INSTRUCTIONS
TO
U. S. DEPUTY
MINERAL SURVEYORS
FOR THE
DISTRICT OF NEW MEXICO
JUNE 15, 1893.

For Reference

Office U. S. Surveyor General

Tucson Arizona

Rec'd July 20. 1893

INSTRUCTIONS

TO

U. S. DEPUTY

MINERAL SURVEYORS

FOR THE

DISTRICT OF NEW MEXICO.

JUNE 15, 1893.

SANTA FE, N. M.:
NEW MEXICAN PRINTING COMPANY.
1893.

U. S. SURVEYOR GENERAL'S OFFICE,

Santa Fé, New Mexico, June 15, 1893.

To U. S. Deputy Mineral Surveyors,

for the District of New Mexico.

GENTLEMEN:—As the "Manual of Instructions" to Deputies, issued from this office in 1886, has become well nigh obsolete through modifying circulars and orders issued since the date thereof by the Hon. Commissioner of the General Land Office, this new "Manual of Instructions" has been prepared for your guidance.

The authority for the same is found in the United States Mining Laws, and judicial and authoritative interpretations of the same; in so far as they are binding upon this office and your official acts.

Several changes have been made in the regulations heretofore obtaining in this surveying district. These have been adapted from the practice of the older districts, chiefly Colorado and California, both as improved methods, and to produce uniformity in procedure, as far as is possible or expedient, between the different surveying districts, as has been recommended by the Hon. Commissioner of the General Land Office.

You are instructed and will be required to strictly comply with all the requirements of the Mining Law, and particularly with these Instructions, and no survey will be accepted or approved until all the requirements mentioned have been fully met.

Edwd F Hobart

U. S. Surveyor General for New Mexico.

INSTRUCTIONS

TO

U. S. DEPUTY MINERAL SURVEYORS

FOR THE DISTRICT OF NEW MEXICO.

GENERAL RULES.

1. All official communications must be addressed to the SURVEYOR GENERAL. You will always refer to the date and subject-matter of the letter to which you reply, and when a mineral claim is the subject of correspondence, you will give the name and survey number.

2. You should keep a complete record of each survey made by you, and the facts coming to your knowledge at the time, as well as copies of all your field notes, reports and official correspondence, in order that such evidence may be readily produced when called for at any future time.

3. Field notes and other reports must be written in a clear and legible hand, and upon the proper blanks furnished you gratuitously by this office upon application therefor. *No interlineations or erasures* will be allowed; and no abbreviations or symbols must be used, except such as are indicated in the specimen field notes.

4. No return by you will be recognized as official, unless it is over your signature as a U. S. Deputy Mineral Surveyor, and made in pursuance of a special order from this office. After you have received an order for survey, you are required to make the survey, and return correct field notes thereof to this office, without delay.

5. The claimant is required, in all cases, to make satisfactory arrangements with you for the payment for your services and those of your assistants in making the survey, as the United States will not be held responsible for the same. You will call the attention of applicants for mineral survey orders to the requirements of the circular of this date in the appendix.

6. You will promptly notify this office of any change in your postoffice address. Upon permanent removal from the District you are expected to resign your appointment.

NOT TO ACT AS ATTORNEY.

7. You are precluded from acting, either directly or indirectly, as attorney in mineral claims. Your duty in any particular case ceases when you have executed the survey and returned the field notes and preliminary plat, with your report, to the Surveyor General. You will not be allowed to prepare for the mining claimant the papers in support of his application for patent, or otherwise perform the duties of an attorney before the land office in connection with a mining claim. You are not permitted to combine the duties of surveyor and notary public in the same case by administering oaths to the parties in interest, but as a notary public you may administer the oaths to your assistants in making the survey. Otherwise you must have absolutely nothing to do with the case except in your official capacity as surveyor. You will make no survey of a mineral claim in which you hold an interest, nor will you employ chainmen interested therein in any manner.

THE FIELD WORK.

8. The survey made and reported must, in every case, be an actual survey on the ground in full detail, made by you in person after the receipt of the order, and without reference to any knowledge you may have previously acquired by reason of having made the location survey or otherwise, and must show the actual facts existing at the time. This precludes you from calculating the connections to corners of the public survey and location monuments, or any other lines of your survey through prior surveys made by others, unless it is satisfactorily shown in your report that you have retraced such lines and found them to be correct.

The term *survey* in these instructions applies not only to the usual field work, but also to the examinations required for the preparation of your affidavits of five hundred dollars expenditure, descriptive reports on placer claims, and all other reports.

SURVEY AND LOCATION.

9. The survey of a mining claim may consist of several contiguous locations, but such survey must, in conformity with statutory requirements, distinguish the several locations, and exhibit the boundaries of each.

10. The survey must be made in strict conformity with, or be embraced within, the lines of the location upon which the order is

based. If the survey and location are identical, that fact must be clearly and distinctly stated in your field notes. If not identical, a bearing and distance must be given from each established corner of the survey to the corresponding corner of the location, and the location corner must be fully described, so that it can be identified. The lines of the location, as found upon the ground, must be laid down upon the preliminary plat in such a manner as to contrast and show their relation to the lines of the survey.

11. If the record of a location is not sufficiently definite and certain to enable you to make a correct survey therefrom, you are required, after reasonable notice in writing, to be served personally or through the United States mail on the applicant for survey and adjoining claimants, whose residence or postoffice address you may know, or can ascertain by the exercise of reasonable diligence, to take testimony of neighboring claimants and other persons who are familiar with the boundaries thereof as originally located and asserted by the locators of the claim, and after having ascertained by such testimony the boundaries as originally established, you will make a survey in accordance therewith, and transmit full and correct returns of the survey, accompanied by the copy of the record of location, the testimony, and a copy of the notice served on the claimant and adjoining proprietors, certifying thereon when, in what manner, and on whom service was made, and having thus ascertained the true and correct boundaries originally established, marked and recorded, you will make the survey accordingly. And no mining claim will exceed the statutory limit of 300 feet in width on each side of the center of vein or 1,500 feet in length, and all surveys must close within 50-100 feet in one thousand feet, and the error must not be such as to make the location exceed the statutory limit, and in absence of other proof the discovery point is held to be the center of the vein on the surface.

INSTRUMENT.

12. All mineral surveys must be made with a TRANSIT, provided with a solar attachment, by which the meridian can be determined independently of the magnetic needle, and all courses must be referred to the true meridian. The variation should be noted at each corner of the survey.

CONNECTIONS.

13. Connect corner No. 1 of each location embraced in your survey by course and distance with nearest corner of the public survey or with a United States location monument, if the claim lies within two miles of such corner or monument. If both are within

the required distance, you will connect with the nearest corner of the public survey.

14. When a boundary line of a claim intersects a section line, give courses and distances from point of intersection to the government corners at each end of the half mile of section line so intersected.

LOCATION MONUMENTS.

15. In case your survey is situated in a district where there are no corners of the public survey and no monuments within the prescribed limits, you will proceed to establish a mineral monument, in the location of which you will exercise the greatest care to insure permanency as to site and construction.

The site, when practicable, should be some prominent point, visible for a long distance from every direction, and should be so chosen that the permanency of the monument will not be endangered by snow, rock or land slides, or other natural causes.

16. The Location Monument should consist of a stone not less than thirty inches long, twenty inches wide and six inches thick, set half way in the ground, with a conical mound of stone four feet high and six feet base alongside. The letters U. S. L. M., followed by the consecutive number of the Monument in the District, must be plainly chiseled upon the stone. If impracticable to obtain a stone of required dimensions, then a post eight feet long, six inches square, set three feet in the ground, scribed as for a stone Monument, protected by a well built conical mound of stone of not less than three feet high and six feet base around it, may be used. The exact point for connection must be indicated on the Monument by a X chiseled thereon; if a post is used, then a tack must be driven into the post to indicate the point.

17. From the Monument, connections by course and distance must be taken to two or three bearing trees or rocks, and to any well known and permanent objects in the vicinity, such as the confluence of streams, prominent rocks, buildings, shafts or mouths of adits. Bearing trees must be properly scribed B. T. and bearing rocks chiseled B. R., together with the number of the location Monument; the exact point on the tree or stone to which the connection is taken should be indicated by a cross or other unmistakable mark. Bearings should also be taken to prominent mountain peaks, and the approximate distance and direction ascertained from the nearest town or mining camp. A detailed description of the locating Monument, with a topographical map of its location, should be furnished this office.

CORNERS.

18. Corners may consist of

First—A stone at least twenty-four inches long set twelve inches in the ground, with a conical mound of stone one and a half feet high, two feet base, alongside, and state kind of stone set for corner.

Second—A post at least four and a half feet long by four inches square set eighteen inches in the ground and surrounded by a substantial mound of stone or earth, and state kind of post used.

Third—A rock in place.

19. All corners must be established in a permanent and workmanlike manner, and the corner and survey number must be neatly chiseled or scribed on the sides facing the claim. The *exact* corner point must be permanently indicated on the corner. When a rock in place is used its dimensions above ground must be stated, and a cross chiseled at the exact corner point.

20. In case the point for the corner be inaccessible or unsuitable, you will establish a witness corner, which must be marked with the letters W. C. in addition to the corner and survey number. The witness corner should be located upon a line of the survey and as near as possible to the true corner, with which it must be connected by course and distance. The reason why it is impossible or impracticable to establish the true corner must always be stated in the field notes, and in running your next course state whether you start from the true place for corner or from witness corner.

21. The identity of all corners should be perpetuated by taking courses and distances to bearing trees, rocks and other objects, as prescribed in the establishment of location monuments, and when no bearings are given state "no bearings available."

22. If an official survey has been made within a reasonable distance in the vicinity, you will run a connecting line to some corner of the same, and connect in like manner with all conflicting surveys and claims, and describe corner with which connection is made.

23. In survey of contiguous locations which are parts of a consolidated claim, where corners are common, mention bearings but once, but where a corner is common to different claims the required number of bearings will be taken from each claim.

the required distance, you will connect with the nearest corner of the public survey.

14. When a boundary line of a claim intersects a section line, give courses and distances from point of intersection to the government corners at each end of the half mile of section line so intersected.

