8,975	12	665	3	275	3,158	2,195
Trinity……..	-	-	120	9,000	-	-	-	-	420	840
Tulare……	-	-	-	-	-	-	-	-	-	-
Tuolumne……..	-	-	380	1,500	-	-	2	100	1,500	4,361
Yolo……	-	-	-	-	-	-	-	-	-	-
Yuba……	-	-	141	4,860	-	-	16	640	12,468	24,936
Totals……	5,682	162,292	9,928	969,670	281	32,900	407	16,565	185,128	254,582

TABLE OF STATISTICS – Continued.

COUNTIES.	FLAX.		HEMP.		TOBACCO.		ALFALFA.		COTTON.		RICE.		CABBAGES – Pounds
	Acres.	Pounds.	Acres.	Pounds.	Acres.	Pounds.	Acres.	Tons.	Acres.	Pounds.	Acres.	Pounds.	
Alameda	-	-	-	-	-	-	-	-	-	-	-	-	-
Amador	-	-	-	-	-	-	-	-	-	-	-	-	-
Butte	-	-	-	-	-	-	-	-	-	-	-	-	-
Calaveras	-	-	-	-	-	-	-	-	-	-	-	-	-
Colusa	-	-	-	-	-	-	65	98	-	-	-	-	-
Contra Costa	-	-	-	-	-	-	-	-	-	-	-	-	-
Del Norte	-	-	-	-	-	-	-	-	-	-	-	-	-
El Dorado	-	-	-	-	-	-	-	-	-	-	-	-	-
Fresno	-	-	-	-	-	-	-	-	-	-	-	-	-
Humboldt	-	-	-	-	-	-	-	-	-	-	-	-	-
Klamath	-	-	-	-	-	-	-	-	-	-	-	-	-
Lake	-	-	-	-	-	-	-	-	-	-	-	-	-
Los Angeles	-	-	-	-	-	-	-	-	-	-	-	-	-
Marin	-	-	-	-	25	25,000	-	-	-	-	-	-	18,000
Mariposa	-	-	-	-	-	-	-	-	-	-	-	-	-
Mendocino	-	-	-	-	-	-	-	-	-	-	-	-	-
Merced	-	-	-	-	-	-	40	75	-	-	-	-	-
Mono	-	-	-	-	-	-	-	-	-	-	-	-	-
Monterey	1	-	-	-	15	1,200	4,820	7,230	-	-	-	-	40,000
Napa	-	-	-	-	85	68,000	125	187	-	-	-	-	-
Nevada	-	-	-	-	-	-	-	-	-	-	-	-	-
Placer	-	-	-	-	8	8,000	-	-	-	-	-	-	-
Plumas	-	-	-	-	-	-	-	-	-	-	-	-	-
Sacramento	-	-	-	-	50	45,000	90	100	-	-	-	-	-
San Bernardino	-	-	-	-	-	-	-	-	-	-	-	-	-
San Diego	-	-	-	-	-	-	-	-	-	-	-	-	-
San Francisco	-	-	-	-	-	-	-	-	-	-	-	-	-
San Joaquin	-	-	-	-	25	25,000	50	75	-	-	-	-	-
San Luis Obispo	-	-	-	-	-	-	-	-	-	-	-	-	-
San Mateo	-	-	-	-	-	-	-	-	-	-	-	-	-

Santa Barbara……..	-	-	-	-	-	-	-	-	-	-	-	-	-
Santa Clara……	-	-	-	-	40	40,000	-	-	-	-	-	-	-
Santa Cruz……	6	-	-	-	-	-	-	-	-	-	-	-	-
Shasta……	-	-	-	-	-	-	-	-	-	-	-	-	-
Sierra……..	-	-	-	-	-	-	-	-	-	-	-	-	20,000
Siskiyou……..	-	-	-	-	-	-	-	-	-	-	-	-	-
Solano……	-	-	-	-	-	-	-	-	-	-	-	-	-
Sonoma……..	-	-	-	-	-	-	-	-	-	-	-	-	-
Stanislaus……..	-	-	-	-	50	40,000	-	-	-	-	-	-	10,000
Sutter……..	-	-	-	-	1	1,000	-	-	-	-	-	-	-
Tehama……..	-	-	-	-	49	16,640	2	-	3 – 16	1,100	-	-	61,420
Trinity……..	-	-	-	-	-	-	-	-	-	-	-	-	-
Tulare……	-	-	-	-	-	-	-	-	-	-	-	-	-
Tuolumne……..	-	-	-	-	½	500	-	-	-	-	-	-	31,500
Yolo……	-	-	-	-	-	-	-	-	-	-	-	-	-
Yuba……	-	-	-	-	20	16,000	-	-	-	-	-	-	28,000
Totals……	7	-	-	-	368 ½	286,340	5,192	7,767	3 – 16	1,100	-	-	208,920

TABLE OF STATISTICS – Continued.

COUNTIES.	Acres of Sugar Cane.	Acres of Broom Corn.	Pounds of Butter	Pounds of Cheese	Dozens of Eggs.	Pounds of Wool.	Bee Hives	Pounds of Honey.
Alameda	-	-	-	-	-	-	-	-
Amador	-	-	-	-	-	-	-	-
Butte	-	-	60,000	5,000	40,000	150,000	400	4,000
Calaveras	-	-	-	-	-	-	-	-
Colusa	-	96	40,000	-	23,700	122,370	870	-
Contra Costa	-	-	-	-	-	-	-	-
Del Norte	-	-	-	-	-	-	50	75
El Dorado	-	-	-	-	-	-	-	-
Fresno	-	-	-	-	-	-	-	-
Humboldt	-	-	21,610	1,900	8,630	1,000	205	359
Klamath	-	-	-	-	-	-	-	-
Lake	-	-	-	-	-	-	-	-
Los Angeles	-	-	-	-	-	-	-	-
Marin	-	-	200,000	600,000	9,000	25,000	130	6,000
Mariposa	-	-	2,500	500	20,000	10,000	30	1,500
Mendocino	-	-	-	-	-	-	-	-
Merced	-	-	7,360	50	5,690	215,780	430	4,000
Mono	-	-	-	-	-	-	-	-
Monterey	-	-	15,000	28,400	10,450	128,450	340	900
Napa	4	25	55,000	2,500	35,000	20,000	1000	-
Nevada	-	-	-	-	-	-	-	-
Placer	-	-	10,675	-	17,453	26,340	854	275
Plumas	-	-	-	-	-	-	-	-
Sacramento	-	8	105,649	27,573	24,396	27,621	1,221	7,945
San Bernardino	-	-	-	-	-	-	-	-
San Diego	-	-	-	-	-	-	-	-
San Francisco	-	-	6,000	2,000	-	-	35	-
San Joaquin	40	50	87,000	7,500	227,000	-	2,000	-
San Luis Obispo	-	-	15,000	5,000	100	80,000	300	450
San Mateo	-	-	75,000	50,000	10,000	-	-	-
Santa Barbara	-	-	2,500	3,000	-	300,000	150	800
Santa Clara	-	200	40,000	200,000	-	120,000	-	-

Santa Cruz……	-	-	47,515	39,380	31,767	10,500	325	500
Shasta……	-	-	-	-	-	-	-	-
Sierra……..	-	-	7,000	1,800	-	-	6	400
Siskiyou……..	-	-	-	-	-	-	75	-
Solano……	-	-	-	-	-	-	-	-
Sonoma……..	-	-	-	-	-	-	-	-
Stanislaus……..	-	10	2,000	1,500	-	35,000	500	10,500
Sutter……..	40	80	37,400	-	48,000	77,400	400	5,200
Tehama……..	-	1	15,212	1,210	18,058	141,990	240	3,270
Trinity……..	-	-	4,500	3,000	425	-	31	-
Tulare……	-	-	-	-	-	-	-	-
Tuolumne……..	-	-	23,000	-	2,000	-	171	300
Yolo……	-	-	-	-	-	-	-	-
Yuba……	14	-	8,438	-	16,842	93,600	884	8,840
Totals……	98	470	888,359	980,313	584,511	1,585,051	10,647	55,414

TABLE OF STATISTICS – Continued.

COUNTIES.	LI VESTOCK									
	Horses – American.	Horses – Spanish (Tame).	Horses – Spanish (Wild).	Horses – Total Number.	Mules.	Asses.	Cows.	Calves.	Stock Cattle.	Beef Cattle.
Alameda……	-	-	-	-	-	-	-	-	-	-
Amador……..	-	-	-	-	-	-	-	-	-	-
Butte……...	2,150	1,800	700	4,650	1,418	100	6,105	2,800	4,150	1,500
Calaveras……...	459	1,584	-	2,043	529	137	-	-	-	-
Colusa……	-	-	-	6,327	923	4	6,350	6,110	18,550	-
Contra Costa…….	-	-	-	-	-	-	-	-	-	-
Del Norte……	100	50	-	150	60	-	200	175	400	-
El Dorado……...	-	-	-	3,003	1,341	41	2,792	1,012	2,831	-
Fresno……	-	-	-	-	-	-	-	-	-	-
Humboldt……	2,067	-	-	2,067	315	8	5,197	8,253	-	2,168
Klamath……..	-	-	-	-	-	-	-	-	-	-
Lake……	-	-	-	-	-	-	-	-	-	-
Lassen……	-	-	-	-	-	-	-	-	-	-
Los Angeles……...	-	-	-	-	-	-	-	-	-	-
Marin……...	476	1,540	1,752	3,768	84	3	8,300	-	19,850	1,200
Mariposa……	250	800	-	1,050	250	75	1,100	800	2,500	2,000
Mendocino……	-	-	-	-	-	-	-	-	-	-
Merced……	-	-	-	3,075	917	10	-	-	-	-
Mono……..	-	-	-	-	-	-	-	-	-	-
Monterey……	480	1,575	13,048	15,103	86	21	2,512	2,512	61,210	-
Napa……..	-	-	-	5,000	174	12	1,648	1,000	4,915	4,000
Nevada……...	-	-	-	-	-	-	-	-	-	-
Placer……	-	-	-	2,118	395	23	1,175	423	1,672	1,500
Plumas……	-	-	-	-	-	-	-	-	-	-
Sacramento……..	5,406	-	-	5,406	822	37	3,889	2,513	7,368	
San Bernardino……	-	-	-	-	-	-	-	-	-	-
San Diego……..	-	-	-	1,000	-	-	-	-	-	-

San Francisco……..	-	-	-	4,500	410	270	5,210	712	-	-
San Joaquin……..	4,800	4,950	4,000	13,750	1,600	40	8,000	5,950	45,000	550
San Luis Obispo……	50	1,200	4,000	5,250	100	100	2,000	-	65,000	-
San Mateo……..	550	1,450	570	2,570	60	40	2,500	1,000	2,800	2,000
Santa Barbara……..	50	1,650	6,000	7,700	89	46	-	-	-	-
Santa Clara……..	-	-	-	-	-	-	-	-	-	-
Santa Cruz……..	1,942	-	-	1,942	50	-	2,887	1,974	10,611	-
Shasta……..	-	-	-	-	-	-	-	-	-	-
Sierra……..	163	300	-	463	151	-	469	300	1,647	110
Siskiyou……..	815	1,219	-	2,034	100	800	-	-	-	-
Solano……..	-	-	-	-	-	-	-	-	-	-
Sonoma……..	-	-	-	-	-	-	-	-	-	-
Stanislaus……..	300	600	200	1,100	100	3	3,500	3,000	13,000	600
Sutter……..	2,500	1,400	700	4,600	600	3	-	-	7,500	-
Tehama……..	841	1,141	1,545	3,527	735	21	1,284	1,617	6,078	3,094
Trinity……..	-	-	-	200	225	3	186	94	234	87
Tulare……..	-	-	-	-	-	-	-	-	-	-
Tuolumne……..	196	1,207	-	1,403	346	61	3,300	425	1,400	675
Yolo……..	-	-	-	-	-	-	-	-	-	-
Yuba……..	-	-	-	4,864	2,180	8	2,841	1,630	8,540	841
Totals……..	23,595	22,466	32,515	78,576	14,060	1,866	71,445	42,400	285,256	20,325

TABLE OF STATISTICS – Continued.

