

## Resurveys

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**6-1 Restoration of Lost Corners:** There is no hard and fast rule for establishing missing corners of mining claims. The method should be selected that will give the best results, bearing in mind that end lines should remain substantially parallel. Ordinarily, the mineral surveyor should not remonument a restored corner; at least, it should not be done without the full knowledge and approval of the owner. A cadastral surveyor may remonument a corner if it is necessary to delineate the boundary between public and private land. As with all lost corners, the corner of a mineral survey should be reestablished from the best available evidence and in such a configuration that will place the lines as nearly as possible to their original position. The ties to bearing trees and objects should be used first. In fact, if such accessories are present the corner is not lost.

Second in order of preference is the use of short ties to or from adjoining surveys. A word of caution in using other mineral survey ties: In Colorado, and presumably in other states, there was a period where the short ties to conflicting surveys were calculated through the section corner tie. Such calculated ties should not be used. This period is not exactly known, but it ran approximately from 1898 to April 28, 1904. If a report of other surveys was contained in the field notes, the ties were not calculated. At the end of this period, it can be determined if calculations were used. It is not so easy to distinguish between the methods of survey at the beginning of the period since it was not customary to report on other surveys. In any event, the short tie should not be used unless the corner tied to (or from) is recovered. If no corners can be found, the section corner tie may be used, but it is the tie of last resort. In such cases, all lines are shown as approved.

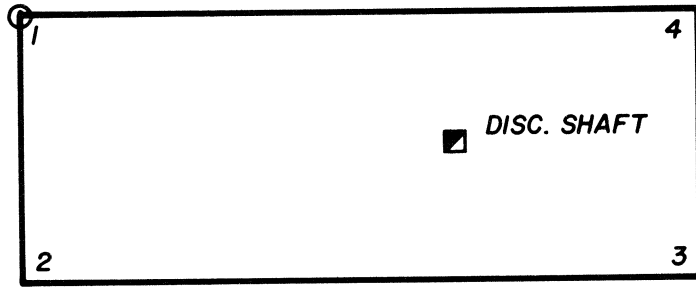
In Figure 7, several conditions are illustrated. In situation A, only one corner is recovered, no other corners or accessories can be found nor are there any short ties available. In the absence of further collateral evidence, the three missing corners must be reestablished at record bearings and distances from the recovered Corner No. 1.

In situation B, Corners Nos. 1 and 2 can be recovered. Lines 4-1 and 2-3 should be shown at the record distance, regardless of the length of line 1-2. The bearings of lines 4-1 and 2-3 may be the record bearing or at the same variation from the record as line 1-2. If this was a rectangular claim, then the bearing of the missing lines probably should be at right angles to line 1-2, unless this would give a distorted relationship between the claim and the workings on it, particularly the discovery. Line 3-4 should be shown parallel and of equal length to line 1-2.

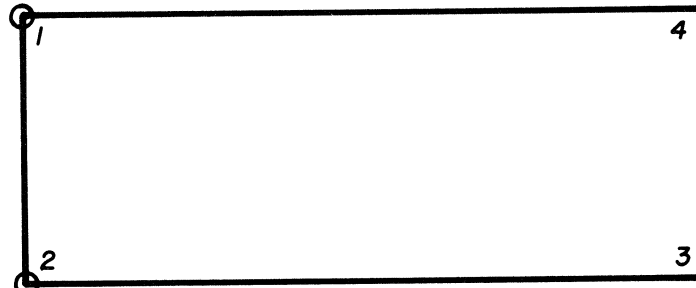
In situation C, Corners Nos. 1 and 4 are recovered. Line 2-3 should be shown parallel and of equal length to line 4-1, if the record was such. Lines 1-2 and 3-4 should be shown at the record distance, and at the record bearing or with the same variance found for line 4-1.

In situation D two corners are again recovered, but they are opposite corners, Nos. 1 and 3. Missing Corner Nos. 2 and 4 can be restored by using the Grant Boundary method. See Section 5-44 of the Manual of Surveying Instructions. They can also be shown at the record bearing and distance from Cors. Nos. 1 and 3, using either the end lines or side lines, with the resulting missing lines being the bearing and distance required to close. The method selected should restore the lines in the best relative position to the workings.

