

armies to have been in command of the cavalry under the constable, and to have in some measure superseded him as master of the horse in the royal palace. He exercised joint and co-ordinate jurisdiction with the constable in the court of chivalry, and afterwards became the sole judge of that tribunal. The marshalship of England was made hereditary in the Clares and Marshals, earls of Pembroke, in the reign of Stephen or Henry II., and through a co-heiress passed to the Bigots, earls of Norfolk, and by Roger Bigot, fifth earl of Norfolk, it was surrendered with his other dignities to Edward I. It was granted by Edward II. to his brother Thomas of Brotherton, earl of Norfolk, and, after it had been variously disposed of by Edward III., was by Richard II. erected into an earldom and conferred on Thomas Mowbray, duke of Norfolk, who was the great-grandson and heir of Thomas of Brotherton. One of the co-heiresses of the Mowbrays was the mother of John Howard, duke of Norfolk, who was created earl marshal by Richard III. After several attainders and partial restorations in the reigns of the Tudors and the Stuarts, the earl marshalship was finally entailed by Charles II. on the male line of the Howards, with many specific remainders and limitations, under which settlement it has regularly descended to the present duke of Norfolk. The Clares and Marshals, earls of Pembroke, and the Lords Morley appear to have been hereditary marshals of Ireland from the invasion of the island until the end of the 15th century. The Keiths were Earls Marischal of Scotland from the institution of the office by James II. in 1458 until the attainder of George, the tenth earl, in 1716.

On the subject of the great offices of state generally, see Stubbs, *Constitutional History*, ch. xi.; Freeman, *Norman Conquest*, ch. xxiv.; Eneist, *Constitution of England*, ch. xvi., xxxv., and liv.; also Gibbon, *Decline and Fall*, ch. liii., and Bryce, *Holy Roman Empire*, ch. xiv.

STATEN ISLAND, an island of New York State, forming, with some adjacent islands, Richmond county, with a population of 38,991 in 1880, is situated about 5 miles south of New York city, from which it is separated by New York Bay, while the Narrows, commanded by Forts Wadsworth and Tompkins and a line of water-batteries, separate it from Long Island on the north-east, Staten Island Sound from New Jersey on the west, and Newark Bay and the Kill van Kull from the same State on the north. It is of an irregular triangular shape, its greatest length being about 13 miles, its greatest breadth about 8, and the total area 58½ square miles. The surface is gently undulating, but a range of hills attaining 310 feet in height extends across the northern portion. Iron ore is found. The island contains many detached villa residences of persons in business in New York. On an artificial island off the east shore is the New York quarantine establishment, and Staten Island is the seat of the "Sailors' Snug Harbour," a retreat for superannuated seamen. Steam ferries ply half-hourly to New York, and on the island there is a railway line from Tompkinsville to Tottenville.

STATE PAPERS. See RECORDS, PUBLIC.

STATES OF THE CHURCH, or PAPAL STATES (Ital. Stato della Chiesa, Stato Pontificio, Stato Romano, Stato Ecclesiastico; Fr. États de l'Église, Pontificat, Souverain de Rome, &c.; Germ. Kirchenstaat; in ecclesiastical Latin often Patrimonium Sancti Petri), that portion of central Italy which, previous to the unification of the kingdom, was under the direct government of the see of Rome. The territory stood at the close as in the annexed table.

With the exception of Benevento, surrounded by the Neapolitan province of Principato Ulteriore, and the small state of Pontecorvo, enclosed within the Terra di Lavoro, the States of the Church formed a compact territory, bounded on the N.W. by the Lombardo-Venetian kingdom,

on the N.E. by the Adriatic, on the S.E. by the kingdom of Naples, on the S.W. by the Mediterranean, and on the W. by the grand-duchy of Tuscany and the duchy of

	Area in English Square Miles.	Population in 1853.
Comarca of Rome.....	1752.8	326,509
Legations. { Bologna.....	1359.2	375,681
{ Ferrara.....	1094	244,524
{ Forlì.....	718.8	218,433
{ Ravenna.....	701.5	175,994
{ Urbino, with Pesaro.....	1414.6	257,751
{ Velletri.....	571.3	62,013
{ Ancona.....	441.8	176,519
{ Macerata.....	895	243,104
{ Camerino.....	320	42,991
{ Fermo.....	335.7	110,321
{ Ascoli.....	476.3	91,916
{ Perugia.....	1555.5	234,533
{ Spoleto.....	1175.9	135,029
{ Rieti.....	531.7	73,683
{ Viterbo.....	1158.9	128,324
{ Orvieto.....	316.6	29,047
{ Cività Vecchia.....	380	20,701
{ Frosinone, with Pontecorvo.....	739.9	154,559
{ Benevento.....	61.3	23,176
	16,000.8	3,124,758