COUNTIES.	LI VE STOCK – Continued.									
	Oxen.	Total Number of Cattle.	Sheep..	Goats.	Hogs.	Chickens.	Turkeys.	Ducks.	Geese.	Guinea Fowls.
Alameda……	-	-	-	-	-	-	-	-	-	-
Amador……..										-
Butte……...	400	14,955	48,000	250	30,500	52,000	3,000	200	180	-
Calaveras……...	-	8,440	15,115	-	4,491	15,748	-	-	-	-
Colusa……	180	31,190	65,370	227	18,738	9,359	7,583	973	273	150
Contra Costa…….	-	-	-	-	-	-	-	-	-	-
Del Norte……	100	875	40	30	300	600	50	20	-	-
El Dorado……...	1,270	7,905	1,742	640	3,100	-	-	-	-	-
Fresno……	-	-	-	-	-	-	-	-	-	-
Humboldt……	664	16,282	579	27	3,344	5,231	115	196	184	-
Klamath……..	-	-	-	-	-	-	-	-	-	-
Lake……	-	-	-	-	-	-	-	-	-	-
Lassen……	-	-	-	-	-	-	-	-	-	-
Los Angeles……...	-	-	-	-	-	-	-	-	-	-
Marin……...	1,020	30,370	8,300	-	1,800	12,500	700	1,100	500	-
Mariposa……	500	16,900	5,700	150	4,000	12,000	6,000	150	65	-
Mendocino…….	-	-	-	-	-	-	-	-	-	-
Merced……	40	63,700	87,000	700	7,635	5,700	580	110	-	-
Mono……..	-	-	-	-	-	-	-	-	-	-
Monterey……	246	66,480	94,680	125	1,580	12,000	320	456	260	-
Napa……...	422	11,985	12,000	100	4,000	12,000	1,000	750	175	-
Nevada……...	-	-	-	-	-	-	-	-	-	-
Placer……	574	5,344	12,471	448	3,536	12,831	686	508	94	-
Plumas……	-	-	-	-	-	-	-	-	-	-
Sacramento……..	862	14,632	11,836	473	4,957	23,857	6,434	1,129	234	120
San Bernardino…….	-	-	-	-	-	-	-	-	-	-
San Diego…….	-	25,000	10,000	2,500	-	-	-	-	-	-
San Francisco……..	220	6,142	3,240	450	8,249	7,500	450	3,140	900	-

San Joaquin……..	1,600	61,100	25,000	1,200	64,000	25,000	6,000	2,500	1,200	100
San Luis Obispo……	600	67,600	60,000	2,000	500	3,000	100	400	-	-
San Mateo……	800	9,100	2,500	200	1,600	1,200	800	500	400	-
Santa Barbara……..	-	97,000	140,000	1,020	1,500	9,200	125	330	25	-
Santa Clara……	-	-	-	-	-	-	-	-	-	-
Santa Cruz……	820	16,292	2,400	361	2,400	8,246	128	648	127	-
Shasta……	-	-	-	-	-	-	-	-	-	-
Sierra……..	384	2,910	480	24	576	-	-	-	-	-
Siskiyou……..	-	12,000	3,000	-	5,000	15,000	1,800	200	100	-
Solano……	-	-	-	-	-	-	-	-	-	-
Sonoma……..	-	-	-	-	-	-	-	-	-	-
Stanislaus……..	100	20,200	18,000	100	2,500	2,000	200	50	50	-
Sutter……..	700	8,200	22,000	85	6,150	17,000	4,010	535	200	-
Tehama……..	605	12,678	31,185	64	7,075	17,778	3,103	831	110	-
Trinity……..	140	741	63	27	187	4,320	28	73	23	-
Tulare……	-	-	-	-	-	-	-	-	-	-
Tuolumne……..	125	6,325	-	905	600	1,500	100	-	-	-
Yolo……	-	-	-	-	-	-	-	-	-	-
Yuba……	624	14,476	23,434	224	8,320	32,628	9,482	1,628	380	-
Totals……	12,996	648,826	704,135	12,330	196,638	318,198	52,794	16,427	5,540	370

TABLE OF STATISTICS – Continued.

COUNTIES.	STOCK SLAUGHTERED.					
	CATTLE.		HOGS.		SHEEP.	
	Number.	Value.	Number.	Value.	Number.	Value.
Alameda	-	-	-	-	-	-
Amador	-	-	-	-	-	-
Butte	2,748	-	4,818	-	2,700	-
Calaveras	-	-	-	-	-	-
Colusa	-	-	-	-	-	-
Contra Costa	-	-	-	-	-	-
Del Norte	-	-	-	-	-	-
El Dorado	-	-	-	-	-	-
Fresno	-	-	-	-	-	-
Humboldt	500	-	1,000	-	100	-
Klamath	-	-	-	-	-	-
Lake	-	-	-	-	-	-
Los Angeles	-	-	-	-	-	-
Marin	1,500	-	400	-	300	-
Mariposa	7,500	$22,500	6,000	$24,000	5,000	$10,000
Mendocino	-	-	-	-	-	-
Merced	-	-	-	-	-	-
Mono	-	-	-	-	-	-
Monterey	7,480	47,400	250	2,500	1,500	2,250
Napa	-	-	-	-	-	-
Nevada	-	-	-	-	-	-
Placer	5,305	-	2,365	-	4,758	-
Plumas	-	-	-	-	-	-
Sacramento	-	-	-	-	-	-
San Bernardino	-	-	-	-	-	-
San Diego	-	-	-	-	-	-
San Francisco	38,400	-	27,240	-	58,290	-
San Joaquin	4,800	50,000	2,800	20,000	4,500	8,000
San Luis Obispo	6,000	-	100	-	4,000	-

San Mateo……	1,900	15,000	500	2,500	1,500	3,000
Santa Barbara……..	8,000	32,000	100	100	5,000	5,000
Santa Clara……	-	-	-	-	-	-
Santa Cruz……	1,215	14,580	1,044	9,400	825	2,075
Shasta……	-	-	-	-	-	-
Sierra……..	-	-	-	-	-	-
Siskiyou……..	2,800	34,000	2,000	17,500	1,100	6,000
Solano……	-	-	-	-	-	-
Sonoma……..	-	-	-	-	-	-
Stanislaus……..	600	-	200	-	500	-
Sutter……..	-	-	-	-	-	-
Tehama……..	724	-	3,298	-	856	-
Trinity……..	1,437	-	746	-	436	-
Tulare……	-	-	-	-	-	-
Tuolumne……..	1,320	6,600	400	2,000	300	-
Yolo……	-	-	-	-	-	-
Yuba……	6,828	68,280	4,480	18,920	6,420	12,840
Totals……	99,057	$290,360	57,741	$96,920	98,085	$49,165

TABLE OF STATISTICS – Continued.

COUNTIES.	IMPROVEMENTS.							
	GRIST MILLS.							
	Number.	Steam Power.	Run of Stone.	Value of Steam Mills.	Water Power.	Run of Stone.	Value of Water Power Mills.	Bushels of Grain Ground.
Alameda	-	-	-	-	-	-	-	-
Amador	-	-	-	-	-	-	-	-
Butte	4	1	-	$10,000	3	7	$100,000	-
Calaveras	-	-	-	-	-	-	-	-
Colusa	1	1	2	-	-	-	-	-
Contra Costa	-	-	-	-	-	-	-	-
Del Norte	-	-	-	-	-	-	-	-
El Dorado	2	-	-	-	2	4	3,000	18,200
Fresno	-	-	-	-	-	-	-	-
Humboldt	4	2	2	8,000	2	2	3,000	10,000
Klamath	-	-	-	-	-	-	-	-
Lake	-	-	-	-	-	-	-	-
Los Angeles	-	-	-	-	-	-	-	-
Marin	-	-	-	-	-	-	-	-
Mariposa	-	-	-	-	-	-	-	-
Mendocino	-	-	-	-	-	-	-	-
Merced	4				4	8	9,000	29,000
Mono	-	-	-	-	-	-	-	-
Monterey	3	3	-	6,500	-	-	-	-
Napa	4	3	7	12,000	1	2	6,000	-
Nevada	-	-	-	-	-	-	-	-
Placer	2	1	2	-	1	2	-	4,000
Plumas	-	-	-	-	-	-	-	-
Sacramento	6	4	13	108,000	2	10	85,000	-
San Bernardino	-	-	-	-	-	-	-	-
San Diego	-	-	-	-	-	-	-	-
San Francisco	9	9	-	-	-	-	-	-
San Joaquin	7	7	21	50,000	-	-	-	650,000

San Luis Obispo……	-	-	-	-	-	-	-	-	-
San Mateo……	2	1	2	4,000	1	2	5,000	-	
Santa Barbara……..	2	-	-	-	2		1,000	-	
Santa Clara……	10	7	14	50,000	3	5	35,000	130,000	
Santa Cruz……	6	1	3	-	5	9	-	700,000	
Shasta……	-	-	-	-	-	-	-	-	
Sierra……..	-	-	-	-	-	-	-	-	
Siskiyou……..	7	2	4	7,000	5	10	18,000	-	
Solano……	-	-	-	-	-	-	-	-	
Sonoma……..	-	-	-	-	-	-	-	-	
Stanislaus……..	-	-	-	-	1	3	18,000	50,000	
Sutter……..	-	-	-	-	-	-	-	-	
Tehama……..	4	1	6	7,000	3	6	34,000	160,000	
Trinity……..	3	-	-	-	3	6	6,000	4,370	
Tulare……	-	-	-	-	-	-	-	-	
Tuolumne……..	9	2	4	5,100	7	-	12,000	-	
Yolo……	-	-	-	-	-	-	-	-	
Yuba……	7	5	18	28,800	2	5	5,000	-	
Totals……	96	50	98	$296,400	47	81	$340,000	1,755,570	

TABLE OF STATISTICS – Continued.

COUNTIES.	IMPROVEMENTS – Continued.					
	SAW MILLS.					
	Number.	Value.	Steam Power.	Water Power.	Number of feet of Lumber sawed.	Shingles.
Alameda	-	-	-	-	-	-
Amador	-	-	-	-	-	-
Butte	19	$48,000	11	8	5,180,000	-
Calaveras	12	20,600	7	5	-	-
Colusa	2	-	1	1	-	-
Contra Costa	-	-	-	-	-	-
Del Norte	1	-	-	1	30,000	-
El Dorado	36	-	24	12	18,900,000	-
Fresno	-	-	-	-	-	-
Humboldt	7	-	4	3	8,000,000	3,000,000
Klamath	-	-	-	-	-	-
Lake	-	-	-	-	-	-
Los Angeles	-	-	-	-	-	-
Marin	2	-	2	-	11,705,500	-
Mariposa	10	50,000	10	-	16,000,000	255,000
Mendocino	-	-	-	-	-	-
Merced	-	-	-	-	-	-
Mono	-	-	-	-	-	-
Monterey	1	-	-	1	-	-
Napa	4	-	2	2	-	-
Nevada	-	-	-	-	-	-
Placer	16		7	9	7,950,000	-
Plumas	-	-	-	-	-	-
Sacramento	1	4,000	1	-	600,000	-
San Bernardino	-	-	-	-	-	-
San Diego	-	-	-	-	-	-
San Francisco	-	-	-	-	-	-

San Joaquin……..	-	-	-	-	-	-	
San Luis Obispo……	-	-	-	-	-	-	
San Mateo……..	6	-	6	-	4,500,000	18,000,000	
Santa Barbara……..	-	-	-	-	-	-	
Santa Clara……..	10	-	3	7	9,500,000	-	
Santa Cruz……..	13	-	6	7	2,500,000	1,000,000	
Shasta……..	-	-	-	-	-	-	
Sierra……..	22	-	-	-	7,000,000	-	
Siskiyou……..	12	36,000	1	11	-	-	
Solano……..	-	-	-	-	-	-	
Sonoma……..	-	-	-	-	-	-	
Stanislaus……..	-	-	-	-	-	-	
Sutter……..	-	-	-	-	-	-	
Tehama……..	1	-	-	-	-	-	
Trinity……..	6	-	-	6	300,000	630,000	
Tulare……..	-	-	-	-	-	-	
Tuolumne……..	14	-	7	7	4,750,000	-	
Yolo……..	-	-	-	-	-	-	
Yuba……..	23	-	17	6	14,820,000	82,000	
Totals……	218	$158,600	109	86	111,735,500	229,967,000	

TABLE OF STATISTICS – Continued.

COUNTIES.	IMPROVEMENTS – Continued.									
	QUARTZ MILLS.			MINING DITCHES.			FERRIES.		TOLL BRIDGES.	
	Number.	Value.	Number of tons of Quartz crushed.	Number.	Value.	Miles in Length.	Number.	Value.	Number.	Value.
Alameda	-	-	-	-	-	-	-	-	-	-
Amador	-	-	-	-	-	-	-	-	-	-
Butte	-	-	-	8	$150,000	167	6	$30,000	3	$18,000
Calaveras	32	$48,300	-	58	157,550	594	6	3,400	4	13,500
Colusa	-	-	-	-	-	-	4	-	-	-
Contra Costa	-	-	-	-	-	-	-	-	-	-
Del Norte	-	-	-	2	-	11	1	-	2	-
El Dorado	6	-	-	60	-	665	-	-	10	-
Fresno	-	-	-	-	-	-	-	-	-	-
Humboldt	-	-	-	-	-	-	3	-	-	-
Klamath	-	-	-	-	-	-	-	-	-	-
Lake	-	-	-	-	-	-	-	-	-	-
Los Angeles	-	-	-	-	-	-	-	-	-	-
Marin	-	-	-	-	-	-	-	-	-	-
Mariposa	25	250,000	125,000	10	-	75	3	-	-	-
Mendocino	-	-	-	-	-	-	-	-	-	-
Merced	-	-	-	-	-	-	2	12,000	-	-
Mono	-	-	-	-	-	-	-	-	-	-
Monterey	-	-	-	-	-	-	2	1,000	1	5,000
Napa	-	-	-	-	-	-	1	-	-	-
Nevada	-	-	-	-	-	-	-	-	-	-
Placer	5	-	2,000	33	146,600	541	-	-	9	21,250
Plumas	-	-	-	-	-	-	-	-	-	-
Sacramento	-	-	-	7	-	120	5	-	9	-
San Bernardino	-	-	-	-	-	-	-	-	-	-
San Diego	1	2,500	-	-	-	-	-	-	-	-
San Francisco	3	-	1,500	-	-	-	2	-	-	-
San Joaquin	-	-	-	1	500	4	7	10,000	3	20,000

San Luis Obispo……	-	-	-	-	-	-	-	-	-	-
San Mateo……	-	-	-	-	-	-	-	-	-	-
Santa Barbara……..	-	-	-	-	-	-	-	-	-	-
Santa Clara……	-	-	-	-	-	-	-	-	-	-
Santa Cruz……	-	-	-	-	-	-	-	-	-	-
Shasta……	-	-	-	-	-	-	-	-	-	-
Sierra……..	8	-	30,000	40	-	130	2	-	3	-
Siskiyou……..	4	-	-	14	-	219	4	6,000	1	1,000
Solano……	-	-	-	-	-	-	-	-	-	-
Sonoma……..	-	-	-	-	-	-	-	-	-	-
Stanislaus……..	-	-	-	2	-	20	11	6,500	1	12,000
Sutter……..	-	-	-	-	-	-	8	6,000	1	25,000
Tehama……..	-	-	-	1	-	6	4	-	1	-
Trinity……..	-	-	-	56	127	-	1	-	1	-
Tulare……	-	-	-	-	-	-	-	-	-	-
Tuolumne……..	19	26,600	-	21	254,280	326	4	1,200	1	5,000
Yolo……	-	-	-	-	-	-	-	-	-	-
Yuba……	4	17,800	17,800	14	-	110	2	-	12	-
Totals……	107	$345,200	176,300	327	$709,057	2,988	78	$76,100	62	$120,750

TABLE OF STATISTICS – Continued.

