

The kidneys being among the most important excretory organs of the body, it follows that when their function is interrupted, as it is alike in acute and chronic Bright's disease, serious results are apt to arise from the retention in the economy of those effete matters which it is the office of the kidneys to eliminate. The blood being thus contaminated, and at the same time impoverished by the draining away of its albumen from the kidneys, is rendered unfit to carry on the processes of healthy nutrition; and, as a consequence, various secondary diseases are liable to be induced. Inflammatory affections within the chest are of frequent occurrence, but the most dangerous of all the complications of Bright's disease are the nervous symptoms which may arise at any stage, and which are ascribed to the effects of uramic poisoning.

In the treatment of acute Bright's disease, good results are often obtained from local depletion, from warm baths, and from the careful employment of diuretics and purgatives. Chronic Bright's disease is much less amenable to treatment, but by efforts to maintain the strength and improve the quality of the blood by strong nourishment, and at the same time by guarding against the risks of complications, life may often be prolonged in comparative comfort, and even a certain measure of improvement be experienced.

See *Report on Medical Cases*, by Richard Bright, London, 1827; *On Granular Degeneration of the Kidneys*, by Robert Christison, M.D., Edinburgh, 1839; *Diseases of the Kidney*, by Dr G. Johnson, London, 1866; *Practical Treatise on Urinary and Renal Diseases*, by Wm. Roberts, M.D., London, 1865; *On the Pathology and Treatment of Albuminuria*, by W. H. Dickinson, M.D., London, 1868; *Practical Treatise on Bright's Diseases of the Kidneys*, by T. Grainger Stewart, M.D., Edin. 1871.

BRIGNOLES, the capital of an arrondissement in the department of Var, in France, is situated in a fertile and pleasant valley on the right bank of the Calami, 22 miles N.N.E. of Toulon. It is neat and well built, and has a magnificent fountain, a public library, a normal school, manufactures of silk thread and leather, and an active trade in wines, brandy, liqueurs, and excellent prunes—the last distinctively known as *prunes de Brignoles*. The prefecture has its offices in the palace of the counts of Provence, and the old house of the Templars is occupied by the theological seminary. Brignoles is a town of great antiquity. In 1291 it gave its name to a treaty between Alphonso III. of Aragon and the king of France. In ancient documents it is often mentioned as *Villa Puerorum*, from the fact that the children of the counts of Provence were generally born and brought up in the castle. In 1524 the town was taken and pillaged by Charles V., and in 1588 it met a similar fate at the hands of the Leaguers. Population of town in 1872, 4843.

BRIL; PAUL, a Flemish painter, born at Antwerp in 1554. The success of his elder brother Matthew in the Vatican induced him to repair to Rome. On the death of Matthew, Paul, who far surpassed him as an artist, succeeded to his pensions and employments. He painted landscapes with a depth of chiaroscuro then little practised in Italy, and introduced into them figures well drawn and finely-coloured. Many of his pictures are extant in Italy. One of his best compositions is the martyrdom of St Clement, in the Sala Clementina of the Vatican. He died at Rome in 1626. (See Lanzi, *History of Painting*.)

BRINDISI, a fortified city and seaport of Italy, in the province of Otranto, is situated at the head of a bay of the Adriatic in 40° 39' 27" N. lat. and 17° 28' 44" E. long. The streets are for the most part narrow and crooked, and the town in general is in a somewhat ruinous condition. Since the restoration of its maritime importance, which is mainly due to the fact that it forms the great transit station in the overland route to Asia by the Mont Cenis Railway and the Suez Canal, some improvement

has taken place, and it bids fair to become one of the most flourishing cities in the country. The progress, however, has hitherto been comparatively slow, and the only extensive addition which has been effected is a new street leading from the railway station to the harbour. A cathedral in rather a dilapidated state, a citadel with huge round towers (founded by Frederick II. and completed by Charles V.), and a seminary (containing a library bequeathed to the town by archbishop Leo), are the only public buildings worthy of notice. The ruins of the circular church of St Giovanni, which was destroyed by earthquake, are not without interest; an ancient building of uncertain date is popularly regarded as the house where Virgil died; and there is a remarkable column supposed by some to have marked the termination of the Appian Way, but more probably belonging to an ancient temple. There are ten public schools in the town. The trade was represented in 1873 by imports to the value of £344,000, and exports to £325,000. The former consist mainly of raw silk, wheat and flour, coals, manufactured cottons, and petroleum; and the latter of manufactured coral, corn, dried fruits, and olive oil. The number of vessels that arrived at the port in 1873 was 709, of which 422 were steamships. The harbour consists of an outer and an inner portion, and the inner is divided into two basins, extending right and left. The outer port is about 6400 feet long by 3200 wide, the western arm of the inner portion 4800 by 800, and the eastern arm 3520 by 640. An extensive system of dredging has been in operation since 1866, and long lines of quays are being gradually constructed. Graving-docks are also in course of construction; and a lagoon, called *Fiume Piccolo*, close to the outer harbour, which has been a constant source of malaria, is being filled up. The population of the town, which was only 8000 in 1861, had increased to 13,755 in 1871.

