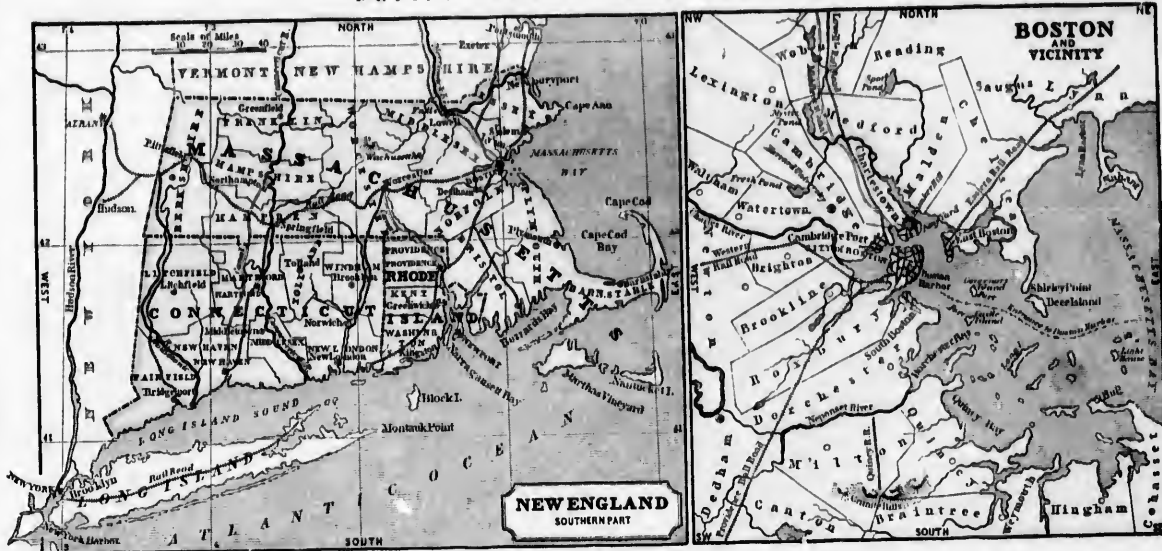




72. The magnetic needle always points North and South, except slight variations.

73. The compass is invaluable to the sailor. With the compass to guide him, he can travel with safety across the pathless ocean.

Questions.—69. What is the sensible horizon? What is the real horizon? If you were raised up so high in the air that the sensible and real horizon would be the same, what would you call the half of the globe which you could see? If you were at either of the poles, what great circle would be the real horizon? 70. What are the four cardinal points called? How is the horizon divided by the cardinal points?

71. What is a compass? How are the four cardinal points marked on the compass? What are the names of the points half way between the cardinal points? How are they marked? 72. Which way does the magnetic needle point? 73. Of what value is the compass?

VIII. MAPS.

74. A map is a representation of the earth's surface, or some part of it, on a plane.

75. In maps, the rivers, coasts, and other lines are commonly drawn as they would appear to the eye if it were at a great height in the air, directly over the centre of the country represented.

[The teacher may show how this is true in the map of the Northern hemisphere, by placing the half of an apple, representing this hemisphere, upon a flat surface, and cutting down perpendicularly on the meridians to the flat surface, the lines on which made by the knife will correspond with the meridian lines as drawn on the map of the Northern hemisphere on the seventh page. And in like manner in other maps. He may show, also, that any place (Boston, for example, or New York) would be put on such a map at the point where a needle passing through it perpendicularly would strike the flat surface.]

76. The top of the map is north; the right-hand side, east; the bottom, south; and the left-hand side, west.

NOTE.—The maps of the world on the polar projection are an exception. The central point in the map of the Northern hemisphere is north, and every direction from the centre to the circumference is south.

77. The lines drawn from the top to the bottom of the map represent meridians, or lines of longitude. The lines drawn from side to side represent parallels of latitude.

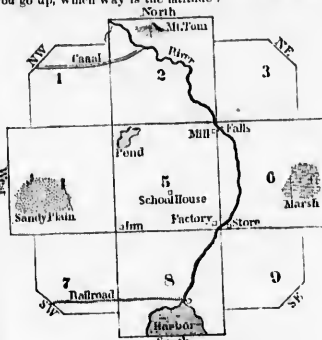
78. The figures along the top and bottom of maps denote the degrees of longitude from the principal meridian.