COUNTIES.	IMPROVEMENTS – Continued.								
	TURNPIKE ROADS.					RAILROADS.			
	Number.	Miles in Length.	Cost.	Income.	Cost of Repairs.	Number.	Miles in Length.	Cost.	Income.
Alameda	-	-	-	-	-	-	-	-	-
Amador	-	-	-	-	-	-	-	-	-
Butte	-	-	-	-	-	-	-	-	-
Calaveras	1	-	-	-	-	-	-	-	-
Colusa	-	-	-	-	-	-	-	-	-
Contra Costa	-	-	-	-	-	-	-	-	-
Del Norte	1	50	$50,000	-	-	-	-	-	-
El Dorado	17	125	-	-	-	-	-	-	-
Fresno	-	-	-	-	-	-	-	-	-
Humboldt	-	-	-	-	-	1	2 ¼	$20,000	-
Klamath	-	-	-	-	-	-	-	-	-
Lake	-	-	-	-	-	-	-	-	-
Los Angeles	-	-	-	-	-	-	-	-	-
Marin	-	-	-	-	-	-	-	-	-
Mariposa	4	20	40,000	$7,000	$2,000	1	4	50,000	-
Mendocino	-	-	-	-	-	-	-	-	-
Merced	1		1,500	-	-	-	-	-	-
Mono	-	-	-	-	-	-	-	-	-
Monterey	-	-	-	-	-	-	-	-	-
Napa	-	-	-	-	-	-	-	-	-
Nevada	-	-	-	-	-	-	-	-	-
Placer	10	42	39,700	-	-	3	30	-	-
Plumas	-	-	-	-	-	-	-	-	-
Sacramento	-	-	-	-	-	5	39	2,000,000	-
San Bernardino	-	-	-	-	-	-	-	-	-
San Diego	-	-	-	-	-	-	-	-	-
San Francisco	3	14	-	-	-	4	20	-	-
San Joaquin	-	-	-	-	-	-	-	-	-

San Luis Obispo……	-	-	-	-	-	-	-	-	-
San Mateo……	-	-	-	-	-	1	23	-	-
Santa Barbara……..	-	-	-	-	-	-	-	-	-
Santa Clara……	6	33	57,000	-	-	1	17	-	-
Santa Cruz……	-	-	-	-	-	-	-	-	-
Shasta……	-	-	-	-	-	-	-	-	-
Sierra……..	3	79	120,000	-	-	-	-	-	-
Siskiyou……..	3	9	-	-	-	-	-	-	-
Solano……	-	-	-	-	-	-	-	-	-
Sonoma……..	-	-	-	-	-	-	-	-	-
Stanislaus……..	-	-	-	-	-	-	-	-	-
Sutter……..	-	-	-	-	-	-	-	-	-
Tehama……..	-	-	-	-	-	-	-	-	-
Trinity……..	2	15	-	-	-	-	-	-	-
Tulare……	-	-	-	-	-	-	-	-	-
Tuolumne……..	-	-	-	-	-	-	-	-	-
Yolo……	-	-	-	-	-	-	-	-	-
Yuba……	6	104	-	-	-	1	12	256,000	-
Totals……	57	491	$308,200	$7,000	$2,000	17	147 ¼	$2,326,000	-

TABLE OF STATISTICS – Continued.

COUNTIES.	HORTICULTURAL PRODUCTS – NUMBER OF TREES AND VINES.							
	Apple.	Peach.	Pear.	Plum.	Cherry.	Nectarine.	Quince.	Apricot.
Alameda	-	-	-	-	-	-	-	-
Amador	-	-	-	-	-	-	-	-
Butte	20,000	150,000	7,000	2,000	1,000	6,500	350	3,128
Calaveras	29,844	22,181	5,480	2,887	1,179	-	-	1,377
Colusa	17,300	31,280	2,640	2,400	2,360	1,230	85	791
Contra Costa	-	-	-	-	-	-	-	-
Del Norte	2,000	100	1,000	200	300	-	10	10
El Dorado	8,100	44,310	9,700	5,990	1,495	874	1,141	1,310
Fresno	-	-	-	-	-	-	-	-
Humboldt	26,719	1,076	626	1,229	415	-	188	40
Klamath	-	-	-	-	-	-	-	-
Lake	-	-	-	-	-	-	-	-
Los Angeles	-	-	-	-	-	-	-	-
Marin	3,550	932	363	402	150	-	350	146
Mariposa	400	14,000	500	1,700	205	382	110	275
Mendocino	-	-	-	-	-	-	-	-
Merced	4,480	5,200	1,853	325	90	130	52	195
Mono	-	-	-	-	-	-	-	-
Monterey	1,275	420	740	284	128	-	18	65
Napa	100,000	60,000	15,000	4,000	5,000	1,000	1,200	1,800
Nevada	-	-	-	-	-	-	-	-
Placer	36,938	33,727	8,168	3,710	1,892	851	1,514	816
Plumas	-	-	-	-	-	-	-	-
Sacramento	76,563	82,480	18,488	5,962	3,748	1,826	3,692	3,469
San Bernardino	-	-	-	-	-	-	-	-
San Diego	-	-	-	-	-	-	-	-
San Francisco	-	-	-	-	-	-	-	-
San Joaquin	25,000	19,200	17,150	12,000	1,400	800	450	1,500
San Luis Obispo	5,000	4,000	1,500	300	100	-	50	200
San Mateo	11,000	3,800	3,200	1,500	1,000	-	400	450
Santa Barbara	1,400	1,600	1,100	300	280	910	300	950

Santa Clara……	165,000	50,000	44,500	9,900	5,500	750	3,500	3,100
Santa Cruz……	36,945	4,017	3,440	2,400	1,260	120	260	571
Shasta……	-	-	-	-	-	-	-	-
Sierra……..	2,850	3,000	500	100	100	50	-	120
Siskiyou……..	4,000	2,000	-	900	500	90	16	45
Solano……	-	-	-	-	-	-	-	-
Sonoma……..	-	-	-	-	-	-	-	-
Stanislaus……..	1,500	2,500	200	125	100	-	-	150
Sutter……..	1,260	13,000	3,000	2,000	780	475	280	900
Tehama……..	7,173	18,757	1,626	917	314	584	109	669
Trinity……..	6,000	3,500	1,420	285	120	20	56	37
Tulare……..	-	-	-	-	-	-	-	-
Tuolumne……..	54,910	78,005	15,203	1,283	861	523	241	746
Yolo……..	-	-	-	-	-	-	-	-
Yuba……..	38,650	84,624	8,400	4,820	4,500	8,280	1,400	6,800
Totals……	687,857	733,709	172,797	67,919	34,777	25,395	15,772	28,660

TABLE OF STATISTICS – Continued.

COUNTIES.	HORTICULTURAL PRODUCTS – NUMBER OF TREES AND VINES – Continued.													
	Fig.	Aloe.	Citron.	Lemon.	Orange.	Olive.	Pomegranate.	Pine Apple	Prune.	Persimmon.	Pecan.	Cherimoya.	Almond.	Walnut.
Alameda	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Amador	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butte	1,118	-	-	100	75	-	-	-	-	-	-	-	195	-
Calaveras	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colusa	125	-	-	-	-	-	-	-	-	-	-	-	297	-
Contra Costa	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Del Norte	-	-	-	-	-	-	-	-	-	-	10	-	-	10
El Dorado	455	-	-	-	-	-	-	-	-	-	-	-	465	-
Fresno	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Humboldt	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Klamath	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lake	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Los Angeles	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Marin	75	-	-	-	-	-	-	-	-	-	-	-	-	-
Mariposa	175	-	-	-	-	-	28	-	-	-	-	-	39	-
Mendocino	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Merced	157	-	-	-	5	-	8	-	-	-	-	-	15	7
Mono	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monterey	12	-	-	-	-	16	-	-	-	-	-	-	26	21
Napa	750	-	-	25	20	3	70	-	25	-	-	-	1,031	1,000
Nevada	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Placer	803	-	-	19	19	50	6	-	-	-	-	-	350	86
Plumas	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sacramento	2,245	-	-	56	88	-	626	-	-	-	15	-	890	505
San Bernardino	-	-	-	-	-	-	-	-	-	-	-	-	-	-
San Diego	-	-	-	-	-	-	-	-	-	-	-	-	-	-
San Francisco	-	-	-	-	-	-	-	-	-	-	-	-	-	-
San Joaquin	800	-	-	-	7	5	11	-	-	-	-	-	50	300
San Luis Obispo	10	-	-	-	-	20	-	-	-	-	-	-	-	-
San Mateo	75	-	-	-	-	-	-	-	-	-	-	-	-	300
Santa Barbara	630	-	-	310	320	1,300	430	-	-	-	-	-	510	200
Santa Clara	500	-	-	10	400	55	110	-	-	-	-	-	670	950

Santa Cruz……	112	-	-	1	4	4	-	-	-	-	-	-	32	48
Shasta……	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sierra……..	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siskiyou……..	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Solano……	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sonoma……..	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stanislaus……..	100	-	-	-	-	-	-	-	-	-	-	-	-	-
Sutter……..	6,000	-	-	-	-	-	-	-	-	-	-	-	380	300
Tehama……..	331	-	-	1	2	3	2	-	-	-	-	-	73	47
Trinity……..	5	-	-	-	-	-	-	-	-	-	-	-	2	-
Tulare……..	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tuolumne……..	501	-	-	24	32	-	-	-	-	-	-	-	106	10
Yolo……..	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yuba……..	840	-	-	20	42	12	48	-	-	-	14	-	300	208
Totals……	15,819	-	-	566	1,014	1,468	1,339	-	25	-	39	-	5,431	3,992

TABLE OF STATISTICS – Continued.

COUNTIES.	HORTICULTURAL PRODUCTS – NUMBER OF TREES AND VINES – Continued.								
	Filbert.	Gooseberry.	Raspberry.	Strawberry.	Grape.	Tons of Grapes.	Gallons of Wine.	Gallons of Brandy.	Value of Fruit.
Alameda	-	-	-	-	-	-	-	-	-
Amador	-	-	-	-	-	-	-	-	-
Butte	-	2,085	2,200	400,000	325,000	205	1,025	-	-
Calaveras	-	-	-	-	362,463	-	-	-	-
Colusa	-	88	-	-	48,469	-	-	-	-
Contra Costa	-	-	-	-	-	-	-	-	-
Del Norte	-	1,000	5,000	-	-	-	-	-	-
El Dorado	-	-	-	-	794,535	-	-	-	-
Fresno	-	-	-	-	-	-	-	-	-
Humboldt	-	6,856	3,402	15,800	313	-	-	-	$2,785
Klamath	-	-	-	-	-	-	-	-	-
Lake	-	-	-	-	-	-	-	-	-
Los Angeles	-	-	-	-	-	-	-	-	-
Marin	-	-	-	-	23,000	40	-	-	20,000
Mariposa	-	150	3,500	100,000	18,000	195	15,500	700	20,000
Mendocino	-	-	-	-	-	-	-	-	-
Merced	-	150	62	2,856	56,307	-	-	-	10,000
Mono	-	-	-	-	-	-	-	-	-
Monterey	-	2,450	650	10,450	25,000	-	250	175	4,500
Napa	-	7,000	10,000	1,000	600,000	-	3,000	500	-
Nevada	-	-	-	-	-	-	-	-	-
Placer	-	2,747	36,636	123,080	255,196	-	3,200	-	-
Plumas	-	-	-	-	-	-	-	-	-
Sacramento	-	4,040	13,136	36,276	430,799	-	10,790	-	-
San Bernardino	-	-	-	-	-	-	-	-	-
San Diego	-	-	-	-	-	-	-	-	-
San Francisco	-	-	-	-	-	-	-	-	-
San Joaquin	-	3,000	17,000	100,000	350,000	-	-	-	-
San Luis Obispo	-	-	-	-	-	-	-	-	-
San Mateo	-	-	-	-	5,500	-	-	-	-
Santa Barbara	-	210	580	650	100,000	-	2,140	231	-

Santa Clara……	-	4,900	600	150,000	750,000	-	8,200	550	30,000
Santa Cruz……	-	3,800	2,384	30,000	53,632	42	-	-	11,289
Shasta……	-	-	-	-	-	-	-	-	-
Sierra……..	-	-	-	-	6,400	1	-	-	12,500
Siskiyou……..	-	-	-	-	-	-	-	-	-
Solano……	-	-	-	-	-	-	-	-	-
Sonoma……..	-	-	-	-	-	-	-	-	-
Stanislaus……..	-	200	200	2,000	-	20,000	500	-	7,000
Sutter……..	-	-	-	-	28,000	-	5,000	500	-
Tehama……..	-	378	329	17,186	40,739	28	3,000	770	7,515
Trinity……..	-	374	163	22,674	733	-	-	-	2,720
Tulare……..	-	-	-	-	-	-	-	-	-
Tuolumne……..	-	-	300	19,000	914,630	-	10,300	700	-
Yolo……..	-	-	-	-	-	-	-	-	-
Yuba……..	-	3,680	3,850	250,860	850,420	-	-	-	-
Totals……	-	43,108	99,992	1,281,832	6,039,136	20,511	63,205	4,126	$128,309

TABLE OF STATISTICS – Continued.