Brindisi, *Brundisium*, or *Sperticor*, was originally, it would appear, a city of the Sallentines, from whom it was captured by the Romans in 267 B.C. Colonized by its conquerors in 244 B.C., it soon rose into importance, and became their chief naval station in the Adriatic. Hannibal vainly attempted to surprise the city, which remained faithful to Rome through the darkest days of the Punic struggle. During the war between Julius Caesar and Pompey the former endeavoured to shut up his rival's fleet in the inner harbour, by closing the entrance with wooden piles, which are frequently but erroneously supposed to have been the cause of the destruction of that part of the port. On the fall of the Western Empire Brundisium seems to have been outstripped by the neighbouring city of Hydruntum (Otranto). In the 10th century it was destroyed by the Saracens, but was rebuilt by Spathalupus the Byzantine governor, whose name still stands graven on the marble column above mentioned. After passing through various vicissitudes in common with the rest of Southern Italy, it fell into the hands of the Normans, and in the 11th century it was the scene of the chivalrous pageantry of Tancred's court. It was plundered in 1348 by Louis, king of Hungary, and in 1458 suffered severely from an earthquake. Some time before this last disaster a more serious injury had been inflicted by Prince Giovanni Antonio Orsini, who completely choked the entrance to the inner port by sinking a number of vessels laden with stone. The commercial importance of the city rapidly declined, and it was of no interest save to the classical scholar as the birthplace of Pacuvius, and from its association with the mirthful journey of Horace and the death of Virgil.

BRINDLEY, JAMES, a celebrated engineer, was born at Thornsett, Derbyshire, in 1716. His parents were, in very humble circumstances, and he received little or no education. At the age of seventeen he was apprenticed to a millwright near Macclesfield, and while in this employment manifested remarkable mechanical talent. Soon after completing his apprenticeship he set up in business for himself as a wheelwright, and quickly became famous for his ingenuity and skill in repairing all kinds of machinery. In 1752 he designed and set up an engine for draining some coal-pits at Clifton in Lancashire. Three years later he extended his reputation by completing the machinery for a silk-mill at Congleton. About 1754 Brindley became acquainted

with the duke of Bridgewater, and an arrangement was soon come to whereby he undertook to carry out that nobleman's scheme of inland navigation. The duke's primary object was the carriage of coal from his estate at Worsley to Manchester. The difficulties in the way were great, but all were surmounted by the genius of Brindley, whose crowning triumph was the carrying the new canal over the River Irwell at Barton, by means of an aqueduct elevated 39 feet above the water. The great success of this canal, the first of its kind in Great Britain, encouraged similar projects, and Brindley was soon engaged extending his first work to the Mersey. He then designed and nearly completed what he called the Grand Trunk Canal, connecting the Trent and Humber with the Mersey. The Staffordshire and Worcestershire Canal, the Oxford Canal, the Stockwith and Chesterfield Canal, were all planned and carried out by him. His excessive toil broke down his strength, and he died in 1772 at the early age of fifty-six. Brindley was a man of no education; he retained to the last a peculiar roughness of character and demeanour; but his innate power of thought more than compensated for his lack of training. It is told of him that when in any difficulty he used to retire to bed, and there remain intensely pondering his problem until the solution became clear to him. His mechanical ingenuity and fertility of resources were very remarkable; he undoubtedly possessed in the very highest degree the engineering faculty, though the kind of works to which he devoted himself has been cast into the shade by the later developments of steam traffic. Brindley was an enthusiast in his business and possessed with the idea of canals. His reported answer to the committee who asked him what was the use of navigable rivers,—“To feed canals,” is characteristic, if not altogether authentic.

