

LESSON XVII.

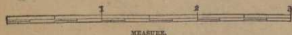
SCALE OF MAPS.

TO THE LEARNER.—In studying maps, you should endeavor to learn the size or dimensions of different countries, and how kingdoms and states differ from each other in their extent. For example, you should know whether Switzerland, in Europe, is larger or smaller than the state in which you live.

You should also learn from the maps the distances between places, the breadth of straits, channels, seas, etc. Thus, you should observe the distance between your town or city and the city of New York; the distance between New York and other large cities, etc. It would be well also to compare distances; as, whether the distance between New York and Philadelphia is greater or less than that between London and Paris, or that between Paris and Rome.

You will ask how you can learn these things from the maps. We will tell you. On each map in this book you will see it stated on what *scale* it is drawn. Some of the maps are drawn on the scale of 100 geographical miles to an inch. By this is meant that an inch on the map represents a distance of 100 miles on the earth's surface; and two cities which are an inch apart on the map are distant from each other 100 miles; if they are two inches apart, they are distant from each other 200 miles, etc. Other maps are on different scales as 300 miles to an inch, 400 miles to an inch, 600 miles to an inch, etc.

Now, if you will take an inch measure, like the one here shown, and apply it to a map, you can easily tell the distances between places. You see it is *three inches long*, and is divided into half inches and quarter inches. You should make one like it of white paper.



Below is a map with the measure placed on it. We will ask a few questions, to familiarize you with the mode of finding distances.



MEASURE APPLIED TO A MAP.

Suppose the map to be on the scale of 100 miles to an inch. What is the distance from the city to the hill? What, to the creek? What, to the canal? To the railroad crossing? To the head of the lake? To the outlet of the lake? How far is it from the head of the lake to its outlet? From the head of the lake to the brook?

Let the pupil answer the above questions, supposing the map to be on the scale of 50 miles to an inch; 25 miles to an inch; 200 miles, etc. In this way, better than any other, will he comprehend what is meant by the scales of maps.

We wish to show you next how to compare the magnitude of countries represented on maps of different scales.



MAPS OF CONNECTICUT.

You see here three maps of the State of Connecticut. The scales, on which they are drawn, are as follows:

No. 1 IS 50 MILES TO AN INCH.

No. 2 IS 100 MILES TO AN INCH.

No. 3 IS 200 MILES TO AN INCH.

You should here observe two things: First, *The greater the number of miles to an inch, the smaller is the map*; thus, No. 3, on the scale of 200 miles to an inch, is the smallest of the three maps. Second, *The map on the scale of 50 miles to an inch is more than twice as large as the one of 100 miles*; it is nearly four times as large.

It is impossible to make all maps on the same scale; but in order that you may easily learn the dimensions of countries, and compare them with other countries, we have taken the pains to draw all the maps in this book on the scale of 50 miles to an inch, 100 miles, or some other easily compared number of geographical miles.

The author would suggest to teachers the utility of frequently exercising pupils on the maps in the manner above shown. It tends, specially, to render map studies more attractive, and, generally, to increase the pupil's interest in geography.