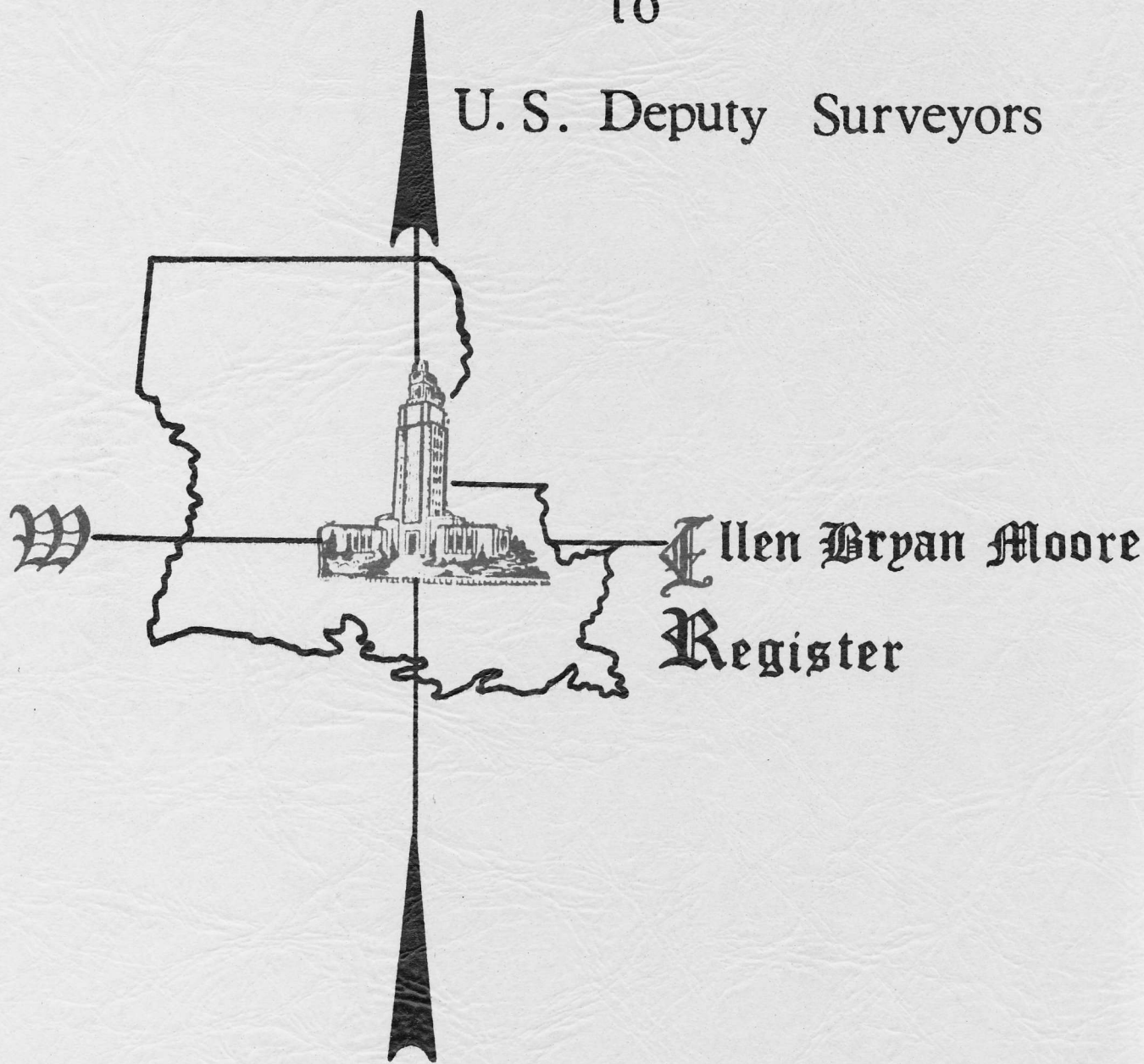


GENERAL INSTRUCTIONS

to

U. S. Deputy Surveyors



State Land Office
Baton Rouge, Louisiana



ELLEN BRYAN MOORE
REGISTER

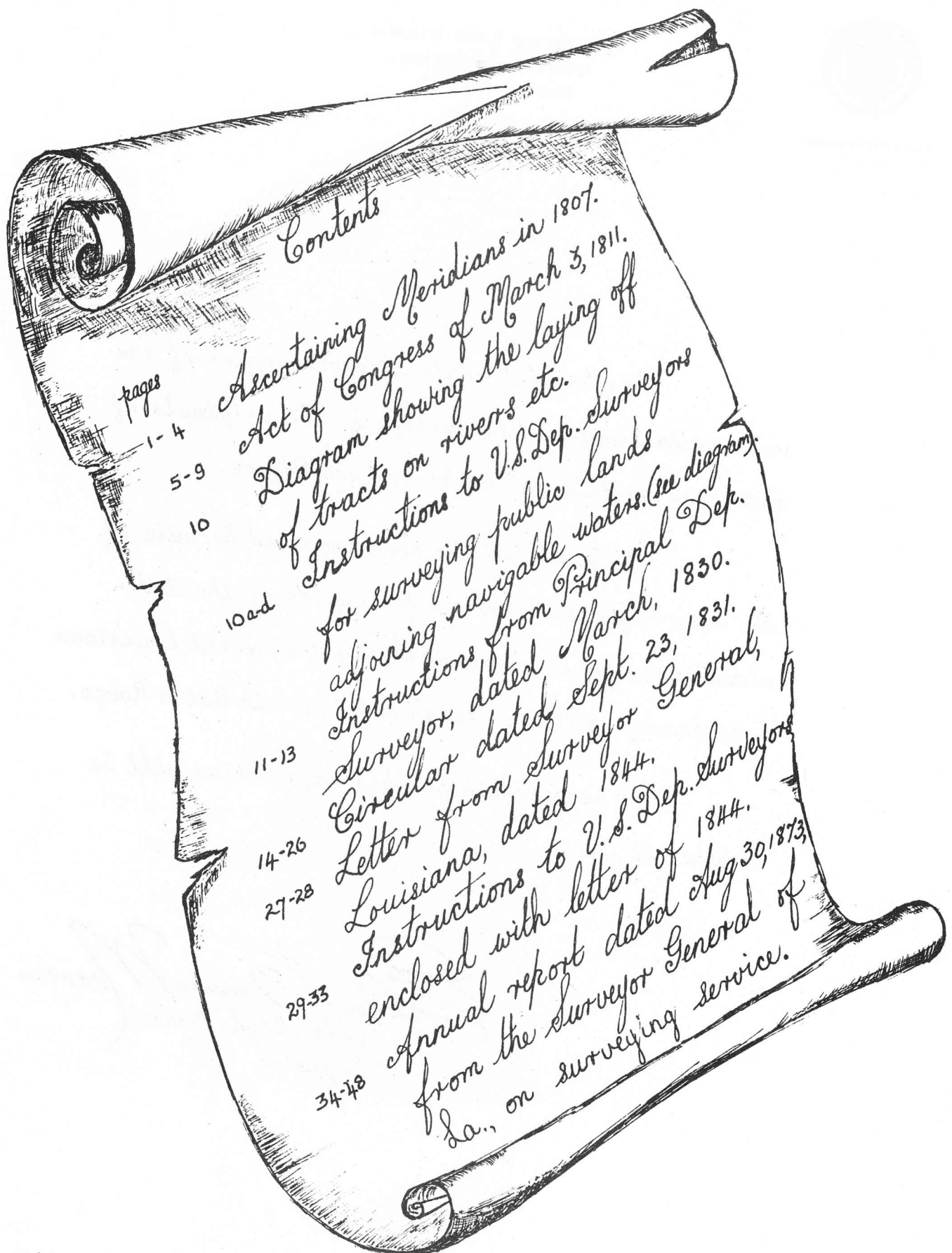
STATE OF LOUISIANA
STATE LAND OFFICE
BATON ROUGE

This booklet contains exact copies of the various instructions to surveyors, the originals of which are on file in the State Land Office.

The material has been compiled because of the many requests received for copies of the individual documents exhibited during the recent Louisiana Land Surveyors Association Conference in Baton Rouge.

I sincerely hope this information will be helpful to you.

Ellen Bryan Moore
Ellen Bryan Moore
Register



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The typewritten pages are copied verbatim from the original records.

In ascertaining the Meridian the following methods are well adapted to the Transit line in the Transit telescope.

Method I

By an observation of Polar star when at its greatest azimuth either East or West.

Begin the observation a little before the time expected and frequently notice the star until assured that it has reached that point when the star appears to retire, in the least degree the observation is complete.

Not calculated with the greatest precision but is sufficiently correct to appraise the observation.

table at end of hour. The time in

EAST AZIMUTH		WEST AZIMUTH	
April	21 5 AM.	January	2 12 P.M.
May	8 4	Jan	16 11
May	23 5	Jan	20 10
June	6 2	Feb.	15 9
June	21 1	Mar.	17 8
July	20 11		

about this time

date day not given in the table make proportion,

invisible the rest of the year	Dec.	6	
	Dec.	19	1

Table of the Greatest Azimuth of the Pole Star.

LAT. 30°		LAT. 31°		LAT. 32°		LAT. 33°	
Star's Polar distance	* Greatest Azimuth	* P. D.	* G. Az.	* P. D.	* G. Az.	* P. D.	* G. Az.
0 1 "	0 1 "	0 1 "	0 1 "	0 1 "	0 1 "	0 1 "	0 1 "
1 42 0	1 57 47	1 42 0	1 59 0	1 42 0	2 0 7	1 42 0	2 1 38
1 42 30	1 58 33	1 42 30	1 57 35	1 42 30	2 0 32	1 42 30	2 2 19
1 43 0	1 58 57	1 43 0	1 57 15	1 43 0	2 0 26	1 43 0	2 2 47

To make

as Radius is to the sine of the stars polar distance; so is the secant of the Latitude of the place to the sine of the stars greatest possible azimuth.

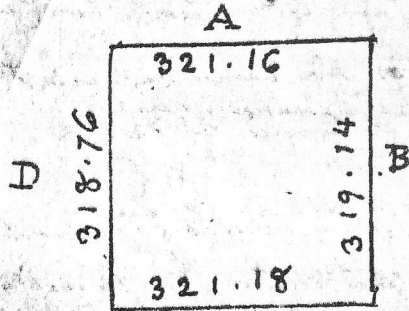
Table of the apparent Polar distances of the Pole Star

1808		1809		1810	
Months.	Polar Distance	Months.	Polar Dist.	Months.	Polar Dist.
Janu. 1	1 42 40	Janu. 1	1 42 16	Jan. 1	1 41 57
Feb. 1	1 42 30	Feb. 1	1 42 0	Feb. 1	1 41 47
March 1	1 42 15	March 1	1 41 45	March 1	1 41 37
April 1	1 42 0	April 1	1 41 35	April 1	1 41 27
May 1	1 41 45	May 1	1 41 25	May 1	1 41 17
June 1	1 41 30	June 1	1 41 15	June 1	1 41 7
July 1	1 41 15	July 1	1 41 5	July 1	1 40 57
Aug. 1	1 41 0	Aug. 1	1 40 45	Aug. 1	1 40 47
Sep. 1	1 40 45	Sep. 1	1 40 35	Sep. 1	1 40 37
Oct. 1	1 40 30	Oct. 1	1 40 25	Oct. 1	1 40 27
Nov. 1	1 40 15	Nov. 1	1 40 15	Nov. 1	1 40 17
Dec. 1	1 40 0	Dec. 1	1 40 5	Dec. 1	1 40 7

*ms. 2. 1. 11. Year
Dec. 3 December 1808*

*Record in Letter Book
Page 33.*

Rule for computing the area of *irregular* sections
 when the sides are expressed in perches and *irregularity*



$$\begin{aligned}
 D+B &= 637.90 \text{ Comp. to } 640 \text{ --- } 2.10 \\
 A+C-640 &= 2.34 \text{ --- } 2.34 \\
 \hline
 & 640.24 \text{ one result.} \\
 & \hline
 & 640.23 \\
 \end{aligned}$$

$$\begin{array}{r}
 2.10 \\
 2.34 \\
 \hline
 2.340 \\
 468 \\
 \hline
 640 \overline{) 49140} \text{ (0)
 \end{array}$$

the lower side subtract 640 which requires the

of the circumpolar not less than the 3rd magnitude with the first star
 will give a good result.

By the help of the following table the azimuths of the stars
 may be readily obtained for any latitude when on the same meridian
 with the several stars contained therein respectively by adding the
 Logarithm Secant of the Latitude of place to the Logarithm
 against the particular star in the table - their sum will give the
 Logarithm of the ^{number of} minutes and decimal fraction of a minute of the
 Azimuth. *Note 10.* must be subtracted in the idea of Log. Secant of Lat.
 if the result the number of minutes of azimuth are to be *forward* the

Log. Secant of 31° 10' Lat 10. --- 0.677
 Answer - the Azimuth is --- 29²⁸/₁₀₀ --- Log. 1.4768 East } Log.

B *ursa minor* 1.6601

a *Dragon* --- 1.4315

these may be observed both
 over and under the pole
 when over the pole their
 azimuth is East, but when
 under the pole it is West

time will not permit
 filling the blanks I shall
 furnish them hereafter

* Over the pole Azim. will be	Stars in Cassiopea		ursa major		* over the pole Azim. will be
	Chara Tari	Logar.	Ch.	Log	
W E	B	1.4091	a		W
W E	a	1.0582	γ		W
W E	γ	0.6269	δ		W
W	δ	0.9543	ε	0.5680	W
W	ε	1.3404	ζ		E
	over the pole - 1				

Method Second

This method is grounded on the principle that when two stars (whose Right Ascension and Declination are known) are on the same Vertical their Azimuth (which is the same in both) may be determined by calculation if the Latitude of the place is also known.

This method does not require the aid of a time keeper, and the observation may be made with great precision. Though the principle is applicable to the Stars generally, yet in practice, judgment must be used in selecting the stars to be made use of - if the true time is known, the table

quadrant is 100 - 100
 or both less than 640 the correction is to be added
 but when one is more and the other less it is to be subtracted
 on these principles the table is framed.