Modena. On the Adriatic the coast extended 140 miles, from the mouth of the Tronto (Truentus) to the southern mouth of the Po, and on the Tyrrhenian Sea 130 miles, from 41° 20' to 42° 22' N. lat. See vol. xiii. Plate VI.

The divisions shown above were adopted on December 21, 1827, the legations being ruled by a cardinal and the delegations by a prelate. Previously the several districts formally recognized were Latium, the Marittima (or seaboard) and Campagna, the Patrimony of Saint Peter, the duchy of Castro, the Orvietano, the Sabina, Umbria, the Perugia, the March of Ancona, Romagna, the Bolognese, the Ferrarese, and the duchies of Benevento and of Pontecorvo.

The question of the origin of the territorial jurisdiction of the pope has been treated under POPEDOM (vol. xix. p. 495). With the moral and ecclesiastical decay of the papacy in the 9th and 10th centuries much of its territorial authority slipped from its grasp; and by the middle of the 11th century its rule was not recognized beyond Rome and the immediate vicinity. By the treaty of Sutri (February 1111) Paschal II. was compelled by the emperor Henry V. to surrender all the possessions and royalties of the church; but this treaty was soon afterwards repudiated, and by the will of Matilda, countess of Tuscany, the papal see was enabled to lay claim to new territories of great value. By the capitulation of Neuss (1201) Otto IV. recognized the papal authority over the whole tract from Radicofani in Tuscany to the pass of Ceperano on the Neapolitan frontier—the exarchate of Ravenna, the Pentapolis, the March of Ancona, the bishopric of Spoleto, Matilda's personal estates, and the countship of Brittenoro; but a good deal of the territory thus described remained for centuries an object of ambition only on the part of the popes. The actual annexation of Ravenna, Ancona, Bologna, Ferrara, &c., dates from the 16th century. The States of the Church were of course submerged for a time by the ground-swell of the French Revolution, but they appeared again in 1814. In 1849 they received a constitution. On the formation of the kingdom of Italy in 1860 they were reduced to the Comarca of Rome, the legation of Velletri, and the three delegations of Viterbo, Cività Vecchia, and Frosinone; and in 1870 they disappeared from the political map of Europe.

STATICS. See MECHANICS.

STATIONERY. Under the name of stationery are embraced all writing materials and implements, together with the numerous appliances of the desk and of mercantile and commercial offices. In addition to these, the term fancy stationery covers a miscellaneous assemblage of leather and other goods, such as pocket-books, purses, bags, card-cases, and many kindred objects which cannot be classified. The principal articles and operations of the stationery trade are dealt with in detail under separate headings—BOOKBINDING, EMBOSSEING, INK, LITHOGRAPHY;

PAPER, PEN, PENCIL, SEALING-WAX, &c.; but in connexion with the separate industry of a commercial stationer there are a number of special operations and machines to which brief allusion may be made.

Paper-Ruling.—The ruling of blue and other coloured lines is usually done on a self-feeding machine provided with as many ruling pens as there are lines to be made, and these fixed in parallel order at intervals the width of the ruled spaces. The pens consist of grooved slips of sheet brass coming to a fine point, which in their upper part are covered by a sheet of felt saturated with a flowing ink, whence each pen obtains the supply required for tracing its line. The paper is carried forward by endless tapes or threads which pass around cylinders. In a recent form of machine the rulers consist of metal disks with thin edges, which take up printing ink from an india-rubber cylinder, and print the lines on the paper as it passes around a revolving cylinder.