LOCATION MONUMENTS.

15. In case your survey is situated in a district where there are no corners of the public survey and no monuments within the prescribed limits, you will proceed to establish a mineral monument, in the location of which you will exercise the greatest care to insure permanency as to site and construction.

The site, when practicable, should be some prominent point, visible for a long distance from every direction, and should be so chosen that the permanency of the monument will not be endangered by snow, rock or land slides, or other natural causes.

16. The Location Monument should consist of a stone not less than thirty inches long, twenty inches wide and six inches thick, set half way in the ground, with a conical mound of stone four feet high and six feet base alongside. The letters U. S. L. M., followed by the consecutive number of the Monument in the District, must be plainly chiseled upon the stone. If impracticable to obtain a stone of required dimensions, then a post eight feet long, six inches square, set three feet in the ground, scribed as for a stone Monument, protected by a well built conical mound of stone of not less than three feet high and six feet base around it, may be used. The exact point for connection must be indicated on the Monument by a X chiseled thereon; if a post is used, then a tack must be driven into the post to indicate the point.

17. From the Monument, connections by course and distance must be taken to two or three bearing trees or rocks, and to any well known and permanent objects in the vicinity, such as the confluence of streams, prominent rocks, buildings, shafts or mouths of adits. Bearing trees must be properly scribed B. T. and bearing rocks chiseled B. R., together with the number of the location Monument; the exact point on the tree or stone to which the connection is taken should be indicated by a cross or other unmistakable mark. Bearings should also be taken to prominent mountain peaks, and the approximate distance and direction ascertained from the nearest town or mining camp. A detailed description of the locating Monument, with a topographical map of its location, should be furnished this office.

CORNERS.

18. Corners may consist of

First—A stone at least twenty-four inches long set twelve inches in the ground, with a conical mound of stone one and a half feet high, two feet base, alongside, and state kind of stone set for corner.

Second—A post at least four and a half feet long by four inches square set eighteen inches in the ground and surrounded by a substantial mound of stone or earth, and state kind of post used.

Third—A rock in place.

19. All corners must be established in a permanent and workmanlike manner, and the corner and survey number must be neatly chiseled or scribed on the sides facing the claim. The *exact* corner point must be permanently indicated on the corner. When a rock in place is used its dimensions above ground must be stated, and a cross chiseled at the exact corner point.

20. In case the point for the corner be inaccessible or unsuitable, you will establish a witness corner, which must be marked with the letters W. C. in addition to the corner and survey number. The witness corner should be located upon a line of the survey and as near as possible to the true corner, with which it must be connected by course and distance. The reason why it is impossible or impracticable to establish the true corner must always be stated in the field notes, and in running your next course state whether you start from the true place for corner or from witness corner.

21. The identity of all corners should be perpetuated by taking courses and distances to bearing trees, rocks and other objects, as prescribed in the establishment of location monuments, and when no bearings are given state "no bearings available."

22. If an official survey has been made within a reasonable distance in the vicinity, you will run a connecting line to some corner of the same, and connect in like manner with all conflicting surveys and claims, and describe corner with which connection is made.

23. In survey of contiguous locations which are parts of a consolidated claim, where corners are common, mention bearings but once, but where a corner is common to different claims the required number of bearings will be taken from each claim.

TOPOGRAPHY.

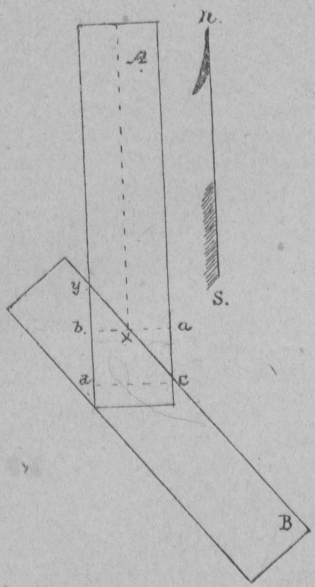
24. Note carefully all topographical features of the claim, taking distances on your lines to intersections with all streams, gulches, ditches, ravines, mountain ridges, roads, trails, etc., with their widths, courses and other data that may be required to map them correctly. If the claim lies within a townsite, locate all municipal improvements, such as blocks, streets and buildings.

CONFLICTS.

25. If in running the exterior boundaries of a claim, you find that two surveys conflict, you will determine the courses and distances from the established corners thereof, situate within the boundaries of your survey, at which the exterior boundaries intersect each other, and run all lines necessary for the determination of the areas in conflict, both with surveyed and unsurveyed claims. You will not, however, show conflicts with unsurveyed claims unless the same are to be excluded.

26. Your attention is directed to paragraphs 50 and 51 of General Land Office circular, dated December 10, 1891, viz:

"50. The rights granted to locators under section 2322, Revised Statutes, are restricted to such locations on veins, lodes or ledges as may be 'situated on the *public domain*.' In applications for lode claims where the survey conflicts with a prior valid lode claim or entry, and the ground in conflict is excluded, the applicant not only has no right to the excluded ground, but he has no right to that portion of any vein or lode the top or apex of which lies within such excluded ground, unless his location was prior to May 10, 1872. His right to the lode claimed termin ates where the lode, in its onward course or strike, intersects the exterior boundary of such excluded grounds and passes within it."



EXPLANATION.

Location "A" in the diagram represents a location for which survey is applied for. As a location it conflicts with location "B" and the claimant of "A" lays no claim to the conflicting area. In accordance with the definition of locators' rights under Sec. 2322 R. S. U. S. as given in paragraph 50 of said circular of Dec. 10, 1891, if location "B" was a valid and subsisting location at the time location "A" was made, the locator of "A" has no right to extend the survey of his claim beyond the point where his lode in its onward course intersects the location "B," and in such case the end lines of the survey should be run through such point of intersection, as represented by lines "a" "b" on diagram.

If it is more desirable, however, the south end line may be the side line of "B" within the side lines of "A" as represented by "c" "y," with which the north end line must be made parallel.

This circular applies also to contiguous locations belonging to one owner and surveyed as a single claim.

If, on the contrary, when location "A" was made the location "B" was not existent, and there was no other conflict, the abandonment of the conflict with the later location "B" brings the case within paragraph 51 of said circular.

"51. The end line of his survey should not, therefore, be established beyond such intersection, unless it should be necessary so to do for the purpose of including ground held and claimed under a location which was made upon public land and valid at the time it was made. To include such ground (which may possibly embrace other lodes) the end-line of the survey may be established within the conflicting survey, but the line must be so run as not to extend any further into the conflicting survey than may be necessary to make such end line parallel to the other end line, and at the same time embrace the ground so held and claimed. The useless practice in such cases of extending *both* the side lines of a survey into the

conflicting survey and establishing an end-line wholly within it, beyond a point necessary under the rule just stated, will be discontinued."

To illustrate: "A" is the first and valid location, afterward the "B" location is made, and for reasons satisfactory to "A" the ground in conflict is relinquished to "B," yet the claimant of "A" claims all the land outside of the conflict included in his location.

The end line contemplated by the circular to include all ground claimed as aforesaid should be run as represented by the line "c" "d," the rest of the lines of conflict being eliminated entirely. The survey must in this case stop at the line "c" "d."

27. It will be particularly observed by you that the above provisions of General Land Office Circular dated December 10, 1891, are just as applicable in the case of conflicting and overlapping locations embraced in one survey as though the several locations were embraced in separate and distinct surveys.

28. A lode claim that is divided into two parts by an intersecting patented mill site, placer or agricultural entry, must be confined to that part which contains the discovery shaft and improvements.

29. The exterior lines of placer claims or mill sites cannot be extended over other claims and the conflicting areas excluded, as with lode claims, it being the surface ground only, with side lines taken perpendicularly downward, for which application is made. The survey must accurately define the boundaries of the *claim*.

30. If, by reason of intervening surveys or claims, a placer survey should be divided into separate tracts, you will preserve a separate series of numbers for the corners of each location, and a consecutive series of numbers for the corners of the tracts embraced in each; distinguishing the detached portions as Tract A, Tract B, etc., connecting by course and distance a corner of each tract with some corner of one previously described. The provisions of this paragraph will also apply to the surveys of mill sites.

LODE AND MILL SITE.

31. A lode and mill site claim in one survey will be distinguished by the letters A and B following the number of the survey. The corners of the mill site will be numbered independently of those of the lode. Corner No. 1 of the mill site must be connected with a corner of the lode claim as well as with a corner of the public survey or U. S. location monument.

FIELD NOTES.

32. In order that the results of your survey may be reported to this office in a uniform manner, you will prepare your field notes and preliminary plat in strict conformity with the specimen field notes and plats, which are made part of these instructions. They are designed to furnish you all the needed information concerning the manner of describing the boundaries, corners, connections, intersections, conflicts and improvements, and stating the variation, area, location and other data connected with the survey of mineral claims, and contain forms of affidavits for the deputy surveyor and his assistants.

33. When a placer claim includes lodes, or when several contiguous placer or lode locations are included as one claim in one survey, you will give to the corners of each location constituting the same a separate consecutive numerical designation, beginning with Cor. No. 1 in each case. In the former case you will first describe the placer claim in your field notes.

34. Throughout the description of the survey, after each reference to the lines or corners of a location, give the name thereof, and if unsurveyed state the fact. If reference is made to a location included in a prior official survey, the survey number must be given, followed by the name of the location. Describe your corners once only.

35. The total area of each location in a claim embraced by its exterior boundaries, and also the area in conflict with each intersecting survey or claim should be stated. Also the total area claimed. But when locations of the survey conflict with each other, such conflicts should only be stated in connection with the location from which the conflicting area is excluded.

36. You will state particularly whether the claim is upon surveyed or unsurveyed public lands, giving in the former case the quarter section, township and range in which it is located, and in the latter, the township as near as can be determined. When upon surveyed lands the section lines should be indicated by full lines and the ¼th section lines by dotted lines.

37. The title page must contain the postoffice address of the claimant or his authorized agent.

EXPENDITURE OF FIVE HUNDRED DOLLARS.

38. In making out your certificate of the value of the improvements, you will follow the form prescribed in the specimen field notes.