The sides are expressed in Chains and Links



$$\begin{array}{r}
 A + C - 160 = 4.00 \\
 B + D - 160 = 4.00 \text{ bal. to } 160 = 6.00 \\
 \hline
 4 \cdot 24.0000
 \end{array}$$

can be done, if not repeat it in their sum, which is then multiplied by 4. then correct it the diff. of A+C ~~is~~ and 160 and B+D and 160 - these differences being multiplied together and divided by 40 gives the correction - which is + or - as in the first Case (by reading 160 instead of 640)

To Geo^m Fitz Roy

Seth Pease

ACT OF CONGRESS

of

March 3, 1811

No. 710

March 3, 1811. No. 710.—AN ACT providing for the final adjustment of claims to lands, and for the sale of the public lands in the Territories of Orleans and Louisiana, and to repeal the act passed for the same purpose, and approved February sixteenth, one thousand eight hundred and eleven.

Allowances and compensations. *Be it enacted, &c.*, That the following allowances and compensations shall be made to the several officers appointed for the purpose of ascertaining the rights of persons claiming lands in the Territories of Orleans and Louisiana; which allowances and compensations shall be in full for all their services, including those rendered since their salaries respectively ceased; that is to say: To each of the commissioners, and to each of the clerks of the boards, fifty cents for each claim, duly filed according to law, which remained undecided on the first day of July, one thousand eight hundred and nine, and on which a decision has been made subsequent to that day, or shall hereafter be made, whether such decision be in favour of, or against the claim: which allowance of fifty

cents shall be paid at the Treasury of the United States, from time to time, and on receipt of the transcripts of the decisions and of the reports of claims not finally confirmed, as the same may be transmitted by the boards respectively to the Secretary of the Treasury according to law. To each of the said commissioners and clerks a further allowance of five hundred dollars, to be paid after the completion of the business of each of the boards respectively to the officers then in office. And to each of the translators, at the rate of six hundred dollars a year, and not to exceed in the whole for each the term of eighteen months: *Provided always*, That the above-mentioned allowance of fifty cents for each claim decided upon, shall not be made to any of the commissioners who may be absent at the time of such decision; the attendance of each to be certified by the clerk, or by a majority of the board: *And provided also*, That no allowance shall be made to any agent heretofore employed by the Secretary of the Treasury for any period of time, subsequent to the time when such agent ceased to act, or when the board ceased to receive evidence. (a)

SEC. 2. *And be it further enacted*, That the two principal deputy surveyors of the Territory of Orleans shall, and they are hereby authorized, in surveying and dividing such of the public lands in the said Territory, which are or may be authorized to be surveyed and divided, as are adjacent to any river, lake, creek, bayou, or water-course, to vary the mode heretofore prescribed by law, so far as relates to the contents of the tracts, and to the angles and boundary lines, and to lay out the same into tracts as far as practicable, of fifty-eight poles in front and four hundred and sixty-five poles in depth, of such shape, and bounded by such lines as the nature of the country will render practicable, and most convenient: *Provided however*, That such deviations from the ordinary mode of surveying shall be made with the approbation of, and in conformity with the general instructions which may be given to that effect, by the surveyor of the public lands south of the State of Tennessee. (b)

SEC. 3. *And be it further enacted*, That for the disposal of the lands of the United States, lying in the eastern land district of the Territory of Orleans, a land office shall be established at New Orleans; and that for the disposal of the lands of the United States, lying south of Red River, in the western land district of the Territory of Orleans, a land office shall be established at Opelousas; and that for the disposal of the lands of the United States, lying north of Red River, in the western land district of the Territory of Orleans, a land office shall be established, which shall be kept at such place as the President of the United States may direct. The register of the western land district of the Territory of Orleans shall act as register of the land office of Opelousas, and as one of the commissioners for ascertaining the rights of persons claiming lands in any part of the said western land district. And for the land office north of the Red River, a register, and for each of the said three offices a receiver of public monies shall be appointed, who shall give security in the same manner, in the same sums, and whose compensations, emoluments, duties and authority, shall in every respect be the same, in relation to the lands which shall be disposed of at their offices, as are or may be provided by law, in relation to the registers and receivers of public monies in the several offices established for the disposal of the lands of the United States, in the Territory of Mississippi. (c)

SEC. 4. *And be it further enacted*, That the powers vested in the President of the United States by the eleventh section of the act, entitled "An act supplementary to an act, entitled An act for ascertaining and adjusting the titles and claims to land within the Territory of Orleans, and the District of Louisiana," passed on the twenty-first day of April, one thousand eight hundred and six, in relation to the public lands, lying in the western district of the Territory of Orleans, and all the other provisions made by the same section, for the sale of said lands, and for obtaining patents for the same, shall be, and the same are hereby, in every respect, extended to the public lands, lying in the eastern district of the Territory of Orleans. (d)

SEC. 5. *And be it further enacted*, That every person who, either by virtue of a French or Spanish grant recognized by the laws of the United States, or under a claim confirmed by the commissioners appointed for the purpose of ascertaining the rights of persons claiming lands in the Territory of Orleans, owns a tract of land bordering on any river, creek, bayou, or water-course, in the said Territory, and not exceeding in depth forty

Duties of the deputy surveyors and mode of survey.

Land offices to be established at New Orleans and Opelousas, &c.

Certain powers with respect to public lands in eastern district of Orleans Territory extended to the President.

Persons entitled to a preference.

arpens, French measure, shall be entitled to a preference in becoming the purchaser of any vacant tract of land adjacent to, and back of his own tract, not exceeding forty arpens, French measure, in depth, nor in quantity of land that which is contained in his own tract; at the same price, and on the same terms and conditions, as are, or may be, provided by law for the other public lands in the said Territory. And the principal deputy surveyor of each district respectively shall be and he is hereby authorized, under the superintendence of the surveyor of the public lands south of the State of Tennessee, to cause to be surveyed the tracts claimed by virtue of this section; and in all cases where by reason of bends in the river, lake, creek, bayou, or water-course, bordering on the tract, and of adjacent claims of a similar nature, each claimant cannot obtain a tract equal in quantity to the adjacent tract already owned by him, to divide the vacant land applicable to that object between the several claimants, in such manner as to him may appear most equitable: *Provided however*, That the right of pre-emption granted by this section shall not extend so far in depth, as to include lands fit for cultivation, bordering on another river, creek, bayou or water course. And every person entitled to the benefit of this section shall, within three years after the date of this act, deliver to the register of the proper land office, a notice in writing, stating the situation and extent of the tract of land he wishes to purchase, and shall also make the payment and payments for the same, at the time and times, which are, or may be, prescribed by law for the disposal of the other public lands in the said Territory; the time of his delivering the notice aforesaid being considered as the date of the purchase. And if any such person shall fail to deliver such notice within the said period of three years, or to make such payment or payments at the time above mentioned, his right of pre-emption shall cease and become void; and the land may thereafter be purchased by any other person in the same manner, and on the same terms, as are or may be provided by law for the sale of other public lands in the said Territory.

Proviso as to the extent of the pre-emption.

When land of- fices established by this act to be opened.

SEC. 6. *And be it further enacted*, That the land offices established by virtue of the third section of this act, shall be opened on the first day of January, one thousand eight hundred and twelve, for the sale of all the public lands, with the exception of section No. sixteen, (c) of the salt springs, and land contiguous thereto, (f) and of the tracts reserved for the support of seminaries of learning as herein after provided, (g) which shall have been previously surveyed, and the surveys thereof returned according to law to the registers of the land offices respectively; and on the first day of February, one thousand eight hundred and twelve, for the sale of such of the public lands, which from the nature of the country cannot be surveyed in the ordinary way, and are embraced by the provisions of the second section of this act, as shall have, at least six weeks previous to the said first day of February, one thousand eight hundred and twelve, been advertised for sale by the surveyor of the public lands south of the State of Tennessee, with the approbation of the President of the United States. The public sales for the land subdivided into quarter-sections in the ordinary way, shall be held for one calendar month, under the superintendence of the register and receiver of each land office respectively, and of either the surveyor of public lands south of Tennessee, or of his principal deputy surveyor in the district, who shall each receive six dollars for each day's attendance on the same; and no tract of land shall be sold at said public sales for a less price, than that which is or may be prescribed by law, for the sale of public lands in the Mississippi Territory. And from and after the first day of February, one thousand eight hundred and twelve, any tract which has been thus offered for sale at public sale, and remains unsold, as well as any tract of land embraced by the provisions of the second section of this act, the sale of which is authorized by this section, may be disposed of at private sale by the register of the land office, for the same price which is or may be prescribed by law, for the sale of public lands in the Mississippi Territory. All the lands sold by virtue of this section, shall in every other respect be sold on the same terms of payment, and conditions, in the same manner, and under the same regulations as are, or may be, prescribed by law, for the sale of public lands in the Mississippi Territory: *Provided however*, That [that] in case of an application being made at the same time, for the purchase at private sale of the same tract of land by two or more persons, one of whom did actually inhabit and cultivate such tract of land at the time of

Proviso.

passing this act, and still continues to inhabit and cultivate the same at the time of such application, the preference shall be given to the person thus inhabiting and cultivating such tract of land. *And provided also,* That till after the final decision of Congress thereon, no tract of land shall be offered for sale, the claim to which has been in due time, and according to law, presented to the register of the land office, and filed in his office, for the purpose of being investigated by the commissioners appointed for the purpose of ascertaining the rights of persons claiming lands in the Territory of Orleans; or which shall have been located by or for Major-General La Fayette, according to law. (d)

Provided.

SEC. 7. *And be it further enacted,* That in addition to the township already reserved for that purpose by law in the western district of the Territory of Orleans, and which shall be located south of Red River, another entire township shall be located by the Secretary of the Treasury north of Red River, for the use of a seminary of learning, and also an entire township in the Territory of Louisiana, for the support of a seminary of learning within the said Territory. (g)

An additional township to be located in Orleans Territory for seminary of learning.

SEC. 8. *And be it further enacted,* That the surveyor-general shall cause such of the public lands in the Territory of Louisiana, as the President of the United States shall direct, to be surveyed and divided in the same manner and under the same regulations and limitation as to expenses, as is provided by law in relation to the lands of the United States, northwest of the river Ohio and above the mouth of Kentucky River. (h)

Surveyor-general to cause certain portions of public lands in Territory of Louisiana to be surveyed and divided.

SEC. 9. *And be it further enacted,* That for the disposal of the lands of the United States lying in the Territory of Louisiana, a land office shall be established, which shall be kept at such place as the President of the United States may direct; and a register and receiver of public monies shall be appointed for said office, who shall give security in the same manner, in the same sums, and whose compensations, emoluments, duties and authority, shall in every respect be the same, in relation to the lands which shall be disposed of at their office, as are or may be provided for by law in relation to the register and receiver of public monies in the several offices established for the disposal of the lands of the United States, northwest of the river Ohio, and above the mouth of Kentucky River. (c)

Office to be established for disposing of public land in Territory of Louisiana.

SEC. 10. *And be it further enacted,* That the President of the United States be, and he is hereby authorized, whenever he shall think proper, to direct so much of the public lands lying in the Territory of Louisiana, as shall have been surveyed in conformity with the eighth section of this act, to be offered for sale. All such lands shall, with the exception of the section "number sixteen," which shall be reserved in each township for the support of schools within the same, (c) with the exception also of a tract reserved for the support of a seminary of learning, (g) as provided for by the seventh section of this act, and with the exception also of the salt springs and lead mines, and lands contiguous thereto; which, by the direction of the President of the United States, may be reserved for the future disposal of the said States, (f) shall be offered for sale to the highest bidder, under the direction of the register of the land office and the receiver of public monies and of the principal deputy surveyor, and on such day or days as shall, by public proclamation of the President of the United States, be designated for that purpose. The sales shall remain open for three weeks and no longer. The lands shall be sold for a price not less than that which has been or may be fixed by law for the public lands, northwest of the river Ohio, and above the mouth of Kentucky River. And shall in every other respect be sold in tracts of the same size, on the same terms and conditions, as have been or may be by law provided for the lands sold in the State of Ohio. The superintendents of the said public sales shall each receive six dollars for each day's attendance on the said sales. All the lands which have been thus offered for sale, at public sale, remaining unsold at the closing of the public sales, may be disposed of at private sale by the register of the land office, for the same price which is or may be prescribed by law for the sale of public lands in the State of Ohio: *Provided however,* That till after the decision of Congress thereon, no tract of land shall be offered for sale, the claim to which has been in due time and according to law presented to the recorder of land titles in the District of Louisiana and filed in his office, for the purpose of being investigated by the commissioners appointed for ascertaining the

Lands in Territory of Louisiana to be offered for sale.

Provided.

rights of persons claiming lands in the Territory of Louisiana. And patents shall be obtained for all lands sold in the Territory of Louisiana, in the same manner and on the same terms as is or may be provided by law for land sold in the State of Ohio. (d)

Patents how obtained. SEC. 11. *And be it further enacted,* That the claim of the corporation of the city of New Orleans, to the common adjacent thereto, and within six hundred yards from the fortifications of the same, as confirmed by the act, entitled "An act respecting claims to lands in the Territories of Orleans and Louisiana," shall be deemed valid, although the relinquishment of the said corporation to any claim beyond the said distance of six hundred yards was not made till after the expiration of the period of six months prescribed by the act last mentioned. (h)

Claim of corporation of Orleans to be deemed valid. SEC. 12. *And be it further enacted,* That all the navigable rivers and waters in the Territories of Orleans and Louisiana shall be and for ever remain public highways.

Navigable rivers to be public highways. SEC. 13. *And be it further enacted,* That a sum not exceeding forty thousand dollars be, and the same is hereby appropriated, for the purpose of carrying this act into effect, which sum shall be paid out of unappropriated monies in the Treasury.

Appropriation. SEC. 14. *And be it further enacted,* That the act, entitled "An act providing for the final adjustment of claims to lands, and for the sale of the public lands in the Territories of Orleans and Louisiana," approved February the sixteenth, [fifteenth] eighteen hundred and eleven, be, and the same is hereby repealed. (i)

- Repeal of the act of Feb. 15, 1811.**
- (a) See Nos. 699, 701, 703, 704, 705, 708, 712, 716, 718, 721, 722, 723, 724, 728, 731, 732, 737, 738, 739, 740, 745, 746, 749, 752, 753, 777, 790, 817, 819, 826, 852, 863, 864, 873, 889, 899, 904, 911, 946, 956, 957, 961, 967.
 - (b) See Nos. 701, 703, 704, 708, 718, 722, 724, 727, 730, 731, 777, 803, 858.
 - (c) See Nos. 701, 704, 708, 711, 718, 731, 737, 740, 831, 879, 965.
 - (d) See Nos. 704, 708, 720, 722, 729, 730, 731, 732, 761, 768, 786, 813, 818, 849, 858, 860, 897, 899, 919, 920, 928, 963.
 - (e) See Nos. 418, 701, 708, 832, 834, 835, 837, 841, 843, 853, 859, 883, 884, 891, 894, 895, 903.
 - (f) See Nos. 704, 708.
 - (g) See Nos. 701, 708, 760.
 - (h) See Nos. 705, 708, 713, 734, 739.
 - (i) See No. 708.

