OFFICE OF THE SURVEYOR GENERAL
Tallahassee, Nov’r 3, 1842
GENERAL INSTRUCTIONS
to
DEPUTY SURVEYORS
1. You will provide yourself with a good nonius compass, which is to be compared with, and regulated by, the standard compass in the Surveyor General's office.

2. You will likewise procure a surveying chain two poles, or 33 feet, in length, and containing fifty links, which is to be compared with, and adjusted by, the standard chain in the Surveyor General's office. It should be made of good iron wire of such size as to prevent the chain from stretching by use, and yet light enough to be readily straightened in measuring—the handles should be made of iron or brass, at least a fourth of an inch in diameter.

3. You must likewise be provided with the measure of the standard chain, which may be made similar to your surveying chain, of smaller wire; and by this your surveying chain must be compared and adjusted at least every other day, or oftener.

4. Tally rods are usually made of iron about 12 inches in length, having a ring at the top in which is fixed a piece of red cloth, or something else of a conspicuous color, that they may be more readily seen when stuck in the ground. Eleven tally rods is the number required. They should be counted by both the chainmen at the end of every "out" to see that none have been lost.

5. Your compass and chain must be frequently examined in the field in order to discover and rectify any error or irregularity which may arise in the use of them.

6. The aberrations of the needle are a fruitful source of error in surveying. These may arise from a variety of causes. "Local attraction," owing to the presence of iron mineral, is generally assigned by surveyors as the principal cause of the disturbance of the needle; but it is believed that in many instances the true source of errors complained of is to be found in the carelessness or inattentiveness of the surveyor in the use and management of his compass, or the erroneous measurement of his lines. All these must be constantly and vigilantly guarded against by every means in your power.

---

OF RUNNING AND MARKING LINES.

1. All lines of whatever description which you may survey, must be run by the true meridian. For which purpose the variation of the magnetic needle, at the place where you survey, must be taken or previously known, and the sights of your compass adjusted to the true meridian, by means of the nonius, before you commence your survey.

2. All lines which you may survey, are to be marked in the following manner, viz: All those trees which your line cuts, must have two notches made on each side of the tree where the line cuts it; but no spot or blaze is to be made thereon. These are indifferently called "station trees," "line trees," or "sight trees." And all those trees on each side of the line and within ten or fifteen links thereof, (or farther, if the land should be thinly timbered,) must be marked with two spots or blazes, diagonally or quartering towards the line, which blazing must be made so conspicuous that the line may be readily found and traced.

3. Whenever, in running lines, your course may be obstructed by insuperable obstacles, as swamps, marshes, lakes, rivers, precipices, or other objects, over which you cannot pass, you will take the necessary offsets, or work by traverse or by trigonometry, in order to pass the obstacle, and to ascertain the exact distance on so much of the line as, by reason of such obstructions, may not be actually run. By whatever method you pass such inaccessible parts of the lines, the utmost accuracy is necessary to obtain the true measure thereof.

4. No lines, of whatever description, embraced in your contract, are permitted in any case to be run or surveyed by any person but yourself, or some regularly accredited deputy surveyor duly authorized by the Surveyor General; or are letters, numbers, or marks of any kind, to be made by any other person than yourself, except it be in your presence and under your immediate and personal direction, in which case you are to inspect such letters, numbers, or marks, to see that they are neatly and correctly made.

---

OF EXTERIOR TOWNSHIP LINES.

1. The act of Congress of 18th of May, 1796, requires that the public lands "shall be divided by north and south lines run by the true meridian, and by others crossing them at right angles, so as to form townships of six miles square." In laying out and surveying the exterior boundaries of townships, in conformity to this provision of the act, the greatest possible accuracy must be observed both in the course and measurement of the lines. To run the lines by the true meridian, the variation of the magnetic needle must be frequently, and with the utmost exactness, determined by celestial observation, and the sights of your compass adjusted accordingly.