COUNTIES.	ASSESSED VALUE OF PROPERTY.				INCREASE OR DECREASE IN VALUE OF PROPERTY.		
	Real Estate.	Improvements.	Personal Property.	Total valuation of Property.	Assessed value of Property for 1862.	Increase.	Decrease.
Alameda*	$2,783,484	-	$1,020,756	$3,804,240	$4,100,000	-	$295,760
Amador*	1,256,549	-	1,142,434	2,398,983	2,187,708	$211,275	-
Butte	1,771,065	-	1,768,549	3,539,614	2,950,551	589,063	-
Calaveras	1,171,489	-	1,279,379	2,450,868	5,248,624	-	2,797,756
Colusa	-	-	-	2,593,875	2,643,809	-	49,934
Contra Costa*	1,018,730	-	723,762	1,742,492	1,840,000	-	97,508
Del Norte	54,670	$101,064	161,531	317,265	300,435	16,830	-
El Dorado	436,015	1,264,655	1,604,110	3,304,780	3,864,449	-	559,669
Fresno*	245,569	-	557,924	803,493	962,985	-	59,492
Humboldt	283,645	271,090	570,965	1,125,700	1,352,790	-	227,090
Klamath*	96,000	-	128,620	224,620	291,645	-	67,025
Lake*	89,755	-	160,894	250,649	313,246	-	62,597
Los Angeles*	742,881	-	879,489	1,623,370	3,065,330	-	1,441,960
Marin	1,098,083	-	637,086	1,735,169	1,817,553	-	82,384
Mariposa	150,000	556,530	733,312	1,439,842	1,536,330	-	96,488
Mendocino*	-	-	-	1,161,773	1,165,502	-	3,729
Merced	312,178	531,178	-	843,356	966,221	-	122,865
Mono*	325,890	-	206,060	531,950	310,896	221,054	-
Monterey	399,060	185,460	810,540	1,395,060	1,297,422	97,638	-
Napa	1,689,307	835,623	-	2,524,930	2,937,760	-	412,830
Nevada*	2,146,995	-	1,513,618	3,660,613	5,055,370	-	1,394,757
Placer	601,228	624,833	1,845,851	3,071,912	3,225,248	-	153,336
Plumas*	81,066	-	1,121,422	1,202,488	1,070,000	132,488	-
Sacramento	5,043,650	705,445	3,826,300	9,575,395	8,820,018	755,377	-
San Bernardino*	158,800	-	211,988	370,788	417,238	-	46,450
San Diego	-	-	-	431,989	471,806	-	39,817

* No report received; figures taken from reports to the Controller.

San Francisco……..	43,135,307	-	20,920,043	64,055,350	66,531,207	-	2,475,857
San Joaquin……..	2,932,508	17,625	2,042,359	4,992,492	4,670,194	322,298	-
San Luis Obispo……	130,806	80,000	402,876	613,686	512,742	100,944	-
San Mateo……..	1,719,850	32,260	551,028	2,302,938	2,165,366	137,572	-
Santa Barbara……..	407,000	-	333,000	740,000	819,405	-	79,405
Santa Clara……..	2,650,145	1,503,150	1,975,717	6,129,012	6,038,375	90,637	-
Santa Cruz……..	671,964	-	386,708	1,058,672	1,086,918	-	28,246
Shasta* ……..	408,439	-	680,263	1,088,702	1,364,998	-	276,296
Sierra……..	1,100,285	-	1,424,121	2,524,406	1,159,205	1,365,201	-
Siskiyou……..	514,760	-	983,432	1,498,192	1,653,000	-	154,808
Solano* ……..	2,148,264	-	1,547,779	3,696,043	3,696,171	94,872	-
Sonoma* ……..	2,049,095	-	1,628,921	3,678,016	3,990,677	-	312,661
Stanislaus……..	275,395	45,286	442,531	763,212	768,058	-	4,846
Sutter……..	705,395	352,680	855,419	1,913,759	1,946,076	-	32,317
Tehama……..	354,272	315,072	883,074	1,552,398	2,013,749	-	461,351
Trinity……..	-	322,506	539,622	861,128	1,166,414	-	305,286
Tulare* ……..	308,981	-	1,077,435	1,085,982	1,266,488	-	180,506
Tuolumne……..	766,592	143,125	957,325	1,867,042	2,742,450	-	875,408
Yolo* ……..	-	-	-	2,458,067	2,322,975	135,092	-
Yuba……..	1,062,862	1,427,805	1,994,525	4,485,192	6,187,773	-	1,702,581
Totals……						$4,270,341	$15,001,015
						-	4,270,341
Total Decrease……							$10,530,674

* No report received; figures taken from reports to the Controller.

APPENDIX

REPORTS OF COUNTY SURVEYORS.

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MARIN COUNTY.

A. D. EASKOOT……County Surveyor.

COUNTY SURVEYOR'S OFFICE,
San Rafael, October 24th, 1863.

Hon. J. F. HOUGHTON,
Surveyor-General:

DEAR SIR: - In compliance with my duties and instructions from your office, I herewith transmit my annual report.

SCHOOL LANDS TAKEN IN LIEU OF THE SIXTEENTH AND THIRTY-SIXTH SECTIONS.

The number of acres taken as the sixteenth and thirty-sixth sections, or in lieu thereof, is about seventeen thousand seven hundred. This large sale of land has been on account of the rejection of the Balsa de Tomales Ranch. The following are the surveys made upon said grant:

Survey No. 8 – Surveyed for ----- Breeze; Section Thirty, south half; Township Five north, Range Nine west – containing three hundred and twenty acres.

Survey No 9 – Surveyed for John Keyes; Section Thirty-Six, north half of north-east quarter – Section Twenty-Five, south half of south-east quarter; Township Five north. Range Ten west – containing one hundred and sixty acres.

Survey No. 10 – Surveyed for George Keys; Section Thirty, east half of north-east quarter – Section Twenty-Nine, west half of north-west quarter; Township Five north, Range Nine west – containing one hundred and sixty acres.

Survey No. 11 – Surveyed for Warren Dutton; Section Twenty-Five, north half of south-east quarter, south half of north-east quarter, north-east quarter-quarter – Section Twenty-Four, south-east quarter-quarter; Township Five north, Range Ten west – containing two hundred and forty acres.

Survey No. 12 – Surveyed for Joel Harvey; Section Twenty-Two, west half of south-east quarter and east half of south-west quarter; Township Five north, Range Nine west – containing one hundred and sixty acres.

Survey No. 13 – Surveyed for L. A. Harvey; Section Twenty-Three, west half of south-west quarter – Section Twenty-Two, east half of south-east quarter; Township Five north, Range Nine west – containing one hundred and sixty acres.

Survey No. 14 – Surveyed for L. B. Harvey; Section Twenty-Seven, west half of north-east quarter, east half of north-west quarter, north-east quarter of south-west

quarter, and north-west quarter; of south-east quarter; Township Five north, Range Nine west – containing two hundred and forty acres.

Survey No. 15 – Surveyed for H. P. McCleave; Section Twenty-Seven, east half of north-east quarter, and east half of south-east quarter – Section Twenty-Six, west half of north-west quarter, and north-west quarter of south-west quarter; Township Five north, Range Nine west – containing two hundred and eighty acres.

Survey No. 16 – Surveyed for Jacob Jacommy; Section Thirty-Five, east half of south-west quarter, and west half of south-east quarter; Township Four north, Range Nine west – Section Two, north-east quarter of north-west quarter, and north-west quarter of north-east quarter; Township Five north, Range Nine west – containing two hundred and forty acres.

Survey No. 17 – Surveyed for Antonio Jacohimeny; Section Thirty, west half of south-west quarter, and fractional south-west quarter of north-west quarter; Township Five north, Range Nine west – containing one hundred and one acres.

Survey No. 18 – Surveyed for Mareck. Therres; Section Thirty-Five fractional north-east quarter – Section Twenty-Six, south-west quarter of south-east quarter and fractional south-east quarter-quarter; Township Five north, Range Nine west – containing two hundred and twenty-eight and thirty-six one hundredths acres.

Survey No. 19 – Surveyed for John De Martinia; Section Thirty-Five, west half of south-west quarter – Section Thirty-Four, east half of south-east quarter and south-west quarter of the south-east quarter; Township Five north, Range Nine west – containing two hundred acres.

Survey No. 20 – Surveyed for Lazan and Dennis Pare; Section Thirty-Five, north-west quarter and the west half of the north-east quarter; Township Five north, Range Ten west – containing two hundred and forty acres.

Survey No. 21 – Surveyed for Thomas Porter; Sections Three and Thirty-Four – south-east quarter of south-west quarter of Section Thirty-Four, Township Five north, Range Ten west – north half of north-east quarter of Section Three, Township Four north, Range Ten west – fractional north-west quarter of north-west quarter of Section Three – fractional south-west quarter of north-west quarter of Section Three – fractional south-west quarter of Section Three – fractional south-east quarter of the north-west quarter of Section Three – fractional north-east quarter of south-west quarter of Section Three; Townships Four and Five north, Range Ten west – containing two hundred and thirteen and ninety-nine one, hundredths acres.

Survey No. 22 – Surveyed for Franklin Mauck; Section Thirty-Four south-east quarter and north-east quarter of south-west quarter and fractional west half of south-west quarter; Township Five north, Range Ten west – containing two hundred and forty-four and seventy-six one hundredths acres.

Survey No. 23 – Surveyed for Robert J. Preston; Sections Two, Three, and Eleven, fractional north-east quarter of south-east quarter of Section Three – south-east quarter of north-east quarter of Section Three – south half of north-west quarter of Section Two – fractional south-west quarter of Section Two – fractional north-west quarter of south-east quarter of Section Two – fraction in Section Eleven; Township Four north, Range Ten west – containing two hundred and ninety-seven and four one hundredths acres.

Survey No. 24 – Surveyed for James M. Preston; Sections Two, Three, and Thirty-Five, north-west quarter of south-east quarter and the south-west quarter of Section Thirty-Five – west half of the north-west quarter of Section Two – north-east quarter of the north-east quarter of Section Three; Townships Four and Five north, Range Ten west – containing three hundred and twenty acres.

Survey No. 25 – Surveyed for Richard M. Preston; Sections One, Two, Thirty-Five, and Thirty-Six, fractional north-west quarter of the north-west quarter of Section One – fractional north-east quarter of Section Two – south half of the south-east quarter of Section Thirty-Five – fractional south-west quarter of the south-west quarter of Section Thirty-Six; Townships Four and Five north – containing two hundred and twenty-two and eighty-five one hundredths acres.

Survey No. 26 – Surveyed for Edward Finster; Sections Thirty-Five and Thirty-Six, west half of the north-west quarter, and the fractional north-west quarter of the south-west quarter of Section Thirty-Six – east half of the north-east quarter and the north-east quarter of the south-east quarter of Section Thirty-Five; Township Five north, Range Ten west – containing two hundred and twenty-eight and sixty-eight one hundredths acres.

Survey No. 27 – Surveyed for Ralph Smith; Sections Thirty-Three, Thirty-Four, and Twenty-Eight, fractional south-east quarter of the south-west quarter of Section Twenty-Eight, fractional north-east quarter and the north-east quarter of the north-west quarter of Section Thirty-Three, the west half and the south-east quarter of the north-west quarter of Section Thirty-Four; Township Five north, Range Ten west – containing three hundred and eighteen and seven one-hundredths acres.

Survey No. 28 – Surveyed for Edward Clark; Section Nineteen, north-west quarter; Township Five north, Range Nine west – containing one hundred and sixty acres.

Survey No. 29 – Surveyed for William McGreevy; Section Twenty-seven, west half of the north-east quarter, east half of the north-west quarter, and the north-west quarter of the north-west quarter of Section Twenty-Seven; Township Five north, Range Ten west – containing two hundred acres.

Survey No. 30 – Surveyed for Westbrook A. Knight; Section Twenty-Seven, west half of the south-east quarter, and the east half of the south-west quarter; Township Five north, Range Ten west – containing one hundred and sixty acres.

Survey No. 31 – Surveyed for George Dillon; Sections Twenty-Seven and Twenty-Eight, north-east quarter of Section Twenty-Eight – north half of the south-east quarter of Section Twenty-Eight – *s*outh-west quarter of the north-west quarter and the north-west quarter of the south-west quarter of Section Twenty-Seven; Township Five north, Range Ten west – containing three hundred and twenty acres.

Survey No. 32 – Surveyed for Morgan Brians; Sections Two and Three, north-east quarter and east half of north-west quarter of Section Three – west half of north-west quarter of Section Two; Township Four north, Range Nine west – containing three hundred and twenty acres.

Survey No. 33 – Surveyed for James Marshall; Sections Thirty-Two and Thirty-Three, south half of north-east quarter, south-east quarter of north-west quarter, and north-east quarter of south-west quarter, and west half of south-east quarter, of Section Thirty-Two – and north-west quarter of south-west quarter, and south-west quarter of

north-west quarter of Section Thirty Three; Township Five north, Range Nine west – containing three hundred and twenty acres.

Survey No. 34 – Surveyed for William Ford; Sections Thirty-Two, Thirty-Three, Thirty-Four, and Thirty-Five, south half of south-east quarter of Section Thirty-Two, south-west quarter-quarter of Section Thirty-Three; Township Four north, range Nine west. North-west quarter-quarter of Section Four – north half of north-east quarter of Section Five; Townships Four and Five north, range Nine west – containing two hundred and forty acres.

Survey No. 35 – Surveyed for Thomas A. Thornby; Sections Four, Nine, and Thirty-Three, south-east quarter of south-west quarter (forty acres) of Section Thirty-Three, Township Five north, Range Nine west – east half of the north-west quarter, (eighty acres,) north-east quarter of the south-west quarter, (forty acres,) south-west quarter of the north-east quarter, (forty acres,) and the west half of the south-east quarter (eighty acres) of Section Four – fractional north-west quarter of the north-east quarter (twenty-six acres) of Section Nine; Townships Four and Five north, Range Nine west – containing three hundred and six acres.