Dec. 12, 1811. Vol. 2, p. 668. No. 711.—AN ACT extending the time for opening the several land offices established in the Territory of Orleans.

Further time allowed for opening land offices. Act of Feb. 15, 1811. *Be it enacted, &c.,* That so much of the sixth section of an act, entitled "An act providing for the final adjustment of claims to lands and for the sale of the public lands in the Territories of Orleans and Louisiana, and to repeal the act passed for the same purpose and approved February sixteenth, [fifteenth] one thousand eight hundred and eleven," as directs that the several land offices established in the Territory of Orleans shall be opened on the first day of January and on the first day of February, one thousand eight hundred and twelve, be, and the same is hereby repealed.

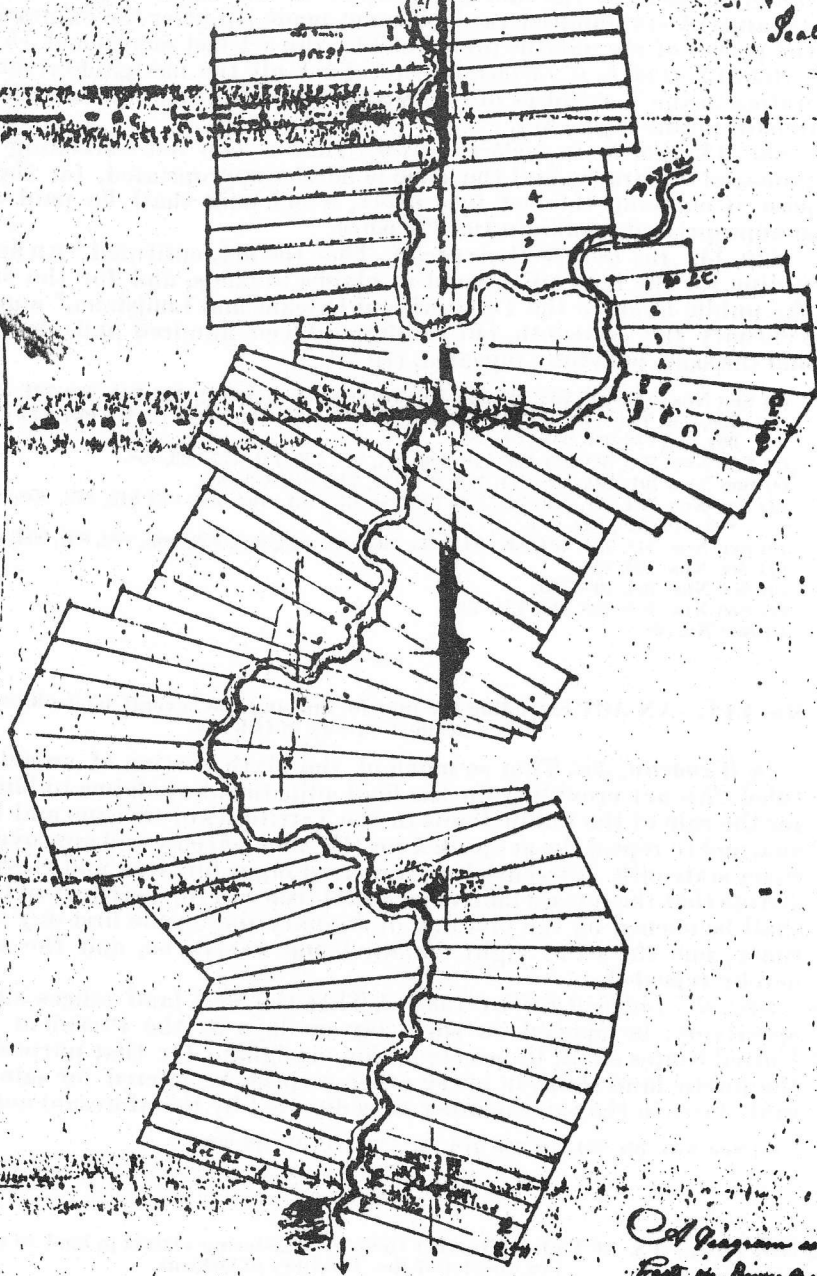
Land offices to be opened on such days as may be designated by the President. SEC. 2. *And be it further enacted,* That the said land offices shall, respectively, be opened on such day or days as the President of the United States shall, by proclamation, designate for that purpose; and the public land shall, in every other respect, be offered for sale at the said offices in the same manner as is directed by the aforesaid act. (a)

- (a) See Nos. 701, 704, 708, 710, 718, 731, 737, 740, 831, 879, 965.

March 10, 1812. Vol. 2, p. 692. No. 712.—AN ACT giving further time for registering claims to land in the western district of the Territory of Orleans.

Further time given for registering claims in the land office at Opelousas. *Be it enacted, &c.,* That every person or persons claiming lands in the western district of the Territory of Orleans, who are actual settlers on the land which they claim, and whose claims have not been heretofore filed with the register of the land office, for the said district, shall be allowed until the first day of November next, to deliver notices in writing, and the written evidences of their claims to the register of the land office at Opelousas; and the notices, and evidences so delivered within the time limited by this act, shall be recorded in the same manner, and on payment of the same fees, as if the same had been delivered before the first day of July, one thousand eight hundred and eight; but the rights of such persons as shall neglect so doing within the time

Scale 40 Chains to an Inch



Col Diagram exhibiting the mode of laying off
Lots on River, Oak, Bayou, &c. in Orleans
territory under the 2^d Relation of this Act of the
5th of March 1811.

Explained in Instructions to Surveyors
Surveyors on that subject accompanying the Diagram

J. P. Greenman
Surveyor

Surveyors Office Washington M.T.
June 1811

Instructions to Deputy Surveyors for surveying the public lands adjoining navigable streams, Lakes, Bayous, etc. in the Orleans Territory under the 2^d Sect of the Act of the 3^d of March, 1811.

The Surveyor should first take an accurate survey of the margin of the water course so far as surveys of tracts are to be extended thereon. Then lay down his survey on the large scale; and draw thereon right lines in the direction of the general course of the water course, and on these lines lay off the lengths of fronts of tracts 58 Rods or 14.50 (Ch. Lks.) chains and through these points draw right lines at right angles to the line first drawn which shall extend back from the margin of the water course 465 Rods or 116.25 (Ch. Lks.) chains and close his tract by drawing a back line at right angles to his side lines, or parallel to his first line, when the water course happens to be straight or nearly so, the back line of one tract may be extended so as to become the back line to several adjoining tracts.

The side lines of the same tract, will frequently be of different lengths, and insect the dimensions & contents of these tracts will frequently differ from each other, but that cannot be avoided. The law in this case can very rarely be accurately complied with in consequence of the very great irregularities of the water courses. Any unavailable and unimportant deviations from the Law, should be in favor of the neatness and convenience of the survey. On large curves or bends of the water course the side lines of tracts should be drawn converging, or diverging, as the case may require. Converging on the concave side to prevent the tracts from interfering with each other and diverging, on the convex side to avoid the incononvenience of small angular vacancies which would remain between the tracts if the side lines were drawn parallel to each other; In these instances the back lines may be drawn at right angles to one of the side lines and at 465 Rods from the margin of the water course, or front, which will necessarily make all the tracts having diverging side lines something larger than required. The tracts having converging sides would contain less, but the fronts of these should be extended so that the lines may include the quantity required or nearly so. It appears to be the object of Government to attach the fronts on the

water courses all the lands from thence within the distance prescribed 465 Rods.

In short we may suppose any lake, bayou, water course, etc. to be circumscribed by lines drawn at 465 rods from the general course of its margin, and that the space included between these lines and the water course is to be divided into tracts of 58 Rods front and 465 Rods in depth. It should be the first object of the artist whose duty it becomes to designate those tracts to take an accurate survey of the water course, to lay that survey down on a large scale, and to divide the space as above into tracts as nearly conformable to the law as possible; To draw his lines on his Map both side and back lines noting their respective courses and distances; Thus prepared the surveyor can with great ease and accuracy transfer these lines of tracts from his plan to the ground and complete his survey agreeably to the intention of the Law and wish of the Government.

The first and principal object of the surveyor should to have his lines accurately run, distinctly marked, and the contents of his survey correctly ascertained. It is much more desirable both to the Government, and purchaser, that the lines of a tract of land should be plainly designated and its contents correctly determined, than that its dimensions should be precisely a given number of chains and links. Should one tract occupy a larger or better front on a water course than another, it will be more valuable, and consequently sell for more than the other.

The surveys contemplated by the 5th section of the Act above mentioned will be so very few in number if any for 2 years to come, that it appears almost unnecessary to say anything on that subject at this time, should application be made by any of the owners of front tracts, to have a back tract surveyed adjoining him, and only on application of proprietors of front tracts are these surveys to be made. The law is very plain on that subject. The front tract should not exceed 40 arpents in depth to Entitle its owner to an adjoining back tract: The back tract is not to Exceed 40 arpents in depth, nor to contain a quantity greater than the front tract, neither shall the back tract in any instance extend so far in depth as to include lands fit for cultivation on another water course, etc.

The only difficulty that can arise in marking these surveys is when, by reasons of bends in the River, lake, etc. bordering on and in rear of front and adjoining tracts; each claimant cannot obtain a tract equal in quantity to his front front tract; in that case the vacant land, in the rear is to be divided between the claimants in the direct ratio of the quantity

contained in their respective front tracts.

Should the parties not consent to abide by the decision you may deem proper to make, you will send me a correct statement of the case, and I will make a division of these lands which shall be carried into Effect.

REMARKS

The Law does not point out any mode of marking or numbering the tracts to be surveyed under the 2^d Sect. of the Act, so that they may be distinctly known from each other, this appears to be a defect which if not remedied will be productive of great trouble and inconvenience both to the Register & purchaser.

The following manner of marking those tracts is recommended. Let the tracts be numerically numbered from some well known point or land mark, such as a Bluff, the junction of some Bayou or water course, or the intersection of some of the meridians or parallels already run. Thus lot N. 1.2.3. etc. as it may be above or below the land mark (naming it) and on the right or left of the water course as it may be situated. The surveyor should set a strong squared picket in the side of each track near the margin of the water course noting its distance therefrom. These pickets should be set firmly in the ground and numbered on each side with a marking Iron the number of the adjacent tract; the course and distance from this picket should be taken to a tree if convenient on each tract, which tree is to be numbered with No. of the tract on which it stands; a picket should in like manner be set in the ground at the termination of the side lines and the bearing and distance taken to two trees which shall be marked and No.^d as above. The whole is to be carefully noted in his field Book.

When the Surveyor shall find it impracticable from the interposition of lakes or impenetrable swamps etc. to extend his side lines their full extent required and to complete his tract by running the back lines he should set a picket at the termination of his side line which picket is to be marked with the No. of the adjoining lots and courses and distances taken from it to two trees which shall also be marked and numbered as in the first instance.

Should the depth required (465 Rods) extend so near another water course as to interfere with, or include lands fit

for cultivation on it. Fronts of tracts should be laid off on both water courses, and the lands between these water courses should be equally divided between the fronts on each. Provided the distance between the fronts or water courses be two miles or nearly so.

These surveys will frequently lie between private claims or tracts already surveyed, in that case the front or tracts may benumbered from one of those former surveys to the other; and should a fraction remain it should be annexed to the adjoining tract without running the side line between them.

I must here repeate a request I made when I first wrote to you on this subject. To report to the office as early as possible the number of tracts that can and ought to be surveyed either under the 2^d Section of the Act above mentioned or in the usual way into Townships and Sections and what No. of the latter description are already prepared for sale. Taking it as a positive order that no new surveys of either description shall be made this year but such as are immediately saleable, or will be certain to be sold in a reasonable time.

The enclosed diagram exhibits the mode recommended for laying off tracts on water courses etc. under the 2^d Sect. of the Act above mentioned. The Red lines represent the general course of the River etc. on which the fronts of the tracts are laid down. The courses and distances of the side and back lines can very readily be ascertained on the Map; and from thence with care and accuracy be transferred to the ground.

Any difficulty that may arise to you in the execution of this or any other part of your duty as connected with this office you will from time to time communicate to me and I shall with pleasure give you my advice and assistance thereon.

I am respectfully

Your Obt. Servant

Thos. Freeman

Gideon Fritz Esqn.
PD Surveyors

PRINCIPAL DEPUTY SURVEYOR'S OFFICE

SOUTHWESTERN LAND DISTRICT, STATE OF LOUISIANA

Opelousas, March 1830

Mr. Edward R. Downing
Deputy Surveyor.

Sir:

Along with the printed instructions accompanying and attached to this for your Governance in surveying your District, you are to attend to and be governed by the following additional ones. (to-wit)

For surveying the exterior and section lines of a Township you are never to run towards, but always from an established point or corner within your own District, which can always be done therein except when you intersect the boundary another surveying District on the opposite side from you the basis or standard lines from which your lines were started, in that case you may establish your corner where you intersect it if you have committed no error in running the line towards it but as your line must have perfect continuity throughout your own District without offsets, therefore when they are commenced on any of the basis or standard or standard lines they must be continued on in the same direction as far as they may be extended by you, Should however by some mismanagement have unavoidably to run a line towards an established point or corner within your District you may make a small inclination of the line to enable you to close at the point already established.

