

the beauties of a fine landscape, and was an enthusiastic lover of the fine arts. In the course of his busy life he several times went to Italy and Switzerland; and in 1847 he bought a small estate in Devonshire, to make his home there. The pressure of business, however, did not allow him to spend much of his time in the country. In 1830 Brunel was elected F.R.S., and he was afterwards a member of many other scientific societies. In 1857 the honorary degree of D.C.L. was conferred on him by the university of Oxford. In July 1836 he married; he left two sons and a daughter surviving him. For the sake of his health he spent the winter of 1858-59 in Egypt, returning to England in May. He was on board his "great ship" on the 5th September 1859, and the same day was attacked with paralysis. The ship sailed on her first voyage on the 7th, and her great projector passed away on the 15th of the month. His remains were interred in Kensal Green Cemetery. In 1870 appeared *The Life of I. K. Brunel, C.E.*, by his son Isambard Brunel, of Lincoln's Inn, chancellor of the diocese of Ely. (W. L. R. C.)

BRUNEL, SIR MARC ISAMBARD (1769-1849), was born at Haqueville, in Normandy. His family had for several centuries held a respectable station in the province, living as farmers and small landowners on the estate on which he was born, and numbering among its members Nicholas Poussin. He was educated at the seminary of St Nicaise at Rouen, with the intention of his entering holy orders; but his predilection for the physical sciences was so strong, and his genius for mathematics and mechanics so decided, that, on the advice of the superior of the establishment, he was removed to follow a more congenial career. His father then destined him for the naval service, which he entered on the appointment of the Marshal de Castries, the minister of marine, and made several voyages to the West Indies. In this position, although only in his seventeenth year, his mechanical talents developed themselves actively on many occasions, and he surprised his captain by the production of a sextant of his manufacture with which he took his observations. On his return to France in 1792, he found the Revolution at its height, and like all who entertained royalist principles, he was compelled to seek safety in emigration. He effected his flight with considerable difficulty, and found refuge in the United States of America, where, driven by necessity to the exercise of his talents as a means of support, he followed the bent of his inclination and became a civil engineer and architect. His first engagement was on the survey of a tract of land near Lake Erie; he then became engaged in cutting canals, and was employed to erect an arsenal and cannon foundry at New York, where he applied several new and ingenious machines. His highly ornamental design for the House of Assembly at Washington was rejected, as being inconsistent with the simplicity of a republic; he was, however, engaged to design and superintend the construction of Bowery Theatre, New York, since destroyed by fire, the roof of which was peculiar and original.

The idea of substituting machinery for manual labour in the making of ships' blocks had long occupied his mind; and, in 1799, having matured his plans, he determined to visit England. Earl St Vincent was at that time at the head of the Admiralty, and after the usual delays and difficulties, which were ultimately overcome chiefly through the powerful influence of his steady friend and patron Earl Spencer, aided by the recommendation of Brigadier-General Sir Samuel Bentham, who at once perceived and appreciated the merit of the machines and the talent of the inventor, the system was adopted, and the machinery erected. The construction of the machines was entrusted to Mr Henry Maudslay, whom Brunel had selected with

true discrimination, and by whom he was ably assisted. The beautiful simplicity of these machines, their perfect adaptation to their various purposes, and, notwithstanding the recent advances in mechanics, their continuing for nearly half a century in active work, without any improvements having ever been suggested, must rank them as among the most complete and ingenious pieces of mechanism ever invented.

The block machinery was completed in 1806, and it was estimated that the economy produced by it in the first year was about £24,000, two-thirds of which sum was awarded to the ingenious inventor, who was soon after engaged by the Government to erect extensive saw-mills, on improved principles, at Chatham and Woolwich. He there suggested modifications of the systems of stacking and seasoning timber, which were afterwards carried into effect. Some time previously, he had invented the ingenious little machine for winding cotton-thread into balls, which, simple as it may at first sight appear, has exercised great influence on the extension of the cotton trade.

He found time also to invent an instrument for combining the use of several pens, so as to produce simultaneously a number of copies of a manuscript; a simple and portable copying-machine; and a contrivance for making the small boxes used by druggists, which had been previously imported in large quantities from Holland. A nail-making machine also occupied his attention; and he discovered the system of giving the efflorescent appearance to tinfoil, by which it was fitted for ornamental purposes. Among other more important improvements may be mentioned that of cutting veneers by circular saws of large diameter, to which is mainly due the present extensive application of veneers of wood to ornamental furniture. About the year 1812 he had devised a scheme for making shoes by machinery; and, under the countenance of the duke of York, the shoes so manufactured, in consequence of their strength, cheapness, and durability, were introduced for the use of the army; but at the peace in 1815, manual labour becoming cheaper, and the demand for military equipments having ceased, the machines were laid aside.