39. Only *actual* expenditures and *mining* improvements made by the claimant or his grantors, having a direct relation to the development of the claim, can be included in your estimate. "Labor or improvements within the meaning of the Statute are deemed to have been had on a mining claim, whether it consists of one location or several, when the labor is performed or the improvements are made for its development, that is, to facilitate the extraction of the metals it may contain." L. D. 6-222.

40. The expenditures required may be made from the surface, or in running a tunnel, drifts or cross-cuts, for the development of the claim. Improvements of any other character, such as buildings, machinery or roadways, must be excluded from your estimate unless you show clearly that they are associated with actual excavations, such as cuts, tunnels, shafts, etc., and are essential to the practical development of the surveyed claim.

41. You will locate all mining and other improvements upon the claim by courses and distances from corners of the survey, or from points on the center or side lines, specifying with particularity and detail the dimensions and character of each, and the improvements upon each location should be numbered consecutively, the point of discovery being always No. 1.

42. You will give in detail the value of each mining improvement included in your estimate of expenditure, and when a tunnel or other improvement has been made for the development of other claims in connection with the one for which survey is made, you must give the name, ownership and survey number, if any, of each claim to which a portion or interest is credited, and the value of the portion or interest credited to the claim. The value of improvements made upon other locations, or by a former locator who has abandoned his claim, can not be included in your estimate, but should be described and located in your notes and plat.

43. In case of a lode and mill site claim in the same survey, an expenditure of five hundred dollars must be shown upon the lode claim only.

44. When a survey embraces several locations held in common constituting one entire claim, whether lode or placer, an expenditure of five hundred dollars upon such entire claim embraced in the survey will be sufficient, but in preparing your estimate of five hundred dollars expenditure thereon you will observe the requirements of the decision of the Honorable Commissioner of the General Land Office, dated June 11th, 1890, quoted below for your information.

"When two or more lode locations are embraced in one entry, and the improvements on each lode are not of the value of $500, it must be shown that a sum equal in value, of labor or improvements, has been expended for the common benefit of all those of which the improvements do not equal that sum, with a satisfactory explanation of how and in what manner such improvements tend to a common benefit."

The explanatory statement in such cases should be given in your field notes, or affidavit, at the conclusion of the description of the improvements included in the estimate of expenditure, and should be as full and explicit as the facts in the case warrant, dealing only with the improvements, conditions and circumstances as they actually exist at the time of making the survey or examination, without reference to what is possible or what the claimants may intend to do.

45. Following your certificate you will locate and describe all other improvements made by the claimant within the boundaries of the survey. Those made by other parties, if any, whose names should be mentioned, will be given in a separate description, following those of the claimants.

46. If the value of the labor and improvements upon a mineral claim is less than five hundred dollars at the time of survey, you are authorized to file your affidavit of five hundred dollars expenditure at any time. If the affidavit is made subsequent to the period of publication it should be shown, if practicable, when the improvements were made. The information on which to base this certificate must be derived from the deputy who makes the actual survey and examination upon the premises.

PRELIMINARY PLAT.

47. You will file with your field notes a preliminary plat on blank sent you for that purpose, protracted on a scale of two hundred feet to an inch, if practicable, in conformity with the specimen plat herewith. In preparing plats make the top north. Copy of your calculations of areas by double meridian distances and of all triangulations or traverse lines, must also be furnished.

ERRORS.

48. You will also mention in your notes the discovery of any material errors in prior official surveys, stating explicitly what lines are found to be in error, and giving in express terms the courses and lengths thereof as determined by you.

49. Whenever a survey has been reported in error, the deputy surveyor who made it will be required to promptly make a thorough examination, upon the premises, and report the result, under oath, to this office. In case he finds his survey in error, he will report in detail all discrepancies with the original survey, and submit any explanation he may have to offer as to the cause. If, on the contrary, he should report his survey correct, a joint survey will be ordered to settle the differences with the surveyor who reported the error.

JOINT SURVEY.

50. A joint survey must be made within ten days after the date of order, unless satisfactory reasons are submitted, under oath, for a postponement.

51. The field work must in every sense of the term be a *joint* and not a separate survey, and the observations and measurements taken with the same instrument and chain, previously tested and agreed upon.

52. The deputy surveyor found in error, or if both are in error, the one who reported the same will make out the field notes of the joint survey, which, after being duly signed and sworn to by both parties, must be transmitted to this office.

AMENDED SURVEYS.

53. Inasmuch as amended surveys are ordered only by special instructions from the General Land Office, and the conditions and circumstances peculiar to each separate case, and the object sought by the required amendment, alone govern all special matters relative to the manner of making such survey and the form and subject matter to be embraced in the field notes thereof, but few general rules applicable to all cases can be laid down.

54. The amended survey must be made in strict conformity with, or be embraced within, the lines of the original survey. If the amended and original surveys are identical, that fact must be clearly and distinctly stated in your field notes. If not identical, a bearing and distance must be given from each established corner of the amended survey to the corresponding corner of the original survey. The lines of the original survey, as found upon the ground, must be laid down upon the preliminary plat in such manner as to contrast and show their relation to the lines of the amended survey.

55. The field notes of the amended survey must be prepared on the same size and form of blanks as are the field notes of the original survey, and the word amended must be used before the word survey wherever it occurs in the field notes.

DESCRIPTIVE REPORTS ON PLACER CLAIMS.

56. By General Land Office circular approved September 23, 1882, you are required to make a full examination of all placer claims at the time of survey, and file with your field notes a descriptive report in which you will describe:

(*a*) The quality and composition of the soil, and the kind and amount of timber, and other vegetation.

(*b*) The *locus* and size of streams, and such other matter as may appear upon the surface of the claims.

(*c*) The character and extent of all surface and underground workings, whether placer or lode, for mining purposes, locating and describing them, as required by Section 41.

(*d*) The proximity of centers of trade or residence.

(*e*) The proximity of well known systems of lode deposits or of individual lodes.

(*f*) The use or adaptability of the claim for placer mining, and whether water has been brought upon it in sufficient quantity to mine the same, or whether it can be procured for that purpose.

(*g*) What works or expenditures have been made by the claimant or his grantors for the development of the claim, and their situation and location with respect to the same as applied for.

(*h*) The true situation of all mines, salt licks, salt springs, and mill sites, which come to your knowledge, or report that none exist on the claim, as the facts may warrant.

(*i*) Said report must be made under oath, and duly corroborated by one or more disinterested persons.

57. Descriptive reports on placer claims taken by legal subdivisions are authorized only by special order, and must contain a description of the claim in addition to the foregoing requirements.

PRACTICE.

58. The practice of employing the claimants, their attorneys, or parties in interest, as assistants in making surveys of mineral claims, being contrary to the requirement of the General Land Office circular of November 20, 1873, will not be allowed.

59. Your field work must be accurately and properly performed and your returns made in conformity with the foregoing instructions. Errors in the survey must be corrected at your own expense,

and if the time required in the examination of your returns is increased by reason of your neglect or carelessness, you will be required to make an additional deposit for office work. You will be held to a strict accountability for the faithful discharge of your duties, and will be required to observe fully the requirements and regulations in force as to making mineral surveys. If found incompetent as a surveyor, careless in the discharge of your duties, or guilty of a violation of said regulations, your appointment will be promptly revoked.

60. All former instructions inconsistent with the foregoing are hereby recalled.

APPLICATION FOR SURVEY OF MINING CLAIM.

.....KELLY, N. M....June 9....1892.

To the United States Surveyor General for New Mexico:

SIR:—In compliance with the provisions of the Act of Congress, approved May 10th, 1872, entitled "An Act to Promote the Development of the Mining Resources of the United States," and the acts amendatory thereof, I hereby apply for an official survey of the mining claim, composed of the mining locations known as the....Woodland No. 1, the Woodland No. 2, the Woodland No. 3, the Woodland No. 4 and the Little Hazle, which are contiguous locations, and the Woodland No. 1 mill site, all claimed by Arthur B. Keeler....located in....Magdalena....Mining District....Socorro....County, Territory of New Mexico. in Township....3 South....Ranges....3 and 4 West....and request that you will cause said claim to be surveyed by....Leonard M. Brown....U. S. Deputy Mineral Surveyor, whose P. O. address is....Socorro....N. M., and will cause to be made a plat thereof, bearing your approval, showing the description of the claim, and value of labor and improvements thereon; that duplicate copies of the plat and certified copies of the field notes of survey be sent to the undersigned applicant.

....I have deposited in a U. S. Depository, the First National Bank of Santa Fe, for the expenses in your office, the sum of $190.00, being $35.00 for each mining location and $15.00 for the mill site. The original and duplicate certificate of deposit will be forwarded to you by said bank....

Very respectfully,

.....ARTHUR B. KEELER.....

Claimant.

Postoffice Address:

.....Kelly.....

.....Socorro.....County.

N. M.

ORDER FOR MINERAL SURVEY.

DEPARTMENT OF THE INTERIOR,

OFFICE OF U. S. SURVEYOR GENERAL.

.....SANTA FE, NEW MEXICO,.....

.....June 11, 1892.....

To....Leonard M. Brown.....

U. S. Deputy Mineral Surveyor,

.....*Socorro, New Mexico....*

SIR:—Application has been filed in this office by....Arthur B. Keeler....., dated....June 9, 1892...., for an official survey of the mining claim of ....Arthur B Keeler,....composed of the mining locations known as the ....Woodland No. 1, Woodland No. 2, Woodland No. 3, Woodland No. 4 and the Little Hazle, which are contiguous locations and Woodland No. 1 M. S..... situate in .... Magdalena.... Mining District, ...Socorro.... County, New Mexico, in Section...., Township No....3 S....., Ranges Nos...3 & 4 W. ...., which claim is based upon locations and amended locations made on....June 3, 1892.....and duly recorded in the Mining Records of....Socorro....County, New Mexico,....June 8,....1892, and is fully described in the duly certified copies of the record of the location certificates filed by the applicant for said survey. You are hereby directed to make the survey of said claim, in strict conformity with existing laws, official regulations, and instructions thereunder, and to make proper return to this office. Said survey will be designated as Survey No.....915 A & B....

Very respectfully,

.....EDWARD F. HOBART.....