In the law directing the manner in which the public lands shall be surveyed into sections it is required that the section meridians shall each be exactly one mile and the parallels of latitude to be run so as to close thereto, except the closing lines, on the North or South boundaries of the Township. (According as your District may be situated North or South of the 31st Latitude) North on the Northside thereof and south on the southside, Therefore beginning at the post one mile from the corner of the Township nearest the basis on Standard lines you are to run the meridian one mile North or South then run a Tandom or guide line on the parallel to the Township boundary and if you do not intersect at the true point, connect the line in direction back again so as to close at the point established on the Meridian (Should you however intersect with your Tandom

line with five or six links of the true point on the Township line you need not connect the direction of the line, but merely mark it properly back again) proceed in the same manner with the next mile of the Meridian and with the parallel to close therewith and so on until you arrive at the opposite boundary of the Township; then travel back to the boundary thereof at which you commenced and begin another Range of Sections and proceed in the same manner with it and so with every range of sections, until the township is completed.

You will mark a tree in each Section at every established corner with the number of the Section in which it stands with letter S. annexed thereto; and on one of these trees at least the number of the Township and Range in which it stands, with Appropriate letters T and R before as above the figures for which purpose you ought to be provided with good marking irons similar to those used for marking Casks by Coopers and others. You will insert all these marks in your Field Book correctly; you will also take the bearing and distance in links from the corner to at least two of these trees, (one of which should always be the one marked with the number of the Township and Range) which bearings and distances you will note correctly in your Field Book Stating also whether the bearing is taken from the true or magnetic meridian; should any of your corners fall in prairie you may either erect a mound of the dimensions, stated in your contract or else plant a good substantial post at least four inches diametre, of light wood, or some other durable timber, squared and set up so as to front the four sections, with the appropriate numbers marked thereon, and on one side the number of the Township and Range as directed above.

As you are confined chiefly to subdividing Townships in which claims favourably reported on by the Register and Receiver in their report dated the 1st of October, 1825 and confirmed by an Act of Congress approved the 16th of May 1826 and as these claims are not to be surveyed you are in conformity with instructions received from the Commissioner of the General Land Office, to ascertain as well as may be in your power the situation shape and extent of the improvements under which the claimant is entitled to and confirmed in his claim in what section it may be situated and whether it extends into one or more sections besides, and the numbers of such sections, and how much of it is in each section as nearly as you can judge without a survey, and insert all in your field notes, to be laid down in the Township Map to enable the Register and Receiver to point out the different half quarter sections to which the claimant may be entitled - You are not authorized to survey any of these

claims but you may do so at the request and expense of the claimant, and in that case must include only half quarter or quarter sections as laid off by the public lines and as nearly in a square as may be.

Your Chain carriers must be sworn faithfully and honestly to carry the chain to the best of their skill and judgment, and agreeable to your instructions from time to time given them and to make true return of all measurements which they shall execute for you as required by you from time - You will pay particular attention to ascertaining the true and correct variation of your compass from the true Meridian, and insert it your field notes and returns to this office.

Wishing you all success in your expedition and that you may do credit to yourself as a man of science and to the department, I am

Respectfully your friend etc

John Dinsmore Sr.

Principal Dep. Surveyor

(CIRCULAR.)

General Land Office
23rd September 1831:

Sir:

I herewith communicate for your guidance & direction in the discharge of your Official duties, the requirements of the Department in reference to the township surveys and the mode of making returns thereof, in order that you may model and adapt your contracts with your deputies, and instructions and forms of field books precisely to suit those requirements.

In the preparation of the township plats it is requisite that they exhibit a perfect delineation of the country as represented in the field notes of the survey . . .

1st. 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 distance between the posts planted at the corners of each Section or fractional Section, and the courses 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.

2nd. Whenever 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 posts, is to be truly represented by the platting and also by figures.

3rd. The distance on a surveyed line at the points where streams cross 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. The courses and distances of the meanders of navigable streams are to be truly delineated and also represented by figures on the plat opposite the delineation, wherever it is practicable to do so, and where the same are too numerous to

admit of their exhibition by figures on the plat, in that mode, the same are required to be exhibited in a detached tabular form either on the face of the plat, or connected therewith as may be found most expedient. The width of all water courses, rivers, creeks, etc., is to be represented on the plat in figures.

4th. The plat is to exhibit the received names of all rivers, creeks, lakes, swamps, prairies, hills, mountains, and other natural objects, and the surveyors should be instructed never to give original names to such objects, where names have heretofore been given. All lakes or ponds of sufficient magnitude to justify such expense are to be meandered and platted agreeably to courses and distances, which are also to be exhibited by figures. In passing such ponds or lakes as are not to be meandered, offsets are to be taken, which offsets are to be carefully noted on the plat to show that the distance across has been correctly ascertained. Such ponds or lakes are to be exhibited on the plat as accurately as practicable, from careful ocular observation to be made by the Deputy and noted in his field book.

5th. Swamps are to be represented in the ordinary method by slightly shaded black lines and dots, and the outlines of the same should be distinctly exhibited.

6th. Prairies are to be represented by slightly shaded green lines and dots, and the outlines of the same to be distinctly exhibited.

7th. The plats should also exhibit as far as practicable all mines, salt springs, salt-licks, & mill seats, also towns, villages and settlements, and the names of the same, also forges, factories, cotton gins, and all other such items of information also the general course of travelled roads, and tracks, denoting the place to which they may lead.

8th. The exterior lines of the township plat should be double the thickness of the sectional lines, and both of them should be in black ink. The lines denoting the quarter sections and the

subdivision of fractional sections should be in red.

9th. The quantities of the subdivision of fractional sections are to be indicated by red figures within the respective subdivisions. The numbers and quantities of the Sections and fractional sections are to be exhibited in black figures at the centre of each as nearly as practicable, and in cases where the marks and figures on the plat are too numerous to admit of the convenient exhibitions of the quantities in that way, the quantity of each sections and fractional section is to be exhibited in a neat tabular statement on the right side of the plat, and where there are private claims in the township, the quantities of such claims are to be exhibited under a separate head in the tabular statement, which is to exhibit separate totals of public lands and private claims. Where any private claims, Indian or other reservation etc is exhibited, the name of the confirmer or reservee must be given; also such other references as will clearly identify the tract with the Report by which it was confirmed, or the Treaty, etc. under which the individuals claims the title.

In cases where the quantities are exhibited in the center of the Section or fractional Section, and it is not necessary to resort to a tabular Statement, the sum total of the public lands in the township is to be exhibited as one item near the foot of the plat.

10th. At the foot of each plat the Surveyor General must give an official certificate of the following purport. Viz.

The above map of Township No.____, of Range No.____, is strictly conformable to the field notes of the survey thereof on file in this office which have been examined and approved (or if any exceptions are taken to the field notes by reason of their not standing the test of correct platting, such exceptions are to be stated in the margin of the plat as before mentioned, and exhibited on the face of the plat by red dotted lines, and alluded to in the Certificate thus — "with the exception

stated in the margin hereof.") The Certificate is then to be closed by indicating the name of the Deputy or Deputies by whom the exterior boundary lines and the subdivisional lines were respectively surveyed, showing the sum total of miles run by each Deputy Surveyor, also the date of the Contract, the quarter of the year in which the survey was made, and the quarter in which the same was paid for and charged in the accounts of the Surveyor General.

11th. All lines in a township survey which have not been actually run; must be represented on your plat of survey by red dotted lines, and any portion of a survey found or suspected to be erroneous must also be represented by red dotted lines, and payment for the same is to be suspended until the error is corrected or the cause of suspicion done away to the full satisfaction of the Surveyor General; and in every case when the survey of a Township is incomplete from any cause, such cause must be fully set forth by a marginal note on the face of the plat, and certified thereon in the mode designated in the 10th Article of this letter.

12th. Navigable Streams are declared by law to be public highways - Except in cases where navigable streams constitute the boundary line between two Land Districts, and where the Ranges & Townships in each district are numbered from different meridians and base lines. They are not to interrupt the regular survey of the township lines, which are to be continued across such stream for the exact distance. Each border of such stream is however, to be meandered by course and distance and a fractional portion of the same township will be constituted on each side thereof to be denominated, as the case may be, the fraction of township North or South, or East or West of such stream, having special regard in such designation to the general course thereof from its source to its mouth.

A Deputy Surveyor continuing surveys on the opposite banks of streams must invariably be made to show the connections of such survey, with certain established posts or points in the opposite survey, which connections as well as the mode by which the same was ascertained, are to be shown in the field

book and exhibited in the plat of survey, and in passing up or down rivers, frequent connections with the surveys across should be made and exhibited both in the field book and plat.

The width of navigable streams and bayous binding on the surveys, should frequently be ascertained by trigonometrical process. Where the width of the same does not sensibly vary in the township the measurement thereof is to be made at the two extreme points of intersection of such objects with the township line, but where there is a sensible variation in the width, measurement thereof must be made as often as may be justly deemed necessary for the accuracy of the Survey in connection with the adjoining lands and the correct exhibition thereof in the Township plats.

13th. Where it is necessary to make a return to this Office of township boundaries merely, prior to the subdividing of such townships into Sections and the rendition of the regular plats of survey, such boundaries are to be platted in connection on a scale of from two to three inches to six miles.

14th. The paper to be used in your plats of surveys must be of the best quality and of uniform size.

The descriptive notes are to be written on paper of the folio post-size, best quality. The records of the plats and field notes to be kept in your office, must be made out on paper of the best quality. Great care and neatness are to be observed in the execution of the work and in the particular examination thereof after the same is completed.

SURVEYS & CONTRACTS

15th. You are to require bond and approved security for the due execution of all surveying contracts in the penalty of double the value of the contract - and in case of failure to comply with the terms of a contract, unless such failure arise from causes satisfactorily proved to be beyond the control of the contractor, immediate measures are to be taken to recover the penalty of the bond,

agreeably to law, and no Deputy Surveyor who has improperly failed to fulfil his engagements is afterwards to be employed by you, and of every such failure you are required to give immediate notice to the Department.

The Surveys must be executed under the personal and immediate superintendence of the contractor --- Sub-contracts are illegal. The contract and bond of the Deputy are expressly to provide against sub-contracts.

16th. The Act of 18th May 1796 (Land laws, New Edition, page 420) provides, that the public lands "shall be divided by North & South lines, run according to the true meridian and by others crossing them at right angles so as to form townships of six miles square."

"The corners of the townships shall be marked with progressive numbers from the beginning; each distance of a mile between the said corners shall be also distinctly marked with marks different from those of the corners."

The same law requires that "townships shall be subdivided into Sections, containing as nearly as may be, six hundred & forty acres each, by running through the same, each way, parallel lines at the end of every two miles, and by marking a corner, on each of the said lines at the end of every mile: the Sections shall be numbered respectively, beginning with the number one in the North East Section and proceeding West and East alternately, through the township with progressive numbers, 'till the thirty six be completed."

"And it shall be the duty of the Deputy Surveyors to cause to be marked on a tree near each corner made, as aforesaid, and within the Section the number of such Section, and over it the number of the township within which such Section may be, and the said Deputies shall carefully note, in their respective field books, the names of the corner trees marked and the numbers so made."

The Act of 10th May 1800 (Land laws New edition, page 456.) "prescribes the mode of

subdivision Sections into half Sections into half Sections of three hundred and twenty acres each as nearly as may be, "by running parallel lines through the same from East to West, and from South to North, at the distance of one mile from each other, and marking corners at the distance of each half mile on the lines running from East to West, and at the distance of each mile on those running from South to North," and making the marks, notes and descriptions, prescribed to Surveyors by the Act of 18th of May 1796 - The same Act also provides, that "in all cases where the exterior lines of the townships thus to be subdivided into Sections or half Sections, shall exceed, or shall not extend six miles, the excess or deficiency shall be specially noted, and added to or deducted from, the Western & Northern ranges of Sections or half Sections in such townships, according as the error may be in running the lines from East to West, or from South to North: the Sections and half Sections bounded on the Northern and Western lines of such townships shall be sold as containing only the quantity expressed in the returns and plats respectively, and all others as containing the complete legal quantity." By a vigilant and faithful attention to duty on the part of the Deputy Surveyor, the excesses and deficiencies alluded to by the law, except to a trifling extent will be of rare occurrence.

The Act of 11th Feby. 1805, entitled "An Act concerning the mode of surveying the public lands of the U. States" (Land laws New edition page 575) prescribes general regulations for dividing townships into Sections, and subdividing such Sections into half Sections and quarter Sections. The following is a summary of those regulations.

The lands are to be laid off in townships of precisely, six miles square by lines running due North and South & East and West. On each of those lines precisely at the distance of one mile apart, corners are to be established for sectional lines. Parallel lines are to be run through the township each way, from each sectional corner to the corresponding sectional corner, on the opposite side of the township on each of which lines sectional corners are to be established at the distance of one mile apart, which process will divide the township into thirty six sections. In running the exterior

township lines, and also the interior sectional lines, intermediate, half-mile, posts or corners (precisely equidistant between the corners of the sections) are to be established as the boundaries of quarter Sections.

17th. Each Deputy Surveyor is to provide himself with two, two-pole chains containing each thirty-three feet and subdivided into fifty links which are to be regulated by the Standard Chain in the Surveyor's Office. One of which chains is to be specially reserved by the Deputy as a standard for his field work, and by which he will adjust the one in active use, at least every other day, if not oftener. Each Deputy will also provide himself with a good compass with a nonius or a theodolite (which latter in some respects, is preferable by reason of its peculiar adaptation to the taking of long sights) which will be compared with the Standard in the Surveyor's Office.

18th. The Surveys are required by law to be made agreeably to the true meridian, and at right angles therewith. The variation of the magnetic meridian is to be observed and ascertained from time to time, as often as the Surveyor General may deem expedient, and is always to be indicated on the township plat.

19th. The greatest care is to be taken in levelling the chain and plumbing the pins, so as to obtain the true horizontal distance where the surface of the country is irregular and hilly.

The oath to be taken by the chain men must specially provide for such levelling and plumbing. The Deputy Surveyor must ever be vigilant over the conduct of his sub-agents (chain-men, marker and flagbearers) whose oaths with that of the Deputies are to be filed in your office.

You are to enjoin on your Deputies a strict regard to the moral integrity of their sub-agents. None must be employed in whom implicit confidence cannot be reposed, as the interest of the public service is at stake.

AS TO MARKING

20th. The greatest possible caution is to be observed in marking the corners of townships etc., in a plain, distinct and permanent manner.

Where a tree is not found immediately at the corner, a corner is to be established by planting a post on which is to be marked the number of the township, over which is to be marked the number of the Range, and underneath the number of the Section.