Survey No. 36 – Surveyed for Nicholas Reynolds; Sections Four and Five, south-west quarter of the north-west quarter and fractional west half of the south-west quarter of Section Four, – fractional south-east quarter and the south half of the north-east quarter of Section Five; Township Four north, Range Nine west – containing two hundred and seventy-one and sixteen one-hundredths acres.

Survey No. 37 – Surveyed for Nathaniel Fluebiery; Section Thirty Four, south-west quarter of north-east quarter and south-east quarter of north-west quarter; Township Five north, Range Nine west – containing eighty acres.

Survey No. 38 – Surveyed for Thomas Cruthers; Section Thirty-three, south-east quarter of north-west quarter, north-east quarter of south-west quarter, north-west quarter of south-east quarter, and south-west quarter of north-east quarter; Township Five north, Range Nine west – containing one hundred and sixty acres.

Survey No. 39 – Surveyed for John James; Sections Twenty-Eight, Thirty-Two, and Thirty-Three – south-west quarter-quarter and south-west quarter of south-west quarter of south-east quarter, Section Twenty-Eight; north-east quarter-quarter, Section Thirty-Two – north half of north-west quarter, and north-west quarter of north-east quarter, Section Thirty-Three; Township Five north, Range Nine west – containing two hundred and forty acres.

Survey No. 40 – Surveyed for William Young; Sections Twenty-Eight and Twenty-Nine, south-east quarter of Section Twenty-Nine, and north-west quarter of south-west quarter of Section Twenty-Eight; Township Five north, Range Nine West – containing two hundred acres.

Survey No. 41 – Surveyed for Henry Richards; Section Twenty-Eight, east half of north-west quarter, and west half of north-east quarter and north-east quarter of south-west quarter, and north-west quarter of south-east quarter; Township Five north, Range Nine west – containing two hundred and forty acres.

Survey No. 42 – Surveyed for S. W. Preble; Sections Twenty-Seven and Twenty-Eight, south-west quarter of north-west quarter, and north-west quarter of south-west quarter of section Twenty-Seven – south-east quarter of north-east quarter, and north-

east quarter of south-east quarter of Section Twenty-Eight; Township Five north, Range Nine west – containing one hundred and sixty acres.

Survey No. 43 – Surveyed for John O'Neil; Sections Twenty-Seven and Thirty-Four, west half of north-east quarter, and north-east quarter of south-west quarter of Section Thirty-Four – south-west quarter of south-east quarter, and south-east quarter of south-west quarter of Section Twenty-Seven; Township Five north, Range Ten west – containing two hundred acres.

Survey No. 44 – Surveyed for Patrick McGreevy; Sections Twenty-Six and Twenty-Seven, north-west quarter of Section Twenty-Six – east half of north-west quarter of Section Twenty-Seven; Township Five north, Range Ten west – containing two hundred and forty acres.

Survey No. 45 – Surveyed for Joseph Agussa; Sections Twenty-Seven and Twenty-Eight, south-west quarter of south-west quarter of Section Twenty-Seven – and the south half of south-east quarter of Section Twenty-Eight; Township Five north, Range Ten west – containing one hundred and twenty acres.

Survey No. 46 – Surveyed for Guy M. Wood; Section Twenty-Two, north-west quarter and south-west quarter of Section Twenty-Two; Township Five north, Range Ten west – containing three hundred and twenty acres.

Survey No. 47 – Surveyed for Geo. G. Williams; Sections Fifteen, Sixteen, and Twenty-One, fractional south-west quarter of south-west quarter of Section Fifteen – fractional south-east quarter of south-east quarter of Section Sixteen – fractional north-east quarter of north-east quarter of Section Twenty-One; Township Five north, Range Ten west – containing seventy-two and eighty-nine one hundredths acres.

Survey No. 48 – Surveyed for H. M. Stemple; Sections Fifteen and Twenty-Two, fractional south-west quarter of south-east quarter, and fractional south-east quarter of south-west quarter of Section Fifteen – north-east quarter of Section Twenty-two; Township Five north, Range Ten west – containing two hundred and seventy-two and sixty-three one hundredths acres.

Survey No. 49 – Surveyed for U. Minear; Sections Fourteen, Twenty-Three, and Fifteen, fractional south half of south-west quarter of Section Fourteen – fractional south-east quarter of south-east quarter of Section Fifteen – north-west quarter, and north half of south-west quarter of Section Twenty-Three; Township Five north, Range Ten west – containing three hundred and eleven and seventy-eight one hundredths acres.

Survey No. 50 – Surveyed for Joseph Willson; Sections Twenty-Seven, Twenty-Eight, Thirty-Three, and Thirty-Four, south-west quarter-quarter Section Twenty-Seven – south-east quarter-quarter Section Twenty-Eight – north-east quarter-quarter Section Thirty-Three – north-west quarter-quarter Section Thirty-Four; Township Five north, Range Nine west – containing one hundred and sixty acres.

Survey No. 51 – Surveyed for Robert Perry; Sections Twenty-Seven and Thirty-Four, south-east quarter of south-west quarter, and south-west quarter of south-east quarter of Section Twenty-seven – north-east quarter of North-west quarter, and north-west quarter of north-east quarter of Section Thirty-Four; Township Five north, Range Nine west – containing one hundred and sixty acres.

Survey No. 52 – Surveyed for A. C. Buffinton; Sections Twenty-Six, Thirty-Four and Thirty-Five, south half of south quarter of Section Twenty-Six – east` half of north-

east quarter of Section Thirty-Four, and north-west quarter Section Thirty-Five; Township Five north, Range Nine west – containing three hundred and twenty acres.

Survey No. 53 – Surveyed for Robert Moore; Section Twenty-Six, south-east quarter of north-west quarter, north-east quarter of south-west quarter, fractional south-west quarter of north-east quarter, fractional north-east quarter of south-east quarter, north-west quarter of south-east quarter; Township Five north, Range Nine west – containing one hundred and sixty-two and forty-two one hundredths acres.

Survey No. 54 – Surveyed for Francis E. Brady; Section Twenty-Five, north-east quarter of the south-west quarter; Township Five north, Range Ten west – containing forty acres.

Survey No. 55 – Surveyed for Nathaniel Jacominy; Sections Three, Four, Nine and Ten, fractional north west quarter of north-west quarter (fifteen and eighty-five one hundredths acres) of Section Ten – south-west quarter of north-west quarter (forty acres) – and the west half of south-west quarter of Section Three – south-east quarter of north-east quarter, (forty acres) and the fractional east half of south-east quarter, (eighty-three and fifty-five one hundredths acres); Township Four north, Range Nine west – containing two hundred and fifty-nine and forty one hundredths acres.

Survey No. 56 – Surveyed for C. E. Colburn; Section Twenty-three, fractional north-west quarter; Township Five north, Range Nine west – containing one hundred and thirty and eighty-eight one hundredths acres.

Survey No. 57 – Surveyed for George Zimmerman; Sections Twenty-Six, Twenty-Seven and Thirty-Four, west half of south-west quarter of Section Twenty-Six – east half of south-east quarter of Section Twenty-Seven, and the east half of the north-east quarter of Section Thirty-Four; Township Five north, Range Ten west – containing two hundred and forty acres.

Survey No. 58 – Surveyed for Benjamin Rimes; Sections Twenty-One, Twenty-Two, Twenty-Seven and Twenty-Eight, south-east quarter-quarter Section Twenty-One – south-west quarter-quarter Section Twenty-Two – north-west quarter-quarter Section Twenty-Seven – north-east quarter-quarter Section Twenty-Eight; Township Five north, Range Nine west – containing one hundred and sixty acres.

Survey No. 59 – Surveyed for M. Osborn; Section Twenty-One, south-west quarter and west half of south-east quarter, and north-east quarter of south-east quarter; Township Five north, Range Nine West – containing two hundred and eighty acres.

Survey No. 60 – Surveyed for George G. Williams; Section Sixteen, fractional south-east quarter of the south-east quarter (twenty-three and sixty-two one hundredths acres); Township Five north, Range Ten west – containing twenty-three and sixty-two one hundredths acres.

Survey No. 61 – *S*urveyed for William Rowland; Sections Sixteen and Twenty-One, fractional south-west quarter of Section Sixteen – fractional east half of north-west quarter the south-west quarter of north-west quarter – fractional north half of south-west quarter– fractional south-west quarter of north-east quarter, and the north-west quarter of south-east quarter of Section Twenty-One; Township Five north, Range Ten west – containing three hundred and four and eighty-five one hundredths acres.

Survey No. 62 – Surveyed for John W. Batman; Sections Twenty and Twenty-One, fractional east half of north-east quarter Section Twenty – north-west quarter of

north-west quarter Section Twenty-One; Township Five north, Range Ten west – containing seventy-seven and fifty-eight one hundredths acres.

Survey No. 63 – Surveyed for Thomas Beggs; Section Twenty-Six, south-east quarter and the south-east quarter of south-west quarter; Township Five north, Range Ten west – containing two hundred acres.

Survey No. 64 – Surveyed for John Buchanan; Section Twenty-five, south-west quarter; Township Five north, Range Ten west – containing one hundred and sixty acres.

Survey No. 65 – Surveyed for Benjamin Williams; Section Twenty-Six, north-east quarter of south-west quarter; Township Five north, Range Ten west – containing forty acres.

Survey No. 66 – Surveyed for Thomas J. Ables; Sections Twenty-Three and Twenty-Six, south half of south-west quarter of Section Twenty-Three – north half of north-west quarter of Section Twenty-Six; Township Five north, Range Ten west – containing one hundred and sixty acres.

Survey No. 67 – Surveyed for Benjamin Ables; Sections Twenty-Two and Twenty-Seven, south-east quarter of Section Twenty-Two – north-east quarter of north-east quarter of section Twenty-Seven; Township Five north, Range Ten west – containing two hundred acres.

Survey No. 68 – Surveyed for John Barry; Section Twenty-Four, south half of south-west quarter; Township Five north, Range Ten west – containing eighty acres.

Survey No. 69 – Surveyed for J. J. Coe; Sections Twenty-One and Twenty-Eight, fractional south-east quarter of north-east quarter, the south-east quarter and fractional south-east quarter of south-west quarter of Section Twenty-One – fractional north-east quarter of north-west quarter, and the north-west quarter of north-east quarter of Section Twenty-Eight; Township Five north, Range Ten west – containing three hundred and ten and fifteen one-hundredths acres.

Survey No. 70 – Surveyed for Alfred Helmes; Section Twenty-Seven, north-west quarter of the north-west quarter; Township Five north, Range Ten west – containing forty acres.

Survey No. 71 – Surveyed for William Rowland; Section Sixteen, fractional south-half of the south-west quarter; Township Five north, Range Ten west – containing forty-two and eleven one-hundredths acres.

Survey No. 72 – Surveyed for Abraham Stines; Sections Twenty-Eight and Twenty-Nine, east half of north-east quarter of Section Twenty-Nine – east half of north-west quarter of Section Twenty-Eight; Township Five north, Range Nine west – containing one hundred and sixty acres.

Survey No. 73 – Surveyed for John Bloom; Sections Thirty-Five, Two, and One, east half of south-east quarter of Section Thirty-Five, Township Four north, Range Nine west; east half of north-east quarter of Section Two – west half of north-west quarter of Section One; Township Five north, Range Nine west – containing two hundred and forty acres.

Survey No. 74 – Surveyed for Robert Bacly; Sections Thirteen and Twenty-Four – fractional south-east quarter of south-east quarter (eleven and fourteen one-hundredths acres,) of Section Thirteen – fractional north-east quarter (one hundred and fifty-one and eight-six one hundredths) of Section Fourteen – north half of the south-

east quarter, (eighty acres,) and fractional east half of the north-west quarter (sixty-six and seventy-three one-hundredths acres) of Section Fourteen; Township Five north, Range Ten west – containing three hundred and nine and seventy-three one-hundredths acres.

Survey No. 75 – Surveyed for Isaac McKenzie; Sections Thirteen, Fourteen, Twenty-Three, and Twenty-four, fractional south-west quarter of south-west quarter (six and thirty-five one-hundredths acres,) of Section Thirteen – fractional south-east quarter of south-east quarter (seven and eighteen one-hundredths acres,) of Section Fourteen – fractional east half of north-east quarter (twenty-five and four one-hundredths acres,) of Section Twenty-Three – south-west quarter of north-west quarter (forty acres,) and north half of south-west quarter (eighty acres,) of Section Twenty-Four; Township Five north, Range Ten west – containing one hundred and eighty-eight and thirty-one hundredths acres.

Survey No. 76 – Surveyed for George Henry; Section Twenty-Three, fractional south-east quarter; Township Five north, Range Ten west – containing one hundred and fifty-three and eighty one-hundredths acres.

Survey No. 77 – Surveyed for Amasa Morse; Sections Five and Eight east half of north-west quarter, (eighty acres,) south-west quarter of north-west quarter, (forty acres,) and the fractional south-west quarter, (one hundred and fifteen and thirty-eight one-hundredths acres,) of Section Five – fractional north-west quarter, (fifty-six and twenty-two one-hundredths acres,) of Section Eight; Township Four north, Range Nine west – containing three hundred and one and twenty-five one-hundredth acres.

Survey No. 78 – Surveyed for Abijah Woodworth; Sections Five and Six, fractional north-east quarter, (one hundred and fifty two and forty nine one-hundredths acres,) and fractional south-east-quarter, (one hundred and eighteen and ninety-three one-hundredths acres,) of Section Six north-west quarter of north-west quarter, (forty acres,) of Section Five; Township Four north, Range Nine west – containing three hundred and eleven and forty-two one-hundredths acres.