U. S. Surveyor General for ....New Mexico....

SPECIMEN FIELD NOTES.

Mineral Survey....No. 915 A. and B....
....Las Cruces.....Land District.

FIELD NOTES

OF THE SURVEY OF THE MINING CLAIM OF

.....Arthur B. Keeler, et al.,.....

KNOWN AS THE

....Woodland No. 1, Woodland No. 2, Woodland No. 3, Woodland No. 4 and Little Hazel Lodes, and Woodland No. 1 Mill Site.... in E ½ of Sec. 7 in Township 3 S, Range 3 W, and N W ¼ of Sec. 12 in Twp. 3 S, R. 4 W.....
in.....Magdalena.....Mining District,
.....Socorro.....County, New Mexico....

Surveyed under instructions dated.....June 11th....1892
by.....LEONARD M. BROWN.....
U. S. Deputy Mineral Surveyor.

Claims located.....April 20th....1889....
Amended locations.....June 3rd....1892....
Mill Site located.....June 3rd....1892....
Survey commenced..June 13th....1892....
Survey completed.....June 18th....1892....

Address of Claimant:
.....ARTHUR B. KEELER,.....
.....Kelly.....
.....Socorro....County....N. M.....

FEET.

SURVEY 915 A.

WOODLAND NO 1 LODE.

Beginning at Cor. No. 1.

Identical with the N. W. Cor. of the location.

A granite stone 24x12x9 ins., set 18 ins. in the ground, chiseled 1-915 A. W. 1, with a mound of stone 1½ ft. high, 2 ft. base alongside.

The N. W. Cor. of Sec. 7, Township 3 S, Range 3 W. which is a porphyry stone 20x12x6 ins., firmly set in the ground with 5 notches on S. and one notch on N. edges with a mound of stones alongside, bears N. 48° 31′ 50″ W. 5233.48 ft.

A pine 13 ins. diam. blazed and scribed B. T. 1-915 A. W. 1, bears N. 11° 30′ W. 14.40 ft.

A pine 18 ins. diam. blazed and scribed B. T. 1-915 A. W. 1, brs. N. 10° 30′ E. 75.50 feet.

Thence S. 14° 19′ 54″ W.

Va. 12° 25′ E.

On line 2-3, Sur. No. 889 C, Pearl Lode. The Cavern Mining Co. claimants.

619.27 To Cor. No. 2.

Identical with S. W. corner of the location.

A granite stone 26x13x7 ins., set 19 ins. in the ground, chiseled 2-915 A. W. 1, with a mound of stone 1½ ft. high, 2 ft. base alongside, whence

Cor. No. 3 of Sur. No. 889 C, bears S. 14° 19′ 54″ W. 330.40 ft.

Thence East.

Va. 12° 40′ E.

Ascending.

1000.00 Top of Mountain Range, course N. N. E. and S. S. W.

Descend.

1099.93 Intersect old West boundary line of the Socorro Grant, S. 5° 45′ W. 2776.47 ft. from the 46th station thereon.

1425.35 To Cor. No. 3.

Identical with S. E. Cor. of the location.

A granite stone 24x8x6 ins., set 18 ins. in the ground, chiseled 3-915 A. W. 1, with a mound of stone 1½ ft. high, 2 ft. base, alongside, whence

Socorro Mountain bears N. 86° E.

Lemitar Mountain bears N. 52° 05′ E.

FEET.	
	Thence N. 14° 19′ 54″ E.
	Va. 12° 25′ E.
619.27	To Cor. No. 4.
	Identical with N. E. Cor. of the location.
	A granite stone 24x16x8 ins., set 15 inches in the ground, chiseled 4-915 A. W. 1, with a mound of stone 1½ ft. high, 2 ft. base, alongside, whence
	A cedar tree, 9 ins. diam., blazed and scribed B. T. 915 A. W. 1, bears S. 20° 15′ E. 10.50 ft.
	A pine tree 14 ins. diam., blazed and scribed B. T. 4 915 A. W. 1, bears S. 55° 30′ W. 28.50 ft.
	Thence West.
	Va. 12° 25′ E.
	Ascending.
418.32	Intersect old West boundary line of Socorro Grant S. 5° 45′ W. 2173.42 ft. from the 46th station thereon.
600.	Top of Mountain Range, course N. N. E. and S. S. W.
	Descend.
1425.35	To Cor. No. 1, the place of beginning.

WOODLAND NO. 2 LODE.

Beginning at Cor. No. 1.

Identical with N. W. Cor. of the location.

A granite stone 24x12x8 ins., set 18 ins. in the ground, chiseled 1-915 A. W. No. 2, with a mound of stones, 1½ ft. high, 2 ft. base, alongside, whence

The N. W. Cor. of Sec. 7 in T. 3 S. R 3 W, bears N. 54° 59′ 20″ W. 4978.12 ft.

A pine tree 13 ins. diam., blazed and scribed B. T. 1-915 A. W. 2, bears N. 14° W. 34.70 ft.

A pine tree 8 ins. diam., blazed and scribed B. T. 1-915 A. W. 2, bears S. 64° W. 28.75 ft.

	Thence S. 14° 19′ 54″ W.
	Va. 12° 25′ E.
69.00	Cor. No. 2 of Sur. No. 889 C, Pearl lode, and along line 2-3 of said survey.
619.27	To cor No. 2.
	Identical with S. W. Cor. of the location, and Cor. No. 1, Woodland No. 1, lode of this survey, chiseled thereon 2-W-2, and scribed the two bearing trees in same manner.

FEET.	
	Thence East.
	Va. 12° 50′ E.
	Along line 1-4 of Woodland No. 1 lode of this survey.
850.	Top of mountain range course N. N. E. and S. S. W. and descend.
1007.03	Intersect west boundary line of old Socorro Grant survey S. 5° 45′ W. 2173.42 ft. from the 46th station on said boundary.
1425.35	To Cor. No. 3.
	Identical with S. E. Cor. of the location and with Cor. No. 4, Woodland No. 1, lode of this survey; chiseled thereon 3 W. No. 2, and scribed the two bearing trees in same manner.
	Thence N. 14° 19′ 54″ E.
	Va. 12° 25′ E.
619.27	To Cor. No. 4.
	Identical with N. E. Cor. of the location, upon face of steep, rocky bluff where it is impracticable to set a corner.
	Establish a witness corner 366.35 ft. west of the true point for Cor. by setting a granite stone 25x12x6 ins., 18 ins. in the ground, chiseled W. C. 4-915 A. W. 2, with a mound of stones 1½ ft. high, 2 ft. base, alongside, whence
	Lemitar mountain bears N. 52° 30′ E.
	Socorro mountain bears S. 87° 20′ E.
	Thence from true point for Cor. No. 4, West.
	Va. 12° 30′ E.
	Ascending.
366.35	Witness Cor. to Cor. No. 4 of this lode.
511.22	Intersect west boundary line of old survey of Socorro Grant S. 5° 45′ W. 1570.29 ft. from the 46th station thereon.
820.00	Top of mountain range, course N. N. E and S. S. W. Descend.
1425.35	To Cor. No. 1, the place of beginning.

LITTLE HAZLE LODE.

Beginning at Cor. No. 1.

Identical with N. W. Cor. of the location.

A granite stone 24x12x9 ins., set 15 ins. in the ground, chiseled 1-915 A. L. H. with a mound of stones 1½ ft. high, 2 ft. base alongside, whence

FEET.

The N. W. Cor. of Sec. 7 in Township 3 S., Range 3 W., bears N. 53° 57′ 20″ W. 4416.04 ft.

Magdalena mountain bears N. 61° W.

Thence S. 17° 32′ W.

Va. 12° 25′ E.

Along line 2 3 of survey No. 889 A, Cavern lode, the Cavern Mining Company claimants.

249.75 To Cor. No. 2..

On line 1-2 Sur. No. 889 C, the Pearl lode.

This Cor. is identical with the S. W. Cor. of location.

A granite stone 24x12x8 ins., set 15 ins. in the ground, chiseled 2 915 A. L. H. with mound of stones 1½ ft. high, 2 ft. base, alongside, whence

Cor. No. 1 Sur. 889 C, the Pearl lode, bears N. 81° 17′ W. 5.89 ft.

No other bearings available.

Thence S. 81° 17′ E.

Va. 12° 25′ E.

Along line 1-2 Sur. 889 C, the Pearl lode.

572.16 To Cor. No. 3.

On line 1-2, W. No. 2 lode of this survey.

This Cor. is identical with location.

A pine post 4 ft.x4 ins. square, set 24 ins. in the ground, scribed 3-915 A. L. H., whence

A pine tree 6 ins. diam. blazed and scribed B. T. 3-915 A. L. H. bears N. 29° 15′ W. 21 ft.

A pine tree 13 ins. diam blazed and scribed B. T. 3-915 A. L. H. bears S. 86° E. 38.75 ft. dist.

Thence N. 17° 32′ E.

Va. 12° 25′ E.

70.11 To Cor. No. 4, on line 1-4 Woodland No. 2 lode of this survey at East 4.04 ft. from its Cor. No. 1.

This Cor. is identical with location.

A granite stone 24x10x6 ins., set 12 ins. in the ground, chiseled 4-915 A. L. H. with mound of stones 1½ ft. high, 2 ft. base, alongside.

No bearings available.

Felt.	
	Thence East.
	Va. 12° 25′ E.
	Along line 1-4 Woodland No. 2, lode of this survey.
	Ascending.
800.	Top of mountain range—course N. N. E. and S. S. W.
	Descend.
907.05	To Cor. No. 5.
	Identical with location.
	A granite stone 24x10x6 ins. set 12 ins. in the ground, chiseled 5-915 A. L. H. with mound of stones 1½ ft. high, 2 ft. base alongside, whence
	Witness Cor. to Cor. No. 4, Woodland lode No. 2, of this survey bears East 148.91 ft.
	No other bearings available.
	Thence N. 17° 32′ E.
	Va. 12° 25′ E.
34.52	Intersect old west boundary line of the Socorro Grant, S. 5° 45′ W. 1537.29 ft. from the 46th station thereon.
270.58	To Cor. No. 6.
	Identical with location.
	A granite stone 36x18x9 ins., set 10 ins. in the ground, too rocky to dig deeper, with mound of stones 1½ ft. high, 2 ft. base alongside, chiseled 6-915 A. L. H.
	No bearings available.
	Thence West.
	Va. 12° 25′ E.
	Ascending.
48.44	Intersect the old west boundary of the Socorro Grant, S. 5° 45′ W. 1311.06 ft. from the 46th station thereon.
300.	Top of mountain range course N. N. E. and S. S. W.
	Descend.
1500.00	To Cor. No. 1, place of beginning.