The bearing and distance, also the names and respective diameter of the nearest trees from such corner are to be carefully taken and noted in the field book. The nearest of such trees (where there are more than one) is to be marked to correspond with the marked corner. The mark should be in a regular chop, Squared off, to be made into such tree, so as to be always distinguishable from a mere blaze. The letters B. T. to denote the fact of its being a "bearing tree" should be distinctly cut into the wood some distance below the other marks. All these particulars are to be most intelligibly and minutely noted in the field book. The posts used in forming the corners of townships must always be larger (for the sake of distinction) than those which denote the Sectional and quarter Sectional corners, and should be neatly squared off at the top to correspond with the cardinal points.

The marks on the posts and bearing trees should be deeply burnt into the wood with marking irons. The posts must always be made of the most durable wood that can be had, and should be set in the earth to the depth of two feet & very securely rammed in with earth and stone. It is highly important in reference to their durability that the portion of each post below the surface should be charred and the whole of it rubbed over with tar, except the portion which bears the Surveyor's marks. The Sectional posts are to indicate by a number of notches on each of the four corners directed to the cardinal points, the number of miles that it stands from the outlines of the township -

the side of the post will be numbered to correspond with the number of the Section it faces - Each half mile post on a Section line, and quarter section post on a township line should be marked to indicate that it is a quarter sectional "(1.4.S)" post, and the nearest adjoining tree on each side of such post, must be similarly marked - The Surveyor to note in his field book the kind of tree, its diameter, bearing & distance from the true corner.

Posts denoting the same kind or character of boundary, should be of uniform construction, and there should always be a striking difference between posts denoting different kinds of boundary.

To create additional and increased facility in the discovery of boundary lines by the purchasers of public lands and to prevent errors of entry, you are to require your Deputies to fasten to the Sectional and quarter Sectional posts, near the ground, but so as to be plainly seen, a finger board on which is to be distinctly marked with black oil Paint, the appropriate number of the tract. This board to point diagonally across the tract and to be marked similarly to this: NW $\frac{1}{4}$ S. 1 T. 1 N. R. 1 E.

In prairie countries where bearing trees cannot be had, mounds, to be covered with sod, are agreeably to contract, to be erected. Such mounds should be of uniform size and conform precisely to instructions to be given by you. As mounds are subject to be worn away by the action of the weather and other causes, I would recommend that a stone be planted in the centre of the mound and that a few handfuls of charcoal be enclosed therein. I would further recommend that at each corner of a square which will enclose the mound and conform to the cardinal point, there be planted a chesnut, hickory nut, walnut or acorn.

A stake to be set up in the centre of the mound to which is to be fastened a finger board on which is to be designated in black oil paint, the appropriate numbers.

All the Particulars relative to the con-

struction of a mound are to be minutely indicated in the field book.

The perpetuation of the corners of the public surveys is a subject of primary importance. Every possible care and precaution to secure correct and durable corners must be observed by your Agents whose fidelity you should test by every means in your power.

AS TO FIELD BOOKS

21st. You are to furnish your Deputy Surveyors with a printed specimen form of field book, which is to be so constructed as to exhibit every particular required either by law or instruction, so as to admit of a perfect topographical exhibition of the country and accompany such form with special instructions on every point in relation to which it can be presumed that instructions are necessary.

In the field book the number of miles, chains and links run on a line are to be exhibited in a column, which is to be added up at the foot of each page and carried forward from page to page, so as to form at the conclusion of the book the aggregate of miles, chains & links run in the township or fractional township.

The Act of Congress approved 18th May, 1796 (Land Laws, New edition, page 420) requires, that "every Surveyor shall note in his field book the true situation of all mines, Salt-licks, Salt-springs, & mill seats which shall come to his knowledge, all water courses over which the line he runs shall pass, also the quality of the lands. These field books shall be returned to the Surveyor General, who shall thereupon cause a description of the whole lands surveyed to be made out and transmitted to the Officers who may superintend the sales. He shall also cause a fair plat to be made of the townships and fractional parts of townships contained in the said lands, describing the subdivision thereof and the marks of the corners. This plat shall be recorded in books to be kept for that purpose, a copy thereof shall be kept open at the

Surveyor General's office, for public information, and other copies sent to the places of sale, and to the Secretary of the Treasury."

As the protraction of the surveys, at the Office of the Surveyor General, from the field books furnished by his Deputies, is the test of the accuracy or incorrectness of the survey, the greatest caution is to be observed in making such pro-tractions.

The field books are to indicate the examination and approval thereof (or disapproval as the case may be) by the Surveyor General, with the date of such examination and approval under his own proper signature, also the date of the contract, the quarter of the year in which the land was surveyed and payment made therefor.

The field books are to be signed by the Deputy Surveyor and also by the Chainmen, marker and flag bearers employed in the survey.

SUBDIVISIONS OF SECTIONS & FRACTIONAL SECTIONS

22nd. The Act of 24th April 1820 entitled "an Act making further provision for the sale of the public lands ("Land laws, New Edition, page 770) requires that the public lands be offered for sale in half quarter sections, and requires that the lines, supposed to divide the quarter sections into half quarter Sections are to run North & South. This law also requires that the corners and contents of half quarter sections shall be ascertained in the manner and on the principles prescribed by the Act of 11th Feby 1805 (Land Laws, New Edition, page 515.)

The same Act requires that fractional Sections containing One hundred and Sixty acres and upwards, shall in like manner, as nearly as practicable, be subdivided into half quarter Sections, under such rules and regulations as may be prescribed by the Secretary of the Treasury; but fractional Sections containing less than One hundred & Sixty acres, shall not be divided, but shall be sold entire."

The instruction of the Secretary of the Treasury under the aforesaid Act, is, that the lines of the subdivisions of fractional sections containing One hundred & sixty acres or upwards, may run either North & South, or East & West so as to preserve to the respective Subdivisions the most compact and convenient forms.

The lines of the Subdivisions of quarter Sections and fractional Sections are to be merely indicated on the maps. It is not contemplated by the existing laws that they should be actually surveyed at the expense of the United States.

In the subdivision of fractional Sections you are requested to observe as a general rule, points equi-distant between the half mile posts, as the supposed boundaries whether North & South or East and West, between the subdivisions.

I am, very respectfully,

Your Obt. Servt.

ELIJAH HAYWORD

P. S. It is invariably required that you furnish to this office and to the Register of the proper Land Office, copies of the same Township plats and descriptive notes, at the same time. A failure to observe this rule will necessarily embarrass the operations of the Government in the sale of public lands.

Hon. Browse Trist Esq.
Sur. Gen of Louisiana.

Surveyor Generals Office
Baton Rouge, (La.)
14th, 1844

For

Honorable Thomas N. Blake
Com.ⁿ Gen Land Office
Washington
D. C.

Sir:

I have the honor to enclose herewith a printed copy of the revised instructions which I have found it necessary to prepare for the information and guidance of my Deputies in the field, for your sanction.

The only material alteration I have required in marking and establishing corners in the field occurs in the directions for prairie surveys, which I have made for the following reasons, viz.

1. That mounds in prairie country are destroyed entirely in a few weeks, owing to the herds of cattle seeking them to protect themselves from the fly and other insects - with their horns and hoofs they soon obliterate all the marks placed at a township corner in connection with a mound - and in two or three years it cannot be distinguished from the surrounding plain or prairie.
2. In the method proposed by me of sinking a pit - the following advantages are attained - If sought by cattle at all, the stake prevents the use of their horns - if the stake is loosened so that they can be free to act upon it, the result is greater depth obtained for the pit, making it more recognized as a land mark - the water which collects in the bottom of the pit, causes the growth of a strong reed grass, which attains from eight to ten feet heights over the grass of the surrounding country, with a much deeper green color - so that a corner can be discovered on foot at two or three miles

distance making at all seasons of the year a permanent and easily ascertained land mark.

To this change of the establishment of mounds, I think your approval is necessary, and if you deem it proper, I would be glad to have it at as early a day as practicable - in order that I may circulate the instructions - Should it not be approved of, I can restore the old plan, by a marginal note.

I have the honor to be with
much respect

Your obedient servant

F. D. Newcomb
Surveyor General, Louisiana

GENERAL INSTRUCTIONS

DEPUTY SURVEYORS.

On presentation in future of returns to this Office, Contractors will be required to make oath that they have actually surveyed, measured and marked all the lines as set forth in their field notes. To whatever persons surveys you may find necessary in the boundaries of your duties, to make connections, you will be careful to notice any and all discrepancies and faithfully make returns of the same to this Office.

You will provide yourself with a good compass or theodolite, with a nonius, and two two-pole chains, each of which should be divided into fifty equal links, one to be used in the field, and the other to be kept for a standard.

Before commencing your surveys, you will adjust your compass to the variation, and all courses should be returned according to the true meridian. The townships and ranges ought to be six miles and numbered numerically, beginning at the basis lines. The boundaries of townships must be run to the cardinal points, and closed at the intersection; and at the distance of each mile from the place of beginning, a post must be set, and four trees marked with the appropriate numbers of section, township and range, in such direction from the post, that each may be within its appropriate section, &c. Equi-distant between the mile posts a half-mile post will be set; and a tree marked in each township, thus, (1-4 S.) It is intended that all errors should fall upon the last mile, which may either exceed or fall short of the required distance, but the half mile post should be set equi-distant between the corners.

Each township must be subdivided into sections, of as near as practicable one mile square, and each section have its appropriate number, beginning at the north east corner, and progressing alternately westward and eastward; and if the township be fractional the sections should still retain the numbers they would have had if the township were entire.

The survey of sections should be commenced at the mile posts on the parallel nearest to the basis lines, and the meridians should be in even miles and half miles, except the last which may be either longer or shorter, and should be closed by a corrected course to the mile post previously established on the parallel, and the half mile post must be set on the corrected line equi-distant between the corners. In like manner the parallel should be run according to a corrected course, from one mile post to the other, and the half mile post set equi-distant from the mile post on the true and established line between them.

Where the land is of sufficient value to justify the expense, all navigable water courses within a township should be traversed on both sides, and posts established and bearing trees noted and marked within each section, upon both sides of the stream, where the lines intersect it, whether they are township or sectional lines, and the distance across the water should be computed, and the measurement and corners established, as if the whole were land. In your notes of the traverse, you will be careful to note your place of beginning, and the side of the stream to which your notes refer, distinguishing them by the terms right and left bank, which should always be applied as if you were descending.

The lines must be marked in the most distinct

and durable manner upon the adjacent timber, so that they may be traced in either direction, and all trees immediately upon the line must be marked with a blaze and two chops on the part of the trunk where the line strikes and where it leaves it; and where the timber is scarce the distance to at least two trees (if there be any on each mile of the meridians) should be reported in your notes, and the description and diameter given.

Posts of sufficient size to be marked with the numbers of section, township, and range, and squared at the top, should be set at each section corner; and the course, distance, diameter, and description of one tree within each section must be reported and marked in the most legible and durable manner, with the appropriate numbers of the section, township, and range, with the initials S. T. R. to distinguish each respective number. In like manner a tree in each section adjacent to the half mile post, must be marked thus, 1-4 S. and reported in your notes.

The distance to the intersection of all water courses, marshes, swamps, prairies, or other changes in the face of the country over which the lines pass, and the course and width thereof must be carefully reported in your notes, by the accepted names of each, if their names are known; and it is expected that you will give no new names to any such objects.

You will also keep a diagram of the township connected with your notes, upon which you will make an eye draft, to represent as near as practicable the course and connection of all such objects.

In prairie countries, where bearing trees cannot be had at a convenient distance, mounds of earth covered with sod are to be erected. Before erecting the mound, about a pint of charcoal is to be deposited beneath the natural surface of the soil.

The mound for a township corner is to be four feet high, and four feet diameter at the base.— The mound for a section or quarter section corner, is to be three feet high and three feet diameter at the base. In the centre of each mound a post is to be set, constructed and marked to suit the corner which the mound denotes.

The greatest care is to be taken in levelling the chain and plumbing the pins where the face of the country is irregular and hilly, in order to obtain the horizontal distance. The oath to be taken by the chain men must specially provide for such levelling and plumbing.

The maximum of error allowed in closing the lines of a township is three chains; in closing the lines of a section eighty links, and fifty links per mile for the traverse of streams.

You will exercise strict vigilance over the conduct of your sub-agents; an oath is to be administered to them for the faithful performance of their duties, which is to be reduced to writing at the head of the field note book.

Instead of erecting mounds in a prairie country as has been the usage and custom heretofore, you will dig a pit from 20 to 24 inches in depth, with three feet diameter, and plant a charred post in the centre, having the earth from the pit thrown within the Township; you are surveying, into one place, and both bearing and distance from the station, given in your notes, in every instance; the top of the stake to be on a level with the surrounding surface.

*All surveys to be executed by the Contractors in person, no work performed by Sub-Contractors will be received or acknowledged by the Office -
- Duplicate Plans of all Private Claims surveyed, will be required of Contractors with returns of work to the Office.
A Book of Field Notes for each Township, say about 5 by 7 1/2 inches in size. Each Contractor to sign his own notes.*

GENERAL INSTRUCTIONS

TO

U. S. DEPUTY SURVEYORS.

FOR THE LAND DISTRICT OF LOUISIANA.

You will provide yourself with a good compass or theodolite, with a nonius, and two two-pole chains, each of which should be divided into fifty equal links, one to be used in the field, and the other to be kept for a standard.

Before commencing your surveys, you will adjust your compass to the variation, and all courses should be returned according to the true meridian. The townships ~~and courses~~ ought to be six miles ~~and numbered~~ ^{annually}, beginning at the basis lines. The boundaries of townships must be run to the cardinal points, and closed at the intersection; and at the distance of each mile from the place of beginning, a post must be set, ~~and~~

two

~~four~~ trees marked with the appropriate numbers of section, township and range, in such direction from the post, that each may be within its appropriate section, &c. Equidistant between the mile posts, a half-mile post will be set, and a tree marked in each township, thus, (1-4 S.) It is intended that all errors should fall upon the last mile, which may either exceed or fall short of the required distance, but the half mile post should be set equidistant between the corners.

Each township must be subdivided into sections, of as near as practicable one mile square, and each section have its appropriate number, beginning at the north east corner, and progressing alternately westward and eastward; and if the township be fractional the sections should still retain the numbers they would have had if the township were entire.

The survey of sections should be commenced at the mile posts on the parallel nearest to the basis lines, and the meridians should be in even miles, and half miles except the last which may be either longer or shorter, and should be closed by a corrected course to the mile post previously established on the parallel, and the half-mile post must be set on the corrected line equidistant between the corners. In like manner the parallel should be run according to a corrected course, from one mile post to the other, and the half-mile post set equidistant from the mile post on the true and established line between them.