2. Celestial observations, to find the variation of the compass, should be made at least every twenty or twenty-four miles. It is not material that these observations should be made at the township corners. They may be made at any part of the lines, so as to be as nearly as practicable at the intervals here directed. But no alteration must be made in the course of any township line until you arrive at the township corner; for with whatever course you set out in running a township line that course must in all cases be continued to the end thereof.

3. The following is the order and method to be pursued in running exterior township lines: A base line, or a township line assumed as a base, is run due east and west across the southern boundary of the tract of country to be surveyed. On this line the quarter section, section, and township corners, are established at the full measure; from each of the township corners on this line, range lines are run due north, the section and quarter section corners established thereon, and at the end of the sixth mile on each of those lines, temporary township corner-posts are set. But at the end of the sixth mile on the most easterly line a township corner is established; from this corner a township line is run due west across the whole district, intersecting the range lines previously run, which, if the work be well done, will be at or near the temporary township corner-posts placed at the end of them. Exactly at the point of intersection, whether at the temporary posts or north or south of them, the township corners are to be established. The distance from the points of intersection to the
temporary posts, must be accurately measured and noted, showing whether it be north or south of those posts. On this west line the intermediate section and quarter section corners will be established as the survey of the line advances.

4. The same process will be repeated in running up due north from the township corners on the last west line, another series or tier of range lines to temporary six mile posts, establishing as before the most easterly one, and from thence extending another, due west, township line across the whole district, in the manner before directed. The same method is pursued in each successive tier of townships until the survey of the township lines is completed.

5. Variations from this order and mode of running township lines, will sometimes be necessary, to accommodate them to the situation and boundaries of the tract of country to be surveyed, or to correct with prior surveys, such cases as they occur, will be provided for in special instructions.

6. Whatever excess or deficiency may occur in the measurement of the exterior township lines, is to be carried to the north or west end of those lines. But by a vigilant and faithful attention to duty on the part of the skilful and experienced surveyor, those excesses or deficiencies, except to a trifling extent, will be of rare occurrence. As the interior section lines must necessarily conform, both in their course and measure, to the township lines, any error committed in the latter will unavoidably be carried into the former, and may mar the beauty and order of the entire subdivisions of the township.

7. It will be seen, then, how very important it is that the townships be as nearly as possible, six miles square; that the exterior boundaries be run exactly by the true meridian; and that the measures thereof be truly and accurately made.

8. The bearing trees at the section and quarter section corners, on the exterior township lines, are to be taken only on the north and west sides of those lines, respectively, wherever it is practicable. And those sections only which lie on the north and west sides, are to be marked and numbered.

With the field notes of exterior township lines the surveyor must return a map or diagram, drawn on a scale of 40 chains to an inch, on which will be represented the length of each line, in chains and links, the variation of the compass by which it was run, and, also, the water courses, lakes, prairies, swamps, roads, and such other objects as may be shewn on a map.

OF MEASURING LINES.

1. In all measurements, the level or horizontal length is to be taken, and not that which arises from measuring along the surface of the ground, when it happens to be uneven, rolling or hilly. For this purpose in ascending or descending hills, the chainmen must let down one end of the chain to the ground, and raise the other end to a level therewith, as nearly as may be; from the end of which a tally rod should be plumbed and let fall to ascertain the spot for setting it. And when the surface of the ground is very steep it may be found necessary to shorten the chain, (by doubling it together,) to one half its length, or even less, so as to obtain the true horizontal measure.

2. Though your lines be measured by a chain of two poles or perches in length, you are notwithstanding, to keep your reckoning in chains of four perches or one hundred links, and all your entries in your field book, and all your calculations, plans &c., must be made accordingly in four pole chains, and decimal parts, (or hundredths) thereof.