Paper-Folding machinery is used for numerous purposes in the stationery trade, apart from its application to the folding of sheets for the bookbinder. Devices for folding come most prominently forward in connexion with the envelope manufacture, an industry which received an enormous development by the introduction of uniform postage rates. In envelope-making the folding is commonly associated with gumming, and sometimes with embossing, in the same system of machinery. The first efficient automatic machine for envelope manufacture was devised by Edwin Hill and Warren de la Rue, and by them patented in 1845. Many forms of envelope folding and gumming machine now exist. In making envelopes the blanks are first cut out by shaped cutters or punches acting at one stroke on a thickness of from 200 to 300 sheets of paper. These blanks in the latest form of machine are gummed by a pad which takes gum from a roller and presses it on the edges of the paper, just as printing ink is received from cylinders and pressed on paper in printing. The gummed surface of the pad lifts each blank separately, places it under a plunger, which, descending, passes it to folders, whence it is delivered into a clip in an endless band of considerable length. The envelopes are delivered into the clips in the band at the rate of about 100 to 150 per minute.

Perforating and Punching give rise to a range of machines of varied form and complexity. The idea of perforating paper so as to allow of the ready detaching of portions by tearing was conceived and patented in 1848 by Mr Henry Archer. Of such utility was Mr Archer's conception deemed by the post-office authorities as a convenience for detaching stamps from sheets that in 1853 he was awarded £4000 for his patent rights. The applications of perforation are now very numerous, but its value still remains most obvious in connexion with the detachment of adhesive stamps from sheets.

Numbering and Paging constitute another series of stationery operations, for which ingenious machines have been devised. For consecutive numbering a series of printing disks are employed, on the periphery of which the series of digits 1 to 0 are raised. The outer disk moves a number after each impression, the second disk moves once in ten times, and so on, thus automatically imprinting consecutive numbers up to the limit of the disks on the machine. Such a machine prints only on one side of the paper, and where the numbering is required on both sides the disks must be geared to move two places, numbering only odd or even numbers, two printings being thus required. For printing right and left consecutively an endless band machine is used, which prints alternately below and above for the two sides of the sheet.

STATISTICS. The word "statistic" is derived from the Latin *status*, which, in the so-called Middle Ages, had come to mean a "state" in the political sense. "Statistic," therefore, originally denoted inquiries into the condition of a state. Since the beginning of the 18th century the denotation of the word has been extended so as to include subjects only indirectly connected with political organizations, while at the same time the scope of the investigations it implies has become more definite, and at the present day may be said, for practical purposes, to be fixed, though there are still controversies as to the position of statistical studies in relation to other departments of scientific procedure.

History.—The origin of what is now known as "statistic" (Ger. *Die Statistik*; Fr. *La Statistique*; Ital. *Statistica*) can only be referred to briefly here. As M. Maurice Block has observed in commencing his admirable treatise, "it is no exaggeration to say that statistic has existed ever since there were states." For the first administrative act of the first regular Government was probably to number its fighting men, and its next to ascertain with

some degree of accuracy what amount of taxation could be levied on the remainder of the community. As human societies became more and more highly organized, there can be no doubt that a very considerable body of official statistics must have come into existence, and been constantly used by statesmen, solely with a view to administration. The Romans, who may be described as the most business-like people of antiquity, were careful to obtain accurate information regarding the resources of the state, and they appear to have carried on the practice of taking the census, a very comprehensive statistical operation, with a regularity which has hardly been surpassed in modern times. As to the efficiency of the work done we have unfortunately very little information, but those who are curious on the subject may be referred to an article by Dr Hildebrand, entitled "Die amtliche Bevölkerungsstatistik im alten Rom," printed in the *Jahrbuch für Nationalökonomie und Statistik*, 1866, p. 82.

Statistics, or rather the material for statistics, therefore existed at a very early period, but it was not until within the last three centuries that systematic use of the information available began to be made for purposes of investigation and not of mere administration. According to M. Block, the earliest work in which facts previously known only to Government officials were published to the world was a volume compiled by Francesco Sansovino, entitled *Del Governo et Amministrazione di Diversi Regni et Repubbliche*, which was printed in Venice and bears the date 1583. Other works of a similar kind were published towards the end of the 16th century in Italy and France. Regarding these and other early books on the subject reference may be made to Fallati's *Einleitung in die Wissenschaft der Statistik*, Dr G. B. Salvioni's preface and notes to his translation into Italian of Dr Mayr's work on statistics, and other authors mentioned at the close of this article.

Works on state administration and finance continued to be published during the first half of the 17th century, and the tendency to employ figures, which were hardly used at all by Sansovino, became more marked, especially in England, where the facts connected with "bills of mortality" had begun to attract attention.

