

I.—THE BASIN OF THE MISSISSIPPI AND OF CANADA. An able geologist, Mr. Edwin James, has recently shewn that this basin is comprehended between the Andes of New Mexico, or Upper Louisiana, and the chains of the Alleghanies which stretch northward in crossing the rapids of Quebec. It being quite as open northward as southward, it may be designated by the collective name of the basin of the Mississippi, the Missouri, the river St. Lawrence, the great lakes of Canada, the Mackenzie river, the Saskatchewan, and the coast of Hudson's Bay. The tributary streams of the lakes and those of the Mississippi are not separated by a chain of mountains running from east to west, as traced on several maps; the line of partition of the waters is marked by a slight ridge, a rising of two counter-slopes in the plain. There is no chain between the sources of the Missouri and the Assineboine, which is a branch of the Red River and of Hudson's Bay. The surface of these plains, almost all savannah, between the polar sea and the gulf of Mexico, is more than 270,000 square sea leagues, nearly equal to the area of the whole of Europe. On the north of the parallel of 42° , the general slope of the land runs eastward; on the south of that parallel, it inclines southward. To form a precise idea how little abrupt are these slopes we must recollect that the level of Lake Superior is 100 toises; that of Lake Erie, 88 toises, and that of Lake Ontario, 36 toises above the level of the sea. The plains around Cincinnati (lat. $39^{\circ} 6'$), are scarcely, according to Mr. Drake, 80 toises of absolute height. Towards the west, between the Ozark mountains and the foot of the Andes of Upper Louisiana (Rocky Mountains, lat. 35° — 38°), the basin of the Mississippi is considerably elevated in the vast desert described by Mr. Nuttall. It presents a series of small table-lands, gradually rising one above another, and of which the most westerly (that nearest the Rocky Mountains, between the Arkansas and the Padouca), is more than 450 toises high. Major Long measured a base to determine the position and height of James Peak. In the great basin of the Mississippi, the line that separates the forests and the savannahs runs, not, as may be supposed, in the manner of a parallel, but like the Atlantic coast, and the Alleghany mountains themselves, from N. E. to S. W., from Pittsburg towards Saint Louis, and