3. In measuring lines, every five chains are called an "out" because at that distance the last of the ten tally rods or pins with which the forward chainman set out, has been set; the other chainman then comes up, counts and delivers to him the ten tally rods which he has taken up in the last "out," the forward chainman likewise counting them as he receives them. At the end of every five chains the forward chainman as he sets the tenth or last tally rod calls "out," which is repeated by the other chainman, by the marker and by the surveyor, each of whom keeps a tally of the "outs," and marks the same as he calls them.

4. You are to pay the strictest attention to the frequent examination, and correction of your surveying chain by the standard measure taken with you. The greatest attention must likewise be observed in obtaining, and entering in your field book, the exact measure on the lines, to every object which is noted therein. These measurements are very frequently found to be important, after many years, both in tracing the lines and in identifying the corners.

5. The principal source of error in surveying is the measurement by the chain. And as the interest of the public service, the rights of purchasers of public lands as well as your own standing as a surveyor, are at stake, it is enjoined on you in selecting your chain carriers, to have strict regard to their character and fitness for the trust; and to employ those only in whose moral integrity, and faithfulness, you can repose the most implicit confidence. You are required to attend vigilantly to the manner in which your chainmen perform their duty, and to cause it to be faithfully and correctly executed; to see especially that they carry the chain horizontally on hilly ground, and that all the lines which you may run, be not only correctly measured by them but the length thereof truly reported to you for immediate entry in the field book.

6. In measuring across streams of water you are to give the width directly across the channel. The distances to the posts which you shall establish on the banks of rivers, lakes, or bayous which are to be meandered, are to be taken with great accuracy.

OF ESTABLISHING AND MARKING CORNERS.

1. The corners of Township sections and quarter sections, are to be established and marked in the following manner:-

2. On the exterior Township lines, corner posts must be erected at the distance of every mile and half mile from the township corners. The mile posts are for the corners of sections and the half mile posts for the corners of quarter sections. These posts are always to be made of the most durable wood that can be had, and should be very securely set or driven into the ground to the depth of fifteen or twenty inches at least, and the sides of the posts to be neatly squared off at the top—the angles of the squares to be set in the direction of
the cardinal points of the compass. Wherever a tree may be so situated as to supply the place of a corner post it is to be blazed on all four sides facing the sections to which it is the corner.

3. At all the posts thus established for section or township corners, there shall be cut with a marking iron, on a bearing tree or some other tree within each section and as near as may be to the corner thereof, the number of each section: and over it the letter T with the number of each Township, annexed thereto the letter N or S, as the Township may be north or south of the base line, and above this the letter R, with the number of the range, and annexed thereto the letter E or W, as the Range may lay east or west of the principle meridian; thus: R 4 E
T 9 N
36.

4. The letters and numbers thus marked should be in a regular chop, cut into such tree and neatly squared off and faced, so as to be always readily distinguished from a mere blaze.

5. At the quarter section corners, the post is to be flattened on two opposite sides and thus marked: "1-4 S." to indicate that it is a "quarter" section post, and the nearest adjoining tree on each side of the sectional line must be marked, to show the Township, Range and Section in which such tree may be situated.

6. The place of all corner posts of whatever description, which may be established, are to be perpetuated in the following manner, viz: from each post the courses are to be taken and distances measured, to two or more trees in opposite directions, as nearly as may be, which trees are called "bearing trees," and shall be blazed on the side next to the post, and one notch made with an axe in the blaze. On each bearing tree the letters B. T. to denote the fact of its being a bearing tree, must be distinctly cut in the wood, below the blaze.

7. In prairies and other places where bearing trees cannot be had, the places of the posts are to be perpetuated by quadrangular mounds of earth, to be raised around the posts to the height of two and a half feet, and having a base of four feet square, the angles of which shall be in the direction of the cardinal points. The earth to form the same must be taken from one place to form a pit, directly south of a section corner, and east of a quarter section corner; but when circumstances conflict with this arrangement the earth to form the pit may be taken from any point where most convenient; but in all cases, the course and distance to the centre of the pit must be noticed in your field notes; near the centre of each mound there must be placed a stone of at least three or four pounds weight, or a few handfuls of charcoal, when convenient. And to prevent, as much as possible, the action of the rains and weather in wearing away the mounds, they must be covered over with sod. The posts should show not less than two feet above the mounds, and are to be squared and marked as in other cases, and must be marked on each of the four square sides thereof, with the number of the section which it faces. Wherever stone can be conveniently obtained, a pile of stones of the same dimensions, will in all cases be made, in the place of a mound of earth.