Steam navigation also attracted his attention, and he became deeply interested in establishing the Ramsgate steam vessels, which were among the first that plied successfully on the River Thames; and on board of them it is believed that the double engines were first used. About this period, after much labour and perseverance, he induced the Admiralty to permit the application of steam for towing vessels to sea, the practicability of which he had strenuously urged. The experiments were tried chiefly at his own expense; a small sum in aid had been promised, but it was eventually withdrawn before the completion of the trials, the Admiralty considering the attempt "too chimerical to be seriously entertained." He introduced various improvements in the steam-engine, and for nearly ten years persevered in the attempt to use liquefied gases as the source of motive power, in which he was ably assisted by his son. The necessary experiments were most laborious, and needed all the persevering energy and resources of a mind determined not to be foiled; in spite, however, of his efforts, after a great sacrifice of time and money, the plan was abandoned.

The whole power of his mind, however, was for many years concentrated on one great object, the construction of the tunnel for communication from shore to shore beneath the bed of the River Thames. It is said that the original idea occurred to him, as applied to the Neva at St Petersburg, in order to avoid the inconvenience arising from the floating ice,—a plan which he offered to the Emperor Alexander, on the occasion of his visit to England in 1814. Undismayed by previous signal failures in the attempt

to construct a tunnel beneath the Thames, Brunel, confident in his own powers, persevered, and in 1824, under the auspices of the duke of Wellington, who always entertained a favourable view of the practicability of the scheme, a company was formed for its execution; and after numerous accidents and suspensions of the works, this great and novel undertaking was successfully accomplished, and the tunnel opened to the public in the year 1843.

In the prosecution of the work he received great assistance from his son, Isambard Kingdom Brunel, and in a scientific point of view the construction of the tunnel will be regarded as displaying, at the same time, the highest professional ability, an amount of energy and skill rarely exceeded, and a fertility of invention and resources, under what were deemed insurmountable difficulties, which will secure to the memory of Sir Isambard Brunel a high position among the engineers of England.

He received the order of the Légion d'Honneur in 1829, and the honour of knighthood in 1841. He was a corresponding member of the French Institute, and a fellow of the Royal Society. He joined the Institution of Civil Engineers in the year 1823, and constantly attended the meetings, took part in the discussions, and promoted the society's interests by every means in his power.

He was unaffected and simple in his habits, and possessed indomitable courage, perseverance, and industry; whilst his benevolence constantly prompted him to kindly and considerate actions. His labours had so seriously impaired his health, that for some years after the completion of the tunnel he was unable to mix in active life. He died on the 12th of December 1849, in his 81st year. (See Richard Beamish, *Memoirs of Sir Marc Isambard Brunel*, 1862.)

BRUNELLESCHI, FILIPPO, (1377-1446), one of the greatest Italian architects, the reviver in Italy of the Roman or Classic style, was born at Florence in 1377. His father, a notary, had destined him for his own profession, but observing the boy's talent for all sorts of mechanism, placed him in the guild of goldsmiths. Filippo quickly became a skilled workman, and, eagerly desirous to excel, perfected himself in the knowledge of sculpture, perspective, and geometry,—whatever, in short, was useful for the architectural art, to which he found himself attracted. He designed some portions of houses in Florence, and in 1401 he was one of the competitors for the design of the gates of the baptistery of San Giovanni. He was unsuccessful, though his work obtained praise, and he soon afterwards set out for Rome. He studied hard, and resolved to do what he could to revive the older classical style, which had died out in Italy. In 1407 he returned to Florence, just at the time when it was resolved to attempt the completion of the cathedral church of Santa Maria del Fiore. Brunelleschi's plan for effecting this by a cupola was approved, but it was not till 1419, and after innumerable disputes, that the work was finally entrusted to him. At first he was hampered by his colleague Ghiberti, of whom he skilfully got rid. He did not live to see the completion of his great work, and the lantern on the summit was put up not altogether in accordance with the instructions and plans left by him. The great cupola, one of the triumphs of architecture, exceeds in some measurements that of St Peter's at Rome, and has a more massive and striking appearance. Besides the masterpiece Brunelleschi executed numerous other works, among the most remarkable of which are the Pitti Palace at Florence, and the churches of San Lorenzo and Spirito Santo, and the still more elegant Capella dei Pazzi. He died in 1446, and was buried in the great church of Santa Maria. See ARCHITECTURE, vol. ii. p. 436.