WOODLAND NO. 3 LODE.

Beginning at Cor. No. 1.

Identical with N. W. Cor. of the location.

A limestone 24x14x10 ins., set 12 ins. in the ground, chiseled 1-915 A. W. No. 3, with a mound of stones 1½ ft. high, 2 ft. base, alongside, whence

FEET.	
	The N. W. Cor. of Sec. 7 in Township 3 S., Range 3 W., bears N. 62° 00′ 30″ W. 4257.47 ft.
	No other bearings available.
	Thence S. 17° 32′ W.
	Va. 12° 37′ E.
	Along line 2-3 of Sur. No. 889 A, the Cavern lode.
155.00	Line of wire gravity tramway, course S. 75° E. and N. 73° W.
629.09	To Cor. No. 2.
	Identical with Cor. No. 1 of Little Hazle lode of this survey and with S. W. Cor. of the location; chiseled thereon 2-915 A. W. 3.
	No other bearings available than the one already taken at this point.
	Thence East.
	Va. 12° 33′ E.
	Along line 1 6 Little Hazle lode of this survey.
	Ascending.
1100.00	Top of Magdalena mountain range, course N. 43° E. and S. 39° 30′ W.
	Descend.
1355.35	To Cor. No. 3.
	Identical with the location.
	A granite stone 24x18x12 ins., set 12 ins. in the ground, chiseled 3-915 A. W. 3, with mound of stones 1½ ft. high, 2 ft. base alongside, whence
	A piñon tree 7 ins. diam., blazed and scribed B. T. 3-915 A. W. 3, bears N. 18° W. 8 ft.
	No other bearings available.
	Thence N. 17° 32′ E.
	Va. 12° 29′ E.
468.74	Intersect the west boundary line of the old Socorro Grant survey. S. 5° 45′ W. 861.84 ft. from the 46th station thereon.
629.09	To Cor. No. 4.
	Identical with N. E. Cor. of the location.
	A granite stone 24x12x8 ins. upon a ledge of rock, with mound of stones 1½ ft. high. 2 ft. base, alongside, chiseled 4-915 A. W. 3.
	No bearings available.

FEET.	
	Thence West.
	Va. 13° E.
	Ascending.
32.91	Intersect West boundary line of the old Socorro Grant, S. 5° 45′ W. 708.19 feet from the 46th station thereon.
600.	Top of ridge, course N. 25° E. and S. 32° W.
	Descend.
1355.35	To Cor. No. 1, place of beginning.

WOODLAND NO. 4 LODE.

Beginning at Cor. No. 1.

Identical with the location.

A porphyry stone 24x12x7 ins., set 12 ins. in the ground, chiseled 1-915 A. W. 4, with a mound of stone 1½ ft. high, 2 ft. base alongside, whence

The N. W. Cor. of Sec. 7, Twp. 3 S., R. 3 W., bears N. 70° 30′ 10″ W. 4189.16 ft.

Magdalena mountain bears N. 64° 20′ W.

	Thence S. 17° 32′ W.
	Va. 12° 33′ E.
113.50	To Cor. No. 2, Sur. 889 A, the Cavern lode, and along line 2-3 thereof.
345.02	Intersect line 2-3 of Survey No. 870 A., Young America lode, C. C. Cowles claimant, N. 22° 25′ W. 7.09 feet from its Cor. No. 3.
354.26	Intersect line 3-4 of Sur. No. 870 A, Young America lode, S. 67° 35′ W. 5.94 ft. from its Cor. No. 3.
629.09	To Cor. No. 2.

Identical with location and with Cor. No. 1 of Woodland No. 3 lode of this survey, chiseled thereon 2-915 A. W. 4.

	Thence East.
	Va. 12° 25′ E.
	Along line 1-4 of Woodland No. 3 lode of this survey, ascending Magdalena mountain range.
1000.00	Top of range, course N. 27½° E. and S. 27½° W.
	Descend.
1322.44	Intersect West boundary line of the old Socorro Grant, S. 5° 45′ W. 708.19 ft. from the 46th station thereon.
1355.35	To Cor. No. 3.

FEET.	
	Identical with location and with Cor. No. 4 of the Woodland No. 3 lode of this survey, chiseled thereon 3-915 A. W. 4.
	Thence N. 17° 32′ E.
	Va. 12° 25′ E.
629.09	To Cor. No. 4.
	A granite stone 24x9x9 ins., set 18 ins. in the ground, chiseled 4-915 A. W. 4, with a mound of stone 1½ ft. high, 2 ft. base alongside.
	The location corner bears N. 36° 40′ E. 110 ft.
	Thence West.
	Va. 12° 40′ E.
	Ascending.
162.05	Intersect west boundary of old Socorro Grant, S. 5° 45′ W. 105.32 ft. from the 46th station thereon.
400.	Top of mountain range N. 25° E. and S. 26° W.
	Descend.
1355.35	To Cor. No. 1, place of beginning.

AREA.

Total area Woodland No. 1 lode	19.63	acres
Less area in conflict with old Socorro Grant	5.13	"
Total area claimed of Woodland No. 1 lode	14.50	acres
Total area Woodland No. 2 lode	19.63	acres
Area in conflict with old Socorro Grant	6.40	"
Total area claimed of Woodland No. 2 lode	13.23	acres
Total area Little Hazle lode	9.20	acres
Less area in conflict with		
Survey of Woodland No. 2 lode ..... 0.003 acres		
Old Socorro Grant ..... 0.120 " —	0.123	"
Total area claimed of Little Hazle lode	9.077	acres
Total area Woodland No. 3 lode	18.66	acres
Area in conflict with old Socorro Grant	0.07	"
Total area claimed of Woodland No. 3 lode	18.59	"

WOODLAND NO. 4 LODE.

Total area Woodland No. 4. lode	18.66	acres
Area in conflict with old Socorro Grant.. 1.34 acres		
Area in conflict with Sur. No. 870 A.... 0.0025 " —	1.3425	"
Total area claimed of Woodland No. 4	17.3175	"

Total area of Woodland No. 1 lode claimed	14.50	acres
Total area of Woodland No. 2 lode claimed	13.23	"
Total area of Little Hazle lode claimed	9.077	"
Total area of Woodland No. 3 claimed	18.59	"
Total area of Woodland No. 4 claimed	17.3175	"
Total area claimed of this lode claim	72.7145	acres

FEET.

SURVEY NO. 915 B.

WOODLAND NO. 1 MILL SITE.

This mill site is located and surveyed in connection with the Woodland No. 1 lode, of Sur. No. 915 A.

Beginning at Cor. No. 1.

Identical with the location.

An oak post 4½ ft. long, 4x4 ins., set 2 ft. in the ground, scribed 1-915 B. W. No. 1, with mound of stones around it, whence

The N. E. Cor. of Sec. 12, Twp. 3 S., R. 4 W., bears N. 66° 30′ E. 3462.12 ft.

Cor. No. 1 of Sur. 915 A, Woodland No. 1 lode, bears S. 73° 36′ 50″ E. 7397.39 ft.

Thence S. 31° 46′ 45″ W.

Va. 12° 25′ E.

Along line 2-3 of Sur. No. 916, the Iron Mask lode.

134.61 Intersect line 2-3 Sur. No. 285, the Granger lode, formerly claimed by Magdalena Mining Co., now abandoned, N. 47° 44′ 15″ E. 31.29 ft. from its Cor. No. 3.

167.01 Intersect line 3-4 of Sur. No. 285, the Granger lode, S. 43° 07′ 30″ E. 13.33 ft. from its Cor. No. 3.

339.40 To Cor. No. 2.

Identical with the location and with Cor. No. 3 of Sur. 916, the Iron Mask lode, Arthur B. Keeler claimant, which is a juniper post 4 ft. long, 4 ins. square, set 2 ft. in the ground, scribed 3-916, with a mound of stone around it; scribed thereon on side facing mill site 2-915 B.

FEET.	
	Thence West.
	Va. 12° 27′ E.
254.10	To Cor. No. 3.
	Identical with location and at intersection with line 1-4 of Sur. 870 B, Young America mill site, C. C. Cowles claimant, 284.10 ft. south from Cor. No. 1 thereof.
	An oak post 4 feet long, 6 ins. square, set 2 ft. in the ground, scribed 3-915 B., with mound of stone 1½ ft. high, 2 ft. base, around post.
	No bearings available.
	Thence North.
	Va. 12° 25′ E.
	Along line 4-1 of Sur. No. 870 B., Young America mill site.
284.10	To Cor. No. 4.
	Identical with location and Cor. No. 1 of Sur. No. 870 B, the Young America mill site, and which is
	A porphyry rock 24x12x9 ins., set 12 ins. in the ground chiseled 1-870 B., with a mound of stones; chiseled thereon facing mill site 4-915 B.
	No bearings available.
	Thence West.
	Va. 12° 25′ E.
	Along line 1-2 Sur. No. 870 B, the Young America mill site.
176.65	To Cor. No. 5.
	Identical with location.
	A pine post 4 ft. long, 6 ins. square, set 2 ft. in the ground, scribed 5-915 B, with a mound of stone 1½ ft. high, 2 ft. base, around post, whence
	Cor. No. 2 of Sur. No. 870 B, the Young America mill site, which is a granite stone 24x19x19 ins., set 15 ins. in the ground, chiseled 2-870 B, on S. E. face, with mound of stones 1½ ft. high, 2 ft. base, alongside, bears West 153.35 ft.
	No other bearings available.
	Thence North.
	Va. 12° 25′ E.
304.40	To Cor. No. 6.
	Identical with location.