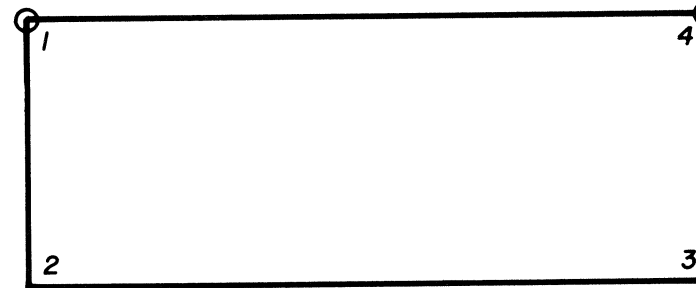
In situation E, three corners, 1, 2 and 4, are recovered. Line 2-3 is shown parallel and of



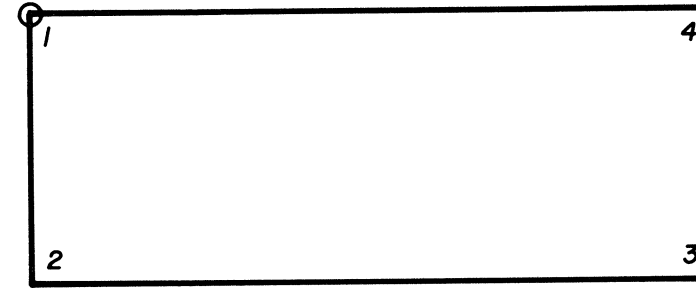
**A**



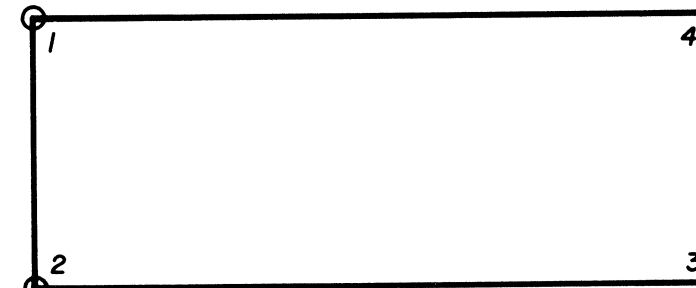
**B**



**C**



**D**



**E**

**FIG. 7**

equal length to line 4-1. Line 3-4 is shown parallel and of equal length to Line 1-2.

In restoring corners of irregular claims, such as metes and bounds placers, the broken boundary (non-riparian) or the Grant Boundary method should be used. It may also be applied to lode claims if the above methods do not give adequate results.

In reestablishing corners of a block of claims, the rules of proportionate measurement may be applied. In Figure 8, missing Corner No. 2 of claims E, F, G and H can be restored by double proportion. Missing Corner No. 1 of claims A and B may also be restored by double proportion; since there is no corner beyond this corner, the record distance from Corner No. 2 would have to be used in this direction. Corner No. 1 might also be established at the record bearing and distance from Corner No. 2, or lines 1-2 of claims A and B could be made parallel and of equal length to line 3-4 of claim A. Since missing Corner No. 3 of claims B and D is on an end line, single proportionate measurement might be considered. See the Manual of Surveying Instructions for proportionate methods, pp. 134-136.

**6-2 Township Resurveys with Mineral Surveys:** Prior to field work, all unpatented mineral surveys embracing claims that have been declared null and void should be cancelled, leaving only valid existing claims and patents to be segregated. Restoration of missing corners should only be made where they are necessary to control the boundaries between private and public land, including the boundaries between public land and unpatented valid mineral surveys. Segregation surveys of unsurveyed

mining claims may be requested to accommodate administrative actions. If possible, the owners of the mining claims should be advised of the resurvey and given an opportunity to express their opinions as to the position of missing corners.

**6-3 Mineral Segregation Surveys:** Sections 7-39 to 7-44 inclusive, of the Manual of Surveying Instructions adequately covers this subject. Segregation surveys are not undertaken unless there is a need for them arising from administrative action involving the adjoining land. Very often it will be necessary to make the survey within the boundaries as they are marked on the ground due to inaccuracies in the location survey. The early township surveys in California often segregated unsurveyed mining claims showing them on the township plats without supporting field notes. Resurveys of such segregations may be required based on the evidence found in the field.

**6-4 Supplemental Plats:** When supplemental plats are required segregating mineral surveys, all such surveys must be segregated. Again, it is desirable that mineral surveys embracing invalid claims be cancelled. The need to lot a cancelled mineral survey will also require a supplemental plat.