Where the land is of sufficient value to justify the expense, all navigable water courses within a township should be traversed on both sides, and posts established and bearing trees noted and marked within each section, upon both sides of the stream, where the lines intersect it, whether they are townships or sectional lines, and the distance across the water should be computed, and the measurement and corners established, as if the whole were land. In your notes of the traverse, you will be careful to note your place of beginning, and the side of the stream to which your notes refer, distinguishing them by the terms right and left bank, which should always be applied as if you were descending.

The lines must be marked in the most distinct and durable manner upon the adjacent timber, so that they may be traced in either direction, and all trees immediately upon the line must be marked with a blaze and two chops on the part of the trunk where the line strikes and where it leaves it; and where the timber is scarce the distance to at least two trees (if there be any on each mile of the meridians) should be reported in your notes, and the description and diameter given.

Posts of sufficient size to be marked with the numbers of section, township, and range,

and squared at the top, should be set at each section corner; and the course, distance, diameter, and description of one tree within each section must be reported and marked in the most legible and durable manner with the appropriate numbers of the section, township, and range, with the initials S. T. R. to distinguish each respective number. In like manner a tree in each section adjacent to the half mile post, must be marked thus, 1-4 S. and reported in your notes.

The distance to the intersection of all water courses, marshes, swamps, prairies, or other changes in the face of the country over which the lines pass, and the course and width thereof must be carefully reported in your notes, by the accepted names of each, if their names are known; and it is expected that you will give no new names to any such objects.

You will also keep a diagram of the township connected with your notes, upon which you will make an eye draft, to represent as near as practicable the course and connection of all such objects.

Instead of erecting mounds in a prairie country as has been the usage and custom heretofore, you will dig a pit from 20 to 24 inches in depth, with three feet diameter, and plant a charred post in the middle, having the earth from the pit thrown, within the townships you are surveying, into one place, and both bearing and distance from the stake given in your note, in every instance; the top of the stake to be on a level with the surrounding surface.

Duplicates plans of all private claims surveyed, will be required of Contractors with returns of work to the office.

A book of field notes for each township, say about 5½ by 7½ inches in size.

Each Contractor to sign his own notes.

On presentation in future of returns to this office, Contractors will be required to make oath that they have actually surveyed, measured and marked all the lines as set forth in their field notes.

To whatever previous surveys you may find necessary in the pursuance of your duties, to make connections, you will be careful to notice any and all discrepancies and faithfully make returns of the same to this office.

You are also required to note in your field books all tracts of land, on which Live Oak or other valuable timber for naval purposes, may be found within twenty miles of any navigable water.

All surveys to be executed by the Contractor in person, no work performed by Sub-Contractors will be received or acknowledged by the office, unless special instructions therefor are given by the Surveyor General.

The greatest care to be taken in levelling the chain and plumbing the pins where the face of the country is irregular and hilly, in order to obtain the horizontal distance. The oath to be taken by the chainmen must specially provide for such levelling and plumbing.

The maximum of error allowed in closing the lines of a township is three chains; in closing the lines of a section eighty links, and fifty links per mile for the traverse of streams.

You will exercise strict vigilance over the conduct of your sub-agents; an oath is to be administered to them for the faithful performance of their duties, which is to be reduced to writing at the head of the field note book.

H. Harzouly
F. Gu Du

GENERAL INSTRUCTIONS

TO

U. S. DEPUTY SURVEYORS.

FOR THE DISTRICT OF LOUISIANA.

You will provide yourself with a good Compass or Theodolite, with a nonius, and two two-pole chains, each of which should be divided into fifty equal links, one to be used in the field, and the other to be kept as a Standard.

Before commencing your surveys, you will adjust your compass to the variation, and all courses, should be returned according to the true meridian. The townships and ranges ought to be six miles and numbered progressively, beginning at the basis lines.

The boundaries of townships must be run to the cardinal points, and closed at the intersection; and at the distance of each mile from the beginning, a post must be set, and four trees marked with the appropriate numbers of section, townships and range, in such direction from the post, that each may be within its appropriate section, &c. Equi-distant between the mile posts, a half-mile post will be set, and a tree marked in each township, thus, (I. 4 S.) It is intended that all errors should fall upon the last mile, which may be either exceed or fall short of the required distance, but the half mile post should be set equi-distant between the corners.

Each township must be subdivided into sections, as nearly as practicable one mile square, and each section have its appropriate number, beginning at the North East corner, and progressing alternately westward and eastward; and if the township be fractional the sections should still retain the numbers they would have had if the township were entire.

The survey of sections should be commenced at the mile posts on the parallel nearest to the basis lines, and the meridians should be in even miles, and half miles except the last which may be either longer or shorter, and should be closed by a corrected course to the mile post previously established on the parallel, and the half-mile post must be set on the corrected line equi-distant between the corners. In like manner the parallels should be run according to a corrected course, from one mile post to the other, and the half-mile post be set equi-distant from the mile posts on the true and established line between them.

Where the land is of sufficient value to justify the expense, all navigable water courses within a township should be traversed on both sides, and posts established and bearing trees noted and marked with each section, upon both sides of the stream, where the township or sectional lines intersect it, and the distance across the stream should be computed, and the measurement and corners be established as if the whole were land. In your notes of the traverses, you will be careful to note your place of beginning, and the side of the stream to which your notes refer distinguishing them by the terms right and left bank, which should always be applied as if you were descending.

The township lines will be first run; and in resurveys whenever the old lines and corners can be found, they will invariably be adopted and remarked, making the necessary corrections in the field notes, and remarking the mile and half mile posts and trees, where they can be found, and establishing new ones when the old ones cannot be found.

After the township lines are correctly established, the confirmed Private claims will be surveyed, and connected to the lines and corners of the township and section.

After the Private Claims are surveyed the section lines must be run, and in resurvey, be retraced and remarked wherever they can be found, and the old section and quarter section corners will be re-established and remarked upon the ground with the numbers properly applicable to them, according to their legal position in a regular Township, making the necessary corrections in the field notes. Where the old lines and corners cannot be found, new ones will be established. Those section lines will be surveyed until their intersection with the lines of private claims and connections will then be taken to the nearest corners of the claims. No section line will be extended through the private claims.

In surveying claims founded and confirmed upon British and Spanish complete titles, or those confirmed by the United States as complete titles, the old lines and corners marked and established on the ground by the British or Spanish Surveyors, shall be reestablished. If no lines exist, the claims will be surveyed in conformity with the courses and distances laid down on the British or Spanish plats; and if no plats exist, the quantity in the grant will be surveyed, but in these two last cases a known point of beginning must be ascertained.

In surveying claims, founded and confirmed upon incomplete titles, the same rule will apply, as for complete titles, unless the confirmatory act reduces the quantity claimed, or unless the Register and Receiver of the District have decided, or shall decide otherwise.

All confirmed claims not heretofore surveyed, will be located in strict conformity with the confirmation : and if any confliotions are found to exist between claims thus surveyed, these must be clearly defined so that they may be referred to the proper officers, for their decision, in pursuance of the 4th Section of the Act of Congress, approved May 8th 1822, and of the 6th Section of the Act of Congress approved March 3d 1831.

Each claim and the conflicting portions of claims, will be marked upon the ground and represented in your returns, by a sectional number, above that of the number *thirty six*, and claims already designated upon the maps by higher sectional numbers than thirty six, will retain them, and this number will be adopted and marked upon the ground accordingly.

At the corners of all sections of public land, at the corners of private claims, at the intersection of township and section lines with claim lines, at the intersection of claim lines with other claim lines; each section, public or private, will be marked upon the ground with its legal or adopted sectional number, in the manner indicated below.

The general rules for the Survey of confirmed claims founded upon complete titles, derived from the former Governments in Louisiana, are the following :

1st. Whenever the old lines and corners established in the original survey can be found, they will be adopted.

2nd. When no old lines, nor corners exist, then the courses and distances on the original plat of survey will be adopted, provided a known point of beginning can be ascertained.

3rd. When no lines, nor corners, nor plat of the original survey exist, then the area in the grant or other title paper will be surveyed, provided a known point can be ascertained.

4th. Claims confirmed under incomplete title, will be surveyed in accordance with the calls of the confirmation, and if any original plat has been filed as the basis of the claim, it will be followed at least so far, as to show the place of location, and if no injury be caused to others, it will be strictly followed, provided it be not contrary to the confirmation.

In cases where claims vary considerably from the original calls, in position, course and distance, or in area, they had better be referred to this office, for special examination and instructions.

The lines must be marked in the most distinct and durable manner, upon the adjacent timber, with a blaze and two chops on the side next the line, so that they may be traced in either direction, and all trees immediately upon the line must be marked with a blaze and three chops on the part of the trunk where the line strikes and where it leaves it.

Posts of sufficient size to be marked with the numbers of Section, Township and Range, and squarred at the top, should be set at each Section Corner, whether of public lands or private claims, and the course, distance, diameter and description of one tree, within each section, must be reported and marked in the most legible and durable manner, with the appropriate number of the section, township and range, with the initials S. T. R. to distinguish each respective number. In like manner a tree, in each section adjacent to the half mile post, must be marked thus, 1-4. S., and reported in your notes. In addition all bearing trees must be marked with the letters B. T.

The distance to the intersection of all water courses, marshes, swamps, prairies, or other changes in the face of the country over which the lines pass, and the course and width thereof must be carefully reported in your notes, by the accepted names of each, if their names are known; and it is expected that you will give no new names to any such objects.

You will also keep a diagram of the township connected with your notes, upon which you will make an eye draft to represent as near as practicable the course and connection of all such objects.

You will dig a pit of about 18 inches in depth and 36 inches in diameter, and in the center you will plant a charred post, the top of which must be on a level with the surrounding surface, or you may plant a post of proper dimensions and underneath or close to it, you will deposit about a quart of charcoal, so that in case the post should decay, the charcoal would designate the corner point. The post in both these cases should be marked with the number of the township and range as in ordinary manner.

Around the post and pit, you will dig a quadrangular trench, the angles of which, at corners common to four townships, or to four sections, must be directed towards the cardinal points ; but at corners common only to two townships or to two sections, the sides of the quadrangular trench will face the cardinal points. The length of the sides of the trench at township corners must be *six feet*, and at section, quarter section, and traverse corners *five feet*.

The trench is to be formed by spading out *wedges* of earth by single operations of the spade, along the sides of the quadrangle, while facing the same, and the earth should be thrown upon the outer edge of the trench, so as to form an elevated border.

The sides of the trench should be neatly and smoothly cut, so that the adjacent earth would not tumble into it and fill it up.

The construction of the trench above mentioned will not be required at the corners of claims, or at connections, or intersection corners.

To whatever previous surveys you may find necessary in the pursuance of your duties, to made connections, you will be careful to notice any and all discrepancies and faithfully make returns of the same to this office.

You will note in your Field Books, all tracts of land on which Live Oak,

Red Cedar, and Long Leaf Yellow Pine fit for naval purposes, may be found within the reach of navigation.

Surveyors will note the situation and extent of all swamp, wet and overflowed lands, *unfit for cultivation*, which have been granted to the State of Louisiana, by Acts of Congress, approved 2nd March 1849, and 28th September 1850.

Surveyors will also note all ancient mounds, earth works, &c., in their returns.

All surveys to be executed by the contractor in person. No work performed by sub-contractors will be received or acknowledged by the office, unless special instructions therefor are given by the Surveyor General.

The greatest care to be taken in levelling the chain and plumbing the pins, where the face of the country is irregular and hilly in order to obtain the horizontal distance. The oath to be taken by the chainmen must specially provide for such levelling and plumbing.

The maximum of error allowed in closing the lines of a township is three chains; in closing the lines of a section eighty links, and fifty links per mile for the traverse of streams.

You will exercise strict vigilance over the conduct of your sub-agents: an oath is to be administered to them for the faithful performance of their duties, which is to be reduced to writing at the head of the Field Note Book, and must be taken before a magistrate or other person authorized to administer oaths.

The field notes returned by you must be written in a neat legible manner; no erasures or interlineations must appear in them and abbreviations must be avoided as much as possible. Upon each line of a survey mention must be made, whether or not the old lines have been retraced, and remarked, and the old corners reestablished, and when the old lines and corners have not been adopted, the reason for the change must be entirely satisfactory and must be given in your field notes.

The Township Boundaries will be written first in your Field Book of Surveys, then the private claims, following these the section lines, and lastly the traverse of streams in front of the public lands. Immediately following the field notes of each township line, of each private claim, and of the section lines and traverse, must be stated the exact date, when each of said lines was surveyed. The field notes will be signed by you in your official capacity, and you must give the names of the assistants who have been employed by you upon the surveys.

Your attention is called to the second Section of an Act of Congress approved 8th August 1846, entitled: *An Act to equalise the compensation of the Surveyors General of the public lands of the United States and for other purposes*, which is as follows:—

SECT. 2. *And be it further enacted*, That the Surveyors General of the public lands of the United States, in addition to the oath now authorized by law to be administered to Deputies on their appointment to office, shall require each of their deputies, on the return of his surveys, to take and subscribe an oath or affirmation that those surveys have been faithfully and correctly executed, according to law and the instructions of the Surveyor General; and on satisfactory evidence being presented to any Court of competent jurisdiction that such surveys, or any part thereof, had not been thus executed, the deputy making such false oath or affirmation shall be deemed guilty of perjury, and shall suffer all the pains and penalties attached to that offense; and the District Attorney of the United States for the time being, in whose District any such false, erroneous or fraudulent surveys shall have been executed, shall upon the application of the proper Surveyor General, immediately institute suit upon the bond of such deputy; and the institution of such suit shall act as a lien upon any property owned or held by such deputy, or his surties, at the time such suit was instituted. Approved August 8th 1846.

The following form of oath under the above enactment has been adopted by this office, and will be required in every instance of survey either of private claims or work under a contract. In returns of work under contract, the oath will be placed in the book of field notes, and in cases of private claims, or separate surveys, of whatever nature, on the back of the plat.

Form of Oath.

