

PHYSICAL CHARACTER OF THE MISSISSIPPI BASIN.

"The Valley of the Mississippi, bounded on the one hand by the Rocky Mountains, and on the other by the Alleghanies, embraces a drainage area of 1,244,000 square miles, which is more than one-half of the entire area of the United States. The Upper Mississippi Valley is composed of three subordinate basins, whose respective dimensions are as follows:

	Square miles.
The Ohio basin.....	214,000
The Upper Mississippi.....	169,000
The Missouri.....	518,000
Making a total of.....	901,000

Its navigable rivers are as follows:

	Miles.
Missouri, to near the Great Falls.....	3,150
Missouri, above Great Falls to Three Forks.....	150
Osage, to Osceola.....	200
Kansas.....	100
Big Sioux.....	75
Yellow-stone.....	800
Upper Mississippi, to St. Paul.....	658
St. Anthony, to Sauk Rapids.....	90
Above Little Falls, to Pokegama Falls.....	250
Minnesota, to Patterson's Rapids.....	295
St. Croix, to St. Croix Falls.....	60
Illinois, to La Salle.....	220
Ohio, to Pittsburgh.....	975
Monongahela, to Geneva (slack-water, 4 locks).....	91
Muskingum, to Dresden " 8 ".....	100
Green River to Bowling Green " 5 ".....	186
Kentucky, to Brooklyn " 5 ".....	117
Kanawha, to Gauley Bridge.....	100
Wabash, to Lafayette.....	335
Salt, to Shepherdsville.....	30
Sandy, to Louisa.....	25
Tennessee, to Muscle Shoals.....	600
Cumberland, to Burkesville.....	370
Total navigation.....	8,967

NOTE.—Steamboats have ascended the Des Moines to Des Moines City, Iowa River to Iowa City, Cedar River to Cedar Rapids, and the Maquoketa to Maquoketa City, but only during temporary floods.

"It would thus appear that the internal navigation of the Upper Mississippi Valley is about 9,000 miles in extent; but, during the summer months, even through the main channels, it becomes precarious, and at times is practically suspended.

"The Mississippi Valley, viewed as a whole, may be regarded as one great plain between two diverging coast ranges, elevated from 400 to 800 feet above the sea. St. Paul, the head of the navigation of the Mississippi, is 800 feet above the ocean; Pittsburgh, at the junction of the Monongahela and Alleghany, forming the Ohio, 699 feet; Lake Superior on the north, 600 feet; but the water-shed on the west, at South Pass, rises to nearly 7,500 feet.

"It is traversed by no mountain ranges, but the surface swells into hills and ridges, and is diversified by forest and prairie. Leaving out the sterile portions west of the Missouri, the soil is almost uniformly fertile, easily cultivated, and yields an abundant return. The climate is healthy and invigorating, and altogether the region is the most attractive for immigration of any portion of the earth."

By means of a *Ship Canal*, connecting with the Illinois River, the waters of the Mississippi will be united with the waters of Lake Michigan—thus forming an uninterrupted navigation for armed vessels of a large class from the Gulf of Mexico to the Gulf of St. Lawrence, forming an inland navigation of about 3,000 miles—running through the sub-tropical and temperate zones, where nature is most lavish of her gifts.

PHYSICAL CHARACTER OF THE ST. LAWRENCE.

The sources of the Mississippi on the east interlock with those of the St. Lawrence, which, with its associated lakes

and rivers, presents a system of water-communication of nearly equal extent and grandeur.