8. Wherever the section or Township lines intersect lakes, streams of water, or islands, which are to be meandered, posts are likewise to be established on the margin or banks thereof, at the points where the lines intersect or leave them. The posts are to be flattened on the two sides coinciding with the lines on which they are set, and on each of these sides is to be marked the number of the section which it faces.

---

**OF SUBDIVIDING TOWNSHIPS INTO SECTIONS.**

1. Each Township is subdivided into thirty-six sections (one mile square by lines running due north and south) crossed by others running due east and west. The sections are known and designated by progressive numbers beginning at the northeast corner of the Township and numbering westward and eastward alternately, as shown in the following diagram:

2. Each side of a section must be made one mile in measure, by the chain, quarter section corners are to be established at every half mile except in closing, when the closin lines vary from eighty chains or one mile, in which case you are to place the quarter section corners equidistant, or at least the average distance from the corners of the section but in running out the last section lines to the north and west boundaries of the Township, the quarter section corners are to be established at the distance of forty chains from the last section corner and the excess or deficiency of measure (if any) carried out into the last half mile, and cast upon the north and west sides of the Township, as required by law.

<table>
<thead>
<tr>
<th>36</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
</tr>
<tr>
<td>34</td>
</tr>
<tr>
<td>33</td>
</tr>
<tr>
<td>32</td>
</tr>
<tr>
<td>31</td>
</tr>
<tr>
<td>30</td>
</tr>
<tr>
<td>29</td>
</tr>
<tr>
<td>28</td>
</tr>
<tr>
<td>27</td>
</tr>
<tr>
<td>26</td>
</tr>
<tr>
<td>25</td>
</tr>
<tr>
<td>24</td>
</tr>
<tr>
<td>23</td>
</tr>
<tr>
<td>22</td>
</tr>
<tr>
<td>21</td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>19</td>
</tr>
<tr>
<td>18</td>
</tr>
<tr>
<td>17</td>
</tr>
<tr>
<td>16</td>
</tr>
<tr>
<td>15</td>
</tr>
<tr>
<td>14</td>
</tr>
<tr>
<td>13</td>
</tr>
<tr>
<td>12</td>
</tr>
<tr>
<td>11</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>9</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>7</td>
</tr>
</tbody>
</table>

3. In closing out the section lines to the north boundary of the township, unless the section lines intersect the boundary at the section corners thereon established for the adjoining Township, you must set a post and take bearing trees at such intersection, and measure and note the distance to the post previously set for the adjoining Township, and on which side of such post, but wherever the closin lines of the section intersect at the post on the north boundary, such post becomes common for the sections on both sides of the Township boundary; bearing trees are however to be taken and the proper marks and numbers made for and within the sections between which the closing lines are run. In establishing the corners on the north side of the Township, where the section lines close thereon, the bearing trees, wherever it may be practicable, are to be taken on the south side of that boundary. But in closing out to the west boundary you will first run a random line and correct back from the post already established thereon, and observe the instructions for establishing
the quarter section corner, given in the second section of this
article.

4. Having adjusted the sights of your compass to cor-
respond with the course of the east boundary of the Town-
ship, you will begin at the corners of sections 35 and 36, on the
south boundary, and run a line due north forty chains, and
establish the quarter section corner between sections 35 and
36, continue north forty chains further, and establish the
corner of sections 25, 26, 35, 36.