See Smiles, *Lives of the Engineers*, vol. i.; *Biographia Britannica*.

BRIOUË, a town of France, in the department of Haute Loire, capital of an arrondissement, is situated on the left bank of the Allier, 39 miles N.W. of Puy. The town is ill-built, but has a fine old Gothic church (St Julien), of the 12th century, with curious mosaic ornamentation, a college, a public library, and beautiful fountains, which date from the 13th century. At Old Brioude, about three miles S.S.E., are the remains of a bridge over the Allier, which consisted of a single arch 60 feet high and 206 feet in span. (See article BRIDGES, p. 332.) This fell in 1822; and a new bridge of one arch, 182 feet in span, was built in 1845. Population in 1872, 4524.

Brioude, the ancient *Brivas*, was formerly a place of considerable importance. It was in turn besieged and captured by the Goths (532), the Burgundians, the Saracens (732), and the Normans. In 1181 the viscount of Polignac, who had sacked the town two years previously, made public apology in front of the church, and established a body of twenty-five knights to defend the relics of St Julien. For some time after 1861 the town was the headquarters of the lord of Castelnaud, who was at the head of one of those bands of military adventurers which then devastated France. The knights (or canons, as they afterwards became) of St Julien bore the title of counts of Brioude, and for a long time opposed themselves to the civic liberties of the inhabitants.

BRISBANE, a town of Australia, capital of the colony of Queensland, is situated in Stanley county, on both banks of the River Brisbane, about 25 miles from its entrance into Moreton Bay. It consists of four parts,—North and South Brisbane, Kangaroo Point, and Fortitude Valley. Among its public buildings are courts of justice, houses of parliament, a governor's residence, a literary institute, a concert-room, a school of arts, and from twenty to thirty churches. It has also an excellent botanical garden. The river, which is about a quarter of a mile broad opposite the town, is navigable for vessels of considerable burden, and has been made more accessible by the partial removal of

the bar at its mouth. Regular steam communication is kept up with Sydney and other Australian ports, and a very flourishing trade is carried on in the export of wool, cotton, tallow, and hides, and the import of European manufactures. The town is the centre of a considerable railway and telegraphic system. Brisbane was founded as a penal settlement in 1825, and was named in honour of Sir Thomas M. Brisbane. In 1842 the establishment was abolished, and general colonization set in. The town was politically a part of New South Wales till 1859, when it was made the capital of Queensland. It is the seat of an Anglican and also of a Roman Catholic bishop. Its population was only 5225 by the census of 1861; but in 1871 it amounted to 15,029, of whom 7204 were males and 7825 females. The number of inhabited houses at the latter date was 2931.