I, _____, Deputy surveyor, do solemnly swear (or affirm) that in pursuance of a contract with (instructions or order of survey from) _____ (late) Surveyor General of Public Lands for the State of Louisiana dated the _____ day of _____ and in strict conformity with the laws of the United States, and instructions of the Surveyor General, I have faithfully and correctly executed the surveys of all the lines, herein noted, of public lands and private claims in Township (or Fractional Township) N^o _____, of Range N^o _____, in the State of Louisiana, (in case of an order of survey, or instructions for any separate survey, insert the description, as name of confirmee, N^o of Report &c.) and I do further swear, (or affirm) that the foregoing (or within) are the true field notes of said survey, executed as aforesaid.

Office of Surveyor General,
District of Louisiana,
New Orleans, August 30th 1873.

Hon Willis Drummond,
Commissioner of Genl Land Office,
Washington, D. C.

Sir:

I have the honor to submit, in duplicate, my annual report of the surveying service in this district for the fiscal year ending June 30th 1873, accompanied by the following enumeration of Tabular statements - to wit -

A.

Surveying contracts entered into by the Surveyor Genl of Louisiana on account of appropriations for the fiscal years ending June 30th 1871, and June 30th 1872, not reported as completed in the statements of previous years.

B.

Surveying contracts entered into by the Surveyor General of Louisiana on account of appropriations for the fiscal year ending June 30th 1873 -

C.

Surveys, and re-surveys, proposed to be made during the fiscal year ending June 30th 1875 in the State of Louisiana, at rates not to exceed twelve dollars (\$12.00) for township boundaries, and ten dollars (\$10.00) for all other lines per mile -

D.

Estimate of funds to be appropriated for the fiscal year ending June 30th 1875, for surveying in Louisiana, for compensation of Surveyor General, and his clerks, and for contingent expenses in his office -

E.

Account of Appropriations for the Salary of Surveyor General of Louisiana, and for Clerks in his office, for the fiscal year ending June 30th 1870 -

F.

Account of Appropriations for incidental expenses of the Office of Surveyor General of Louisiana for the fiscal year ending June 30th 1873 -

G.

Tabular Statement of the Reports made by the officers under Congressional appointments, for the final adjustment of Private Land Claims in the State of Louisiana -

H.

Statement showing the appropriations for Salary, clerk hire, incidental expenses, and for survey of public lands in Louisiana, from the year 1844 to 1874 -

These tables exhibit the progress of the public surveys during the period embraced by this report, explain

the condition of all surveying contracts in force at the close of the last fiscal year, the present attitude of subsequent contracts, and account, fully, for all the disbursements of appropriations granted this office for the prosecution of field surveys, and for clerical services; exhibiting, also, a statement of the surveys proposed to be made during the next fiscal year, and the usual estimates therefor. —

Field Work.

During the first, second, and third quarters of the past fiscal year, the season for field operations was favorable, and the execution of contracts progressed satisfactorily; but, since the first of April last, extraordinary rains have seriously retarded field work, compelling the deputies to suspend their labors, an extension of time has been granted most of them with the hope that, during the coming fall, all surveying contracts, now in force, will be completed. —

Office Work.

The regular, and miscellaneous, work of this office has been unusually large for the limited force employed, and, to prevent an accumulation which would have unavoidably occurred, an extension of the usual business hours established by custom, or prescribed by law, has been required of the clerks of this office; extra clerks, also, have been employed, and, with your sanction, paid from the appropriation for contingent expenses; furthermore, I have been compelled to have regular office work performed at my own personal expense. —

The "Exhibit of Private Land Claims" in this State has been found to be a labor of greater magnitude than was at first reported, still, good progress has been made in this most desirable and important work, and that part of it, relating to the Greensburg District, has advanced nearly to completion. —

There have been issued during this fiscal year, under the Act of June 2, 1808, sixty three (63) certificates of locations, but, since the receipt of your instructions of August 26, 1842, requiring additional evidence of confirmation, and a more thorough investigation into the merits of the claims themselves, and owing also, to the encroachments of others, and more pressing duties, this work has been suspended, and, as yet, had not been resumed. —

In order that you may fully comprehend the present condition of the public surveys in this State, and the necessity, existing, for the estimates herewith submitted, it is thought proper to take a brief retrospect, in as condensed a manner as possible, of the early surveys. —

Retrospect

The Territory of Louisiana was ceded by France to the United States under the treaty of April 30, 1803, and, with the exception of the West Florida parishes occupied a few years later, from

possessions, under the provisions of the Act of Congress approved October 31st 1803, was taken by the American Government on the 20th of December of the same year.

Division of the Territory.

By the Act of Congress approved March 26th 1804, the territory, thus acquired, was divided as follows - that portion of the Cession lying South of the Mississippi Territory, and of an east and west line commencing on the Mississippi river at the 33rd degree of north latitude, and extending West to the boundary of the said Cession, was to constitute one division under the name of the "Territory of Orleans," now known as the State of Louisiana, the remaining portion of the Cession, lying to the north, and north-West, of the first division, was designated as the "District, or Territory of Louisiana" -

Surveying District.

By several Congressional enactments, following closely upon this act of Cession, the Territory of Orleans became attached to the Surveying district of the "Surveyor of public lands South of the Tennessee," who was instructed to cause such public lands, therein situated, as the President should direct, to be surveyed and divided as correctly as the nature of the country would admit, in the same manner, and under the same legal requirements, as were applicable to the other public domain of the Country.

Land Districts

By the same Acts the Territory of Orleans was divided into two Land Districts. That portion of the territory lying east of the river Atchafalaya, and Grand Lake, including the Island of New Orleans, was designated as the "Eastern," now known as the "South Eastern District," with Land Office at New Orleans, the remainder was designated as the "Western District," with the Land Office at Opelousas; this latter has since been subdivided into the South Western, North of Red River, and North Western, Districts -

The old Eastern and Western Districts were each provided with a board of Commissioners empowered to examine, and decide, upon all claims to land, the titles to which emanated from Governments previously holding sovereignty over the territory, and with a principal deputy Surveyor, to have charge of the Surveys in his district, with directions to report to the Surveyor south of Tennessee. -

Instructions

Liberal appropriations were placed at the disposal of the said surveyor of public lands, accompanied by instructions to cause, in the first place, the survey of the 33rd of north latitude, the meander of certain rivers, to locate the eleven thousand five hundred and twenty acres of land granted by Congress to General

Lafayette, and by observations, and explorations, to prepare and perfect a comprehensive plan for the general survey of the public lands of the territory, and, before the close of the year 1806, such a plan was matured and adopted.

Further Instructions.

The following extract from a letter dated May 8th 1806, written by the Hon. Albert Gallatin, then Secretary of the Treasury, to Isaac Briggs, Surveyor of public lands south of Tennessee, explains the reasons which actuated the Government at that date in hastening the survey and sale of public lands in the territory.

Extract.

"You will use every possible endeavor to have as much of the public lands in the Western District of the territory of Orleans surveyed during this year, as is practicable; it is the wish of the legislature that the public lands in that quarter should be offered for sale, and I will add, that that object is intimately connected with the welfare, and even the safety of that newly acquired territory; for it is this only portion where any great increase of American population can take place, and I need not comment on the importance of this object; it may indeed, in this instance, be found necessary to sacrifice the scientific correctness which would otherwise be desirable, to the dispatch, which is indispensably necessary."

Plan of Survey.

The plan of survey adopted, was to extend the 31st of latitude, or, as it was called, "the line of demarcation," which was established by treaty between the United States and Spain of the 27th of October 1795, as the boundary between the Mississippi territory, and Spanish province, across the Mississippi river, and thence, due West, to the Sabines, as a base line from which surveys should be made; at the same time a Meridian line was to be established, extending from the Red river to the sea, running sufficiently to the West of the Mississippi to avoid its inundations, and, at first, Natchitoches, or The Rapids were suggested as eligible initial points; finally, however it was decided to run the base line from the eastern bank of the Mississippi river, due West, on the true 31st of latitude forty eight miles, or eight ranges of townships, and there establish an initial point from which the Basis Meridia should be extended due North, to the 33rd of latitude, and due South, to the Gulf, and then, as rapidly as possible, to cause the public domain to be subdivided.

Contractors.

The survey of the base line was intrusted to John Linn, a deputy surveyor, who commenced his labors towards

the close of the year 1806, and completed, early in 1807, 84 miles of his contract, to a point 36 miles west of the intersection of the meridian, to a stream supposed by him to be the Sabine river, but which was afterwards ascertained to be the Rio Hondo, or Calcasieu.

For the survey of the Basis Meridian, a contract was made with Thomas Owings, another deputy surveyor, and for the survey and subdivision of all the townships West of that line, to the meridian of Katchitoches, 5 ranges of townships, and east of it to the river Atchafalaya, there were employed 18 deputies, who, during the year 1807, completed the survey of more than one hundred townships in the Western District, alone.

Erroneous Surveys.

These extensive surveys had not proceeded far, before it became apparent that grave, and reprehensible, errors had been committed by both Cook, and Owings, in running their respective lines; the unintentional latitude expressed in the last clause of Mr. Gallatin's letter, had been most audaciously perverted, and not only "scientific correctness," but the most ordinary rules of compass surveying, had been sacrificed to accomplish a field survey so hurried, and superficial, that an accurate representation of the Country in township Maps was delayed for many years, and, in fact, has not been fully accomplished to this day; indeed, so glaring were these discrepancies, that, before the township maps could, with any degree of correctness, be protracted from the Surveyor's notes, it was deemed necessary to retrace, or run anew, these fundamental lines; in doing which, Cook's base line, from the initial point east to the Mississippi river, was discarded, and a new line run, and adopted, as the Basis Parallel.

This line commenced at Cook's initial point, and extended, eastward, to the Mississippi river terminating at a point 27 miles, and a few chains from the initial point, and more than 1200 yards to the north of Cook's place of beginning on the 31st of latitude.

The line west of the initial point, which was retraced, and reestablished, was found to be a zigzag, incongruous line, which, in 36 miles, had gained to the north over 600 yards.

Now was the original survey of the Basis Meridian by Owings, worthy of much more confidence; on the contrary, it betrayed nearly the same want of accuracy, and precision, as had marked the labors of Cook.

In the 66 miles resurveyed the following year, there was found to be an excess of 50 chains over the proper distance; fortunately, however, at its considerable variance from the true meridian.

The Results.

The consequences of these erroneous surveys are as severely felt in the surveying service to day, as at the time of which we speak, for, although the objectionable character of their principal lines was so early known, yet, as extensive and important surveys had been based upon them, at great expense to the Government, it was deemed necessary, whenever it was reasonably practicable, to re-establish these erroneous lines, and, with the omission of accurate connections, with all possible celerity to draft separate township maps from surveys already made, so that no delay should ensue in bringing the lands into market, hence, further corrections were not attempted, but the notes that had been returned were, to some extent, so amended as to conform, partially, to the corrections made on the principal lines, and, by this method, a continuation of the public surveys was uninterrupted.

This plan was carried into effect, and the surveys of public lands over the Western district, including what was afterwards the 'South Western', and 'North Western' Districts, and the 'District North of Red River', especially of such lands, there in, as were regarded as the most valuable were rapidly extended.

Eastern District.

In this district considerations of a different nature affected the early surveys; the country was, mostly, low alluvial, liable to the inundation of the Mississippi river, and, with the exception of the narrow ridges along the streams, where settlements existed, covered with a luxuriant vegetation, and an almost impenetrable undergrowth, interspersed, too, with soft and boggy quagmires, or cut up with deep and turbid bayous, whose waters were alive, and swarming, with reptiles hideous to the sight, and venomous in their nature. Nor was this all; it was claimed by conflicting, and interfering, concessions, held, frequently, by parties inimical and hostile, to the government recently in possession; and as the maximum rate per mile, established by law, for compensation of surveyors, was the same as in the upland portions of the State, where surveys could be executed with less expense and for less exposure, it was found exceedingly difficult to induce competent surveyors to contract, and, with the exception of extending a few township boundaries on the west side of the Mississippi river, and the lines of some private claims, but little surveying was done in this district until the adoption of the system authorized by Act of Congress 24th 1824, of surveying irregular sections, or lots of eighty acres, each having a front equal to two acres on a stream of water, by a uniform depth of forty acres.

Under the provisions of this Act, nearly all the pub

lands bordering upon any water course, including some that had already been surveyed under the rectangular system, and lands that were held and owned as private claims, were subdivided into lots; these surveys, however, like those to which we have previously referred, were conducted in a manner so hurried, and hasty, that the surveyors omitted, in almost every instance, to connect their lines with the township boundaries —

Land Claims

Following the cession by France to the United States, Congress, in a liberal spirit, and anxious to preserve the national faith, adopted various provisions for the confirmation of titles to land; and not only titles perfect in themselves, but that class of incomplete titles known by the names of Riquettes, Orders of Survey, Permissions to settle, Surveyors Plats or Certificates, as well as other written evidences derived from foreign powers previously holding sovereignty, were, when properly authenticated, confirmed; and, beyond this, persons who had, at the time of the cession, occupied or cultivated tracts of land, or those who had purchased settlement rights, were confirmed in their possessions in the same manner as would have been the case under the laws and usages of former governments —

These legislative provisions for the final adjustment of private land claims in Louisiana continued to be extended, and re-enacted, from time to time, and, under the Act of June 10th 1872, are still in force. —

By virtue of these enactments, for several years subsequent to the time when the Land Commissioners commenced their investigations, the attention and labors of the officers of this surveying district were directed, principally, to the location of these private claims, under orders from the Land Commissioners, and their successors, the Register and Receiver of the Land Office. —

Survey of Claims.

Private Claims were generally surveyed as distinct, separate tracts; and, as the claimants, at least for several years, were required to pay for such service, they felt no obligation to have their lines connected with those established by public, or other surveys. —

In the meantime, as the investigations of the Commissioners continued, the fact was developed that larger portions of the territory were held by individuals than was originally imagined, thus, much of the land that had previously been surveyed as public, was found to be covered by private claims, and that these claims, frequently not only conflicted and interfered with each other, but, also, with public lands which the government, in good faith, had surveyed and sold; producing inevitably

disputes, dissatisfactions, and disorders, which the land offices at that time were unable to reconcile.

The following extract from the Surveyor General's report of 1846, will convey a fair idea of the condition of the surveys in these districts —

Extract

"The condition of the old surveys in the South Eastern, and South Western Districts, is a subject which demands the most serious consideration. Although, heretofore, marked on the maps as 'surveyed', not one in ten of the Townships, containing private claims, will stand the test of the most superficial office examination at the present time; so full of errors and discrepancies are they, that it is scarcely possible to take up a single separate plat of survey which will bear that kind of examination which, under present regulations, would entitle it to the official sanction of the Surveyor General."