5. From the corner of sections 25, 26, 35, 36 run a random
line, without blazing, due east from the corner of 25 and 36 on
the east boundary, at the distance of five or ten chains on
the random line, set up a stake, or make some other mark; if you
intersect exactly at the post on the range line, you shall
blaze the random line back as the true line, but if your random
line falls north or south of the corner on the range line, you must
measure and note such deviation in your field book; and from
the said corner on the range line, return upon a true line back
to the corner where you commence the random, blazing and
marking the true line, and observing to verify the correctness
of its course, by means of offsets, from the stake set or marks
made on the random. The quarter section first is to be estab-
lished on the true line, at the average distance between the
corner of sections 25, 26, 35, 36, and the corner on the range
line.

6. From the corner of sections 25, 26, 35, 36, run due north,
between sections 25, 26, setting the quarter section post as
before, at forty chains; and at eighty chains establish the
corner of sections 24, 25, 26, 27. Then run a random line due
east for the corner 24, 25 on the range line; correcting back and
establishing the quarter section corner, in the manner
directed for running the line between 25 and 36.

7. In this manner proceed with the survey of each successive
section in the first tier, until you arrive at the north
boundary of the Township, which you will reach by running
up the line between sections 1 and 2. On this line, the
distance at which the north boundary is intersected, is to be
carefully noted. If you should not intersect at the post estab-
lished for corner to sections 35, 36 in the adjoining Township,
you must carefully measure and note in your field book, the
distance of the point of intersection from said post, showing
whether you fall east or west thereof; and at that point you
will set a post and establish a corner for sections 1 and 2,
taking your bearing trees, if practicable, south of the
Township line, making the proper marks and numbers for
and within sections 1 and 2. Bearing trees are to be taken,
and marks and numbers made in the same manner, should
your line intersect at the post for sections 35 and 36.

8. The first tier of sections being thus laid out and sur-
veyed you will return to the south boundary of the Township,
and from the corner sections 34 and 35, commence and survey
the second tier of sections, in the same manner that you
pursued in the survey of the first, closing at the section
corners on the first tier.

9. In like manner proceed with the survey of each success-
ive tier of sections, until the 5th, or last entire tier is run up.
From the section corners on this tier you will run random
lines for the corresponding corners established on the Western
boundary of the Township and correct back on the true
lines from these corners on the West boundary.—But instead
of setting the quarter section post, on these true lines, at the
average distance, you will establish them at the exact dis-
tance of 40 chains from your last section corners; carrying out
any excess or deficiency in the measure, into the last half
mile, or that part of the line West of the quarter section post.
In closing thus on the West boundary, you will take bearing
trees on the east side thereof, if practicable, and make the
proper marks, and numbers for, and within each section as on
the north boundary.

10. Great care must be taken that the north and south
lines be run according to the true meridian, as required
bylaw. But if you find by the measurement of the closing lines
of the sections, that there is an increasing convergency or
divergency of the north lines, you may reasonably distrust
the accuracy of the direction of your lines by the needle. In
such case it will be necessary, so to vary your course as to run
parallel to the meridian (or north and south line) on which
you are closing in order that the sections may contain, as
nearly as possible the just and legal quantity of 640 acres or
one mile square.

11. The east and west lines are to be run at right angles
with the north and south lines as far as may be practicable in
closing: But if on running an east and west line, you find the
post you are running for, lies much to the north or south of
the point where you intersect, you are to mistrust the measure-
ment of the north and south line last run by you. In such case
a re-measurement of the lines must be made, and the error,
wherever found corrected.

12. You are referred here to the accompanying specimen
of the field notes of a Township in which the whole process of the
subdivision is illustrated at large, by example.

13. The foregoing mode of subdividing Townships into
sections, it will be perceived, is intended for, and can be fully
applied only to entire Townships. In the subdivision of
fractional Townships, however, the order of survey will be varied
no further than may be necessary to adapt it to the situation
and boundaries of such fractional Township. As a general
rule, from which there will be few exceptions, it will be found
best to make entire sections on the Township lines bounding
a fractional Township, and making the work to close on the
irregular boundaries thereof.

