IX

(The following instructions from Thomas Freeman to Silas Dinsmore, for the St. Helena Meridian surveys is taken from a copy of the original, now in the possession of the State of Florida, Bureau of State Land Management, Title Section, Tallahassee, Florida. Some words are bound into the margins and are missing from the copy. These are shown here in parentheses as indicated by inference in the text to give the most logical sentences.)

Instructions to the Principal Deputy Surveyor of the Land District East of Island of N. Orleans
This district of which you are appointed Princip(al) Deputy Surveyor is bounded on the North by the Parellel of the 31st degree of N.L. on the East by Perdido River & Bay on the South by the Gulf of Mexico & the Island of N. Orleans and on the West by the Miss. River. It is divided into two land Districts Called the District East of the Island of N. Orleans the Land Office for the East District to be held at Jackson Courthouse and for the Western District at St. Helena Courthouse.— The Registers of these land offices will furnish you with abstracts of the confirmation of all private Claims confirmed within their respective Districts, which abstracts with the plans of the Original Surveys will be necessary to enable the Deputy Surveyor to make the Survey or resurvey correctly.— You will proceed without delay to Survey the land district East of the Island of N. Orleans into Townships agreeable to the Instructions here inclosed. When the Townships Shall have been designated you will proceed to Survey the Private Claims.

The Titles of which being confirmed by the board of Commissioners carefully locating and connecting wh(en) practicable these Claims with each other & with (the) Townships, So that when laid down on a Genl. Map (of the) District, the position, connection, and dimenions of (each) Claim may be distinctly exhibited.— When the Survey of the District Shall have thus far progressed the vacant Spots of Public Land shall be Surveyed into Section(al) Teritories and prepared for Sale. The Survey of these (districts) will be commenced by extending the Basis Meridian of the Land Districts East and West of Pearl River & North of the parrellel of the 31st. Deg. of N.L. (due) South from that parrellel through the District to (the) Southern limits, which Meridian when so run Shall(l be) the Basis Meridian. And the Parellel of the 31(st Degree) of N.L. will be the Basis Parellel for the Distri(ct) East of the Island of N. Orleans.— The Ranges will be numerically numbered East & West of the Basis Meridian and the Townships South from the Basis Parellel to (the) boundaries of the district. The Ranges and Township(s) of these Districts approaching each other will terminate at Pearl River which River is the boundary between the (districts)

Standard Meridians must be accurately run, marked & measured due South from the Basis Parellel at 4 Townships or 24 miles apart through the Districts to their Southern limits, and one Standard Parellel Shall be run through the Districts at the distance of 24 miles from the Basis Parellel(1) This Standard line will be commenced at the termination of the 24th mile on the Basis Meridian, and be correctly run, marked and measured due East & West through the Districts intersecting the Standard Meridians (if practicable) at the termination of the 24th mile from the Basis Parellel and will of course become the Southern Boundary of the 4th Townships through the Districts.—

The Variation of the magnetic needle must be carefully ascertained on the Basis Parellel at the Basis & Standard Meridians and also at the 24th mile or South Boundary of the 4th Townships on these Meridians.— A true Meridian must be distinctly designated at the points on trees or by Pickets firmly Set in the ground, and also the correct length of the Chain Measured on a tree or Sapling Cut down for that purpose, or by Pickets Set in the ground at those points for the Surveyors who may be employed in Townshiping or Sectioning the Districts to Compare their Compasses and Chains with.—

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Townshiping

The Townships lines must be run due South (from) the Township monuments established on the Basis Parellel and due East and West from the Township Corners previously established on the Basis Meridian, Closing (the) Townships at the points of Intersections of these lines on (the) East of the Basis Meridian at their South East Corners and on the West of the Basis Meridian at their South (West) Corners or Angles, beginning with the Townships adjoining (the) Basis Meridian & Parellels, and Closing the Township(s) adjoining these lines first for the purpose of detecting (&) Correcting any inaccuracies that may be in them, thence extend and Close the Townships progressively allway(s) running the Township lines from the Basis line.— In Closing the Townships on the Standard meridians (It not being expected that South Boundary will intersect (their) Meridians exactly at the Township Corners) Previously established) the Points of intersection of the Township lines with the Standard Meridians will be adopted as the Township Corners, (and) marked as hereafter directed. But in extending the (Survey) from the Standard Meridians, the lines both Township (& section) must be run from the monuments or Corners previously established on them.—

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In Closing Townships or Sections on the Standard Parellel the lines must be run to the monuments previously established on that Parellel and thence proceed due South from these monuments.—

