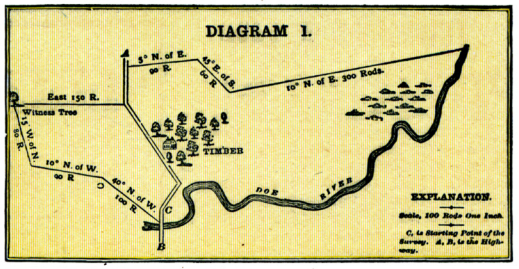
ANALYSIS OF THE SYSTEM OF UNITED STATES LAND SURVEYS

METES AND BOUNDS.

UP to the time of the Revolutionary War, or until about the beginning of the present century, land, when parcelled out, and sold or granted, was described by "Metes and Bounds," and that system is still in existence in the following States, or in those portions of them which had been sold or granted when the present plan of surveys was adopted, viz.: New York, Pennsylvania, New Jersey, Delaware, Maryland, Virginia, North and South Carolina, Georgia, Tennessee, Kentucky, Texas, and the six New England States. To describe land by "Metes and Bounds," is to have a known land-mark for a place of beginning, and then follow a line according to the compass-needle (or magnetic bearing), or the course of a stream, or track of an ancient highway. This plan has resulted in endless confusion and litigation, as land-marks decay and change, and it is a well-known fact that the compass-needle varies and does not always point due North.

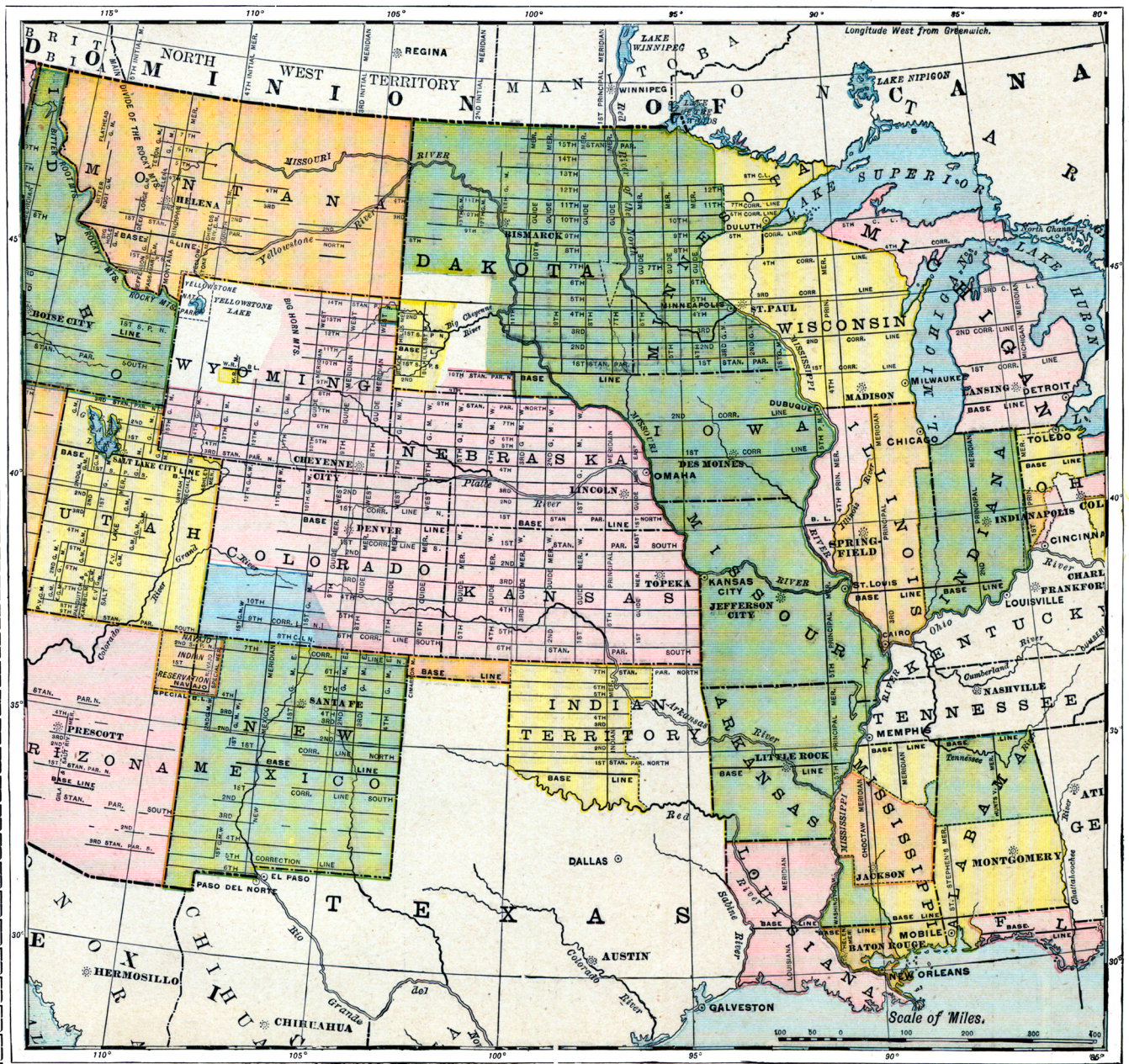
As an example of this plan of dividing lands, the following description of a farm laid out by "Metes and Bounds," is given: "Beginning at a stone on the Bank of Doe River, at a point where the highway from A. to B. crosses said river (see point marked C. on Diagram 1); thence 40° North of West 100 rods to a large stump; thence 10° North of West 90 rods; thence 15° West of North 80 rods to an oak tree (see Witness Tree on Diagram 1); thence due East 150 rods to the highway; thence following the course of the highway 50 rods due North; thence 5° North of East 90 rods; thence 45° East of South 60 rods; thence 10° North of East 300 rods to the Doe River; thence following the course of the river Southwesterly to the place of beginning." This, which is a very simple and moderate description by "Metes and Bounds," would leave the boundaries of the farm as shown in Diagram 1.

DIAGRAM 1.



MERIDIANS AND BASE LINES.

DIAGRAM 2.



THE present system of Governmental Land Surveys was adopted by Congress on the 7th of May, 1785. It has been in use ever since and is the legal method of describing and dividing lands. It is called the "Rectangular System," that is, all its distances and bearings are measured from two lines which are at right angles to each other, viz.: +. These two lines, from which the measurements are made, are the Principal Meridians, which run North and South, and the Base Lines, which run East and West. These Principal Meridians are established, with great accuracy, by astronomical observations. Each Principal Meridian has its Base Line, and these two lines form the basis or foundation for the surveys or measurement of all the lands within the territory which they control.

Diagram 2 shows all of the Principal Meridians and Base Lines in the central portion of the United States, and from it the territory governed by each Meridian and Base Line may be readily distinguished. Each Meridian and Base Line is marked with its proper number or name, as are also the Standard Parallels and guide (or auxiliary) Meridians.

Diagram 3 illustrates what is meant when this method is termed the "Rectangular System," and how the measurements are based on lines which run at right angles to each other. The heavy line running North and South (marked A. A.) represents the Principal Meridian, in this case say the 5th Principal Meridian. The heavy line running East and West (marked B. B.) is the Base Line. These lines are used as the starting points or basis of all measurements or surveys made in territory controlled by the 5th Principal Meridian. The same fact applies to all other Principal Meridians and their Base Lines. Commencing at the Principal Meridian, at intervals of six miles, lines are run North and South, parallel to the Meridian. This plan is followed both East and West of the Meridian throughout the territory controlled by the Meridian.