

has been considerably increased within the last few years. The ancient common fields belonging to the townships are now mostly inclosed. Draining having been carried on to a great extent; there is very little marshy ground left. Near the river Tees, and in some places bordering on the other rivers, the soil is loam or a rich clay. At a farther distance from these rivers it is of an inferior quality, with patches of gravel interspersed. The hills between the sea and an imaginary line from Barnard Castle on the Tees to Alansford on the Derwent, are covered with a dry loam, the fertility of which varies with its depth. From this line westward the summits as well as the sides of the hills are in great part moorish wastes.

At the distance of about three miles from Darlington, at Oxenhall, are cavities in the earth, called "Hell Kettles." There are similar natural pits in the neighbourhood of Ripon, and elsewhere. The diameter of the largest is not less than 114 feet, and that of the least .75. About five miles from Hartlepool is one of the most singular clusters of rocks in the north of England, called "Black Halls," formed by the force and constant action of the waves, which have separated enormous masses of the magnesian limestone, washing some entirely away, but leaving others standing, like vast towers. In some places the rock is perforated so as to form curious arches.

The only considerable river, beside those just mentioned, is the Wear, which rises in the western hills and flows past Durham to join the sea at Bishop-Wearmouth and Monk-Wearmouth, which places unite with Sunderland to form one great town. The Team, which gives its name to the Team Valley Railway, is a mere rivulet.

Trees are chiefly confined to the parks and seats of the nobility and gentry; but many plantations have been made of late years. The banks of the rivers and brooks, particularly in the vicinity of Durham, are fringed with wood of long growth and much value, and the deep wooded *denes* or ravines which open on to the sea-coast, each having a small stream at the bottom, are very characteristic. Castle Eden dene is about four miles in length, and famous for its beautiful trees and wild flowers.

Minerals.—The western hills are composed of carboniferous limestone, succeeded eastward by millstone grit, coal-measures, magnesian limestone, and new red sandstone. The south-east portion of the limestone is covered with sand, resulting from disintegration of the coal-measures and often showing black beds of coal-detritus. The mountain limestone contains productive veins of lead ore, which are extensively worked, also zinc ore. The beds of coal in the coal-measures are from 5 to 6 feet thick, and have long been source of enormous wealth. The mines are among the most extensive and productive in the kingdom. At Sunderland the coal trade furnishes employment for hundreds of vessels, independently of the "keels" or lighters which convey the coal from the termini of the railroads and tramways to the ships. The seams now worked extend horizontally for many miles, and are from 20 to 100 fathoms beneath the surface. Under almost every seam of coal is a bed of fire-clay, full of roots of primeval forest trees. The basaltic formation known as the "Great Whin Sill" appears in Teesdale, and is also remarkable at Cockfield. A beautiful variety of the mountain limestone known as Frosterley marble, has for many centuries been quarried near Stanhope for decorative purposes, in Durham Cathedral and elsewhere taking the place of Purbeck marble, while in modern houses it is used chiefly for chimney-pieces. Ironstone is extensively worked in the neighbourhood of Swalwell and Winlaton. Some excellent quarries of slate for buildings have been opened in different parts of the county. The neighbourhood of Welsingham abounds in fine millstones. The Newcastle

grindstones are procured at Gateshead Fell; and freestone of high estimation, for building ovens, furnaces, and the like, is obtained in various parts of Durham, and exported in considerable quantity.

Towns.—Besides the city of Durham, the county includes seven ancient boroughs, viz., Hartlepool, Barnard Castle, Bishop Auckland, Darlington, Sunderland, Stockton, and Gateshead. The large villages of Staindrop, Wolsingham, Stanhope, and Sedgefield are "market towns." The port of Stockton-upon-Tees is well situated for commerce. Hartlepool, being on a promontory, nearly encompassed by the German Ocean, which forms a capacious bay to the south of the town is advantageously placed for maritime traffic; Sunderland and South Shields are also well placed at the mouths of the Wear and Tyne.

No county in England presents a closer network of railways than Durham. The York, Newcastle, and Berwick trunk line enters the country south of Darlington, and continues due north until at Gateshead, it crosses the Tyne and enters Northumberland. From this a great many smaller lines diverge to the ports and mineral fields.