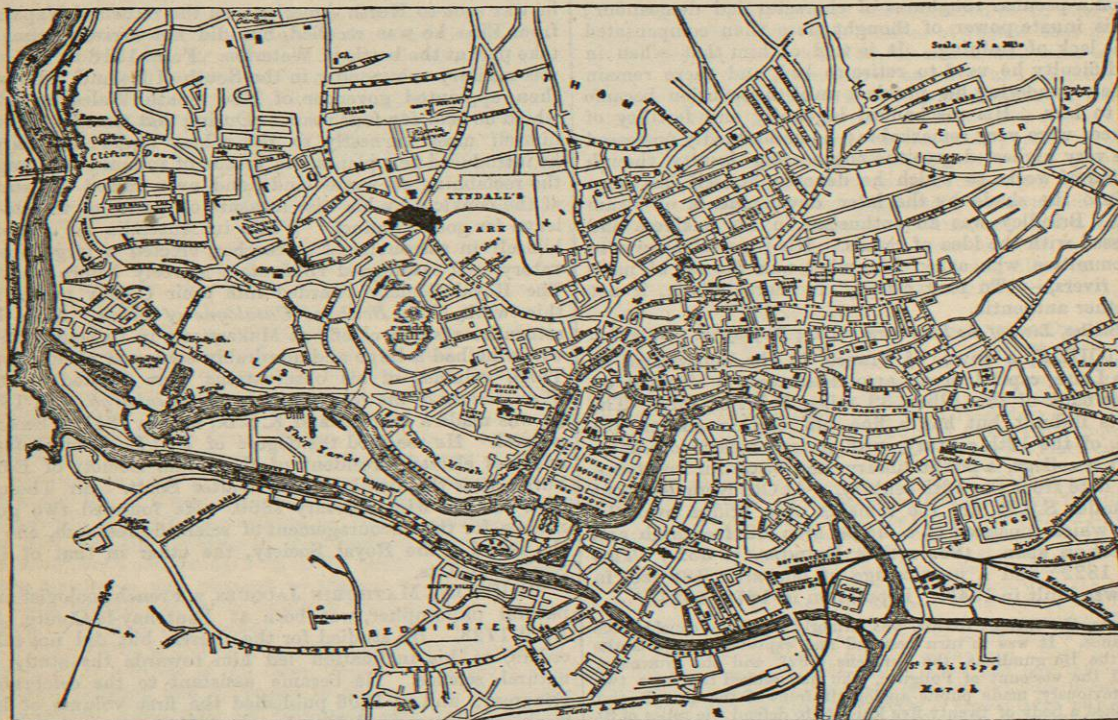
BRISBANE, SIR THOMAS MAKDOUGALL, a distinguished soldier and astronomer, was born in 1773 at Brisbane in Ayrshire. He entered the army in 1789, and served in Flanders, the West Indies, and the Peninsula. In 1814 he was sent to North America; on the return of Napoleon from Elba he was recalled, but did not arrive in time to take part at the battle of Waterloo. From 1818 to 1821 he was military commander in the South of Ireland. He was then appointed governor of New South Wales, an office which he held for four years. During that time he devoted himself most earnestly to the colony under his charge; he introduced new plants and breeds of animals, encouraged the reclaiming of waste lands, and even raised the status of the convicts by his wise measure of granting tickets-of-leave for good conduct. While in Australia he occupied himself in astronomical researches, erected a large observatory, and catalogued 7385 stars scarcely before known. The Royal Society awarded him their Copley medal for this work, *The Brisbane Catalogue of Stars*. After his return he resided chiefly at Makerstoun in Roxburghshire, where he had a large and admirably equipped observatory. Three volumes of his observations were printed in the *Transactions of the Royal Society of Edinburgh*. In 1836 he was made a baronet and K.C.B.; and in 1841 he became general. He received the degree of D.C.L. from Oxford, and was elected president of the Royal Society of Edinburgh after the death of Sir Walter Scott. Sir Thomas died on the 31st January 1860. He founded two gold medals for the encouragement of scientific research, one in the award of the Royal Society, the other in that of the Society of Arts.

BRISSON, MATHURIN JACQUES, a French zoologist and natural philosopher, was born at Fontenay-le-Comte, 3d April 1723. He studied for the church, but did not take orders, as his inclination led him towards the study of natural science. He became assistant to the celebrated Réaumur, and in 1756 published the first volume of his work on the animal kingdom, containing an account of the quadrupeds and cetacea. Of his other works on natural history the most important was the *Ornithologie*, 6 vols., 1760. After the death of Réaumur and the amalgamation of his museum with the royal cabinet, Brisson gave up the study of natural history and devoted himself to physical science. He obtained an appointment as professor in the college of Navarre, and was made instructor of the royal family in natural philosophy. Several text-books on physics were published by him, and were in considerable repute for a time, but his most important piece of work was the *Tables of Specific Gravities*, published in 1787. Brisson died in 1806.

BRISSOT, JEAN PIERRE, who assumed the name *De Warville*, a celebrated Girondist, was born of humble parents at Chartres in January 1754. He received a good education, and entered the office of a lawyer at Paris. His first works, *Théorie des Lois criminelles* (1781) and *Bib-*

Bibliothèque philosophique du Législateur (1782) were on the philosophy of law, and showed how thoroughly Brissot was imbued with the ethical precepts of Rousseau. The first work was dedicated to Voltaire, and was received by the old *philosophe* with much favour. Brissot became known as a facile and able writer, and was engaged on the *Mercur*, on the *Courrier de l'Europe*, and on other papers, a connection with which was not creditable to him. He seems, indeed, to have sold his pen readily, and to have degraded himself by being associated with such men as De Morande. Ardently devoted, however, to the service of humanity, he projected a scheme for a general concourse of all the *savants* in Europe, and started in London a paper, *Journal du Lycée de Londres*, which was to be the organ of their views. The plan was unsuccessful, and soon after his return to Paris Brissot was lodged in the Bastille on an unfounded charge. He obtained his release after four months, and again devoted himself to pamphleteering, but