"These errors and discrepancies have been caused by the loose, irregular, and independant, manner in which the surveys were made, the number of surveyors permitted to operate in the same townships, and the inadequate compensation allowed the officers appointed to examine the returns, which, depending, as it did, almost entirely, upon the amount of work passed through his office, would not allow him to give every separate survey that careful, mathematical, consideration which it ought to receive prior to having the approval of an officer of the Government."

Greensburg or St. Helena District

Soon after the occupation by the United States of the province of West Florida, which embraced the lands east of the Mississippi river, and the island of New Orleans, to the Rio Perdido, and northward to the 31st of North latitude, and which, until the treaty of February 22nd 1819, was claimed by the Government of Spain as a part of her domain, that portion lying west of Pearl river, was, by the acts of the 14th and 25th of April 1810, attached to the State of Louisiana, and a Land District was organized with the office at St. Helena Court House, subsequently removed to Greensburg.

A commissioner, also, was authorized and afterwards appointed, who was required to receive, classify, and report to Congress all claims to land in a manner similar to that adopted in the other districts of Louisiana, and furthermore, to report a list of actual settlers occupying lands without written evidences of title.

Report

In consequence of the war and other causes, delays occurred before the Commissioner commenced his in-

-tigation, and a complete report was not made until June 1815, which was submitted to Congress on the 3^d of Jan'y. 1816. —

It embraced ten hundred and twenty four claims derived from the French, Spanish and British authorities, and a list of twelve hundred and thirty four actual settlers.

This report was not acted upon by Congress until the 3^d of March 1819, when an Act was passed confirming the claims derived from the previous Government, under certain limitations, and confirming to the actual settlers a donation not to exceed six hundred and forty acres of land each, provided the settlements were made prior to April 15th 1813, granting, also preemption rights to those who had made their settlements at a later date. —

By the same Act, the time for filing claims to land was extended, and, by subsequent acts, re-extended, and the Register and Receiver of the Land Office were invested with the powers, and required to perform the duties, formerly imposed upon the Commissioner. —

These officers made several reports; for their dates, the number of claims reported, the Acts of Congress confirming the same, and relative information, reference is made to tabular statement "G," submitted herewith. —

Register & Receiver

The Act of May 5th 1812 required these officers to direct the manner in which all confirmed claims should be located and surveyed, specifying that they should be guided by the laws, usages, and customs, of the Spanish government. —

It appears that, at this time, and for several years subsequently, much difficulty was experienced in securing for these places, competent officers who would, for the limited remuneration allowed by law, perform the required duties; and the inevitable confusion resulting from a frequent change of officers, and the disorderly condition of the records, occasioned embarrassment, and delays, in obtaining the evidence requisite for the proper location of these claims. —

By the said Acts of 1812, the powers vested in the Surveyor of public lands south of Tennessee were extended over this section of Country, and a principal deputy surveyor, residing therein, was appointed, with instructions to extend the lines of public surveys over this district. —

Principal Lines.

The line of Demarcation was taken for the base. This line was originally surveyed, several years prior to this time, by Andrew Elcot Esq, who ran his line east

from the Mississippi river, and erected his posts at the end of every mile; the first 31 miles were run with a transit instrument, but the remainder of the line, from the 31st mile post to Pearl river, was run with a compass, and the guide line, only, was marked; at the latter point Elicott ascertained, by astronomical observations, that he had erred, northward, about 70 yards, and continuing to the Mobile river, by a second observation, he discovered that he had gained to the North 2847 yards, returning, he removed the mile posts to the true line.

In the meantime, before Congress acted on the Commissioners reports, the government, importuned by the new settlers, urged the surveyor south of Tennessee to prosecute, with expedition, the public surveys; therefore, with the base line as stated, an independent meridian running south from the thirtieth mile post was extended, and about the year 1820 the surveying of the district into townships, sections, and subdivisions of sections, was commenced, conformably to the general provisions of law respecting the survey of public lands.

Complications

Several surveyors were sent to the fields, some commenced from Elicott's tree, and others from the guide lines, and thus, in a short time, confusion and occasional differences were discovered, complications followed of a more serious character; a want of harmony developed between the operations of the surveyors, and those of the officers of the land district, for, while the former were subdividing the land into public sections, or, from their meagre information of the extent and correct location of the boundaries of private property, were locating private claims on land actually public, and constructing and distributing maps intrinsically erroneous, the latter, acting under general instructions and pressed by reason of the wants of an increasing emigration, were throwing these lands, without reserve, upon the market, and, at the same time, acting under their special instructions as Commissioners for adjusting Land Claims, were issuing Orders of Survey, and directions to deputy surveyors, to locate the private Land Claims according to the laws, usages, and customs, of the Spanish Government.

A more intelligible idea of the inherent defects of these usages and laws cannot, perhaps, be given than is to be found in the language of one of our most experienced Surveyors of the States—

"It was the general custom of the surveyors employed by the French or Spanish Governments, in locating tracts in the province of Louisiana, having a depth of forty arpens, merely survey the fronts of such tracts, and to indicate the courses of the side lines by planting bournes, or posts, at equal intervals from each other, and at short distances from the river, without actually running and measuring the full depth of said side lines, and without closing the survey by run-

the rear line between the extremities of such side lines, and what in tracts having greater depth than forty arpents, or a depth extending to another river, lake, or other natural boundary, it was their custom, invariably followed as far as I can ascertain after careful examination, to measure to the forty arpent points on such side lines, and thence, at short distances therefrom, to establish bournes, or posts, to exhibit the prolongation of the side boundaries:—

This mode of surveying claims was adopted by the deputies acting under explicit instructions of the Register and Receiver, of course, no connections with township boundaries, or any lines already established were made, nor, even did they join their claim lines, but separate plats of each survey were made and returned, as in other districts.

The Neutral Territory.

Until the treaty of 1809, no definite line had been agreed upon as the boundary between the United States, and the Spanish province of Mexico, but, by this treaty, the strip of country known at that time as "neutral territory" lying between the Sabine River and Red River, nearly as far down as Natchitoches, and the Rio Grande & Calcasieu rivers to the Gulf was admitted to be a part of Louisiana.—

In the year 1800 the survey of this late neutral territory was commenced. The Paris parallel was extended to the Sabine river, but whether or not an accurate connection was made with Cooks terminus on that line, cannot now be determined from the field notes, the presumption, however is that the survey was commenced at the 36 mile post as reestablished in the survey of Cooks line.—

From the 36 mile post west on the said base line, a guide meridian was extended, due south, to the line of sea marsh, and from these lines the townships were laid off and subdivided, westward, to the Sabine, and, eastward, one range of townships, to the supposed western border of the surveys of 1804, before mentioned.—

Owing to the errors and omissions in the first surveys, and the failure of these later surveys with few exceptions, to identify the old boundaries, it is known that these later surveys, in some instances, overlapped the earlier ones, causing interferences, and conflicts, which have not yet been adjusted.—

Surveys on the Coast.

It will be observed, that the surveys herebefore mentioned, were mainly confined to the upland portion of the state, and the strips, or ridges, fronting on the water courses.

At a later period it was found necessary to connect these together, by extending township lines, and traversing the Gulf coast.—

The great difficulty in securing competent surveyors to extend township lines was not surmounted for several years.

but contracts were made for surveying the coast line, and the subdivision of the townships bordering the coast.

In doing this for the South Western district, instead of extending the principal meridian south from the point where the first surveyors ceased their work at the line of the sea march, to the margin of the Gulf, and then continuing their surveys, east and west of the meridian, they began at the mouth of the Atchafalaya river, in range 11 east, and ran west establishing township corners at every six miles, and made subdivisions accordingly.

The first surveyor in working south, had taken into consideration the divergence of the lines of the true meridian, and between the 31° & 30° north latitude, had increased the south boundary of ^{each} township over its corresponding north boundary, forty two links, dividing the excess on each subdivision, therefore the south boundary of township N^o 12 south - about the place at which they discontinued their surveys - was at least five chains in excess of six full miles, resulting as is now ascertained, in an excess of seventy eight chains from the principal meridian to the Atchafalaya, and as a consequence the townships bordering on the coast are at variance with those in the interior.

The extensive belt between these surveys, which is a region of marshy prairie, interspersed with islands of extraordinary fertility, has not, with isolated exceptions, as yet been surveyed.

Act of March 5 1831.

Up to this time the public surveys of this State, were performed under the immediate direction of a principal deputy surveyor in each land district who was paid an annual salary of five hundred dollars, with small additional fees for examining and recording, if we stop, for one moment, to consider the inadequacy of such remuneration to secure the services of officers qualified to perform duties so responsible, and to reflect upon the intrinsic difficulties arising from the conflicting provisions of the laws, the pecuniaries entertained by the retiring officers of the late Government who appropriated valuable public records for private use, refusing to deliver them to their successors, and if we reflect upon the apathy of the old inhabitants, and their reluctance to furnish information of which they were the natural custodians, and shall find in these considerations, and in the fact that the surveys in each land district were made independent and not joined by extending townships, or other lines, across the dividing streams, some of the courses that produced the unfortunate, and inexplicable condition in which the survey of this State existed at the time of the passage of this Act.

By the provisions of the law of March 5 1831, the surveying district of Louisiana was organized, the office of principal deputy surveyor was abolished, and that of Surveyor General

but, by reason of a limited clerical assistance, several years elapsed before the office was put in working order, and not until after the reorganization of the General Land Office, under Act of July 2, 1836, was any progress made in solving the complex problem of harmonizing the surveys of Louisiana. Through the operations of the latter Act, a more liberal apportionment of funds was made for clerical work, and, at the same time, the maximum mileage for surveying was increased, and a system of corrective surveying was adopted. —

Resurvey, Greensburg District

After several years of fruitless effort to quiet the surveys in this district, a resurvey was found imperative, and this was authorized by Act of Congress of August 29, 1842. —

To accomplish this intricate and tedious enterprise, liberal appropriations were made which were applied, not only to the payment for such survey, but also for the salary of an assistant surveyor to superintend the field work, for clerks, draughtsmen and other incidental expenses. —

The work commenced in the year 1844 and was completed by the year 1853, and, although, owing to the great lapse of time, the loss of records, the removal from the country of interested parties, and because of vague and indefinite descriptions, a large number of confirmed private claims were not located, yet there is not, probably, in the United States a region of equal extent that is laid off with more precision, or one in which the field work is more thoroughly performed, and the maps representing the same, contain more useful and exhaustive information, than is the case in this district. —

For the accomplishment of this credible work, the Government is indebted, in a great measure, to the long experience, and conscientious devotion, of R. W. Boyd, Esq., the Surveyor General. —

Other Resurvey

During the advancement of the surveys of the St Helena district, a system of corrective surveys was inaugurated in the four other districts. —

These corrections consisted, mainly, in an extension of township boundaries, locating claims, and connecting them with the lines of the original surveys, and it was generally found that in undertaking the correction of townships where it was supposed only a few miles of surveying would be required, so many errors and conflicts existed that not only a complete resurvey of a township, was necessary, but, often, extensive errors were developed in the surrounding townships. —

To exemplify this fact I submit, herewith, two diagrams of township 19 south of range 18 east, Southwestern district, west of the river, the first is a protraction from the original

field notes as returned to the principal deputy surveyor, the second is a true representation of the survey of the same townships where the old corners were identified and re-established, and connected together by straight lines. (see diagram following report) —

In consequence of these inaccuracies and conflicts, it soon became apparent that new surveys of many portions of the Southeastern and Southwestern districts, and the district North of Red River were necessary, which, with some isolated exceptions, have been made, and, but for the suspension of this office in consequence of the late war, it is probable that the public surveys of the State would have been brought to a final conclusion several years ago, and it is but justice for me to add, that these results are largely owing to the supervision of the then Surveyor General, ^{Wm.} J. M. Cullloh Esq, whose general acquirements, and intimate acquaintance with the laws, customs, and usages of the previous governments, signally adapted him for the labors which he has with assiduity, and capacious ability performed. —

Unfinished field work.

After a careful examination of the old surveys in the Northwestern district, and Dist. North of Red River, which remained uncorrected at the time of the suspension of this office, I have become satisfied that, with the exception of a few connections of township lines across Red River, and some detached jobs, such as the survey of Lake-beds Bc, and the correction of a few irreconcilable errors, no further work is required to be performed in these districts. —

In the Southwestern district it is proposed to continue the system of correcting old ^{surveys}, and preparing new plates of those now illegible, westward to the border of the surveys of 1830 from about two ranges west from the Basis Meridian where they were, in the year 1860, and 1861 suspended, and to continue the extension of township lines across that belt of country between the border of the sea marsh, and the Gulf of Mexico, to meander the lakes, water courses, and islands therein, and to subdivide such tracts as may be found suitably adapted for inhabitation and cultivation. —

In the Southeastern district the unfinished work consists in detached jobs, isolated townships, locating confirmed claims, connecting the coast with the interior surveys, and correcting errors arising from the approval of erroneous and fraudulent surveys. —

The inherent difficulties incident to the prosecution of these surveys, necessitate an increase of the maximum rate allowed per mile for surveying, and the estimates for the following year have been based accordingly. —

The extraordinary nature of some of these detached jobs renders their execution impracticable under ordinary

methods, and it is proposed, therefore, to employ and employ on a salary, who, when not engaged in the field, can be advantageously employed in this office. —

Unfinished Office work.

Your attention has been called in previous reports to the large amount of unfinished work which must be performed, before the closing of this office, and the transfer of its records to the State authorities. — My report for 1871 shows that the transcript of field notes for more than seven hundred townships, and plats for the patenting of sixty-one hundred and eighty private claims, remained to be prepared and transmitted to the proper offices. —

Since that time no provisions having been made for this work, it remains *in statu quo*. —

The Exhibit of private land claims, before mentioned if consummated according to the plans proposed, requires the services of at least two able and competent clerks for the ensuing year. —

The estimates herewith submitted, statement "D." have been reduced to the lowest figures, commensurate with the amount of proposed work, and with the the labor that will be necessarily required in finally closing this office, which it is believed, can be accomplished by the 30th of June 1876. —

I have the honor to be

Very Respectfully

Your Obedt. Servt.

E. W. Foster

Surveyor General La.