Agriculture.—Improvements in agriculture have been pursued with considerable spirit and success. On some spots of gravelly soil, turnips and barley are grown in almost perpetual succession, a crop of clover being sometimes interposed. The manures are chiefly lime and the produce of the fold-yard; and though abundance of sea-weed might be collected on the coast, as it was in mediæval times, the farmers now make but little use of it. The farms are of moderate size, few of them exceeding 200 acres. The largest portion of each is arable, except towards the western extremity of the county, where the whole is pasture. The farm houses are well situated and commodious; and improvements in farming and farming machinery keep pace with the age. The cattle of Durham have long been in great repute; in point of form, weight, produce of milk, and quickness of fattening, there are none better. The cows yield from 25 to 30 quarts of milk daily. The sheep also stand high in estimation, particularly the Tees-Water breed. The Wear-dale sheep are small, but their mutton is finely flavoured.

The following figures, taken from the Agricultural Returns for 1873 and 1876, show the acreage of the principal crops and the numbers of the live stock in the county in those years:—

	Corn Crops.	Wheat.	Oats.	Barley and Bere.	Green Crops.	Turnips.	Grass, under rotation
1873...	99,243	37,669	37,631	18,470	32,803	22,153	50,834
1876...	91,109	28,359	35,815	23,070	33,616	22,196	53,170
		Horses.	Cattle.	Sheep.	Pigs.		
1873.....		16,204	62,452	224,714	12,053		
1876.....		17,486	61,028	202,109	12,182		

According to the Owners of Land Return, Durham was divided in 1873 among 34,317 separate proprietors, of whom the large proportion of 91 per cent. owned less than 1 acre—the average of England and Wales being 71 per cent. The gross rental of the land amounted to £2,889,152, or an average of £5, 11s. 2½d. per acre—as compared with £3, 0s. 2d., the average of England and Wales. This unusual value per acre is to be ascribed to the presence of minerals. The proprietors possessing more than 8000 acres were as follows:—duke of Cleveland, 55,837 acres; Ecclesiastical Commissioners, 26,868; Viscount Boyne, 15,310; earl of Durham, 14,664; marquis of Londonderry, 12,823; earl of Eldon, 11,841; John Bowes, 8313; dean and chapter of Durham, 8089.

Natural History.—Except in the moorlands of the west only a few scraps of the county have been left in their natural state; but these portions are of great interest to the student of natural history. The ballast-hills at Shields and Hartlepool are overgrown with aliens, many of which are elsewhere unknown in this country. Nearly fifty different



species have been found. *Cypripedium*, *Epipactis*, *Pyrola*, *Ophrys*, under the yews of Castle Eden, are visited by butterflies found nowhere else in England, as *Oreinablandina*, *Polyommatus salmacis*, and the little moth *Acidalia blomeraria*. The most interesting birds left are the dotterel (*Charadrius morinellus*), pied flycatcher (*Muscicapa luciuosa*), and crossbill (*Loxia curvirostra*), which still breed occasionally in the west of the county. The siskin (*Chrysomitris spinus*) and black redstart (*Ruticilla tithys*) have reared their young near the city of Durham. The stockdove has within the last few years become not uncommon. Red grouse and black game are abundant in suitable localities, and one heronry still remains. But the shores of Durham are deserted by the sea fowl, which 200 years ago were so abundant by Tees and Tyne that, as an old writer says, "in tyme of breeding one can hardly sett his foote so warylye that he spoyle not many of theyr nestes." The badger and the otter still linger in one or two nooks; the last marten was killed in Weardale 30 years ago, and meantime the squirrel has become common. Stockton is almost the last retreat in England of the native black rat. Of the former abundance of deer, wild ox, and boar every peat bog testifies by its remains; the boar appears to have existed in the reign of Henry VIII., and records of red deer in the county may be traced down to the middle of the last century.