Survey No. 79 – Surveyed for Joseph L. Leffingwell; Sections Thirty-One and Thirty-Two, north-east quarter of Section Thirty-One – south-west quarter of north-west quarter of Section Thirty-Two; Township Five north, Range Nine west – containing two hundred acres.

Survey No. 80 – Surveyed for Lysander C. Woodworth; Sections Thirty-One and Thirty-Two, fractional south-east quarter, (one hundred and fifty-four and eighty-two one-hundredths acres) of Section Thirty-One – west half of south-west quarter, (eighty acres,) and south-east quarter of south-west quarter, (forty acres,) of Section Thirty-Two; Township Five north, Range Nine west – containing two hundred and seventy-four and eighty-two one-hundredths acres.

Survey No. 81 – Surveyed for Joseph Leffingwell; Section Thirty-Two, north-east quarter of the north-west quarter; Township Five north, Range Nine west – containing forty acres.

Survey No. 82 – Surveyed for Hiram J. Beck; Sections Six and Thirty-One, fractional south-west quarter, (one hundred and forty-four and forty-two one-hundredths acres,) of Section Thirty-One – fractional north-west quarter, (forty-three and seventy-one one-hundredths acres,) of Section Six; Townships Four and Five north, Range Nine west – containing one hundred and eighty-eight and thirteen one-hundredths acres.

Survey No. 83 – Surveyed for Richard M. Preston: Section Thirty-Six, fractional south-west quarter of the south-west quarter; Township Five north, Range Ten west – containing thirteen and eighty-five one-hundredths acres.

Survey No. 84 – Surveyed for Edward F. Brady; Section Thirty-Six, fractional south-west quarter of the north-east quarter; Township Five north, Rang Ten west – containing eleven and fourteen one-hundredths acres.

Survey No. 85 – Surveyed for Alfred Helms; Section Twenty-Eight, fractional south-east quarter of the north-west quarter, (nineteen acres,) and fractional north-east quarter of the south-west quarter, (seventeen acres,) of Section Twenty-Eight; Township Five north, Range Ten west – containing thirty-six acres.

Survey No. 86 – Surveyed for Andrew Fisher; Section Twenty-Eight, east half of south-west quarter; Township Five north, Range Nine west – containing eighty acres.

Survey No. 87 – Surveyed for John Berry; Section Twenty-Four, north half of the south-west quarter; Township Five north, Range Nine west – containing eighty acres.

Survey No. 88 – Surveyed for Lewis D. Martinya; Sections Thirty-Three, Thirty-Four, Three, and Four, south half of south-east quarter, and north-east quarter of south-east quarter of Section Thirty-Three – south-west quarter-quarter of Section Thirty-Four; Township Four north, Range Nine west – north half of north-east quarter of Section Four – northwest quarter-quarter of Section Three; Townships Four and Five north, Range Nine west – containing two hundred and eighty acres.

Survey No. 89 – Surveyed for Thomas Casey; Section Three, east half of south-west quarter, west half of south-east quarter, and north-east quarter of south-east quarter; Township Four north, Range Nine west – containing two hundred acres.

Survey No. 90 – Surveyed for Lefevre Goubron; Section Thirty-Six, north-west quarter; Township Five north, Range Ten west – containing one hundred and sixty acres.

Survey No. 91 – Surveyed for Joseph Agusse; Sections Twenty-Seven, Twenty-Eight, and Thirty-Four, south-west quarter of south-west quarter of Section Twenty-seven – south half of south-east quarter and fractional south-east quarter of south-west quarter of Section Twenty-Eight – north-west quarter of the north-west quarter and the south-east quarter of north-west quarter of Section Thirty-Four; Township Five north, Range Ten west – containing two hundred and thirty-three acres.

Survey No. 92 – Surveyed for Ralph Smith; Sections Thirty-Three and Thirty-Four, south-west quarter of north-west quarter of section Thirty-Four – fractional north-west quarter and fractional south-west quarter of Section Thirty-Three; Township Five north, Range Ten west – containing three hundred and two and seventy-six one-hundredths acres. Base meridian of Mount Diablo.

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SWAMP AND OVERFLOWED LANDS.

There has been only two surveys made of Swamp and Overflowed Lands in this county since my last annual report:

Survey No. 83 – Surveyed for Peter Dolan; being for the north-east quarter-quarter of Section Twenty-One; Township One north, Range Six west – containing forty acres.

Survey No. 84 – Surveyed for J. R. Sweetzer; being for the south-west quarter of south-east quarter of Section Sixteen – west half of north-east quarter, south half of north-west quarter, east half of south-west quarter and west half of south-east quarter of Section Twenty-One; Township Three north, Range Six west – containing three hundred and sixty acres; being re-survey of Number Seventy.

All from the base and meridian of Mount Diablo.

TIDE LANDS.

Number of surveys of Tide Lands, two:

Survey No. 4 – Surveyed for J. R. Preston; being for the fractional east half of south-east quarter of Section Three, and fraction in the south-west quarter of south-west quarter of Section Two, and fraction in north-west quarter of north-west quarter of Section Eleven; Township Four north, Range Ten west – containing fifteen and twenty-seven one-hundredths acres.

Survey No. 5 – Surveyed for R. M. Preston; being for the fraction in north-west quarter of south-east quarter of Section Two – a fraction in south-west quarter of south-east quarter of section Two – a fraction in south-east quarter of south-west quarter of section Two – and fraction in north-east quarter of north-east quarter and north-west quarter of north-east quarter of Section Eleven; Township Four north, Range Ten west, Mount Diablo meridian – containing fifty-six and twelve one-hundredths acres.

MINERAL LANDS.

This county must soon be classed amongst the mining counties of this State. The great discoveries of copper and silver give indications of great mineral wealth yet to be developed. Some quartz lodes have been discovered which have assayed from four to forty per cent of copper, and about eight hundred dollars per ton of silver; the most of these discoveries have been made near Tamal Pais Mountain and Novato Point.

TAXABLE PROERTY.

The taxable property of this county amounts to one million seven hundred and thirty-five thousand one hundred and sixty-nine dollars. Total tax raised, thirty-nine thousand three hundred and ninety-two dollars.

All of which is most respectfully submitted.

Respectfully, your obedient servant,

A. D. EASKOOT,
County Surveyor of Marin County.

SUTTER COUNTY.

J. W. GAITHER……..County Surveyor.

OFFICE COUNTY SURVEYOR,
Sutter County, Nov. 10th, 1863.

HON. J. F. HOUGHTON,
Surveyor-General:

Sir: - In accordance with the law and your instructions, I transmit herewith the following report of work done in this office since October first, eighteen hundred and sixty-one.

SWAMP AND OVERFLOWED LAND SURVEYS.

Of this class of land I have made sixty-four surveys, numbering from two hundred and eighty-nine to three hundred and fifty-three, inclusive. A portion of them were re-surveys of old locations which had been relinquished – all of which have been forwarded to your office for approval.

SCHOOL LAND LOCATIONS.

I have made sixteen surveys of this class, including thirteen of sixteenth and thirty-sixth sections, and three of School Land Warrant locations – all of which have been transmitted to the State Location Agent.

In consequence of the “great flood” of eighteen hundred and sixty-two, Swamp Lands had been in poor request until within the last three months, since which time, a decided improvement has taken place.

At this late date it is scarcely necessary to speak of the overflow of eighteen hundred and sixty-two, but I will state that about the ninth of January of that year, two thirds of the county was inundated by water, varying in depth from one inch to eighteen feet, and from eighteen to thirty feet above low water mark in the Sacramento and Feather Rivers. From a point near the centre of the county, it presented the appearance of a vast lake, with here and there a knoll or small island on which could be seen large numbers of domestic animals. A light deposit of sandy sediment was left on the submerged lands, from one to six inches deep, improving the same along the margins of Feather and Bear Rivers. Much of the most valuable land, was, however, covered with sand, from one to four feet deep, making much of it worthless for cultivation. Many changes were wrought in the vegetation of our county. In the point formed by the confluence of the Sacramento and Feather Rivers, covering a large area of land, and in many places along the edges of the tules, heavy crops of worthless knuckle burs take the places of luxuriant grasses, and in other places the salt and sour grasses have been superseded by those of a better quality; showing that by means of irrigation and a good system of reclamation, much of the least valuable land in the county might be made the most productive. The raising of sheep, to fertalize our soil as well as for their meat and wool, has been too much neglected by our farmers, as well as

discouraged by the Legislature in many counties, and I know of no branch of husbandry of stock raising more deserving of the attention of the guardians of our State.

The road law of this county should be amended so as to comply with the provisions of an Act approved April seventeenth, eighteen hundred and sixty-three, (pages 317, 318,) for Santa Cruz County; also, the word *may* should be inserted in place of the word *shall*, in the first line of section six of an Act approved May ninth, eighteen hundred and sixty-one (page 314,) for Sutter and Santa Cruz counties, thereby giving the Board of Supervisors greater discretion in the matter of locating roads, and, in many cases, saving the County financially.

There are other matters that might be communicated at this time, but as this paper has already become lengthy, I respectfully submit it as it is.

J. W. GAITHER,
County Surveyor, Sutter County.

REPORTS OF COUNTY ASSESSORS.

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BUTTE COUNTY.

A. G. SIMPSON……County Assessor.

COUNTY ASSESSOR'S OFFICE,
Oroville, Butte County, Cal., November 2nd, 1863.

Hon. J. F. HOUGHTON,
Surveyor-General:

SIR: - I herewith inclose statement of the agricultural and other statistics of Butte County, complied from the assessment books for the year eighteen hundred and sixty-three, as also an abstract of the assessed value of real and personal property, with the amount of taxes for State and county purposes levied thereon.

Farmers, generally speaking, have reaped an average crop.

The several branches of industry in the county, to wit – agricultural, mercantile, and mining – appear to be in a prosperous condition.

The breed of stock is improving slowly, but steadily.

Fruit growing has increased during the present year, and the greater part of the finer fruits are of excellent flavor. I will here refer to the orchards of Messrs. Biddwell, Briggs, Hanshaw, Woolen, Gilyson, and Durham. The facilities for the cultivation of the grape vine in this county in many localities are good, and some of the different classes of grapes are as fine as any raised in the State.

The mercantile business in this county is, I think, in a prosperous condition, though for some time past not so extensive as we could have wished. However, the trade with Oroville is slowly progressing, and as we have a railroad built within four miles of Oroville, which will soon connect Oroville with tide water, were have no doubt of future prosperity, and within a short period of time. Within the past year we have had considerable improvements made in our county in good and substantial buildings, the most of which have been made in the Towns of Oroville and Chico, and will, undoubtedly, within the coming year witness much more.

The principal seats of mining enterprise and at Thompson's Flat, Cherokee Flat, Wyandotte, and Bidwell's Bar; the two latter are mostly copper mining, some claims of which are prospecting very well, to wit: the Frost, the Occidental, the Bliss, and Live Oak, near Wyandotte. River mining is not carried on to such and extent as in former years. In quartz mining there are but few claims being worked, with but little success.

The number of miles of boundary necessary to be run in this county, at least prior to March first, eighteen hundred and sixty-four, I should say would be about thirty; the said lines to be run between the Counties of Butte and Colusa, and Butte and Sutter,

there being much difficulty experienced by the Assessors of the several counties in making their assessments.

Of electro-magnetic telegraphs in this county, we have but one; its value is about five thousand dollars. It extends about fifty-four miles in length.

Of the timber in the county, the greater part is cedar and pine. Oak is to be found generally in the valley, but the lands are heavily timbered.

The assessment the present year is about the same as in eighteen hundred and sixty-two.

I am, Sir,

Yours very respectfully,

A. G. SIMPSON,
Assessor of Butte County.

By J. BEAN, Deputy.

CALAVERAS COUNTY.

J. THOMPSON AND OTHERS……Township Assessors.

ASSESSOR'S OFFICE, CALAVERAS COUNTY,
November 21st, 1863.

Hon. J. F. HOUGHTON,
Surveyor-General:

SIR: - In compliance with law, we herewith beg to transmit to your office our annual report of statistics, etc., of Calaveras County.

AGRICULTURE, ETC.

This county, as heretofore advised by the several reports, is but a limited agricultural county, though the number of acres of land inclosed has greatly increased; still, the productions are not proportionately on the increase, the attention of our people being more generally devoted to procuring wood and timber lands. This will apply more especially to those lands lying higher up on the mountain belt, as they are destined soon to become a source of almost inexhaustible wealth to their possessors; as the timber is being cut from the lower lands, in some few instances, they are cultivated, and still further improved by the addition of substantial residences, gardens, and orchards, but in a majority of cases are abandoned to the more enterprising vine grower – yet, no doubt, to clothe our hills with verdure from the snow belt to the foothills.

Within the range of mountains passing through the eastern section of the county are many very fine grazing lands, upon which are large numbers of the cattle and sheep of the neighboring counties annually driven, to fatten them for the markets of the larger

towns and cities below, and which must, as the county is more developed by opening up the several contemplated roads to the country east of the Nevada range, in course of time become very valuable, and consequent source of considerable revenue to the State and county.

MINES AND MINING.

Our mining interests are still occupying the attention of much the larger part of our population; in fact, so great is the excitement produced by the discovery and development of our copper and silver lodes, that as a consequence, a considerable portion of capital and labor, heretofore invested in agriculture, and now turned to mining, thus lessening the value of production from that source.

Our copper mines, as they are becoming developed, prove the necessity of some investment of the surplus capital of some of our more favored citizens of San Francisco and elsewhere. To develop a copper mine, and make the production of ore remunerative to the owner, a large outlay is in most cases necessary. The lodes, or strikes, making through the county from the Stanislaus to the Mokelumne River, thus far discovered, are among the richest of the world. The Union, Keystone, Napoleon, Copper Hill, Hog Hill, Campo Seco, Lancha Plana, Josephine, Collier, Camp, McNulty, and some few other companies, are already shipping large amounts of ore, varying from twelve to thirty per cent of metal. The daily production of ore from this county is already about one hundred tons – giving employment to a large number of men and teams for its transportation and shipment; which amount will soon be greatly increased from the shipment of ore from the San Domingo District, further to the east and more nearly the center of the county, which will send ore even better than much of that sent from the Copperopolis and Campo Seco districts.