In the year 1660 Hermann Conring, "professor of medicine and politics," a rather odd combination, in the university of Helmstädt, was in the habit of giving lectures in which he analysed and discussed the circumstances existing in various countries, in so far as they affected the happiness of the inhabitants. Conring's example was followed by other writers, in Germany and elsewhere, to whom reference is made by Block (*Traité*, pp. 5, 6) and Haushofer (*Lehr- und Handbuch*, p. 10, note).

The best-known member of the "descriptive" school was Achenwall (1719–1772), who is sometimes spoken of as "the father of modern statistics," but, as his procedure was essentially the same as that of Conring, though it was carried out more fully, the title has not been unanimously granted. It is generally admitted, however, that Achenwall's work gave a great impulse to the pursuit of the studies which are now included under the title of statistics. He called his book *Staatsverfassung der europäischen Reiche* in the first two editions (1749, 1752), meaning "Constitution of the States of Europe." Subsequently he added "vornehmsten" and then "heutigen" before "europäischen," evidently with the desire of bringing his work, which may be regarded as the germ of such volumes as the *Statesman's Year-Book*, "up to date." Achenwall is usually credited with being the first writer who made use of the word "statistics," which he applied to his collection of "noteworthy matters regarding the state"

(*Staatsmerkwürdigkeiten*), but the claim has been disputed by M. Block, who points out that the term *collegium statisticum* had been previously employed by Schmeitzel, a follower of Conring, whose lectures at Jena were no doubt attended by Achenwall.

In any case statistics, in the modern sense of the word, did not really come into existence until the publication by J. P. Süßmilch, a Prussian clergyman, of a work entitled *Die göttliche Ordnung in den Veränderungen des Menschlichen Geschlechts aus dem Geburt, dem Tode, und der Fortpflanzung desselben erwiesen*. In this book a systematic attempt was made to make use of a class of facts which up to that time had been regarded as belonging to "political arithmetic," under which description some of the most important problems of what modern writers term "vital statistics" had been studied, especially in England. Süßmilch had arrived at a perception of the advantage of studying what Quetelet subsequently termed the "laws of large numbers." He combined the method employed by the Conring-Achenwall school of "descriptive statistics," whose works were not unlike modern school-books of geography, with that of the "political arithmeticians," who had confined themselves to investigations into the facts regarding mortality and a few other similar subjects, without much attempt at generalizing from them.

Political arithmetic had come into existence in England in the middle of the 17th century, or about the time when Conring was instructing the students of Helmstädt. The earliest example of this class of investigation is the work of Captain John Graunt of London, entitled *Natural and Political Annotations made upon the Bills of Mortality*, which was first published in 1666. This remarkable work, which dealt with mortality in London only, ran through many editions, and the line of inquiry it suggested was followed up by other writers, of whom the most distinguished was Sir William Petty, whose active mind was naturally attracted by the prospect of making use of a new scientific method in the class of speculations which occupied him. Sir William was the first writer to make use of the phrase which for nearly a century afterwards was employed to describe the use of figures in the investigation of the phenomena of human society. He called his book on the subject, which was published in 1683, *Five Essays in Political Arithmetick*. Other writers, of whom Halley, the celebrated mathematician and astronomer, was one, entered on similar investigations, and during the greater part of the 18th century the number of persons who devoted themselves to "arithmetical" inquiries into problems of the class now known as statistical was steadily increasing. Much attention was given to the construction of tables of mortality, a subject which had a great attraction for mathematicians, who were eager to employ the newly-discovered calculus of probabilities on concrete problems. Besides Halley, De Moivre, Laplace, and Euler busied themselves with this branch of study. Attempts were also made to deal with figures as the basis of political and fiscal discussion by Arthur Young, Hume, and other historical writers, as well as by the two Mirabeaus.

It is now necessary to return to Süßmilch, who, as already mentioned, endeavoured to form a general theory of society, based on what were then termed "arithmetical" premisses, treated nearly on the lines laid down by Achenwall. In modern language, he made use of quantitative aggregate-observation as an instrument of social inquiry. It is true he did not enter on his investigation with an "open mind." He desired to support a foregone conclusion, as the title of his work already mentioned shows. But nevertheless his work was a most valuable one, since it pointed out a road which others who had no desire to