Antiquities of pre-Roman date, whether implements of stone or bronze, or sepulchral remains, are scarcely found except in the valley of the Wear. A very remarkable discovery was made some years ago at Heathery Burn Cave, near Stanhope, where, under a coating of stalagmite, were preserved a great many bronze weapons and other objects, including almost every article which appears to have been known in Britain at that remote period. One mile north of Eggleston are some remains of an ancient structure called the Standing Stones. This originally consisted of a cairn in the centre, surrounded by a trench, and that again encompassed by a circular arrangement of rough stones, many of which have been removed and broken to repair the roads. Near a brook, at a small distance, is a large barrow, crossed from east to west by a row of stones. There are frequent references to "Standing Stones" now gone in old charters, where they are referred to as marking boundaries. The principal Roman remains are connected with the ancient Watling Street, which entered the county by crossing the Tees at Pierse-bridge, and left it on crossing the Derwent just north of Ebchester. The boundaries of the four stations of Pierse-bridge, Binchester, Lanchester, and Ebchester, on the line of this road, may still be clearly discerned. At Lanchester there are considerable remains of masonry, and at Binchester the most perfect hypocaust in the north of England. Chester-le-Street, as its name indicates, occupies the site, now obliterated, of a Roman station, on a subsidiary Roman road; and there was a camp, still partly to be recognized, on "Maiden Castle Hill," near the city of Durham. Many Roman altars and sculptured stones from Lanchester and elsewhere are preserved in the chapter library at Durham. Roman altars, coins, &c., have been found at South Shields, as well as about the above-mentioned stations. To the Anglo-Saxon period are to be referred portions of the churches of Monk-Wearmouth and Jarrow, and numerous sculptured crosses, two of which are *in situ* at Aycliffe. The best remains of the Norman period are to be found in Durham Cathedral (the finest Norman building in England) and in the castle, also in some half-dozen parish churches. Of the Early English period are the eastern portion of the cathedral (see below), the fine churches of Darlington, Hartlepool, and St Andrew, Auckland, and portions of a few other churches. The Decorated and Perpendicular

periods are very scantily represented, on account, as is supposed, of the incessant wars between England and Scotland in the 14th and 15th centuries. The principal monastic remains, beside those surrounding Durham Cathedral, are those of its subordinate house or "cell," Finchale Priory, situated in a lovely valley by the Wear. The most interesting castles are those of Durham, Raby, Brancepeth, and Barnard. There are ruins of castlelets, or peel-towers, at Dalden, Ludworth, and Langley Dale. The hospitals of Sherburn, Greatham, and Keyper, founded by early bishops of Durham, retain but very few ancient features.

The principal noblemen's seats are Raby Castle (duke of Cleveland), Lambton Castle (earl of Durham), Wynyard Castle (marquis of Londonderry), Ravensworth Castle (earl of Ravensworth), Brancepeth Castle (Viscount Boyle), and Whitham Hall (Sir Hedworth Williamson, Bart.)

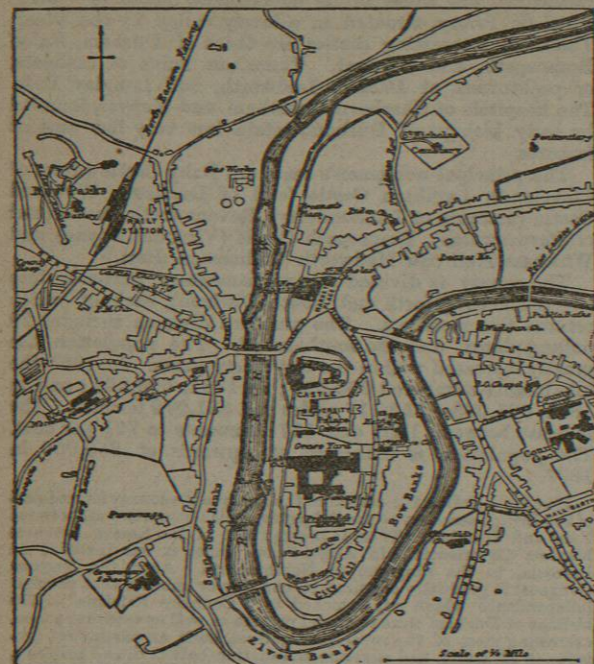
The county is divided for parliamentary purposes into two divisions (North and South Durham), each of which returns two members. The northern division includes 20 polling-places, and the southern 33. The population has greatly increased within the last thirty years. In 1851 the inhabitants numbered 390,997; in 1861, 508,666; and in 1871, 685,089—353,117 males and 331,972 females. The increase between 1851 and 1871 amounts to 72½ per cent. The population is estimated at upwards of 850,000 in 1877.