NOTE.—If the figures increase from left to right, the longitude is east; if from right to left, the longitude is west. In English maps, the meridian of Greenwich, near London, is commonly taken as the principal meridian.

79. The figures along the sides of the map express the degrees of latitude.

NOTE.—If the figures increase upward, the latitude is north; if downward, south.

Questions.—74. What is a map? 75. Where is the eye of the map-maker supposed to be when he is making his map? 76. Which part of the map is north? Which part, east? south? west? How is it with maps of the world on the polar projection? 77. What lines on maps represent meridians? What lines, parallels of latitude? 78. What do the figures along the top and bottom of maps denote? In which direction do the figures increase when the longitude is east? 79. What do the figures along the sides of the map denote? If the figures increase as you go up, which way is the latitude?



Map of the nine townships.

IX. POLITICAL DIVISIONS.

80. A monarchy is a government in which the sovereign power is in the hands of one person. If this power is limited by law, it is called a limited monarchy; if not, it is an absolute monarchy, or despotism.

81. An aristocracy is a government in which the supreme power is vested in a few persons, usually styled the nobility.

82. A democracy is a government in which the power is in the hands of the people collectively.

83. A republic is a state in which the power is in the hands of persons elected by the people as their representatives.

84. A kingdom is a country, usually of great extent, subject to a monarch called a king.

85. Principalities, duchies, grand-duchies, &c.,

are monarchies of small extent governed by princes, dukes, grand-dukes, &c.

86. An empire is composed of several large countries ruled by one man, called an emperor.

Questions.—80. What is a monarchy? 81. What is an aristocracy? 82. What is a democracy? 83. What is a republic? 84. What is a kingdom? 85. What is a principality? What is a duchy? 86. What is an empire?

QUESTIONS AND EXERCISES ON THE MAPS.

MAP OF THE NINE TOWNSHIPS.—Which of the townships is farthest north? Which, farthest east? Which, farthest south? Which, farthest west?

Which way from township No. 5 is township No. 2? No. 3? No. 6? No. 7? No. 8? No. 9? No. 1? No. 4? No. 1?

In what part of No. 5 is the school-house? In what part, the pond? In what part, the mill? In what part, the factory? In what part, the inn?

Which way from the school-house is Mt. Tom? Which way, the marsh? the harbor? the sandy plain?

In what direction does the river run through township No. 2? through township No. 6? through township No. 8?

How is township No. 5 bounded?

MAP OF BOSTON AND THE VICINITY.—Are there any islands on the map of Boston and vicinity? Name some of them.

Are there any peninsulas? What is Boston, an island or a peninsula? What is East Boston? Charlestown? Nahant? Are there any lakes or ponds on the map? Name some of them.

Which way from Boston is the town of Chelsea? What bays on the coast south of Boston? What river empties into Boston harbor? What river, into Dorchester bay? What hills or mountain at the point where the towns of Quincy, Braintree, and Milton meet? What railroad runs from these hills to Boston?

Which way from Boston is Charlestown? Lynn? Shirley point? Cohasset? Quincy? Dedham? Brighton? Fresh pond?

In what direction from Boston, and through what towns, does the Eastern railroad run? the Lowell railroad? the Worcester railroad? the Providence railroad? the Middlesex canal?

MAP OF NEW-ENGLAND.—What states on the north of Massachusetts? What body of water on the east? What states on the south? What state on the west?

Between what capes does Massachusetts bay set up from the ocean? What bays on the opposite sides of the peninsula of Cape Cod? What large islands south of the peninsula?

What river divides Vermont from New-Hampshire, and runs through Massachusetts and Connecticut into Long island sound? In what direction does the Connecticut run?

What counties in Massachusetts on the northern border? southern border? on the coast? Name the county towns in each of these counties? What is the capital of Massachusetts?

What are the capitals of Connecticut? of Rhode island? Which way from Boston is Albany? By what towns does the railroad from Boston to Albany pass? Which way from New-Haven is Northampton? Through what counties does the canal from New-Haven to Northampton pass? Which way from New-York to Albany? What river unites them? In what direction does the Hudson run? Which way from Boston is New-York? How far is it in a straight line?

NOTE.—The teacher may here show the pupil the answer to this last question by applying the compasses, or the edge of a sheet of paper, to the scale of miles, and measuring the distance.