procure evidence in favour of a particular system of thought were not slow to follow. M. Block makes the following remarks on the influence exercised on his contemporaries by the work of Süßmilch:—"If the author of the *Göttliche Ordnung* had been a professor his influence would have been much greater than it was. In maintaining that the movement of population is subject to law, that there is a regularity in the recurrence of such phenomena which allows of their being foreseen, he cast into the public mind a leaven which has evidently contributed to the progress of science." Although for many years after the appearance of Süßmilch's book there was a good deal of resistance to the introduction of "arithmetic" as the coadjutor of moral and political investigations, yet, practically there was a tacit admission of the usefulness of figures, even by the chiefs of the so-called "descriptive" school. On the other hand Süßmilch's success was the origin of a "mathematical" school of statisticians, some of whom carried their enthusiasm for figures so far that they refused to allow any place for mere "descriptions" at all. These two schools have now coalesced, each admitting the importance of the point of view urged by the other. They were, however, still perceptibly distinct even as late as 1850, and the ignorant hostility with which many people even among the cultivated classes still regard statistical inquiries into the nature of human society may be regarded as a survival of the much stronger feeling which showed itself among "orthodox" professors of law and economics on the publication of Süßmilch's treatise.

M. Block is of opinion that the descriptive school, by whom figures are regarded merely as accessories to and illustrations of the text, would have maintained its position even now but for the establishment of official statistical offices and the influence of the great Belgian Quetelet. Quetelet's work was certainly "epoch-making" in a far higher degree than that of any of his predecessors. To the impulse created by him must be attributed the foundation in 1835 of the Statistical Society of London, a body which, though it has contributed little to the discussion of the theory of statistics, has had a considerable and very useful influence on the practical work of carrying out statistical investigations in the United Kingdom and elsewhere. Quetelet's works were numerous and multifarious, but his most important contribution to the growth of statistical inquiry was his investigation of the theory of probabilities as applied to the "physical and social" sciences, contained in a series of letters to the duke of Saxe-Coburg and Gotha, and published in 1846. Quetelet was above all things an exponent of the "laws of large numbers." He was especially fascinated with the tendency to relative constancy of magnitude displayed by the figures of moral statistics, especially those of crime, which inspired him with a certain degree of pessimism. His conception of an average man (*l'homme moyen*) and his disquisition on the "curve of possibility" were most important contributions to the technical development of the statistical method, though, as M. Block observes, their value may have been somewhat exaggerated by subsequent writers (Block, ch. i. p. 16, and ch. v. p. 112 sq.). It is not possible to enter at length into Quetelet's work in connexion with statistical science. At the close of this article will be found a list including those of his works which are likely to be of use to students of statistics.

The influence exercised by Quetelet on the development of statistics is clearly seen from the fact that, though there is still considerable controversy among statisticians, the old controversy between the "descriptive" and arithmetical schools has disappeared, or perhaps we should say has been transformed into a discussion of another kind, the question now at issue being whether there is a science

of statistics as well as a statistical method. It is true that a few books were published between 1830 and 1850 in which the politico-geographical description of a country is spoken of as "statistics," which is thus distinguished from "political arithmetic." The title of Knies's great work, *Die Statistik als selbständige Wissenschaft* (Cassel, 1850), is especially noteworthy as showing that the nature of the controversy was changing. The opponents of Süßmilch maintained that "political arithmetic" ought not to be spoken of as statistics at all. They clung to the conceptions of Conring and Achenwall, to whom "statistics" represented "Staatenkunde" or "Staatszustandskunde," or, as Herzberg, one of Achenwall's followers, called it, "die Kenntniss von der politischen Verfassung der Staaten." Knies claimed that the really "scientific" portion of statistics consisted of the figures employed. As Haushofer says, "his starting point is political arithmetic."

Some eminent statisticians of the latter half of the present century agree with Knies, but the majority of the modern writers on the theory of statistics have adopted a slightly different view, according to which statistics is at once a science relating to the social life of man and a method of investigation applicable to all sciences. This view is ably maintained by Mayr, Haushofer, Gabaglio, and Block, who may be taken to represent the opinions held by the majority of statisticians on the Continent.

Having dealt as far as was possible, within the limits of this article, with the history of statistics, we may here enter a little more minutely into the views of the existing Continental school. This is all the more necessary because, singular to say, there has been no systematic exposition of the subject in England. Isolated dicta have been furnished by high authorities, such as the late Dr W. A. Guy, Prof. Ingram, Sir Rawson W. Rawson, Mr Robert Giffen, and to some extent also by John Stuart Mill, Buckle, Sir George Cornewall Lewis, and other historical and economic writers. There are also monographs on particular points connected with the technique of statistical investigation, such as the contribution made by Mr F. Y. Edgeworth to the discussions at the jubilee of the Statistical Society in 1885, and some of the observations contained in a paper by Mr Patrick Geddes, entitled *An Analysis of the Principles of Economics*, read before the Royal Society of Edinburgh in 1884. Prof. Foxwell has also lectured on the subject of statistics in his capacity of Newmarch lecturer at University College, London. But there has been no attempt to deal with the subject in a systematic way. The practice of statistical inquiry, on the other hand, has been carried on in England with a high degree of success.