BRUNET, JACQUES CHARLES, the eminent bibliographer, was born at Paris in 1780, and died in 1867. He was the

son of a bookseller, and at an early age began the study which occupied the whole of his after life. In 1802 he printed a supplement to the *Dictionnaire Bibliographique* of Duclos and Cailleau, and in 1810 there appeared the first edition of his *chef-d'œuvre*, the *Manuel du Libraire*. With the exception of a few pamphlets and mirror dissertations, Brunet published nothing beyond successive editions of his great bibliographical dictionary, which had come to be recognized as the first book of its class in European literature. The last (fifth) edition in six volumes was completed in 1865.

BRUNI, LEONARDO (1369-1444), author of the *History of Florence*, was an eminent scholar of the 15th century. He was born at Arezzo, and is generally known as L. Aretino. He was secretary to the papal chancery under Innocent VII. and John XXII. From 1427 to his death in 1444 he was chancellor to the republic of Florence. He was buried at the expense of the state in Sta. Croce, where his lauralled statue is still to be seen. His *History of Florence* comes down to 1404.

BRÜNN, the capital of the Austrian margraviate of Moravia, is situated for the most part between two hills at the confluence of the Schwarzwawa and the Zwittawa, 69 miles N. of Vienna and 115 W.S.W. of Prague, with both of which it is connected by railway. Lat. 49° 11' 39" N., long. 16° 39' 35" E. On one of the hills known as the Spielberg stands the castle of the same name, which has long been used as a prison, and is famous for its connection with the patriotic Silvio Pellico, who was confined within its walls for about eight years. The old town, which is comparatively small, still retains some of its fortifications, but most of them have given place to promenades. Its streets are narrow and crooked but well-paved, and it contains many of the most important buildings in the city. Extensive suburbs have grown up around it, and since 1849 form portions of the same commune. There are fine public gardens and a large park known as the Augarten, presented to the town by the Emperor Joseph II. The Rathaus, which dates from 1511, has a fine Gothic portal, and contains several interesting antiquities. The ecclesiastical buildings comprise the cathedral of St Peter's, situated on the lower hill; the fine Gothic church of St James, built in the 15th century, with its iron tower added in 1845, and a remarkable collection of early typography; the church of the Augustine friars, dating from the 14th century; that of the Minorites with its frescoes, its holy stair, and its Loretto-house; the bishop's palace; a splendid Jewish synagogue; and several monastic establishments. As the capital of the province Brünn is the seat of the chief legal and military courts, and thus possesses various official edifices, the old Jesuit convent having been turned into barracks. It is also the seat of a Roman Catholic bishop and of a Protestant consistory. Its educational and benevolent institutions comprise a theological seminary, a gymnasium, several academies and schools, an agricultural society, a botanic garden, an infirmary, an orphanage, a blind asylum, a deaf-mute institution, a lunatic asylum, and several hospitals, of which the most important is the great hospital of St Anna. The national museum for Moravia and Silesia, though comparatively poor, must also be mentioned. Brünn is one of the chief seats of the woollen manufacture in the Austrian dominions, and the centre of a large miscellaneous trade. Considerable quantities of silk and cotton goods are manufactured, as also leather, paper, tobacco, oil, and sugar. There are also steam-flour-mills, engineering works, and breweries. There is a remarkable viaduct in the immediate neighbourhood of the town. Brünn probably dates from the 9th century. In the 11th it was bestowed by Duke Wratiaslas II. on his son Otto. Brünn is a place of great

strength, and held out successfully against sieges—in 1428 by the Hussites, in 1467 by King George of Bohemia, in 1645 by the Swedish general Torstenson, and in 1742 by the Prussians. In 1805 it was the headquarters of Napoleon before the battle of Austerlitz. Its population in 1869 was 73,771.