14. An act of Congress of the 24th of May 1842 authorizes
a departure from the ordinary mode of surveying the public
land on any river, lake, bayou whenever in the opinion of the
President of the United States, the public interest would be
promoted thereby; so as to survey such land in tracts of two
acres in width, fronting on such river, lake or bayou and
running back to the depth of forty acres. But as no general
rules can be framed to govern all such surveys, this branch of
the service is left to be provided for in special instructions, as
cases thereof may occur.

15. Should you find a manifest error in the measurement
of any Township line within, (or bounding your district)
which will be readily detected by the closing of your lines
thereon, you are to correct such error, by re-measuring such
Township line, from where the error is found, to the north or
west end thereof, the section and quarter section corners
thereon, are to be removed to proper distances and there
established; and the marks and numbers are to be cut off or
effaced, and the distance at which you pass those corners
must be noted by you. Of such re-measurement and cor-
rections you are to take full and complete field notes, in a
OF MEANDERING RIVERS.

1. You will accurately meander, by course and distance, all navigable rivers which may bound or pass through your district; all navigable bayous flowing from or into such rivers; all lakes or deep ponds of sufficient magnitude; and all islands suitable for cultivation.

At those points where the township or section lines intersect the banks of such rivers, bayous, lakes, or islands, posts are to be established, as before directed. In meandering, you are to intersect all these posts, closing at each post the course and distance on which it is intersected; you will likewise notice all streams of water falling into the river, lake, or bayou, which you are surveying, with their width at their mouth; all springs, noting the size thereof, and whether pure or mineral water; the head and mouth of all bayous, and all rapids, falls or cascades; all islands and bars, with intersections to their upper and lower points, to establish their exact situation; this must be done with great accuracy, in relation to all islands which you shall meander so as to determine and shew their precise location and bearing on the maps of the surveys; and at the close of the meanders within each section, you will give the estimated elevation of the banks; the shores, whether bold or shallow; the current, whether quick or sluggish; the quality of the soil, and kind of timber.

2. Should any lake or pond which you shall meander, be situated within any one section, so as not to be intersected with any of the lines thereof, you will run, and measure, a line very exactly; but without marking, from one of the corners, or one of the half mile posts, or other given point on one of the lines of said section, to the point of the margin of the lake at which you shall commence the meanders thereof. The true location of such lakes is necessary, in order to calculate the contents of the subdivisions of such sections.

3. The width of streams of water, and bayous binding on, or forming a boundary of your surveys, must be ascertained at every intersection of your lines therewith, by trigonometrical process, or otherwise; which can generally be most conveniently done in taking the meanders. This is necessary for the correct exhibition of such streams on the townships plats.

4. Except in cases where navigable streams constitute the boundary line between two series or systems of surveys, commencing from different standard lines, such streams are not to interrupt the regular survey of the townships through which it passes, the lines of which shall be continued across the streams to the complete measure; and where the surveys have been closed on a stream, as a boundary of a cession, or from other cause, and are afterwards to be continued across such stream, the surveyor continuing the surveys on the opposite side, must extend a line across the stream so as to make the sections thereon complete.

5. To establish a uniform and simple mode of designating and distinguishing the two sides of navigable streams, the terms “right bank,” or “left bank,” will be used in all cases, thus: Suppose yourself standing at the head of the river looking down stream; then that bank of the stream on your right hand is to be called and referred to in your field notes, as the right bank, and that on your left hand as the left bank; and these terms thus applied to navigable rivers, are to be used in all cases, whether in running lines or taking meanders.

6. Great care must be taken to describe clearly the post at which any meanders of a river, bayou, lake, or island, commence; and also, all the posts on township or section lines, which may be intersected in the progress of the meanders.