FEET.	
	An oak post 4 ft. long, 6 ins. square, set 2 ft. in the ground, scribed 6-915 B., with a mound of stone 1½ ft. high, 2 ft. base, around post.
	No bearings available.
	Thence East.
	Va. 12° 37′ E.
176.65	To Cor. No. 7.
	Identical with location.
	A pine post 4 feet long, 6 ins. square, set 2 ft. in the ground, scribed 7-915 B, with a mound of stone 1½ ft. high, 2 ft. base, around post, whence
	A juniper tree 36 ins. diam., blazed and scribed B. T. 7-915 B, bears S. 65° W. 49.75 ft.
	No other bearings available.
	Thence S. 55° 16′ 30″ E.
	Va. 12° 25′ E.
526.65	To Cor. No. 1, place of beginning.

Total area of Survey 915 B, Woodland No. 1 mill site.... 5.000 acres
Area in conflict with
Sur. No. 285, the Granger lode..... 0.004 "

Total area claimed..... 5.000 acres

LOCATION OF SURVEY 915 A.

This survey is located in the Eastern half of Section 7, Township 3 South, Range 3 West.

LOCATION OF SURVEY 915 B.

This survey is located in the N. W. ¼ of Sec. 12, Township 3 South, Range 4 West.

EXPENDITURE OF FIVE HUNDRED DOLLARS.

I certify that the value of the labor and improvements upon this claim, placed thereon by the claimants and their grantors, is not less than five hundred dollars, and that said improvements consist of:

Discovery Tunnel No. 1; the center of face of which bears, from the center of line 3-4 of Woodland No. 1 lode, west 200 feet; width of tunnel 3 feet, height 6 feet, by 18 feet long, in rock, course west.

Value $180.00.

The discovery open cut of Woodland No. 2 lode, leading to a tunnel. The face of open cut bears, from center of line 3-4 of Woodland No. 2 lode survey, west 200 feet; size of open cut 4 feet wide, 7 feet high, 9 feet long, in rock. Value $75.00.

Size of tunnel 4 feet wide, 5 feet high, 18 feet long. Value $180.00.
Course of open cut and tunnel west.

The discovery open cut of the Little Hazle lode survey; the face of which bears, from Cor. No. 1 thereof, south 80° 30′ E. 13.70 ft.; size of open cut 5 ft. wide, 10 ft. high, 10 ft. long, in earth and rock.
Value $50.00.

Course of open cut west.

The discovery tunnel of Woodland No. 3 lode; center of mouth of which bears, from center of line 3-4 thereof, west 15 feet; size of of tunnel 5 feet wide, 6½ ft. high, 37 feet long, in hard rock, course west. Value $400.00.

Tunnel No. 2; center of mouth of which bears, from Cor. No. 1, S. 56′ E. 390 feet; size of tunnel 4 ft. wide, 6 ft. high, 200 feet long, in rock, course east. 50 ft. in from the mouth of this tunnel is a Drift No. 3, 4 ft. wide, 6 ft. high, 200 ft. long, in rock, course north, and, from the same point in the tunnel, Drift No. 4, 4 feet wide, 6 feet high, 151 feet long, in rock, well timbered, course south.
Value of Tunnel No. 2, and Drifts Nos. 3 and 4, $7,000.00.

The Drift No. 4 to the south is intended to cut the veins at a great depth on the Little Hazle and Woodland Nos. 2 and 1 lodes, and an undivided one-fourth interest is accredited to each of the three surveys last mentioned. The Drift No. 3 to the north is intended to develop the Woodland Nos. 3 and 4 lodes, and an undivided one-half interest thereof is accredited to each of these surveys.

From the mouth of Tunnel No. 2, there is a gravity wire tramway, built by Trenton Iron Works, extending westerly about 1½ miles to the smelter owned and operated by the claimants.
Value $15,000.00.

This tramway is used for transporting the ores from the five lodes of this survey to the smelter. An undivided one-fifth interest is accredited to each location.

The discovery tunnel of Woodland No. 4 lode; the mouth of which bears, from center of line 3-4 of said survey, west 200 ft.; size of tunnel 4 ft. wide, 6 ft. high, 75 ft. long, in blasting rock, course west. Value $750.00.

The summit of the Magdalena mountain range crosses the eastern portion of these claims, in a north and south direction; falling off abruptly to the east and more gradually to the west. The veins upon these claims have a dip of about 30°.

The Tunnel No. 2 and Drifts Nos. 3 and 4 on the Woodland No. 3 lode, described and included in the estimate of expenditure, continued in their present courses, will cut the veins of the several locations at great depths, when by one system of workings and one plant of machinery the entire claim can be most advantageously and economically developed.

OTHER IMPROVEMENTS.

A log cabin, the east corner of which bears, from Cor. No. 4 of the Woodland No. 4 lode, S. 45° W. 395 ft.; size 12x16 ft., course of long sides N. 44° E.

A shaft, which bears, from Cor. No. 3 of Woodland No. 4 lode, N. 48° 30′ W. 305 ft.; 3x5 ft., 12 ft. deep, in earth and gravel.

A frame store house; S W. Cor. of which bears, from Cor. No. 2, Sur. No. 915 B, the Woodland No. 1 mill site, N. 18° E. 158 ft., 18x50 ft., course of long sides north; an adobe office, the S. E. Cor. of which bears, from Cor. No. 2 Survey 915 B, the Woodland No. 1 mill site, N. 6° 30′ W. 193 ft., 25x75 ft., course of long sides east; a well, the center of which bears from the same Cor. N. 6° 30′ W. 193 ft., 4 ft. diam. and 25 ft. deep.

INSTRUMENT.

Instrument used, a Gurley Mountain Transit, with solar attachment and a steel tape. All courses determined by the use of the solar apparatus.

NOTE.—The disagreement between the field notes and the location certificates of the Woodland No. 1 and Woodland No. 2 lodes, with regard to length of the locations and the courses of the boundary lines, are due to errors in the latter.

NOTE.—Neither E. L. Mann or Jose Velasques, the chainmen, or myself held any interest, directly or indirectly, in this claim at the time of making the survey.

FINAL OATHS FOR SURVEYS.

LIST OF NAMES.

List of names of individuals employed to assist in running, measuring and marking the lines and corners described in the foregoing field notes of the claim of....Arthur B. Keeler et al.,....upon the....Woodland No. 1, Woodland No. 2, Woodland No. 3, Woodland No. 4 and Little Hazle lodes and Woodland No. 1 mill site....in.... Magdalena....Mining District,....Socorro....County, New Mexico.

.....E. L. MANN.....

.....JOSE VELASQUES....

FINAL OATHS OF ASSISTANTS.

We hereby certify that we assisted....Leonard M. Brown...., U. S. Deputy Mineral Surveyor, in surveying the exterior boundaries and marking the corners of the claim of....Arthur B. Keeler.... upon the....Woodland No. 1, Woodland No. 2, Woodland No. 3, Woodland No. 4 and Little Hazle lodes and Woodland No. 1 mill site....in....Magdalena....Mining District,....Socorro....County, New Mexico, and that said survey has been, in all respects, to the best of our knowledge and belief, well and faithfully made, and the boundary monuments planted according to the instructions furnished by the Surveyor General.

....E. L. MANN..... *Chainman.*

....JOSE VELASQUES.... *Chainman.*

..... *Axman.*

..... *Flagman.*

Subscribed and sworn to by the above-named persons this.... 18th....day of....June.... 1892.

[SEAL] .....JOHN C. SMYTH,.....

....*Notary Public*.....

FINAL OATH OF U. S. DEPUTY MINERAL SURVEYOR.

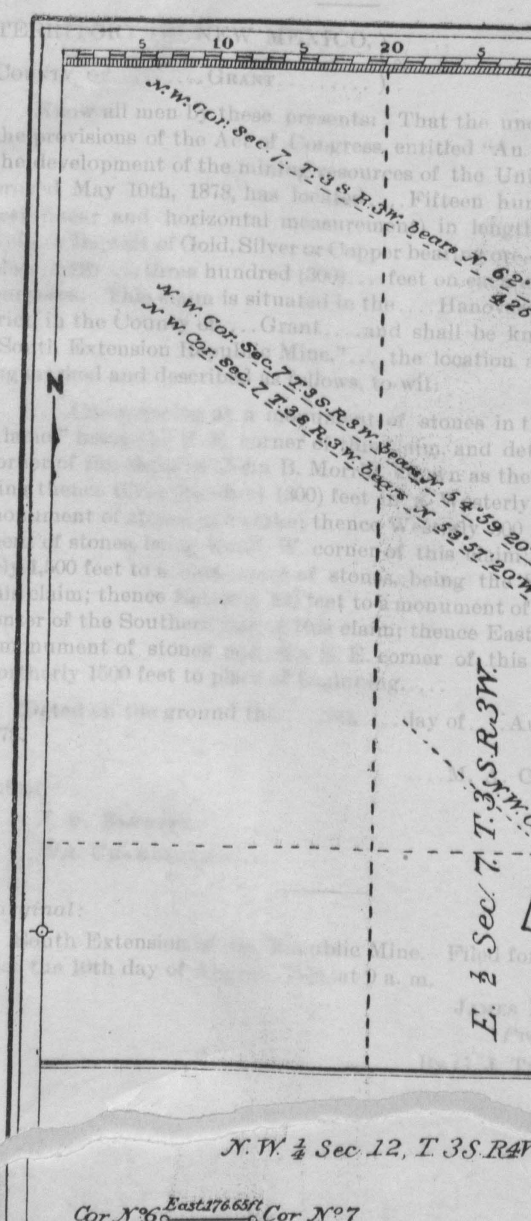
I,.....Leonard M. Brown.....U. S. Deputy Mineral Surveyor, do solemnly swear that in pursuance of an order from the United States Surveyor General of the public lands in the Territory of New Mexico, bearing date the....11th day....of....June....1892, and in strict conformity to the laws of the United States and the instructions furnished by said Surveyor General, I have faithfully surveyed the claim of....Arthur B. Keeler et al., known as the Woodland No. 1, Woodland No. 2, Wooodland No. 3, Woodland No. 4 and Little Hazle lodes and Woodland No. 1 mill site, in the E. ½ of Sec. 7, Township 3 S., Range 3 W., and N. W. ¼ of Sec. 12 in Township 3 S., Range 4 W..... in....Magdalena....Mining District....Socorro ....County, New Mexico, and do further solemnly swear that the foregoing are the true and original field notes of such survey, and that the improvements are as therein stated.

