they were transitory.” He possessed a strong sense of high honour, as well as of duty; and his liberality and hu­manity were evinced by some practical occurrences in which he had occasion to exercise them : his steward had defrauded him, and when the day of reckoning came, had destroyed himself: he not only forgave the debt, but pro­vided also for the widow and her family.

“ His amiable temper and unaffected desire of giving pleasure, no less than his superior knowledge and talents, had rendered him highly acceptable to a numerous and distinguished circle of society, by whom he was justly va­lued, and by whom his premature death was sincerely la­mented. But the real extent of his private worth, the genuine simplicity and virtuous independence of his cha­racter, and the sincerity, warmth, and constancy of his friendship, can only be felt and estimated by those to whom he was long and intimately known, and to whom the recol­lection of his talents and virtues must always remain a pleasing though melancholy bond of union.”@@1 (l. l.)

TENNESSEE, one of the principal states in the North American union, extends from 81° 40' to 90° 15' west longitude, and from 35° to 36° 40' north latitude, being about 110 miles in width, and about 400 miles in length in the northern part, and 300 in the southern, and includes an area of 45,000 square miles. It has Virginia and Ken­tucky on the north ; North Carolina on the east ; Georgia, Alabama, and Mississippi on the south ; and Missouri and Arkansas on the west. The eastern part of the state is mountainous. The Kittatinny range, forming its eastern boundary, rises in some points to the height of about 5000 feet, or about 3000 feet above its base. To the west of this are several parallel ridges, separated by deep valleys, in which the great branches of the river Tennessee take a southerly course. These are prolongations of the Alleghany and Chestnut ridges of Virginia and Pennsylvania. The Cumberland Mountains are a prolongation of the Laurel ridge, the summits of which do not probably exceed 2000 feet in height : they are for the most part wooded to the top, but in some places are too rocky and rugged for cultivation. West of these mountains is Middle Tennes­see, which is generally of a moderate hilly, and agreeably diversified surface. West Tennessee, beyond the river Tennessee, is a level or slightly undulating plain.

Tennessee is amply supplied with noble rivers and pure streams. The Mississippi washes the western border for a distance of 160 miles ; and although its banks are generally low, and liable to inundation, the high grounds approach to its bed at several points, affording some of the most valuable sites for commercial marts to be found in its long course. These high banks, here called bluffs, have received the name of the first, second, third, and fourth Chickasaw Bluffs, from the Indian nations to whom this tract once be­longed. Western Tennessee sends most of its waters directly y into the Mississippi ; the Obion, Forked Deer, Hatchy or Hatchee, Wolf, and Nonconnoch, empty themselves into that river. The Wolf is a rapid and broken torrent, but the others are navigable streams. All the rest of the state is drained by two great trunks into the Ohio. The Cum­berland River has its sources and its termination in Ken­tucky, but runs for about 250 miles, with a circular sweep, in Tennessee, preserving throughout a remarkable parallel­ism with the Tennessee River. There is no obstacle to its navigation below Nashville, 200 miles from its mouth, and during a great part of the year steam-boats go up to Car­thage ; but there are several shoals between these places, which interrupt the navigation in low stages of the water. During floods, steam-boats ascend to Burkesville in Ken­tucky, and they have even ascended to the mouth of the South Fork. South Fork, Cancy Fork, and Stone’s Rivers, its principal tributaries in Tennessee, are navigable streams. The Tennessee, which has but part of its course in this state, is the principal tributary of the Ohio, and is not in­ferior to that river in length and volume of water. It is formed by the junction of the Clinch and Holston at King­ston, about 600 miles by its windings from its mouth. It is navigable by large steam-boats to Florence, 300 miles ; but higher up, shoals and masses of rock render the navi­gation difficult and dangerous even for keel-boats. The sources of the Clinch and Holston are in Western Virginia, in the valleys between Kittatinny and Cumberland Moun­tains, and they flow nearly parallel to each other. The Watoga, the French Broad River, and its branches the Nolichucky and Big Pigeon, the Little Tennessee, and the Hiwassee, all traverse the mountain ridges at right angles to their course.

The eastern part of Tennessee contains indications of gold, lead, copper, and zinc, but has not been sufficiently examined to determine whether these metals exist in work­able quantities. The gold occurs only in deposit mines, or in masses of quartz rock out of place. Iron ore is also found, and there are several furnaces in Carter and Rhea counties. The rock-formations of this section, between the Kittatinny and Cumberland Mountains, have generally been referred by geologists to the grauwacke or transition series, but are perhaps of a more recent age. They comprise argillaceous slates, fossiliferous limestones, red sandstones, and conglo­merates. West of this is the great coal-field of Tennessee, which is co-extensive with the Cumberland Mountains, whose summit is occupied by the coal-measures. It ex­tends into Kentucky across the Cumberland, and perhaps across the Kentucky River, and into Alabama across the Tennessee. The coal crops out at numerous points on the declivities of the mountains, and is worked in Fentress, where it is sent down the Obey River to the Cumberland ; in Morgan, where Emery’s River affords facilities for trans­porting it to the Tennessee ; and in the Sequatchee valley. From these points, and from the banks of the Cumberland in Kentucky, it is carried down the rivers in flat boats as far as New Orleans. The supposed coal of Hawkins and Carter counties, and of Williamson, Davidson, and Maury counties, is, according to Professor Troost, aluminous slate, slightly impregnated with bitumen. Beneath the coal- measures is an alternation of different strata of limestone, some black, and others gray, sometimes compact, sometimes granular, and sometimes of an oolitic structure, in which are found extensive caves. One of these, on the borders of White and Warren counties, has received the name of the Big Bone Cave, from its containing bones of the mastodon and megalonyx. West of the Cumberland Mountains, the rocky strata are, in a descending series, a silico-calcareous deposit, a fetid encrinitic limestone, aluminous slate with­out animal remains, and limestone containing spirifers, pro­ducti, orthoceratites, &c. The silico-calcareous stratum in­cludes the rich deposits of hydrate of iron, which is largely worked in Tennessee ; the ore is abundant, and yields a metal of excellent quality. In 1836 there were twenty-seven furnaces, making about 30,000 tons of iron in a year.

Agriculture forms almost the sole occupation of the in­habitants of Tennessee. A large proportion of the land is productive, and many of the valleys of East Tennessee, and much of the middle and western sections, are eminently fertile. Indian corn and cotton are the staples of the state, and a good deal of tobacco, hemp, and wheat are raised. Cotton thrives in almost every part except in the north-eastern triangular section, and the crop is about 150,000 bales ; but the climate of Tennessee is not so well adapted for this plant as that of the states south of the thirty-fifth parallel of latitude. The new lands of the western part have,

@@@\* [Wisbawin] Thomson's Annals, vol. vi. 1813, p. 1. 80.