7. The field notes of meanders are to be written at the end of the subdivisions. The courses are to be inserted in a column on the left of the page; the distance in chains and links in a column next to this; at the extreme right of the page the notes and remarks.—Each section is to be tabled by latitude and departure before you leave it as finished, so as to correct any mistake that might occur while meandering such section. The column of distances must be added up at the foot thereof on each page.

8. Errors in meandering are of very frequent occurrence, arising principally it is believed from bad chaining. Your special attention is called to the manner in which this part of the work is executed; and all possible accuracy is enjoined, both in the courses and measurement, and the entry thereof in your field book, and in testing the same before you leave the field.

OF PRIVATE CLAIMS, INDIAN RESERVATIONS, &c.

1. In surveying private claims, Indian reservations, or other tracts not conforming to section lines, the location thereof must be particularly described and the place of beginning clearly stated in your field notes; also, the name of the claimant in whose right the survey is made, with the numbers by which it is known, and if a reservation the quantity contained in it, and the name of the reservee. The field notes of all the lines of each tract must be complete, and are to be entered in the field book separately from the notes of other tracts. The field notes of private claims and Indian reservations must be entered in separate books.

2. Wherever a section or Township line intersects a private claim or Indian reservation, there a corner must be established. The particular line intersected with its course and the name of the claimant or reservee with the number or other designation by which it is known must be noted. And from such intersection the private claim or reserved line must be carefully measured, each way along said line, to the end thereof, unless it should be intersected by another section or township line before the end be reached.

3. The course of every line of the survey of a private claim or Indian reservation, with the length thereof and the variation of the compass and the date of the survey are to be inserted in the field notes, which are to be certified to and signed by you.
OF FIELD NOTES.

1. The field books are to be made of one uniform size, the paper must be of good quality and the books covered with morocco or other leather, and neatly stitched and trimmed and containing space enough for all the field notes of a township. The pages are to be ruled with red ink and faint lined.

2. On the first page of your field book of each township, insert in a plain and neat manner, by way of title, the number of the Township and Range; by whom surveyed, with the date of the commencement, and the date of completing the subdivision of the same.

3. At the head of each subsequent page on which the field notes are written, you will insert a running title designating the number of the township and range which is to be separated from the field notes by a double red line.

4. The field notes of the surveys furnish primarily the materials from which the plats and calculations of the public lands are made; and the source from whence the description and evidence of the location and boundaries of those surveys are drawn and perpetuated. It is evidently then of the utmost importance that the field notes should be at once, an accurate, clear and minute record of everything that is done by the Surveyor and his assistants (in accordance with these instructions) in relation to the running, measuring and marking lines, establishing corners, &c., as well as a full and complete topographical description of the country surveyed; as it regards every thing which may afford useful information, or gratify public curiosity.

5. Rivers, creeks, and smaller streams, lakes, swamps, prairies, hills, mountains, or other natural objects, are to be distinguished in your field notes by their received names only, where names have heretofore been given. To such you are not to give original names.

6. Besides the ordinary field notes taken on the lines you will add, at the end of your field book, such further description or information as you may be able to give, concerning any thing in the township worthy of particular notice, or which you may judge necessary, or useful, to be known; and you will add also, a general notice or description of the township in the aggregate, as it regards the face of the country, soil, timber, &c.

7. In your field book the courses and distances must be placed in a column on the left hand side of the page, and your notes and remarks on the right. Each page is to contain the field notes of one section line only. The field notes of the subdivisions of each township, and fractional township, are to be written in a separate field book. The field notes are to be written in a fair and legible hand—if otherwise, they must be accompanied with true and fair copies. The original field notes must in all cases be returned into the office of the Surveyor General according to your contract.

8. With your field notes you are to return a plat of every township surveyed by you, protracted on a scale of 40 chains to an inch, exhibiting all ponds, lakes, rivers, and creeks, the contents of all sections and fractional sections will be ascertained by latitude and departure. The area of public lands and private claims must be exhibited in separate tables on your township plats, as is explained in the form furnished.