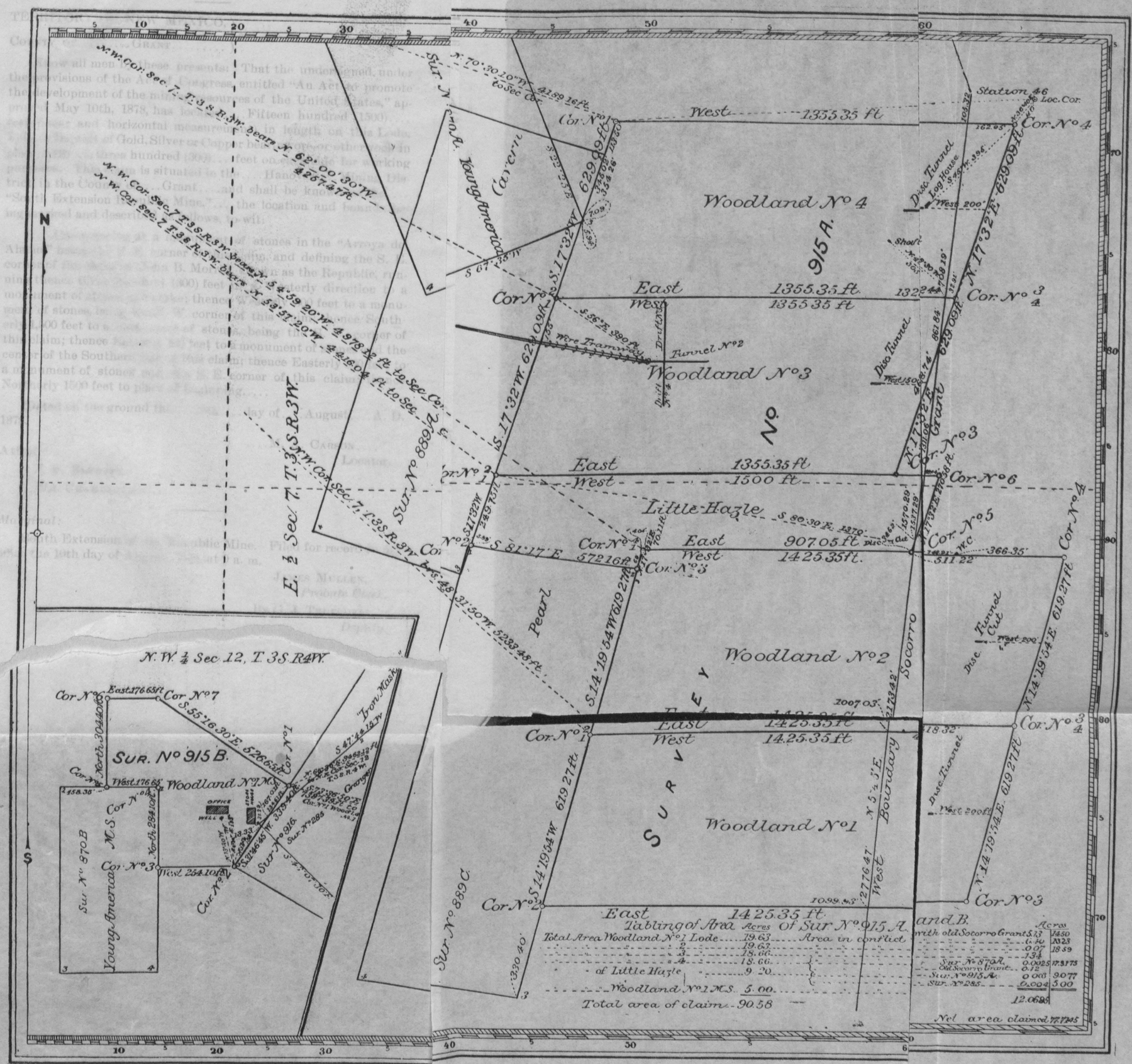
.....LEONARD M. BROWN,.....
U. S. Deputy Mineral Surveyor.

Subscribed by said....Leonard M. Brown....U. S. Deputy Mineral Surveyor, and sworn to before me this....21st.... day of....June....1892.

.....JOHN C. SMYTH,.....
....*Notary Public*.....

SAMPLE OF MINING LOCATIO





Claim Located: Amended Locations made June 4 1892

Mineral Survey No. 915 A and B.

LOT No.

Las Cruces Land District.

PLAT

OF THE CLAIM OF

Arthur B. Keeler et. al.

KNOWN AS THE

Woodland No 1, Woodland No 2, Woodland No 3, Woodland No 4 and Little Hazle Lodes, and Woodland No 1 Mill Site

IN MAGDALENA MINING DISTRICT, SOCORRO COUNTY, NEW MEXICO

Containing an Area of 90.58 Acres.

Scale of 300 Feet to the inch.

Variation 12° 25' E.

SURVEYED June 13 to 18, 1892, BY Leonard M. Brown, U.S. Deputy Mineral Surveyor.

The Original Field Notes of the Survey of the Mining Claim of Arthur B. Keeler, et al. known as the Woodland No 1, Woodland No 2 Woodland No 3, Woodland No 4 and Little Hazle Lodes, and Woodland No 1 Mill Site from which this plat has been made under my direction, have been examined and approved, and are on file in this Office; and I hereby certify that they furnish such an accurate description of said Mining Claim as will, if incorporated into a patent, serve fully to identify the premises, and that such reference is made therein to natural objects or permanent monuments as will perpetuate and fix the locus thereof.

I further certify that Five Hundred Dollars worth of labor has been expended or improvements made upon said Mining Claim by claimants or their grantors, and that said improvements consist of Disc. Tunnel on Woodland No 1 3'x6'x18 ft; Disc. Open Cut of Woodland No 2, 4'x7'x9 ft. leading to tunnel 4'x5'x18 ft; Disc. Open Cut to Little Hazle 5'x10'x10 ft. long; Disc. Tunnel of Woodland No 3, 5'x6½'x37 ft; Tunnel No 2, 4'x6'x200 ft long, with drifts 4'x6'x350 ft. long, Tramway 1½ miles long Disc. Tunnel on Woodland No 4, 4'x6'x75 ft long and Store house, office and well on Woodland No 1 M.S. that the location of said improvements is correctly shown upon this plat, and that no portion of said labor or improvements has been included in the estimate of expenditures upon any other claim.

And I further certify that this is a correct plat of said Mining Claim made in conformity with said original field notes of the survey thereof, and the same is hereby approved.

U.S. Surveyor General's Office, Santa Fe, N.M. Aug 6th, 1892

Edwd F. Hobart, U.S. Surveyor General for New Mexico

Claim Located: Amended
Mineral Survey No 915 A and
Lot No
Las Cruces
PLAT
OF THE CLAIM
KNOWN AS
Land No 1 Mill Site
IN MAGDALENA
SOCORRO COUNTY
Containing an Area of
Scale of 300 Feet
Variation
The Original Field Notes of the Survey of
known as the
from which this plat has been made
have been examined and approved, and
Cor No 4
Cor No 3
Cor No 6
Cor No 5
Tunnel
Log House

SAMPLE OF MINING LOCATION.

TERRITORY OF NEW MEXICO, }
COUNTY OF.....GRANT..... } ss.

Know all men by these presents: That the undersigned, under the provisions of the Act of Congress, entitled "An Act to promote the development of the mining resources of the United States," approved May 10th, 1878, has located....Fifteen hundred (1500).... feet (linear and horizontal measurement) in length on this Lode, Vein or Deposit of Gold, Silver or Copper bearing ore, or other rock in place, with....three hundred (300)....feet on each side for working purposes. This claim is situated in the....Hanover....Mining District, in the County of....Grant....and shall be known as the.... "South Extension Republic Mine,"....the location and bounds being marked and described as follows, to-wit:

....Commencing at a monument of stones in the "Arroya del Alamo," being the N. E. corner of this claim, and defining the S. E. corner of the claim of John B. Morrill, known as the Republic, running thence three hundred (300) feet in a Westerly direction to a monument of stones and stake; thence Westerly 300 feet to a monument of stones, being the N. W. corner of this claim; thence Southerly 1,500 feet to a monument of stones, being the S. W. corner of this claim; thence Easterly 300 feet to a monument of stones and the center of the Southern line of this claim; thence Easterly 300 feet to a monument of stones and the S. E. corner of this claim; thence Northerly 1500 feet to place of beginning.....

Dated on the ground this....9th....day of....August....A. D. 1878.

....M. A. CARSON....
Locator.

Attest:

....J. F. BENNETT.....

....WM. CHAMBERLAIN.....

Marginal:

South Extension of the Republic Mine. Filed for record in my office the 10th day of August, 1878, at 9 a. m.

JAMES MULLEN,
Probate Clerk.

By G. J. TRUESDELL,
Deputy.

TERRITORY OF NEW MEXICO, }
COUNTY OF.....GRANT..... } ss.

I,....E. M. Young,....Probate Clerk and Ex-Officio Recorder within and for said County and Territory, do hereby certify that the foregoing is a true and correct copy of the Notice of Location of the....South Extension of Republic Mine,....situate in the.... Hanover....Mining District,....Grant....County N. M., as the same appears of record in my office at page....485....in Book....1....of Mining Locations, Records of....Grant....County, N. M.

In witness whereof, I have hereunto set my hand and affixed the Seal of the Probate Court, at my office in....Silver City....N. M., this the ....28th....day of....March....A. D. 1892.

[SEAL] ....E. M. YOUNG....

Probate Clerk and Ex-Officio Recorder.

SAMPLE OF AMENDED LOCATION.

AMENDED LOCATION OF SOUTH EXTENSION REPUBLIC MINE.