Our silver mines, though doubtless very rich, are not as yet much developed. The great rush of prospectors for silver to more distant localities has drawn from Blue Mountain that attention which its prospects would seem to demand. Quite as good prospects are had form the lodes of this district as from most of those of more distant localities; all that is needed here, as in the copper mining districts, is the necessary capital from abroad to assist the hardy miner in his heavy undertaking – the opening up and successful working of a silver mine.

FRUIT TREES AND VINES.

Of the production of our orchards and vineyards but little can be said in addition to our report of last year. There has been a gradual increase in some and a falling off in others of the produce of the orchard, while the vines are annually increasing in number, and the wine made will soon be in quantities sufficient to give employment to the several transportation lines to the seaboard, while the quality of wine will bear favorable comparison with much that is brought from abroad.

TAXABLE PROPERTY.

Consequent upon the rush of people for the several silver mining districts east of the Nevadas, our assessment roll has not come up to that of last year, and we may look

for a continuation of this decrease for perhaps another two years, when the natural reflux of the people, and the continued development of rich copper and silver lodes on this, the west side of the mountains, will tend to increase the amount of taxable property, and continue gradually till the time when “Old” Calaveras will rank among the rich counties of the State.

We have also somewhat reduced the number of horses and cattle, while a small increase is had in the number of sheep. Hogs have decreased in number, while the quality of both beef and pork is better than heretofore, from a more systematic mode of treatment.

All of which we respectfully submit.

Yours truly,

J. THOMPSON,
D. S. BATES,
D. S. LANE,
S.W. BRIGGS,
R. K. THORNE,
JOHN GILLILAND,
Township Assessors of Calaveras County.

COLUSA COUNTY.

H. W. Brown……County Assessor.

Hon. J. F. HOUGHTON,
Surveyor-General:

SIR: - Please find herewith the necessary report, as required by law.

Not having any blanks left from last year, I send in the present form. The report differs but little from last year. There are fewer cattle, but a few more horses and sheep. The value of cattle was less, making the total valuation a figure less than that of last year.

Very respectfully, yours,

H. W. BROWN,
County Assessor of Colusa County.

DEL NORTE COUNTY.

GEORGE W. RUSSELL……..County Assessor.

CRESCENT CITY,
September 8, 1863.

Hon. J. F. HOUGHTON,
Surveyor-General:

SIR: - Herewith, I submit my report as Assessor of Del Norte County, for the year eighteen hundred and sixty-three:

It is a matter of impossibility for me to obtain anything like a correct statement relating to the agricultural interests in our county, and I have returned the statement to you filled up with only such figures as could be relied upon.

The farming land in this county is confined to two small valleys, and they are cultivated to a small extent. The land cannot be excelled in the State, and is susceptible of the highest cultivation. We have vast forests of timber running through the county; redwood, white and yellow fir, hemlock, spruce, and pine, abound in great quantities, and are, in fact, inexhaustible, and I prophesy that, in two years time, Crescent City will be the heaviest lumber exporting port on the Pacific coast. The harbor of Crescent City is the only port of entry between San Francisco and the Columbia
River that is susceptible of improvement, and a survey of the harbor has already been made by the Government, with the view of constructing a breakwater, and let this be completed, Crescent City will rank with the wealthy cities of the Pacific.

The most promising productive interests of Del Norte are its copper mines. Over thirty claims have been located, twenty of the incorporated, and in various stages of development. Up to this time, about five hundred tons of ore, averaging twenty-five per cent, has been shipped from this place, and, from present appearances, the amount of ore that will be sent forward the coming season will reach five thousand tons, with a certainty of doubling the amount every succeeding year.

The future of this little northwest corner of creation is a bright one. Business of all kinds looks better, all are encouraged, and none more so than.

Your humble servant,

GEORGE W. RUSSELL,
Assessor of Del Norte County.

HUMBOLDT COUNTY.

R. WILEY……County Assessor.

OFFICE COUNTY ASSESSOR,
Eureka, Sept. 21st, 1863

Hon. J. F. HOUGHTON,
Surveyor-General:

SIR: - Please find inclosed my report as County Assessor for the year eighteen hundred and sixty-three. The difficulties in gathering statistics which would enable one to furnish a *correct* statement is sufficiently apparent to any person who has had any experience in the business, without any explanations whatever. But when to the ordinary difficulties incident to the office is added an unrelenting, devastating Indian war, that is carried to the very doors of our homes, I hope will be deemed a sufficient excuse of any shortcomings or imperfections which may appear in my report. In fact, to this war may be traced the various difficulties and defects which we are compelled to endure.

Our list of taxable property is over two hundred thousand dollars short of what it was last year. Our taxable inhabitants are one hundred short, and every department of our domestic relations have more or less been damaged by the same cause.

Since may last report whole neighborhoods in our county have been deserted; citizens who have bought their land from the United States, invested all their little means in building themselves up a *home*, and by untiring energy and industry have had everything that was requisite to make a home comfortable, have been compelled to give up everything – leaving their orchards ladened with choice fruits, their fine fields of grain, their herds and flocks; yea, and alas! too often the father and husband have been left amid the ruins of what was once a peaceful and quiet home, but now to them a home no longer.

Our grazing interests are entirely destroyed, and our agricultural interests very considerably impaired, from the fact that when a man sows he has no assurance that he will ever be permitted to reap his harvest. There is now in this county quite a number of fine fields of grain that cannot be harvested with safety without an armed guard to protect the men while harvesting. Then our lumbering interests are impaired materially by the same cause. In fact, every department of society feels the oppression more or less. Yet notwithstanding all of our difficulties our march is “onward and upward;” improvements still go on. New farms are being opened all the time, new enterprises entered into, and new features in the natural resources of our county are being continually developed.

I think I can say of a truth, that in Humboldt County there is a greater combination of requisites for a good county than any part of our State, namely: Good soil, good timber, good water, good climate, and good health with a harbor second to none in the State, save San Francisco, and entirely free from that bane of California, “Spanish grants.” When a man buys land in this county he has *the* title form the General Government direct.

There is no way for me to arrive at the aggregate number of acres of timber, grazing, and agricultural lands, the greater portion of our county never having been surveyed.

Our county is about sixty miles in length along the coast, by about forty miles in width. There is a belt of redwoods that runs through our county from north to south, and parallel with the coast, about ten miles in width, leaving a strip of agricultural and grazing lands on the west, between that and the coast, on which the entire settlements of the county are at present located – the strip of open land lying to the eastward of the redwoods being entirely deserted and given up to the Indians, and which is a fine a grazing country as their is in the State.

The salmon fisheries of Eel River are second to none in the world for quantity, quality and facilities for taking them.

Some fine banks of coal have been discovered on Eel River the past season, which at some future day will be an article of export from our bay.

With the assurance that I have done everything I could under the circumstances to make my report complete,

I am, sir, yours, most respectfully,

R. WILEY,
County Assessor.

MARIPOSA COUNTY.

GEORGE W. CORNELL……County Assessor.

Hon. J. F. HOUGHTON,
Surveyor-General:

SIR: - I have the honor to transmit to your office in accordance with the requirements of law, my annual report as Assessor of Mariposa County, accompanied with which you will find a statistical report of all and such matters pertaining thereto.

Since my last annual report, I have the satisfaction of returning an increase in the taxable property of this county, and also in reporting a decided improvement in the productiveness in mining and agricultural pursuits of our citizens.

By a recent Act of the Legislature, our floating debt has been bonded, and our Supervisors, with commendable zeal, are endeavoring to make due preparation to meet the exigencies of the case, and doubtless, if *all* would promptly pay their taxes, it would liquidate the entire debt in a few years. You are aware that within our county lies the celebrated Las Mariposas estate. The parties controlling this estate have heretofore claimed that the property should only be assessed for the value the improvements and a nominal value of the land; asserting that the hidden treasures contained in the land could not be a guide to assessment, as their value could not be known. The

Supervisors have endeavored to assess the property at something like a moderate valuation, but all their efforts thus far have been vain, because of the chicanery and legal technicalities of parties interested. In every suit heretofore instituted by this county to recover taxes upon this estate, the Supervisors have been invariably beaten, and they have grown chary of expending money to coerce the owners of the estate to a compliance with the law. Such being the case, the taxes have fallen heavily upon the other tax payers of the county. But, could the parties now owning the estate be forced to give an assessment for anything like the value for which it has been recently sold, a sufficient revenue would soon be realized to discharge our county indebtedness and materially decrease the rate of taxation. This can be easily understood when the facts are stated – that heretofore the estate has been assessed at less than three hundred thousand dollars, yet recently the property has passed into the hands of a joint stock company with a nominal value of ten millions, the par value which is rated and realizing fifty per cent. This then, by their own showing, would bring the value of the estate to the amount of five millions. But, allowing a reasonable deduction from this amount, three millions of dollars would be a fair assessment of the estate. Could they be taxed upon that amount, the State as well as the county would receive dues out of which they have been defrauded heretofore.

For a description, geographically, of our county, I beg leave to refer you to my last annual report.

Since my last report, I am happy to be able to state that improvements have been progressive, and are of a permanent nature. We can boast of as good roads as any in the mountains, and bridges and ferries have been repaired since the flood of eighteen hundred and sixty-two, and are now in good order for travel.

We have six School Districts, all of which are supplied with Teachers. A manifest improvement is discernible in the interest taken by our citizens in Public Schools since my last report. Our population is becoming more settled, and the number of children is largely increasing, and our School Fund, judiciously managed, will give a good ratio to each scholar.

I beg to refer you to my last annual report for such other and further matters as in this would be a repetition.

I am, Sir, very respectfully, your obedient servant,

GEORGE W. CORNELL,
Assessor of Mariposa County.

MONTEREY COUNTY.

W. V. McGARVEY……..County Assessor.

SAN JUAN, Monterey County,
October 3rd, 1863.

Hon. J. F. HOUGHTON,
Surveyor-General:

SIR: - Inclosed please find my statistical report of this county for the year eighteen hundred and sixty-three. There has been some falling off in the number of stock cattle, as many have been driven out of the county on account of the scarcity of grass; and, also, our stock in horses has fallen off – a disease something like the blind staggers has killed many off in the last year. As to sheep, some considerable number have been driven out of the county, but yet the number is a few thousand more than last year.

We have a matanzas at Monterey, erected by San Jurjo, Bolado & Pajol, and superintended by Messrs. Leigh & Winter. They have been in operation since the first of May, and have been killing from sixty to one hundred head of cattle per day for hides and tallow. They have also killed a few sheep. Many of the cattle have been poor cattle, and, I might say, they were killing them to save their lives, as they would undoubtedly have died the coming winter, and were purchased at very low prices – from one dollar and a half to two dollars per head – which will explain to you the low value of the whole number of cattle slaughtered.

In the culture of tobacco, I can only say that but very few have as yet tried it, and all have succeeded beyond their expectations. You may look for tobacco from here in a few years.

Very respectfully yours,

W. V. McGARVEY,
Assessor of Monterey County.

PLACER COUNTY.

RECORDER'S OFFICE,
Auburn, Placer County, November 17th, 1863.

Hon. J. F. HOUGHTON,
Surveyor-General:

SIR: - Inclosed please find report filled up, as per blank form sent for County Assessor to compile. I have made the same up from the ten different Assessors of our county, as they reported to me. Some of the items, in my opinion, are not as full as they should be; but on the whole, they are about correct. It is with considerable difficulty that I have been able to report as full as I have.

Yours respectfully, etc.,

W. H. PATTON, Recorder,
And ex officio Auditor and Clerk of Supervisors.

By R. R. PATTON, Deputy.

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SAN DIEGO COUNTY.

A. E. MAXCY……..County Assessor.

ASSESSOR'S OFFICE,
San Diego, California.

Hon. J. F. HOUGHTON,
Surveyor-General:

SIR: - This county extends north and south from the southern lines of Los Angeles and San Bernardino Counties to the State line and Mexican boundary some ninety miles, east and west form the Colorado River to the Pacific Coast, some one hundred and fifty miles.

That portion lying between the Colorado River and the Coast Range of the mountains is a barren desert, comprising two thirds of the county. The remaining portion, lying between the dividing line of the Coast Range and Pacific Coast, though habitable and containing a few tolerably good ranches for grazing stock in good seasons, nine tenths is almost wholly unserviceable to man.

This county does not furnish its own few inhabitants with breadstuffs, fruit, or vegetables.

We have no internal improvements of any kind.

Some placeros have been worked the past year on the two peaks of mountains adjoining the River Colorado, called Pekatchy and Pilot Knob.

Gold is obtained by dry washing, but not in large quantities.

We have a gold quartz mine some twenty miles from the Pacific Coast east, the quartz yielding thirty-five percent of gold. It is not being worked at present.

A vein of copper ore and silver is now being opened five miles only from the Coast and twenty miles north from the town of San Diego.

The only other product of the county worthy of mention is the stock, for which I refer to the statistics.

The stock is dying in large numbers from starvation, and it is impossible to conjecture what portion will survive the coming winter.

Very respectfully,

A. E. MAXCY,
County Assessor, San Diego.

SAN JOAQUIN COUNTY.

J. M. LONG……..County Assessor.

OFFICE OF COUNTY ASSESSOR,
Stockton, Nov. 4th, 1863.

Hon. J. F. HOUGHTON,
Surveyor-General:

SIR: - I have the honor, in conformity with the law of the State, to submit to you the following as my annual report for the year eighteen hundred and sixty-three:

AGRICULTURE – WORKING THE SOIL.