History.—Before the arrival of the Romans the county formed part of the British territory of the Brigantes, which comprised all between Tyne and Humber. Then it became part of the Roman province Maxima Caesariensis. In Anglo-Saxon times it was included in Bernicia, in the kingdom of Northumbria. After the Norman Conquest it gradually acquired in one way or another that peculiar independence which was attached to "Counties Palatine." The bishops of Durham were temporal princes as well as spiritual rulers, exercising most of the royal prerogatives, such as paramount property in all lands, and supreme jurisdiction both civil and military, as in making war, right of forfeiture, levying of taxes, &c. These privileges would be the more readily conceded to this county on account of its remoteness from the metropolis, and its proximity to the hostile kingdom of Scotland, in order that the inhabitants, having justice administered at home, might not be obliged to go out of their county, and leave it open to an enemy's incursions. For they pleaded privilege not to pass over Tees or Tyne for military service, their special charge being, as was alleged, to keep and defend the sacred body of St Cuthbert, whence they were called "Haliwer folc" (Holy war folk). By an Act passed in the 27th year of Henry VIII. a heavy blow was struck at the regal powers which the bishops of Durham had enjoyed, and at the death of Bishop Van Mildert in 1836, an Act was passed whereby all temporal jurisdictions and privileges were declared to be for ever removed from the bishopric. Up to that time the bishops opened the assizes in person, as being still at the head of the administration of justice, the judges sitting by virtue of the bishop's writ. Durham is now included in the province of York, and in the north-eastern circuit.

The principal county histories are those by Hutchinson and Surtees, the latter incomplete, but, so far as it goes, it is a noble work, one of the very best of that class ever published. Murray's handbooks to the county and to the cathedral, though occasionally inaccurate, are full of interesting and valuable information.

DURHAM CITY, a municipal and parliamentary borough of England, and the chief town of the county of Durham, is situated on the River Wear (which is crossed there by four bridges), 14 miles S. of Newcastle and 60 miles N.N.W. of York. Though there was a small Roman camp at Maiden Castle Hill, about a mile distant, Durham itself dates only from the end of the 10th century, when the monks of Lindisfarne rested there with the body of St Cuthbert, after wandering about with it almost all over the north of England. Soon afterwards a church was built by Bishop Ealdhune, and the removal of the see from Lindisfarne thither, together with the growing fame of the incorruptible body of the saint, led to the rise of the city. The rocky peninsula on which Ealdhune's church was founded, about 80 feet above the river, was called Dunholme (Hill Island).

which in Norman times was softened to "Duresme," whence "Durham." The castle was erected by William the Conqueror in 1072, across the neck of the peninsula, so as to guard the church and monastery. In 1093 Ealdhune's



Plan of Durham.

church was rebuilt by Bishop Carileph, who changed the Anglo-Saxon establishment of married priests into a Benedictine abbey.

The Cathedral.—Carileph's grand Norman church still forms the main part of the cathedral buildings; but numerous additions have been made from time to time, the chief of which are—the Galilee or western chapel, of the Transitional period, the eastern transept or "Nine Altars" and the western towers (Early English), and the central tower (Perpendicular). Decorated and Perpendicular windows have, as is usual in old churches, been freely inserted. The interior presents the appearance, as Dr Johnson remarked, of "rocky solidity and of indeterminate duration," and combines, we may add, absolutely perfect proportion in all its original parts with a harmonious magnificence of detail in its massive columns, arches, and stone groining. It has recently been thoroughly cleaned, and supplied with much painted glass and very costly modern fittings, including a new organ built on the largest scale and of fine tone. Durham Cathedral, or "The Abbey," as old-fashioned residents still call it, has long been celebrated and still maintains its reputation for its choral services, as being at least equal to any in England in point of musical execution. This glorious building has been admirably illustrated in Carter's Plates, and in Billings's *Architecture of Durham Cathedral*. It is 507 feet in length, by 200 in extreme breadth, with a central tower 214 feet in height, and two smaller ones 138 feet high at the west end. The Galilee or western chapel was built by Bishop Pudsey between 1153 and 1195, and contains the supposed remains of the Venerable Bede. In the chapel of the Nine Altars are the remains of St Cuthbert, brought to light in 1627. The cathedral library, formerly the dormitory and refectories of

the abbey, contains a number of curious and interesting printed books, and MSS., and the portable altar, vestments and other relics found in St Cuthbert's grave.

The see of Durham was long the richest bishopric in England. The total revenue of the dean and chapter during the seven years ending 1834 amounted to £36,937 a year. On the death of the incumbent in 1836, at the recommendation of the Ecclesiastical Commissioners, the income of the bishop was fixed at £8000 per annum—the surplus revenues of the see being reserved to form a fund for augmenting the incomes of the poorer bishops.