BRUNO, Sr, the founder of the Carthusian order of monks, was born at Cologne about the year 1030. He was educated at Cologne, and afterwards at Rheims, where he was appointed to superintend the studies in all the chief schools of the diocese. Many of his pupils afterwards became distinguished, and in the number was Pope Urban II. In 1084, after some disputes with Manasses, the archbishop of Rheims, he retired with six companions into the desert of Chartreuse, where he built an oratory, with cells at a little distance from each other. Six years afterwards he went to Rome, where Urban II. pressed him to accept the archbishopric of Reggio. He declined the honour, and withdrew into the solitudes of Calabria, where he died October 6, 1101. He wrote treatises on the Psalms and on some of the Epistles, but none of his works are extant. His canonization took place in 1514. (See Mrs Jameson's *Legends of the Monastic Orders*, 124-134; Butler's *Lives of the Saints*, vol. ii. 592.) This saint is not to be confounded with others of the same name,—the bishop and apostle of the Prussians (970-1008), and the great archbishop of Cologne (925-968).

BRUNO, GIORDANO, the most genial and interesting of the Italian philosophers of the Renaissance, was born at Nola about the year 1548. Little is known of the life of this knight-errant of philosophy; the very date of his birth rests in obscurity. What we do know is attractive enough to render it matter of regret that the materials should be so scanty. In his fifteenth year he entered the order of the Dominicans at Naples, and is said to have composed a treatise on the ark of Noah. Why he should have submitted to the bonds of a discipline palpably unsuited to his fiery and vehement spirit, we cannot tell. He soon found the restraints intolerable, and became an outcast from his church and a wanderer on the face of the earth. His opinions with regard to some of the Romish mysteries seem to have been too liberal to find toleration with so strict an order as that of St Dominic. He was accused of impiety, and after enduring persecution for some years, he fled from Rome about 1576, and wandered through various cities, reaching Geneva in 1577. The home of Calvinism was no resting-place for him, and he travelled on through Lyons, Toulouse, and Montpellier, arriving at Paris in 1579. Everywhere he bent his irrepressible energies to the exposition of the new thoughts which were beginning to effect a revolution in the thinking world. He had drunk deeply of the very spirit of the Renaissance, the determination to open his eyes and see for himself this noble universe, unclouded by the mists of authoritative philosophy and church tradition. The discoveries of Copernicus, which were unshining men's minds and teaching them to look upon their little world in a new light, were eagerly accepted by him, and he used them as the lever by which to push aside the antiquated system that had come down from Aristotle, and which was loaded with the weight of that great thinker's name. For Aristotle, indeed, he had a perfect hatred. Like Bacon and Telesius he infinitely preferred the older Greek philosophers, who had looked at nature for themselves, and whose speculations had more of reality in them. He had read widely and deeply, and in his own writings we come across many expressions familiar to us in earlier systems. Yet his philosophy is no eclecticism. He owed something to Lucretius, something to the Stoic nature-panteism, something to Anaxagoras, to Heraclitus, to the Pythagoreans, and to the Neo-

platonists, who were partially known to him; above all, he had studied deeply and profoundly the great German thinker Nicolas of Cusa, who was indeed a speculative Copernicus. But his own system has a distinct unity and originality; it breathes throughout the fiery spirit of Bruno himself.

Bruno had been well received at Toulouse, where he had lectured on astronomy; even better fortune awaited him at Paris. He was offered a chair of philosophy, provided he would receive the Mass. He at once refused, but was permitted to deliver lectures. These seem to have been altogether devoted to expositions of a certain logical system which Bruno had taken up with great eagerness, the *Ars Magna* of Raymond Lully. With the exception of a comedy, *Il Candelajo*, all the works of this period are devoted to this logic. The most important of them is the treatise *De Umbris Idearum*. It has seemed to many a curious freak of Bruno's that he should have so eagerly adopted a view of thought like that of Lully, but in reality it is in strict accordance with the principles of his philosophy. Like the Arabian logicians, and some of the scholastics, who held that ideas existed in a threefold form,—*ante res, in rebus, and post res*,—he laid down the principle that the archetypal ideas existed metaphysically in the ultimate unity or intelligence, physically in the world of things, and logically in signs, symbols, or notions. These notions were the shadows of the ideas, and the *Ars Magna* furnished him with a general scheme, according to which their relations and correspondences should be exhibited. It supplied not only a *memoria technica*, but an *organon*, or method by which the genesis of all ideas from unity might be represented intelligibly and easily. It provided also a substitute for either the Aristotelian or the Ramist logic, which was an additional element in its favour.