The statement I made in a former report in regard to the great natural agricultural advantages of the county, it is unnecessary to repeat, as the remarks then made, particularly in regard to the character and quality of the soil, would now equally apply. The soil of this county is probably richer in all the essential elements necessary for the production of cereal crops than any other in the State. More attention is given to improved methods of cultivating the soil, and all the agricultural implements of modern invention and improvements are coming generally into use. Deep plowing is approved and generally practiced by the farmers, and husbandmen generally approve the practice of planting their crops on fallow land. This method of cultivating facilitates the early sowing of seed, extending to the crops all the benefits afforded by time before the dry weather of early summer sets in.

The agricultural productions of the county mainly consist in wheat, although a considerable amount of barley is raised. A greater number of acres have been devoted to the cultivation of barley this year than formerly, but the yield has been less per acre than that of last year. The whole amount of land in the county is one hundred and seventy-five thousand acres, and seventy thousand eight hundred acres of that amount has been sowed in barley, which produced five hundred and sixty-six thousand four hundred bushels.

The amount of land in wheat was sixty thousand acres, and the quantity produced, six hundred thousand bushels. So it will be seen that although there has been ten thousand acres less land devoted to the raising of wheat than to barley, the amount produced of the former exceeds the latter by thirty-three thousand six hundred bushels.

The cultivation of oats, rye, corn, buckwheat, peas, and beans, have been circumscribed within narrow bounds; only twenty thousand bushels of oats, ten thousand bushels of rye, and six thousand bushels of buckwheat have been produced.

The cultivation of potatoes has been more extended. The amount raised on twelve hundred and fifty acres is one hundred and twenty-five thousand bushels. But the schedule of compiled statistics accompanying this paper will show you the various agricultural products, number of live stock, vines, and fruit trees; also improvements, value of real estate, personal property, etc.

TOBACCO.

But a limited attempt has been made to cultivate tobacco. Yet thus far the efforts of a few have been very successful in producing an article of good quality. It is believed the growth can be made very remunerative, and the only drawback to its extended production is the want of manufacturing facilities.

BROOMCORN AND SORGHUM.

Although the quantity is but light, a very superior article of broomcorn has been raised the past season; a quality – not long and slender, but short and brushy – such as manufacturers of brooms are anxious to obtain. Some fifty acres of land only have been planted in this article, and it yields so good a revenue for the labor used that there is but little doubt but its cultivation will be greatly increased the coming year.

Sorghum or Chinese sugar cane has been successfully raised in some places, and not so in others. On the rich lands bordering the Calaveras River the crop of sorghum has yielded as much as one hundred and seventy-five gallons of syrup to the acre. On deep alluvial soil, containing a good proportion of vegetable matter, the plant more easily obtains the requisite juices and therefore succeeds much better than on higher ground, where there is a comparative destitution of moisture, occasioned by the light and porous character of the soil.

FRUIT TREES AND VINES.

The superior attention given to the tillage of orchards and vineyards throughout the county is apparent from the quantity and excellent quality of the fruit produced.

Peaches and apricots, which in former years were plentiful and luscious, have failed this year to come up to their former standard in many places. The cause of this is attributed to the damage done to the trees by the floods in the winter of eighteen hundred and sixty-one and eighteen hundred and sixty-two. Many trees died the following spring, and many more seem to have been irretrievably injured. The apple crop, however, has been good, as is shown by the adornment of the fruit gardens with heavy loads of well ripened fruit. The grape producing and wine making interests of the county are rapidly growing into importance, and in a year or two will be paramount to the culture of all other kinds of fruits; the cultivation of the grape and the manufacture of wine are alike well understood, and the pursuit will soon lead to a large and constantly increasing revenue from that source.

BEES.

Bees have done very poorly this year, and instead of the nineteen hundred hives of last year doubling or trebling their number, there are only about one hundred more hives in the county, as shown by the figures of last year. The season has been peculiarly unpropitious for this indefatigably industrious insect, the more than ordinary length of the dry season militating greatly against them in procuring the desired nectar from the vegetable kingdom.

LIVESTOCK.

There has been a considerable falling off in the former amount of horned stock, which in a measure may be accounted for by the land throughout the county being nearly all fenced up; therefore, stock has to be driven to other inappropriate localities for pasture. Sheep have greatly fallen off for like reason. It may also be proper to say, that an increased demand for sheep and cattle east of the Sierra Nevada Mountains has occasioned the removal of a large quantity of both to that market. The Washoe trade has occasioned the diminution of the number of mules, but first-class horses and the finer breeds of cattle and swine have slightly increased in number. By inviting your attention to the accompanying schedule of figures, particularly those relating to real estate, you will notice an increase of taxable property over last year of three hundred and twenty-two thousand two hundred and seventy-seven dollars.

Hoping the report will receive your approbation, I have the pleasure of subscribing myself

Your obedient servant,

J. M. LONG,
Assessor San Joaquin County.

SIERRA COUNTY.

ALFRED MARMON……..County Assessor.

OFFICE OF COUNTY ASSESSOR,
Downieville, Sierra County, Cal., September 23rd, 1863.

Hon. J. F. HOUGHTON,
Surveyor-General:

SIR: - The statistics of this county are not so full and complete as I desired, but I find it a very difficult thing indeed to gather the various items required in the catalogue of statistics, especially where two thirds of the county is covered with snow, when the original assessment has to be made, (which in this county has to be done by the first Monday in June,) and it naturally follows that many items of importance cannot be gathered, but upon the whole we feel satisfied that Sierra "lives," as the result of the second day of September testifies. Quite an acquisition also has been made in property by the settling up of Sierra Valley. Improvements are being made; stock raising is far superseding former years, both in cattle, horses, and mules. Hay in abundance is procured in this valley, and in fact the valley with its lands and property of all kinds is daily increasing in value, while many other portions of our county show strong symptoms of decay and depopulation. I assessed the people of the valley this year on their possessory rights to eighteen thousand one hundred and fifty-one acres of land, and one thousand two hundred and forty-seven head of stock cattle, one hundred and ninety-two yoke of oxen, three hundred and sixty-three horses, and forty-nine mules, besides five saw mills, of which Fletcher & Rowland have one from which they are cutting from seven to ten thousand feet per day, which they are hauling to Virginia City, Nevada Territory.

The assessed value of the property this year will not show quite as large as it did last, owing to about eight hundred thousand dollars of worthless mortgages that have been stricken from our county records by the persons applying to the Board of Supervisors this past summer, yet we hope to realize a larger sum, both for the county and State, than last year.

Howland Flat, in Northern Sierra, will probably yield more gold than any other mining camp in the county, with an increased population. And also at Fur Cap, Deadwood, etc., mines are being opened and developed of great richness, and which in all probability surpasses in richness anything yet discovered in this county, together with many new and valuable quartz ledges that have been discovered and tested in various portions of our county during the past summer, which places her on an equal footing with any in the State for mineral resources. Copper, also, has been found in some portions of the county in quantities sufficient to warrant good pay.

Many valuable homesteads have been assessed this year for the first time on the Truckee and Henness Pass Roads, east of Jackson's Ranch, which promises in future to increase the revenue of the county.

The fruit crop of apples, peaches, pears, grapes, etc., is abundant, especially peaches, which bend beneath their load of golden fruit, and the cheapness of such delicacies will testify to their superabundance.

I would mention that the line between Sierra and Plumas Counties has not been run, owing to the failure on the part of the Plumas County Surveyor to meet out County Surveyor at a stated time and place to run the line between the two counties. As it is necessary that such lines should be run and definitely settled, property holders near the lines, or contemplated lines, will then know to which of the two counties they are required to pay their taxes. As it now remains, disputes arise as to which of the counties they are entitled to pay to, and consequently some refuse to pay to either of the counties until the lines are defined.

We have twelve thousand acres of wild hay land, yielding a crop of four thousand tons of hay annually.

All of which is respectfully submitted,

ALFRED MARMON,
County Assessor of Sierra County.

SAN MATEO COUNTY.

S. H. SNYDER……..County Assessor.

OFFICE OF COUNTY ASSESSOR,
Redwood City, Nov. 4th, 1863.

Hon. J. F. HOUGHTON,
Surveyor-General:

SIR: - In conformity to the law and in compliance with your circular, I submit my annual report for the year eighteen hundred and sixty-three, which is as full and correct as I have been able to ascertain by diligent investigation. Although not as full as could be desired, still it approximates somewhat near the facts.

There has been an increase in the various productions of the county over the last year; the principal productions being wheat, barley, oats, hay, and potatoes. In cattle there has been a decrease of nearly one third since last year. By the way of improvements, we have twenty-two miles of railroad now completed, and cars running their regular trips to and from San Francisco. You will observe by the report that there has been an increase in the assessed valuation of real estate. This fact is attributable to the sudden rise of real estate in the markets and the great demand for the same. To our improvement of railroad we owe this change. Our climate was good and our soil was prolific, and the railroad made it accessible and available. In regard to fruit, there is

but very little grown in the county, the orchards being all young, and I did not make any returns of the quantity of fruit raised. Wheat, oats, and barley is a fair crop.

The number of acres of Marsh and Overflowed Lands is about ten thousand.

We have eight Public Schools, and well attended.

Yours, respectfully,

S. H. SNYDER,
Assessor of San Mateo County.

SAN LUIS OBISPO COUNTY.

VALENTIN GAJIOLA……..County Assessor.

SAN LUIS OBISPO,
September 26th, 1863.

Hon. J. F. HOUGHTON,
Surveyor-General:

SIR: - In conformity with the law I herewith send the statistics of this county, hoping the report will meet with your approbation. San Luis Obispo County represents a variety of interests – agricultural, stock raising, and mineral. Live stock of this county has very much improved within the last few years. Horses, cattle, and sheep have greatly improved by the importation of fine blooded American stallions, bulls, and rams.

FRUIT.

On the various farms of the county, the cultivators of orchards and vineyards have made considerable progress. The ranch of Mr. T. F. Branch, situated on the Arroya Granda, has yielded a very large lot of fruit, more so than that of any other farmer in the county.

MINES.

There has been discovered, on what they call the Santa Rosa Ranch, situated about forty miles from the county seat, a coal mine, which, from all accounts, is very rich. They have not commenced work on the mine as yet, but it is to be hoped the day is not far distant before they commence taking out that hidden treasure; also, there has been discovered a copper mine within twenty-five miles of the coal mine, which, from all accounts, is very rich. I think as soon as winter is over these mines will be worked with a will, and, in the meantime, the county is all alive about the new discoveries of copper mines.

VALUATION OF PROPERTY.

Comparing the value of property of the year eighteen hundred and sixty two with eighteen hundred and sixty-three, you will perceive there has been an increase in the valuation of all kinds of property.

Valuation of Property for Year 1862.		
Real estate……..	$234,721 50	
Personal property…….	274,021 06	
Total…….		$512,742 56
Valuation of Property for Year 1863*.*		
Real estate……..	$210,806 45	
Personal property…….	402,876 00	
Total…….		$613,682 45

All of which is respectfully submitted.

VALENTIN GAJIOLA,
County Assessor of San Luis Obispo County.

By BENJAMIN F. HOOK, Deputy.

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SANTA CRUZ COUNTY.

N. TAYLOR……..County Assessor.

SANTA CRUZ,
October 6th, 1863.

Hon. J. F. HOUGHTON,
Surveyor-General:

SIR: - In compliance with law, I have the honor to submit to you the statistics of Santa Cruz County as collected while assessing the county. You will notice that there is an advance over the statement of eighteen hundred and sixty-two.

All the different interests in this county are being vigorously prosecuted, and new ones being opened.

A powder mill is being built on the San Lorenzo River a short distance above the paper mill, and other improvements are talked of.

The mining interests are being prosecuted quite thoroughly – several companies incorporated and vigorously at work.

The crops of all kinds are abundant this year in this county.

All of which is respectfully submitted.

Yours, etc.,

N. TAYLOR,
Assessor of Santa Cruz County.

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SUTTER COUNTY.

P. A. CLARKE……..County Assessor.

YUBA CITY,
November 6th, 1863.

Hon. J. F. HOUGHTON,
Surveyor-General:

SIR: - Inclosed you have my report, which I am sorry was not transmitted before this. I did not observe the erasure of the old date in your circular until a few days ago; however, I hope it may reach you in time. The report is as correct as I could make it.

Many kinds of property in my county have greatly decreased, and also depreciated in value, whilst other kinds have increased – such as lands and improvements. Owing to the great emigration to newly discovered mineral regions, this county, I think, is decidedly retrograding; much good land lying idle.

The culture of tobacco seems to have proven a failure, though the land is well adapted to its culture – that is, a great portion of it – but the prices at the present are too low, and the expense of raising too great. Sugarcane also, though growing well, for the same reason will occupy but little attention.

There is some improvement in horses and some in sheep, (I mean in stock,) but all other kinds seem to have very little attention paid to them.

You will see by my report no public improvements, such as railroads, turnpikes, or canals; no mills, either steam or water.

We scarcely raise any kind of hay but the natural grasses of the country, except the wild oats, which is also a native.

Our county is sparsely wooded, and that only fit for fuel.

I remain, very respectfully,

P. A. CLARKE,
Assessor of Sutter County.

TRINITY COUNTY.

GEORGE F. MIERS……..County Assessor.

WEAVERVILLE, Trinity County,
October 2nd, 1863.

Hon. J. F. HOUGHTON,
Surveyor-General:

SIR: - Please find accompanying this, statistics of this county.

You will perceive that the taxable property of this county has fallen off, since last year about two hundred thousand dollars. So it is with the population; we have lost about five hundred voters since the election a year ago. As to the natural productions of this county, the report of last year will apply.

Very respectfully,

Your obedient servant,

GEORGE F. MIERS,
Assessor of Trinity County.

By H. NICHOLS, Deputy.