(100 feet), and is for the most part laid out in well-cultivated fields, intersected by rivers and *khals* (creeks) partially affected by the tides. In the lowlands the soil is light and sandy; but in the higher parts a deep alluvial soil alternates with bands of clay and sand. The principal rivers are the Meghna, or estuary of the Brahmaputra; and the Gumti, Dākātiā, and Titās, which are also navigable for a considerable portion of their course. There are many marshes or *bils.* The wild animals include tigers, leopards, wild boars and buffaloes. The climate is mild and healthy. In 1901 the population was 2,117,991, showing an increase of 19% in the decade, being the highest rate in the province. Mahommedans form nearly three-fourths of the total. Rice is the staple crop, followed by jute; betel-nut and betel­leaf and chillies are also grown. The chief exports are rice, jute and betel-nuts; and the principal imports cotton goods, salt and kerosene oil.

The eastern border of the district is traversed by the Assam- Bengal railway, with branches from Laksham to Chandpur and Noakhali; but waterways remain the chief means of com­munication.

Tippera came under the East India Company in 1765; but more than a fifth of its present area was under the immediate rule of the raja of Hill Tippera, who paid a tribute of ivory and elephants. At that time Tippera with Noakhali formed part of Jalalpur, one of Shuja-ud-Din’s divisions of the province of Bengal; but in 1822 it was separated, and since then great changes have been made in its boundaries. With the exception of a serious raid in 1860 by the Kukīs or Lushāis, nothing has disturbed the peace of the district.

**TIPPERARY,** a county of Ireland in the province of Munster, bounded N.W. by Galway, N.E. by King’s County, E. by Queen’s County and Kilkenny, S. by Waterford, and W. by Cork, Limerick, Clare and Galway. The county is the sixth in size of the Irish counties, having an area of 1,062,963 acres, or about 1661 sq. m. The surface is varied and picturesque. The Knockmealdown Mountains on the southern border reach an elevation of 2609 ft. To the north of this range are the pic­turesque Galty or Galtee Mountains (Galtymore 3015 ft.). To the east, bordering Kilkenny, are the Slieveardagh Hills, and near Templemore the Devil’s Bit Mountains (1583 ft.) with a curious gap on the summit. In the north-west is Keeper Hill, 2278 ft. The greater part of the county, however, is a gently undulating plain. From the rich level country the Rock of Cashel rises boldly. Tipperary has only one considerable river, the Suir, which has its source in the Devil’s Bit Moun­tains, and flows southward and eastward by Templemore, Thurles, Caher, and Clonmel. The Nore, which also rises in the Devil’s Bit Mountains, soon passes into Queen’s County, and the Shannon forms part of the western border. The Mitchelstown stalactite caverns, discovered accidentally in 1833, attract a large number of visitors. They are in the extreme south-west of the county; take their name from the neighbouring town of Mitchelstown, 6 m. distant in County Cork; and were explored and surveyed by Μ. Martel, the French speleologist, in 1895.

*Geology.—*In this county the Carboniferous Limestone is escaping, as it were, from confinement between the Old Red Sandstone ridges of the south, and spreading out northward into the great plain. Its folded character is seen in the anticlinal boss on which the acro- polis of Cashel stands; but generally its level surface is covered by oulder-drift. A great denuded dome of Old Red Sandstone, with Silurian exposed across the centre, divides the north of the county, and another similar mass, the Arra Mountains, rises between Nenagh and Lough Derg. The same rocks form the Galtees, Slieve- naman and the Knockmealdown Mountains. In the east, Upper Carboniferous shales and sandstones lie along a synclinal axis, from Cashel to Kilkenny, and anthracite is mined on a Coal Measure plateau at Killenaule. The lead-ore mined for many centuries at Silvermines south of Nenagh is silver-bearing, and is associated with zinc blende. Indications of ore have been traced along the junction of the limestone with the older rocks for thirty miles. Good slates are quarried in the Silurian area in Clashnasmuth townland on Slievenaman.