With regard to the few invasions of the domain of theory attempted by English writers, it may be observed that the authorities above mentioned are not unanimous. Dr Guy as well as Sir Rawson Rawson, who handled the subject with great ability at the jubilee meeting of the London Statistical Society in June 1885, both claim that statistics is to be regarded as an independent science, apart from sociology, while Prof. Ingram, who presided over Section F at the Dublin meeting of the British Association in 1878, maintained that statistics cannot occupy a position co-ordinate with that of sociology, and went on to say that they "constitute only one of the aids or adminicula of science." Mr Giffen has also expressed himself adversely to the Continental doctrine that there is an independent science of statistics, and this opinion appears to be the correct one, but, as Dr Guy and Sir Rawson Rawson have the support of the great body of systematic teaching emanating from distinguished Continental statisticians in support of their view, while their opponents have so far only the *obiter dicta* of a few eminent men to rely upon, it appears needful to examine closely

the views held by the Continental authorities, and the grounds on which they are based.

The clearest and shortest definition of the science of statistics as thus conceived is that of M. Block, who describes it as "la science de l'homme vivant en société en tant qu'elle peut être exprimée par les chiffres." He proposes to give a new name to the branch of study thus defined, namely, "Demography." Mayr's definition is longer. He defines the statistical science as "die systematische Darlegung und Erörterung der thatsächlichen Vorgänge und der aus diesen sich ergebenden Gesetze des gesellschaftlichen menschlichen Lebens auf Grundlage quantitativer Massenbeobachtungen" (the systematic statement and explanation of actual events, and of the laws of man's social life that may be deduced from these, on the basis of the quantitative observation of aggregates). Gabaglio's view is practically identical with those adopted by Mayr and Block, though it is differently expressed. He says "statistics may be interpreted in an extended and in a restricted sense. In the former sense it is a method, in the latter a science. As a science it studies the actual social-political order by means of mathematical induction."

This discussion regarding the nature of statistics is to a large extent a discussion about names. There is really no difference of opinion among statistical experts as to the subject-matter of statistics, the only question being—Shall statistics be termed a science as well as a method? That there are some investigations in which statistical procedure is employed which certainly do not belong to the domain of the supposed statistical science is generally admitted. But, as already shown, an attempt has been made to claim that the phenomena of human society, or some part of those phenomena, constitute the subject-matter of an independent statistical science. It is not easy to see why this claim should be admitted. There is no reason either of convenience or logic why the use of a certain scientific method should be held to have created a science in one department of inquiry, while in others the said method is regarded merely as an aid in investigation carried on under the superintendence of a science already in existence. It is impossible to get over the fact that in meteorology, medicine, and other physical sciences statistical inquiries are plainly and obviously examples of the employment of a method, like microscopy, spectrum analysis, or the use of the telescope. Why should the fact of their employment in sociology be considered as authorizing the classification of the phenomena thus dealt with to form a new science?

The most effective argument put forward by the advocates of this view is the assertion that statistics are merely a convenient aid to investigation in the majority of sciences, but are the sole method of inquiry in the case of sociology. Dr Mayr especially (*Gesetzmässigkeit, &c.*, p. 14 sq.) makes use of this argument, and illustrates it with his usual ability; but his reasoning is very far from being conclusive. When, indeed, it is tested by reference to the important class of social facts which are named economic, it becomes obvious that the argument breaks down. Economics is a branch—the only scientifically organized branch—of sociology, and statistics are largely used in it, but no one, so far as we are aware, has proposed to call economics a department of statistical science. Sir Rawson W. Rawson, it is true, has boldly proposed to throw over the term "sociology" altogether, and to describe the study of man in the social state as "statistics," but common usage is too firmly fixed to make this alteration of nomenclature practicable even if it were desirable. The existence of the works of Mr Herbert Spencer and Dr Schäffle alone would render the attempted alteration abortive.