had speedily to retire for a time to London. On this second visit he became acquainted with some of the leading Abolitionists, and attempted to set up in Paris a *Society of the Friends of the Blacks*. As an agent of this society he paid a visit to the United States, and returned just at the outbreak of the Revolution. Into this great movement Brissot threw himself heart and soul. He edited the *Patriote Français*, and being a well-informed, capable man, soon began to take a prominent part in affairs. In the National Assembly he leagued himself with the party, well known in history as the Girondists, but then frequently called the *Brissotins*. Of this party he was in many respects the ruling spirit. Vergniaud certainly was far superior to him in oratory, but Brissot was quick, eager, impetuous, and a man of wide knowledge. But he was at the same time timid and vacillating, and not qualified to struggle against the fierce energies roused by the events of the Revolution. His party fell before the "Moun-



Plan of Bristol.

tain;" sentence of arrest was passed against the leading members of it on the 2d June 1793. Brissot, persuaded by his friends, attempted to escape in disguise, but was arrested at Moulins. His demeanour at the trial was quiet and dignified; and on the 31st October 1793 he died bravely with his comrades. His works are numerous, but their interest was merely temporary.

See Mignet, *Revolut. Franc.*; Carlyle, *French Revolution*; and the numerous histories of the period, particularly Lamartine's *Histoire des Girondins*.

BRISTOL, a seaport town in the west of England, is situated in 2° 35' 28" W. long., 51° 27' 6" N. lat., 108 miles from London by road, 118 by Great Western Railway, 12 miles N.W. of Bath, and 8 miles inland from Bristol Channel, with which the port communicates by the Avon. That river, as well as the Frome which unites with it at

the quay, runs through the city and forms the topographical division between Gloucestershire and Somersetshire, out of which provinces Bristol was constituted a distinct county in itself by a charter of Edward III. Its geological position is on the New Red Sandstone, which rises above the alluvial deposit of the rivers, while deep beneath these layers would be found the coal measures that succeed the millstone grit beds of the adjacent hills (250 feet in height) of Brandon and Kingsdown. The origin of the name is doubtful. Mr Seyer, the historian of Bristol, gives forty-two variations in the spelling of the word, and after showing attempted derivations from Brennus, the legendary founder of the town, Brictric, its Saxon lord, &c., finally decides for Brigstow, or Bridge-place, an etymology accepted by the author of *Words and Places*. "In fact, Bristow," says the Rev. John Earle, "is a condensed compound for *Tra-*

jectus ad Abonam," the place of the bridge at which the Avon was crossed. The vestiges of Roman occupation, however, on the site of the ancient city are scanty, and consist almost solely in the discovery at different spots of some coins of Severus and other emperors. *Caer Brito*, one of the thirty-three early cities of Britain mentioned by Nennius, is interpreted by Henry of Huntingdon (1154 A.D.) to mean Bristol. If (as now municipally) the name include the outlying heights of Clifton this interpretation may be adopted with less hesitation. 300 feet above the surface of the Avon, on both sides of the river, are Belgic British camps, with traces of superadded Roman work, one of which is comparatively perfect, a second of well-marked outline, while a third has been wantonly destroyed within the last two or three years. The existence of coins of Canute, of Harold I., of Hardicanute, of Edward the Confessor and of Harold II., of Bristol mintage, shows that the place was a centre of population under the Danes and Anglo-Saxons, but there is no positive mention of a Danish invasion except by Polydore Vergil, a 16th century historian.

The history of the town hardly begins till the subjugation of Gloucestershire by the Conqueror, in 1068. Bristol is not specially named, but there is no reason to believe that it offered any futile resistance to the sweeping tide of conquest. Early in the following year, three sons of Harold, — Godwin, Edmund, and Magnus, — resolving to reconquer the kingdom their sire had lost with his life, came at the head of fifty-two ships from Ireland up the Bristol Channel, and laying waste the coast on their way, sailed up the Avon to Bristol. Here they were sharply repulsed by the townsmen, and afterwards more thoroughly routed by Geoffry Mowbray, bishop of Coutance, nephew to the famous Tancred the crusader (*Biog. Univers.*) Though Bristol is mentioned in *Domesday*, Bristol Castle is not,

Obverse. Reverse.
Corporation Seal (Motto: *Virtute et Industria*).