*Industries.,*—Tipperary ranks among the best agricultural districts of Ireland. The subsoil in the lower grounds is limestone, which is overlaid by a rich calcareous loam, capable of yielding the finest crops. The centre of the county is occupied by the Golden Vale, the most fertile district in Ireland, which stretches from Cashel to the town of Limerick. On the higher districts the soil is light and thin, partaking much of the character of the clay slate and sands on which it rests. Detached portions of the Bog of Allen encroach on the north-east of the county. The proportion of tillage to pasture is roughly as 1 to 2½, and the area under the standard crops of oats and potatoes decreases. The area under barley, however, is well maintained, as distillation causes a steady demand for this grain. Turnips are also an important and steady crop. The numbers of cattle, sheep, pigs, goats and poultry also increase generally; and butter-making occupies considerable attention. A few persons are employed in mining, but the occupation of the inhabitants is chiefly agricultural. There is a considerable number of meal and flour mills.

Communications are supplied by the Great Southern & Western railway, the main line of which crosses the county from north-east to south-west by Templemore and Thurles. The Ballybrophy (Queen’s County) & Limerick branch from this line serves the north of the county by Roscrea (junction for Birr) and Nenagh. The Waterford & Limerick line passes through the south of the county by way of Clonmel and Tipperary, crossing the main line at Limerick junction. The two lines are also connected by the Thurles, Fethard and Clonmel branch.

*Population and Administration.—*The population (175,217 in 1891; 160,232 in 1901) shows a serious decrease (though much less so than formerly), and emigration is very heavy. Of the total about 94% are Roman Catholics, and about 76% constitute the rural population. The principal towns are Clonmel (the county town, pop. 10,167), Tipperary (6281), Carrick-on-Suir (5406), Nenagh (4704), Thurles (4411), Cashel (a cathedral city, 2938), Roscrea (2325), Caher (2058), Temple­more (2774) and Fethard (1498). Tipperary is divided into a north and south riding, each consisting of six baronies. For parliamentary purposes it is separated into four divisions— East, Mid, North and South—each returning one member. Before the Union in 1800 the county returned two members to the Irish parliament, and the boroughs of Cashel, Clonmel and Fethard two each; afterwards, until the Redistribution Act of 1885, the county returned two members and Cashel and Clonmel one each. Assizes for the north riding are held in Nenagh and for the south riding in Clonmel. Quarter-sessions are held at Cashel, Clonmel, Nenagh, Roscrea, Thurles and Tipperary. Ecclesiastically the county belongs to the Pro­testant dioceses of Cashel and Killaloe, and the Roman Catholic dioceses of Cashel, Killaloe, Waterford and Lismore.

*History and Antiquities.—*Tipperary is one of the counties generally considered to have been formed by King John in 1210; in 1328 Edward III. made it a county palatine in favour of the earl of Ormonde; and, though the king shortly after­wards resumed his regal prerogative, the county was regranted in 1337. In 1372 the grant was confirmed to James Butler, earl of Ormonde, the lands belonging to the Church retain­ing, however, a separate jurisdiction, and being known as the county of Cross Tipperary, or the Cross of Tipperary. In 1621 James I. took the county palatine into his own hands. It was, however, restored in 1664 to James, 12th earl and 1st duke, whose regalities were further made to include the county of the Cross. On the attainder of James, 2nd duke, in 1715, the jurisdiction reverted to the Crown, and the last of the Irish palatinates thus ceased to exist.

There are two round towers within the county—one at Roscrea and the other on the Rock of Cashel. The county is rich in posses­sion of remains of several ecclesiastical foundations of the highest interest. Of these the following are described under the names of the respective towns: the remarkable collection of buildings on and adjacent to the Rock of Cashel ; the Cistercian abbey of Holy Cross near Thurles, one of the finest monastic ruins in Ireland; and the abbey and Franciscan friary at Roscrea. The stronghold of Caher, occupied as a barrack, is in good preservation. At Roscrea one of the towers of the castle built by King John remains, and the strong­hold of the Ormondes, erected in the reign of Henry VIII., forms the dépot attached to the barracks. The other principal ecclesias­tical ruins are the priory of Athassel, founded for Augustinian monks about 1200; and Fethard Abbey, founded in the 14th century, now used as a chapel.

**TIPPERARY,** a market town of Co. Tipperary, Ireland. Pop. (1001), 6281. It is beautifully situated near the base of the Slieve na muck or Tipperary Hills, a branch of the Galtee