Directions for Marking and Lettering

All Trees on each side of a line for a Sufficient number to distinctly mark the line Shall be blazed on their Sides facing the line, and all line trees or trees Standing in the line blazed on each Side in direction of the line. On the Basis Meridian there Shall be one Chop under each blaze on each Side of the line, & two chops above & two below each blaze on line trees.— On Standard lines there Shall be two Chops below each blaze on line trees — and Section line trees are to be blazed without chops as above.—

Lettering

The lines must be carefully & distinctly marked at the termination of each mile a Square post must be firmly set in the ground its Sides facing diagonally the four Sections or
Townships to which it is a boundary having each Side lettered with the letter T for Township

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R for Range & S for Section, with the proper numbers of the Township, Range & Section to which it is a boundary prefixed to these letters as in the margin. The Course & distance from the post to a tree in each of the adjoining Sections must (be) taken and these trees lettered & numbered with the letters & numbers of the Township Range & Section in which they stand so that the face of the post and reference trees may be marked and lettered alike.—Posts must also be set in the ground at the termination of each ½ mile faced on two Sides & each Side marked thus ½ S for half Section Corner, the bearing & distance of two trees lettered thus ½ S (one on each side of the line taken from the half mile post) All the numbers and letters must be plainly & distinctly marked with a lettering iron and the names of the reference trees with their letters & numbers and bearing & distance from the corner post must be plainly noted in the Surveyors field Book.

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<th>R.1W.</th>
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On Section Corners in the interior of Township the Range & Township may be omitted one the tree excepted.

Misclosures of Townships

The misclosure of a Township or the difference in length of the north & South Boundaries arising from the figure of the earth will be in your District about 40 Links which increase from the Basis to the Standard Parallel amounts to 160 Links. The errors arising from the impaction of Instruments, and unavoidable irons in practice may be estimated at 300 links.—Then the admissible error in Closing Townships in your District will be limited to 500 Links Should the error in closing a Township be more than that the Township line should be run over again and Corrected.

Sectioning

The Sections of the Townships on the East of the Basis Meridian will be Closed at their S.E. Angles and on the West of the Basis Meridian at their S.W. Angles. The Townships on the East of the Basis Meridian will be Sectioned by running a correct line between these corners fixing the ½ S post in the Center of the line.—The Guide lines will be measured but not marked, Fractional Section lines falling on the margin of water courses, Bayous, Lakes &c. may be run out with a guide line from the Sectional monuments previously established but these lines must be continued in right lines across water courses correctly to the opposite boundary of the Township as if such Water course had not intervened.—At the termination of Section lines on the margin of water courses a post with two reference trees must be established to Identify the points and correct Survey of the margin of the water courses uniting these points must be taken to ascertain the contents of the fraction.—Townships on the West of the Basis Meridian must be Sectioned in like manner with the difference of commencing with the Section in N.E. Corner of the Township closing the Sections at their South West Corners — on the South and West boundaries of the Township.—

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Chain Carriers

The Chain Carriers must be Sworn faithfully (& honestly) to make all measurements on the lines agreeable to the instructions the may receive from the Surveyor to the best of their Skill & Knowledge, and faithfully return at their measurements at all times make (to) the Surveyor when required.—The Chain must be exactly two rods or 33 feet in length, and (of) fifty links of equal length, The measurement will be kept in two pole chains and links.—The pin must be of iron or iron pointed of about 12 In. (in) length with a Scrap of red Cloth attached to each, the may be conveniently seen amongst grass & weeds, or found if lost.—

Flag

To avoid a constant Source of errors in running (lines) for want of a proper object at each Station to (retain) the direction of the line and to enable the Chain Carriers to measure correctly in the line each Surveyor must
must make use of a Flag, for that purpose. A man with a flag Staff and a Small Flag attached to it must be kept ahead and at each Station fixed in the line by the Surveyor to retain the true position or direction of the line for the Surveyor and to enable the Chain Carriers to continue their measurements correctly in the line. This must not be omitted by any Surveyor throughout his whole Survey.

Variation

To determine the variation of the magnetic needle note exactly by a good watch when the Polar Star and the first in the tail of the great Bear (or Star next the Square) are vertical to each other, or range with a Plumb line. Ten minutes afterwards the polar Star will be on the rue meridian a Stake or Small light placed at that time in a right line with the Plumb line and the Polar Star will point out a true meridian, To which

To which the Compass being applied will show the Variation of the needle. Which Variation must be Carefully laid off on the index or limb of the Compass, so that when the needle points to the North and South points of the Base the ind(ex) or Sight will point out the true meridian. The most convenient, practical & accurate mode for Surveyors to ascertain the Variation of the needle will be by the polar Star's greatest Elongation which will be visible from the first of November to the first of March (& to) the West and from the first of May to the first of Sept. to the East. — When the polar Star's Elongation is to the East, its Azimuth must be added or laid off to the West and when West its azimuth must be deducted or laid off to the East. The azimuth of the Polar Star for the year 1820 within our District will be 1°58'30" nearly, and Sufficiently Correct for your Surveyors. — It will

It will be at its greatest Elongation West at midnight on the 1st of Jan'y and east at midnight on the third of July.