Castle, &c.—The castle of Durham consists of a polygonal keep, now reconstructed to form a very inconvenient set of college rooms; the great hall built by Bishop Hatfield, which in some respects exceeds any hall in the older universities; the Norman hall, now cut up into rooms; the old Norman crypt chapel; Bishop Tunstall's chapel, at present in use; the Black Staircase, built by Bishop Cosin; and the kitchen, the gate-house, and other offices. These are grouped round a court very irregular in plan, and not less picturesque in general effect. Durham Castle was the chief residence of the bishops of the Palatinate, but is now appropriated to the uses of the university, with the exception of the state apartments, which are partly reserved for the bishop and for Her Majesty's judges of assize. The university was opened in 1833; an account of it will be found under UNIVERSITIES. Besides the cathedral, Durham has seven parish churches. There are also places of worship for Roman Catholics, and for various denominations of Protestants. The grammar school attached to the cathedral was founded by Henry VIII. in 1541, and possesses eighteen "king's scholarships," of the annual value of nearly £40 each. There are also several scholarships and exhibitions tenable at the universities. The original school-room is now used by the university of Durham; the new buildings are beautifully situated to the west of the city, and are very handsome and commodious, including residences for the head and second masters, and a school infirmary. Durham possesses flourishing diocesan training colleges for schoolmasters and schoolmistresses; and about four miles to the west of the city is the great Roman Catholic College called St Cuthbert's College, Ushaw, the present representative of the old college at Douai.

The civil corporation of Durham and Framwellgate consists of the mayor, six aldermen, and eighteen councillors, with a recorder, a chaplain, and town clerk, two elective auditors, and two elective assessors. On the passing of the Corporation Act, 5 and 6 Will. IV. c. 76, the election of the eighteen councillors was vested in the citizens occupying houses and paying poor and other rates. The councillors so elected have to choose the six aldermen, and the aldermen and councillors have the election of the mayor. Four charters (all, except the third, preserved in the "Hutch" at the Guild Hall) have been granted to the city by different bishops of Durham:—the first by Hugh Pudsey, confirmed by Pope Alexander III., 1179 or 1180; the second by Tobias



Arms of Bishopric.



Corporation Seal.

Matthew, confirmed by James I.; the third by Nathaniel Lord Crew, 1684 (afterwards redelivered to the bishop, the corporation acting under the second charter); and the fourth by John Egerton, 1780.

Durham can scarcely be said to have any staple trade or manufacture, though it possesses one carpet factory and one large mill for the preparation of "Durham mustard." It is now a very different place, socially, from what it was when there were twelve prebendaries with much larger incomes than the six canons now have, and when "The College" was a noted centre for dignified and liberal hospitality. At that time, canonical residence was kept with much more strictness than it is at present, and the prebendary in residence entertained guests of all classes. Noblemen and gentlemen then resided in houses in Framwellgate and Elvet, now let out into tenements and serving as the squalid homes of the very poorest class. The Bailey and Old Elvet are, however, still chiefly occupied by the upper classes, and Western Hill is a new and rapidly increasing suburb. The Palace Green is an open space having the cathedral on the south side, the castle, now University College, on the north, the Exchequer Buildings, now the university library, together with Bishop Cosin's library, on the west, and the museum, alms-houses, and other offices on the east. The museum contains an almost complete collection of British birds. Six out of the seven parish churches are ancient, and possess features of interest. The high banks of the river on which the cathedral and castle stand are richly wooded, and traversed in all directions by well-kept paths, which afford ever-changing views of wood, water, rocks, bridges, the cathedral, the castle, picturesque old houses, and terraced gardens.

In 1861 the municipal borough of Durham had within its area of 880 acres 2007 inhabited houses, with a population of 14,088. In 1871, the number of inhabited houses was 2349, and the population comprised 6956 males and 7450 females, or 14,406 in all. The parliamentary borough, which with an area of 967 acres had 14,833 inhabitants in 1871, returns two members to Parliament. (J. T. F.)