WHEREAS, I....[if the clain was originally located by some other person insert the name here]....did on the....9th....day of ....August....1878, locate the....South Extension Republic.... Mining Claim in what is now the....Central City....Mining District, in the County of....Grant....and Territory of New Mexico, and afterwards, to-wit: on the....10th....day of....August....1878, at....9....o'clock....a....m., caused a copy of the notice of such location to be recorded in the office of the Recorder of said county, on page....485....in Book....1....of Mining Location Records;

Now, in order to more definitely describe the metes and bounds of said mine by courses and distances, and especially reserving all the rights acquired by such original location, and claiming all the rights that can be acquired by virtue of this amended location, I, the undersigned, being the present owner of said mining claim location, as shown by the records of....Grant....County, New Mexico, do hereby make this amended location of the said mine and mining claim upon this lode, vein or deposit of mineral bearing quartz, or other rock in place, and describe, establish and claim the same as follows:

Beginning at this monument of stones erected at the center of the....Northerly....end of claim and upon which this notice is posted, and running....366....feet in a....N. 65° 50′ W....direction to a monument of stones, thence....820....feet in a....S. 11° 45′ E....direction to a monument of stones, thence...725....feet in a.....S. 3° W.....direction to a monument of stones, thence..... 330....feet in a....S. 65° 30′ E....direction to a monument of stones, being the center of the...Southerly...end of claim, thence ....330....feet in a....S. 65° 30′ E....direction to a monument of stones, thence....1060....feet in a....North 3° East....direction to a monument, thence...435...feet in a...N. 11° 45′ W...direction to a monument of stones, thence....366....feet in a....N. 65° 50′ W... direction, to the place of beginning.

This claim lies in the....N. E. part of S. E. ¼....of Sec.... 16....T....17 S....R....12 W...being bounded on the N. by the.... Republic....claim, on the East by the....New Hampshire....claim, and on the West by the....West End and Indiana....claims, and on the S. end by the....Illinois....claim.

....The N. E. Cor. of this claim is also a corner of the Mother Lode and Republic claims, from which the quarter corner between Secs. 15 and 16 in said Township brs. N. 36° 45′ E. 425 feet; said monuments have been set in ground and marked with initials....

Survey made and monuments erected and stones set by.... Ricard L. Powel.... U. S. Deputy Mineral Surveyor, the....15th ....day of....August....A. D. 1882.

This claim shall be known as the ...South Extension Republic Mine....

Dated on the ground this....16th ....day of....September.... A. D. 1882.

Attest: ....M. H. Carson,....

....Ricard L. Powel.... Locator.

....C. A. Ensign.....

Marginal:

South Extension Republic. Filed for record Oct. 10th, 1882, at 3 p. m.

E. Stine,
Probate Clerk.
By N. Scarrett,
Deputy.

TERRITORY OF NEW MEXICO,
County of.....Grant..... } ss.

I,....E. M. Young,....Probate Clerk and Ex-Officio Recorder within and for said County, do hereby certify that the foregoing is a true and correct copy of the Amended Notice of Location of the.... South Extension Republic....Mine, situate in....Central City.... Mining District,....Grant....County, N. M., as the same appears of record in my office, at pages....463 & 464....in Book....7....of Mining Locations, Records of....Grant....County, N. M.

In witness whereof, I have hereunto set my hand and affixed the Seal of the Probate Court, at my office in....Silver City ....N. M., this the .... 26th....day of....March....A. D. 1892.

[seal] ....E. M. Young....
Probate Clerk and Ex-Officio Recorder.

APPENDIX.

CIRCULAR TO APPLICANTS

FOR

MINERAL SURVEY ORDERS

IN THE

DISTRICT OF NEW MEXICO.

U. S. SURVEYOR GENERAL'S OFFICE,

JUNE 1, 1893.

CIRCULAR.

UNITED STATES SURVEYOR GENERAL'S OFFICE,

SANTA FE, NEW MEXICO.

To Applicants for Mineral Survey Orders
in the District of New Mexico:

You will observe the following requirements in the conduct of your business with this office, the same being based upon the United States mining laws and circular and special instructions from the Hon. the Commissioner of the General Land Office.

1. All applications for survey orders, descriptive reports on placer claims, or certificates of five hundred dollars expenditure, should be addressed to the Surveyor General and be signed by the claimants, their agent or attorney.

2. Each application should contain:

(*a*) The name of the claimant in full, and as it is desired to appear in the application for patent.

(*b*) The name of each location embraced in the claim.

(*c*) The name of the land and mining districts in which the claim is located.

(*d*) The name of the U. S. Deputy Mineral Surveyor to whom it is desired the order shall be issued.

3. You are required to file with each application for survey order, a copy of the record of location of the claim, properly certified by the Clerk of the Probate Court of the county where the claim is situate.

4. The Deputy Mineral Surveyor is required to survey the claim in *strict conformity* with or *within* the lines of the location upon which the order of survey is based. You are, therefore, advised before filing your application to see that your location has been made in compliance with the law and regulations, and that it properly describes the claim for which the patent is sought,

The act of Congress of May 10th, 1872, expressly provides that "the location must be distinctly marked on the ground, so that its boundaries can be readily traced," and "that all records of mining claims hereafter made shall contain the name or names of the locators, the date of location, and such a description of the claim or claims, located by reference to some natural object or permanent monument, as will identify the claim."

"These provisions of the law must be strictly complied with in each case to entitle a claimant to a survey and patent, and therefore should a claimant under a location made *subsequent* to the passage of the mining act of May 10th, 1872, who has not complied with said requirements in regard to marking the location upon the ground, and recording the same, apply for a survey," I "will decline to order it."

"The only relief for a party under such circumstances, will be to make a new location in conformity to law and regulations, as no case will be approved by this office, unless these and all other provisions of law are substantially complied with." See General Land Office circular dated Nov. 20, 1873.

5. Par. 99, General Land Office circular, last revised Dec. 10th, 1891, relating to the expense of office work connected with the survey of mineral claims, reads as follows:

"With regard to the *platting* of the claim and other *office work* in the Surveyor General's office, that officer will make an estimate of the cost thereof, which amount the claimant will deposit with any assistant United States treasurer, or designated depository, in favor of the United States treasurer, to be passed to the credit of the fund created by 'individual depositors for surveys of the public lands,' and file with the Surveyor General duplicate certificates of such deposits in the usual manner."

6. The following is the estimated cost of platting and other office work in connection with the survey of mineral claims:

Lode Claim	$35 00
Placer Claim	35 00
Mill Site Claim	35 00
Mill Site included in one survey with a Lode Claim	50 00
Each Lode Claim within and included in the survey of a Placer Claim	35 00
Several Lode or Placer locations included in one survey, each location	35 00
Descriptive report on Placer Claim taken by legal subdivisions	10 00

7. Should the office work in any case amount to more than the above estimate, or if an amended order is issued, an additional deposit will be required.

8. In districts where there are no United States depositories, you should deposit with the nearest assistant United States treasurer, or depository, and in all cases immediately forward the original certificate to the Secretary of the Treasury and the duplicate to this office, retaining the triplicate for your own use and security. Under no circumstances will the deposit be made by the Surveyor General. See paragraph 5, preceding.

9. An application for an amended survey order must be accompanied with a statement setting forth fully the reasons for the proposed amendment and all the material facts in the matter.

10. If, after having obtained a survey order, you should abandon your purpose of having a survey made, you can apply the deposit, less the amount estimated for office expenses already incurred, on a new survey if one is desired.

11. Upon discovery of any error or defect in an order your are requested to return it to this office for correction or amendment.

12. If, after having obtained an order for survey, you should find that the record of location does not practically describe the location as staked upon the ground, you should file a certified copy of an amended location certificate, correctly describing the claim, and obtain an *amended order* for survey. If a relocation of the claim is made embracing ground not included in the original order, or other material change is made, you will abandon the original number of the order for survey, and a new order will be issued in which a number in the current series will be substituted.

13. The order of approval of surveys of mineral claims is prescribed by General Land Office circular dated March 3, 1881, as follows:

"The mining survey first applied for shall have the priority of action in all its stages in the office of the Surveyor General, including the delivery thereof, over any other survey of the same ground or any portion thereof."

"The Surveyor General should not order or authorize a survey of a claim which conflicts with one previously applied for until the

survey first applied for has been completed, examined, approved and platted, and the plats delivered."

"When the conflict does not appear until the field notes of the respective surveys are returned, then the survey first applied for should be first examined, approved and platted, and the plats delivered before the field notes of the survey last applied for are taken up for examination or plats constructed."

"When the survey first authorized is not returned within a reasonable period, and the applicant for a conflicting survey makes affidavit that he believes (stating the reasons for his belief) that such first applicant has abandoned his purpose of having a survey made, or is deferring it for vexatious purposes, to-wit: to postpone the subsequent applicant, the Surveyor General shall give notice of such charges to such first applicant, and call upon him for an explanation under oath of the delay. He shall also require the deputy mineral surveyor to make a full statement in writing, explanatory of the delay; and if the Surveyor General shall conclude that good and sufficient reasons for such delay do not exist, he shall authorize the applicant for the conflicting survey to proceed with the same; otherwise, the order of proceeding shall not be changed."

"Whenever an applicant for a survey shall have reason to suppose that a conflicting claimant will also apply for a survey for patent, he may give a notice in writing to the Surveyor General particularly describing such conflicting claim, and file a copy of the notice of location of such conflicting claim. In such case the Surveyor General will not order or authorize any survey of such conflicting claim until the survey first applied for has been examined, completed, approved and platted, and the plats delivered."

14. You have the option of employing any U. S. deputy mineral surveyor in the district to execute the order of survey, and must make satisfactory arrangements with such surveyor for the payment for his services and those of his assistants in making the survey, as the United States will not be held responsible for the payment of the same. The duty of the deputy surveyor in any particular case ceases when he has executed the survey and returned the same to this office. He is not allowed to prepare for the mining claimant the papers in support of an application for patent, being precluded from acting either directly of indirectly as attorney in mineral claims.

15. You are advised of your right to appeal to the Hon. Commissioner of the General Land Office from the approval or disapproval of the survey of your claim. The appeal must be in writing

or in print, should set forth in brief and clear terms the specific points of exception to the ruling appealed from, and should be transmitted through this office.

Edwd F Hobart

U. S. Surveyor General for New Mexico.