9. The plats are to be so constructed as to indicate, both by protraction and by figures, the courses and distances of all lines, viz.—The exact distances between the posts planted at the corners of each section or fractional section; and the course of the lines where, from any cause, they vary from the cardinal points; also, the precise delineation by courses and distances of private claims, reservations, and other tracts of land not conforming to sectional lines, wherever the continuation of a surveyed line is interrupted by an impassable swamp, or from any other cause, the distance of the line actually run between the starting and finishing post is to be truly represented by the platting, and also by figures.

10. The distance of a surveyed line at the points where a stream crosses the same, is to be indicated by figures, and the general course of such streams, where they are not navigable, between such different points of intersection, is to be delineated on the plat as nearly as the same can be conjectured.

11. The plat is to exhibit the received names of all rivers, creeks, lakes, swamps, prairies, hills, and other natural objects; original names are never to be given to objects which have heretofore been named, all ponds or lakes which are not actually meandered are to be represented as nearly as practicable on the plat by occular observation, swamps are to be represented by slightly shaded black lines, and dots and the outlines of the same should be distinctly exhibited.

12. The plat should also exhibit as far as practicable all mines, salt springs, salt licks, and mill seats, also towns, villages and settlements with the names of the same, also forges, cotton gins and all other such items of information—all the general course of traveled roads and tracts denoting the places to which they may lead.

13. When any private claim, Indian or other reservation &c. is exhibited, the name of the confirmee or reservaee must be given, all lines in the Township survey which have not been actually run must be represented on your plat of survey by dotted lines. The bearing and distance of each line of all private claims must be exhibited on the plats and noted in the field book, the length of all connective lines between private claims and public lands to be exhibited on the plats. A separate plat and certificate of each claim protracted to a scale of twenty chains to an inch to be made out.

14. The date of each days work must be inserted at the close thereof near the bottom of the page.

15. At the close of the original field notes of the subdivision of each Township and fractional Township, the following certificate is to be written and signed by yourself:

"I hereby certify that in pursuance of a contract entered into with V. Y. CONWAY, Surveyor General of the United States for the Territory of Florida, bearing date ______ day of ______ 18____, and in strict conformity to the laws of the United States and the instructions of said Surveyor General, I have surveyed and subdivided into sections, Township [fractional Township] in range ______ in the Territory of Florida.

And I do further certify that the foregoing are the true and original field notes of the said survey and subdivision, executed as aforesaid. Certified this ______ day of ______.”

16. Any material departure from these instructions, or negligence in the observance thereof, will be considered as a violation of the conditions of your contract, and a forfeiture of
all claim for-payment: all loose, inaccurate, precipitate or defective work, either as it respects the surveys in the field or the notes and returns thereof on paper WILL BE REJECTED.

**FORM OF FIELD NOTES.**

<table>
<thead>
<tr>
<th>Distance</th>
<th>North Boundary of Township 9, Range 9, So. &amp; East.</th>
</tr>
</thead>
<tbody>
<tr>
<td>40.00</td>
<td>Beginning at the N. E. C. and ran N. 89° 40' W.</td>
</tr>
<tr>
<td>45.00</td>
<td>½ mile post. Pine N. 34° E. 15 Lks. Pine S. 77° E. 15.</td>
</tr>
<tr>
<td>72.00</td>
<td>To Bushy Cypress Pond.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Mile West on the North Boundary</th>
</tr>
</thead>
<tbody>
<tr>
<td>40.00</td>
</tr>
<tr>
<td>45.00</td>
</tr>
<tr>
<td>80.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Mile West on the North Boundary</th>
</tr>
</thead>
<tbody>
<tr>
<td>40.00</td>
</tr>
<tr>
<td>80.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4th Mile West on the North Boundary</th>
</tr>
</thead>
<tbody>
<tr>
<td>40.00</td>
</tr>
<tr>
<td>45.00</td>
</tr>
</tbody>
</table>