DURHAM, JOHN GEORGE LAMBTON, FIRST EARL OF (1792-1840), born at Lambton Castle, Durham, on the 12th April 1792, was the eldest son of William Henry Lambton, M.P. for the city of Durham. It is noteworthy that the family to which he belonged had held the Lambton estate in uninterrupted male succession from the 12th century. Educated at Eton, he held for a short time a commission in a regiment of hussars. In 1813, soon after attaining his majority, he was returned to Parliament as representative of his native county. He was an advanced Liberal from the beginning to the end of his political career, and distinguished himself by his uncompromising opposition to the reactionary measures of the Tory Government. His political position was strengthened by his marriage in 1816 to the eldest daughter of Earl Grey. In 1819 he championed the rights of the people by his denunciation, in the House of Commons and at numerous public meetings, of the coercive measures proposed by the Government against the Chartists. In April 1821 he proposed in the House a scheme of parliamentary reform which was in some points, notably in regard to the redistribution of seats, more thoroughgoing than that which was carried eleven years later. The delicate state of his health compelled him in 1826 to proceed to Naples, where he resided for about a year. He was a prominent supporter of the Canning administration of 1827, and of that of Lord Goderich by which it was succeeded. When the latter fell to pieces owing to its inherent weakness in January 1828, Lambton's services were acknowledged by his elevation to the peerage as Baron Durham. On the accession of Lord Grey to power in 1830 Lord Durham obtained the

office of lord privy seal. He was one of a Cabinet committee of four who were intrusted with the preparation of the Reform Bill, the others being Sir James Graham, Lord John Russell, and Lord Duncannon. It was understood at the time that his influence was exerted to make the measure as liberal as possible, and in particular that he wished to introduce the ballot as one of its provisions. In the debates on the bill in the Lords he did not take the leading part that might naturally have been expected from the only peer who had been on the Cabinet committee for its preparation. This was owing partly to his own indifferent health and partly to grief at the death of his eldest son, the Master Lambton of one of Lawrence's most admired portraits. Continued ill-health led him to resign office in March 1833, when he was raised to the dignity of Viscount Lambton and earl of Durham. In the summer of the same year, however, he was able to undertake a special embassy to the court of St Petersburg, the chief object of which was to secure lenient treatment for the insurgent Poles. In this he was unsuccessful. When the party that had carried reform began to be divided, Lord Durham was generally regarded as a likely leader of the more advanced section, and a strongly radical speech which he delivered at the celebrated Grey banquet at Edinburgh in 1834 helped to strengthen his claims to the position. It took the form of a reply to a previous speech of Lord Brougham, whose enmity Lord Durham thus provoked. In 1837 he accepted the post of ambassador at St Petersburg, which he occupied for about a year. Meanwhile a very serious insurrection had broken out in Canada, and early in 1838 the Government found it necessary to suspend the colonial constitution and send out a new governor with special powers. Lord Durham was selected to undertake the difficult task, for which his extensive experience and his well-known advanced liberalism were supposed specially to qualify him. Somewhat hasty and irascible in his temperament, he unfortunately adopted measures which were beyond the powers conferred upon him by the special Act of Parliament under which he had been appointed. These measures were disapproved of by a vote of the House of Lords on the motion of Lord Brougham, who imported the bitterness of his earlier quarrel with Lord Durham into the debate, and the Government were compelled to disallow the ordinances in which they were embodied. Lord Durham was so deeply incensed at this that he took the extraordinary step of returning home without waiting for his recall, and the Government marked its disapproval of his conduct by directing that he should not receive the customary salute on landing in England. He defended his plan of administration in an able and elaborate report addressed to the queen, and his policy was practically justified by being adopted by his successor. He had returned to England in shattered health, and he died at Cowes, in the Isle of Wight, on the 28th July 1840.

DURIAN (Malay, *duri*, a thorn), the fruit of *Durio zibethinus*, a tree of the natural order *Sterculiaceae*, which attains a height of 70 or 80 feet, has oblong, tapering leaves, rounded at the base, and yellowish-green flowers, and bears a general resemblance to the elm. The durio is cultivated in Sumatra, Java, Celebes, and the Moluccas, and northwards as far as Mindanao in the Philippines; also in the Malay Peninsula, in Tenasserim, on the Bay of Bengal, to 14° N. lat., and in Siam to the 13th and 14th parallels. The fruit is spherical, and 6 to 8 inches in diameter, approaching the size of a large cocoa-nut; it has a hard external husk or shell, and is completely armed with strong pyramidal tubercles, meeting one another at the base, and terminating in sharp thorny points; these sometimes inflict severe injuries on persons upon whom the fruit may chance to fall when ripe. On dividing the fruit at the