Field Book

The Surveyors must take care to Record in their field Book the nature, quality & growth of the Soil, the width depth & direction of water courses, the elevation of waters during their inundation and their greatest depression at low water. — The depth or width of the low or Alluvial Lands from the water Courses Capable of Cultivation; noting all mines or mineral productions or appearances; all Salt or Mineral Springs or waters; and Mill Seats, with such further remarks & observations as may be necessary to give an accurate Topographical Knowledge of the Country in which the Survey.

Their field notes must be plainly & distinctly kept, and their

Original notes returned to the Surveyor's Office for examination without alteration or correction after taken on the lines. — The Sections in the Township must be numbered as in the following figure Commencing with the Section in the N.E. No. 1 and Terminating with the Section in S. (E.) No. 36 when the Township does not contain private Claims. — But when private Claims are included in a Township, each Claim or tract, (or) part of a private Claim, must be a Separate Sectional number. The Sections and fractional Sections, in a fractional Township must be numbered as if the would be, had the Township been complete.

Silas Dinsmore Esq. (Surveyors Office)
P D Surveyor District (Town of Washington)
E. Island N. Orleans (Sept. 15th 1819)
(Unnumbered Page)

All deviations from the True Cardinal point must be carefully noted by the Surveyor; when the Surveyor finds it necessary to alter the course of any Township or Section line from the due North or South, East or West to Close a Township or Section, the Course and distance of such line as actually run marked and measured must be recorded in his field book. —

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A Township of Public land Sectioned & numbered

All Townships of Public land Clear of Private Claims must have their Sections numbered as in the above figure whether the Township be in Range East or West of the Basis meridian. — Each private Claim or part of a private Claim in a Township must have a Sectional number. — No two Sectional numbers in a Township Shall be alike. —

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Dear Sir,

I have received your letter of the 9th inst. and am entirely satisfied with the explanation it contains of the circular letter therein referred to.

The omission in the form of contracts with deputy surveyors which you advert, is supplied in the Instructions given them. You will observe by the contract that it binds the deputy to execute his surveys "agreeably with the laws of the United States, and such instructions as he may receive from the said Edward Tiffin, Surveyor General". To every surveyor is given in writing ample and detailed instructions regarding every part of his duty, and which instructions contain the following rule: "In case any corner should fall in a prairie or other place where there may be no trees for bearings within a convenient distance, you will, at the mark of such corner raise around the post a mound of earth or pile of stones, not less than two and a half feet high and two and a half feet diameter at the base.

It has never been the usage in this Surveying department for Deputy Surveyors to Stipulate in their contracts for the correction of Errors at their own expense should any be subsequently discovered in their Surveys. But it has often been and still is required of them to correct, where material errors have been committed by them, especially when done through inattention or carelessness.

It would be particularly desirable if I could reduce the price per mile which is paid for Surveying the public lands, and under more favourable circumstances than those which have of late years attended the public Surveys this might be effected. During the war, and until within the last three years, the prices of all kinds of provisions, the wages of hands, and the cost of transportation were very high. Within that period, the public Surveys, which commenced at the old Indian boundary where the Settlements terminated, were extended in general from fifty to more than one hundred miles into the wilderness. The Surveyors have Still to obtain their provisions from the Settlements, and are obliged to transport them on pack horses through a trackless wilderness, in many parts literally impenetrable from Swamps, fallen timber, etc. So that in general by the time the Surveyors get their provisions to where their work lies, they really cost them more than they did five years ago, when the Surveying was contiguous to the Settlements, and provisions dear. It may with propriety be added, that at least two thirds of the Surveyors are obliged to abandon their work before it is finished and return home, either on account of the Sickness of themselves or their hands, or both, or from high waters, the loss of their pack horses, breaking of their compasses, and other casualties—any of which oblige them to return to their Settlements, at a heavy expense and loss of time. Another circumstance may be added:—To prevent Surveyors from employing journeymen (on a per diem pay) to Survey their districts on the plea of their own Sickness, I have adopted the rule to give