In the train and under the protection of the French ambassador, Michel de Castelnau, Bruno passed over in 1583 to England, where he resided for about two years. He was much disgusted with the brutality of the English manners, which he paints in no flattering colours, and he found in Oxford pedantry and superstition as rampant as at Geneva. But he indulges in extravagant eulogies of Elizabeth, and he formed the acquaintance at London of Sir Philip Sidney, Fulke Greville, and other eminent Englishmen. At Oxford he was allowed to hold a disputation with some learned doctors on the rival merits of the Copernican and so-called Aristotelian systems of the universe, and, according to his own report, had an easy victory. The best of his works were written in the freedom of English social life. The *Cena de le Ceneri*, or Ash Wednesday conversation, devoted to an exposition of the Copernican theory, was printed in 1584. In the same year appeared his two great metaphysical works, *De la Causa, Principio, ed Uno*, and *De l'Infinito, Universo, e Mondi*; in the year following the *Eroici Furori* and *Cabala del Cavallo Pegaseo*. In 1584 also appeared the strange dialogue, *Spaccio della Bestia Trionfante*, or *Expulsion of the Triumphant Beast*, an allegory treating chiefly of moral philosophy, but giving at the same time the very essence and spirit of Bruno's philosophy. The gods are represented as resolving to banish from the heavens the constellations, which served to remind them of their evil deeds. In their places are put the moral virtues. The first of the three dialogues contains the substance of the allegory, which, under the disguise of an assault on heathen mythology, is a direct attack on all forms of anthropomorphic religion. But in a philosophical point of view the first part of the second dialogue is the most important. Among the moral virtues which take the place of the beasts are Truth, Prudence, Wisdom, Law, and Universal Judgment, and in the explanation of what these mean Bruno unfolds the very inner essence of his system. Truth is the unity and

substance which underlies all things; Prudence or providence is the regulating power of truth, and comprehends both liberty and necessity; Wisdom is providence itself in its supersensible aspect—in man it is reason which grasps the truth of things; Law results from wisdom, for no good law is irrational, and its sole end and aim is the good of mankind; Universal Judgment is the principle whereby men are judged according to their deeds, and not according to their belief in this or that catechism. Mingled with his allegorical philosophy are the most vehement attacks upon the established religion. The monks are stigmatized as pedants who would destroy the joy of life on earth, who are avaricious, dissolute, and the breeders of eternal dissensions and squabbles. The mysteries of faith are scoffed at. The Jewish records are put on a level with the Greek myths, and miracles are laughed at as magical tricks. Through all this runs the train of thought resulting naturally from Bruno's fundamental principles, and familiar in modern philosophy as Spinozism, the denial of particular providence, the doctrine of the uselessness of prayer, the identification in a sense of liberty and necessity, and the peculiar definition of good and evil. Altogether the *Spaccio*, as it is the most popular, is the most characteristic of Bruno's works.

In 1586 he returned to Paris with Castelnau, but was soon driven from his refuge, and we next find him at Marburg and Wittenberg, the headquarters of Lutheranism. There is a tradition that here or in England he embraced the Protestant faith; nothing in his writings would lead one to suppose so. Several works, chiefly logical, appeared during his stay at Wittenberg. In 1588 he went to Prague, then to Helmstadt. In 1591 he was at Frankfurt, and published three important metaphysical works, *De Triplici Minimo et Mensura*; *De Monade, Numero, et Figura*; *De Immenso et Innumerabilibus*. He did not stay long at Prague, and we find him next at Zurich, whence he accepted an invitation to Venice. It was a rash step. The emissaries of the Inquisition were on his track; he was thrown into prison, and in 1593 was brought to Rome. Seven years were spent in confinement. On the 9th February 1600 he was excommunicated, and on the 17th was burned at the stake.

As has been said, for an estimation of Bruno's philosophy, the most important works are the two Italian dialogues and the three last-mentioned Latin treatises. It is not an easy matter to put his opinions into small compass, for the general form of exposition adopted by him, the dialogue, imposes a certain looseness on his own mode of thinking.