**6-5 Correcting Errors in Patented Mineral Surveys:** As a general rule, the record of a patented mineral survey should not be changed or amended. When such errors are discovered, a pencil notation on the index card and/or on the field notes may be appropriate. Reported errors generally stand on their own merit and are contained in the field notes of the reporting survey.

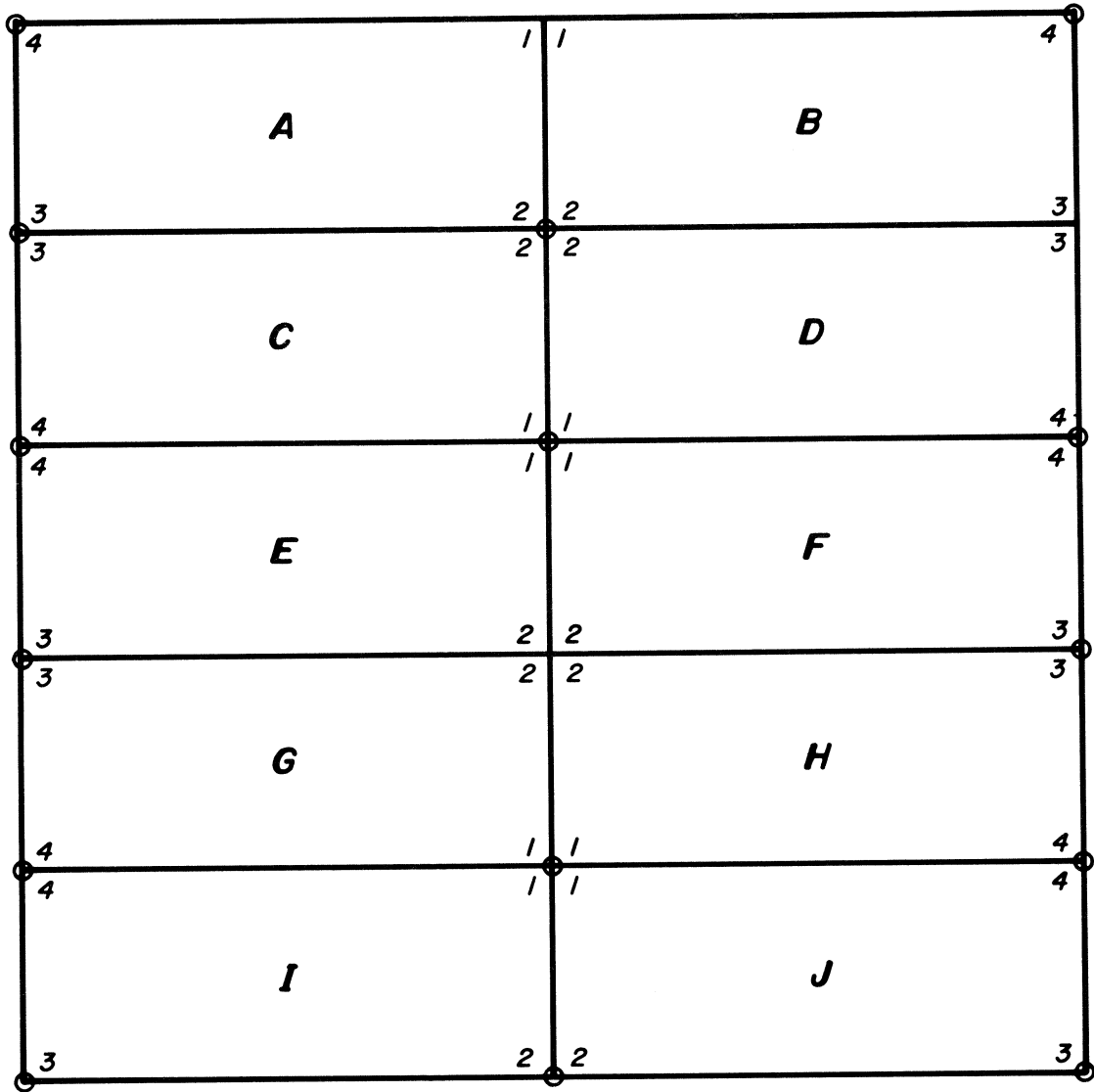


FIG. 8