but appears first in history in connection with the constabulary of the martial prelate just named, who held the fortress for Robert duke of Normandy against William Rufus. When the king had crushed the insurrection and driven the rebel churchman out of the realm, he granted the royalty, or Honour of Gloucester, which included Bristol, to his kinsman Robert Fitzhamon, who thus became feudal chief of the territory. Fitzhamon's daughter, Mabel, marrying Robert earl of Gloucester, natural son of Henry I., that noble, upon the death of his father-in-law, became lord of the tower and town of Bristol. He rebuilt the castle, which soon received as captive within its walls Robert duke of Normandy, who was afterwards removed to Gloucester's stronghold at Cardiff. The red earl of Gloucester, as he was called, was the most powerful baron of his age; and among his successes in war, was the capture of king Stephen at the battle of Lincoln, who was brought to Bristol, and, like Curthose, imprisoned in the castle, where he remained in chains till exchanged for Gloucester himself, who in his turn was defeated and captured by Stephen's queen at Winchester. Earl Robert died in 1147

¹ *Arch. Inst. Jour.*, vol. xviii. 350.

and was succeeded by William his son, whose daughter, Avisia, marrying John earl of Moreton, afterwards king John, the town and castle of Bristol became an appanage to the crown, and as such it continued to the time of Charles I. John was as many as nineteen times at Bristol, the neighbouring forest of Kingswood, which stretched 14 miles square to the east of the city, no doubt resounding frequently to the cry of his hunt.

Henry III., upon the death of John, came for security to Bristol Castle, when he permitted the town to choose a mayor after the manner of London; and in like usage that the mayor of London was sworn before the constable of the Tower, so here he was directed to be sworn before the constable of the castle of Bristol, each fortress being distinct from its respective city. This feudal custom was continued here until Edward III. conceded, among other chartered benefits, that the new mayor should take oath of office before the retiring mayor in the Guildhall of Bristol in the presence of the commonalty. Other privileges from the same monarch were the establishment here of the wool-staple, and the empowering of the mayor and sheriff to elect from time to time forty of the "better and more honest" men of the town, as a council to rate and levy taxes, &c., which common council, in nearly the same form as instituted, is yet maintained.

Richard II. confirmed all the grants of his predecessors, and directed that the steward and marshal and clerk of the royal household should not sit in the town of Bristol, as before had been granted to the city of London. In 1387 the king was at Bristol castle "with," says Froissart, "the queen and all the ladies and damsels of her court," having accompanied thus far his favourite, De Vere, towards Ireland. Two years later Henry Bolingbroke, with his vast northern army, surrounded the walls of this important western city which immediately surrendered. After four days' siege the castle also capitulated, one of the terms of the treaty with the duke of York, agreed to by its governor, Sir William Courtney, being that Lord Scrope, earl of Wilts, Sir Henry Green, and Sir John Busbie, who were within its walls, should be delivered into the hands of the duke of Lancaster. In Shakespeare's *Richard II.* is a scene wherein Bolingbroke denounces these minions of the falling cause, and orders Lord Northumberland to see them despatched. They were beheaded in the centre of the town, where then stood the high cross. Only a few years since an unsuccessful attempt was made in the House of Lords to revive the peerage of Wilts, which included the right to wear a kingly crown in the Isle of Man, that peerage having been dormant from the time Sir William Scrope here lost his head. In 1408 Lord Spencer, another adherent of the ruined dynasty, was also executed at the same spot.

By a charter of Henry VI. the town of Bristol, with its gates, ditches, walls, and markets, was farmed to the mayor and burgesses for sixty years at the annual rent of £102, 15s. 6d. to the king's household, and £57, 4s. 6d. to the abbot of Tewkesbury and to the castle. This yearly fine of £160 was granted by Edward IV. to Elizabeth his queen consort. Richard III. released £60 of this rent, and the remainder was redeemed in the reign of Charles I.

The doctrines of the Reformation were preached here by Tyndale, Cranmer, and Latimer. The issue of the dissolution of religious houses, of which thirteen encircled the outer walls of the city, was the erection here of a bishopric (1542) by the conversion of the abbey church of Austin canons into a cathedral. It has singularly escaped the notice of every writer that the episcopate was refounded in 1551, by power of letters apostolic directed by Pope Paul IV. to Cardinal Pole; a MS. copy of the original Bull is in the Bristol Museum. The transitional epoch from the Papal to the Protestant faith was stained here by the