To Bruno as to all other great thinkers, the end of philosophy is the search for unity. Amid all the varying and contradictory phenomena of the universe there is something which gives coherence and intelligibility to them. Nor can this unity be something apart from the things; it must contain in itself the universe, which develops from it; it must be at once all and one. This unity is God, the universal substance,—the one and only principle, or *causa immanens*,—that which is in things and yet is distinct from them as the universal is distinct from the particular. He is the efficient and final cause of all, the beginning, middle, and end, eternal and infinite. By his action the world is produced, and his action is the law of his nature, his necessity is true freedom. He is living, active intelligence, the principle of motion and creation, realizing himself in the infinitely various forms of activity that constitute individual things. To the infinitely actual there is necessary the possible; that which determines involves somewhat in which its determinations can have existence. This other of God, which is in truth one with him, is matter. The universe, then, is a living cosmos, an infinitely animated system, whose end is the perfect realization of the variously graduated forms.

The unity which sunders itself into the multiplicity of things may be called the *monas monadum*, each thing being a *monas* or self-existent, living being, a universe in itself. Of these monads the number is infinite. The soul of man is a thinking monad, and stands mid-way between the divine intelligence and the world of external things. As a portion of the divine life, the soul is immortal. Its highest function is the contemplation of the divine unity, discoverable under the manifold of objects.

Such is a brief summary of the principal positions of Bruno's philosophy. It seems quite clear that in the earlier works, particularly the two Italian dialogues, he approached more nearly to the pantheistic view of things than in his later Latin treatises. The unity expounded at first is simply an *anima mundi*, a living universe, but not intelligent. There is a distinct development traceable towards the later and final form of his doctrine, in which the universe appears as the realization of the divine mind.

The Italian works of Bruno, formerly exceedingly rare, have been collected and published in two volumes, by A. Wagner, 1830. An edition of the Latin works was begun by Gröner in 1834, but has not been completed. The most complete monograph on him is that by C. Bartholmess, 2 vols. 1846-47; the most recent life is that by Domenico Berti, 1868. The best systematic account of his philosophy is that by Carriere, *Philosophische Weltanschauung der Reformationszeit*, 1847, pp. 411-494. The relations between his philosophy and that of Cusanus are treated in Clemens, *G. Bruno und Nicolaus von Cusa*, 1847. An English translation by Morehead (not, as is generally supposed, by Toland) of the *Spaccio* is dated 1713. It was probably printed before that time, and it is now excessively rare. Toland translated the preface to *De l'Infinito*; it is found in his *Posthumous Works*. There is a French translation of part of the *Spaccio*, *Le Ciel Reformé*, 1750. Lasson has translated *De la Causa* into German, 1872, with introduction and notes.

The earlier literature with regard to Bruno is copious; it will be found in Bayle, Buhle, and Tennemann. (R. AD.)

BRUNSWICK (German BRAUNSCHWEIG), a duchy and state of Northern Germany, forming part of the new German Empire, and included in the Prusso-German Zollverein. It consists of three larger and five smaller portions of territory lying mainly between 51° 38' and 52° 28' N. lat., and between 9° 20' and 11° 30' E. long. The principal part, containing the cities of Brunswick, Wolfenbüttel, and Helmstedt, is situated between Hanover and Prussia, to the S.E. of the former, and has its surface diversified by hill and plain. The part containing Holzminden and Gandersheim extends eastward from the Weser to Goslar, and is intersected by branches of the Hartz Mountains. The Blankenburg portion lies to the S.E. of the two former, between Prussia, Anhalt, and Hanover, and is traversed by the Hartz. Of the smaller portions some form *enclaves* in Hanover and others in Prussia.

Brunswick has an area of 1424 English square miles, and is divided into six circles, comprehending thirteen cities, and between four and five hundred smaller towns and villages. Besides the cities already mentioned the most important are Schöningen, Seesen, and Schöppenstedt. The population was in 1812, 209,527; in 1852, 271,208; in 1861, 281,708; and in 1871, 311,175. Of the last number 302,989 were Protestants, 7030 Roman Catholics, and 1171 Jews. The proportions in the political divisions were as follows:—

Circles.	Extent in square miles.	Inhabitants.		
		1834.	1867.	1871.
Brunswick	209	61,232	82,323	90,845
Wolfenbüttel	294	50,423	59,454	60,739
Helmstedt	304	41,155	52,023	58,705
Holzminden	221	41,290	42,129	41,581
Gandersheim	212	39,277	43,430	42,322
Blankenburg	184	19,855	22,928	22,523
	1424	253,232	302,792	311,715