ment of the truth reached by its means. The *Amendment of the Understanding* was therefore put aside unfinished, and was first published in the *Opera Posthuma*. Spinoza meanwhile concentrated his attention upon the *Ethics*, and we learn from the correspondence with his Amsterdam friends that a considerable part of book i. had been communicated to the philosophical club there before February 1663. It formed his main occupation for two or three years after this date. Though thus giving his friends freely of his best, Spinoza did not cast his thoughts broadcast upon any soil. He had a pupil living with him at Rhijnsburg whose character seemed to him lacking in solidity and discretion. This pupil (probably Albert Burgh, who afterwards joined the Church of Rome and penned a foolishly insolent epistle to his former teacher) was the occasion of Spinoza's first publication,—the only publication indeed to which his name was attached. Not deeming it prudent to initiate the young man into his own system, he took for a text-book the second and third parts of Descartes's *Principles*, which deal in the main with natural philosophy. As he proceeded he put Descartes's matter in his own language and cast the whole argument into a geometric form. At the request of his friends he devoted a fortnight to applying the same method to the first or metaphysical part of Descartes's philosophy, and the sketch was published in 1663, with an appendix entitled *Cogitata Metaphysica*, still written from a Cartesian standpoint (defending, for example, the freedom of the will), but containing hints of his own doctrine. The book was revised by Dr Meyer for publication and furnished by him, at Spinoza's request, with a preface, in which it is expressly stated that the author speaks throughout not in his own person but simply as the exponent of Descartes. A Dutch translation appeared in the following year.[1]

In 1663 Spinoza removed from Rhijnsburg to Voorburg, a suburban village about 2 miles from The Hague. His reputation had continued to spread. From Rhijnsburg he had paid frequent visits to The Hague, and it was probably the desire to be within reach of some of the friends he had made in these visits—among others the De Witts—that prompted his change of residence. He had works in hand, moreover, which he wished in due time to publish; and in that connexion the friendly patronage of the De Witts might be of essential service to him. The first years at Voorburg continued to be occupied by the composition of the *Ethics*, which was probably finished, however, by the summer of 1665. A journey made to Amsterdam in that year is conjectured to have had reference to its publication. But, finding that it would be impossible to keep the authorship secret, owing to the numerous hands through which parts of the book had already passed, Spinoza determined to keep his manuscript in his desk for the present. In September 1665 we find Oldenburg twitting him with having turned from philosophy to theology and busying himself with angels, prophecy, and miracles. This is the first reference to the *Tractatus Theologico-Politicus*, which formed his chief occupation for the next four years. The aim of this treatise may be best understood from the full title with which it was furnished—*Tractatus Theologico-Politicus, continens dissertationes aliquot, quibus ostenditur libertatem philosophandi non tantum salva pietate et reipublicæ pace posse concedi sed eandem nisi cum pace reipublicæ ipsaque pietate tolli non posse.* It is, in fact, an eloquently reasoned defence of liberty of thought and speech in speculative matters. The external side of religion—its rites and observances—must of necessity be subject to a certain control on the part of the state, whose business it is to see to the preservation of decency and order. But, with such obvious exceptions, Spinoza claims complete freedom of expression for thought and belief; and he claims it in the interests alike of true piety and of the state itself. The thesis is less interesting to a modern reader—because now generally acknowledged—than the argument by which it is supported. Spinoza's position is based upon the thoroughgoing distinction drawn in the book between philosophy, which has to do with knowledge and opinion, and theology, or, as we should now say, religion, which has to do exclusively with obedience and conduct. The ægis of religion, therefore, cannot be employed to cover with its authority any speculative doctrine; nor, on the other hand, can any speculative or scientific investigation be regarded as putting religion in jeopardy. Spinoza undertakes to prove his case by the instance of the Hebrew Scriptures. Scripture deals, he maintains, in none but the simplest precepts, nor does it aim at anything beyond the obedient mind; it tells us nought of the divine nature, but what men may profitably apply to their lives. The greater part of the treatise is devoted to working out this line of thought; and in so doing Spinoza consistently applies to the interpretation of the Old Testament those canons of historical exegesis which are often regarded as of comparatively recent growth. The treatise thus constitutes the first document in the modern science of Biblical criticism. It was published in 1670, anonymously, printer and place of publication being likewise disguised (*Hamburgi apud Henricum Künraht*). The storm of opposition which it encountered showed that these precautions were not out of place. It was synodically condemned along with Hobbes's *Leviathan* and other books as early as April 1671, and was consequently interdicted by the states-general of Holland in 1674; before long it was also placed on the Index by the Catholic authorities. But that it was widely read appears from its frequent re-issue with false title-pages, representing it now as an historical work and again as a medical treatise. Controversialists also crowded into the lists against it. A translation into Dutch appears to have been proposed; but Spinoza, who foresaw that such a step would only increase the commotion which was so distasteful to him, steadily set his face against it. No Dutch translation appeared till 1693.

The same year in which the *Treatise* was published Spinoza removed from his suburban lodging at Voorburg into The Hague itself. He took rooms first on the Veerkay with the widow Van de Velde, who in her youth had assisted Grotius to escape from his captivity at Loewenstein. This was the house afterwards occupied by Colerus, the worthy Lutheran minister who became Spinoza's biographer. But the widow insisted on boarding her lodger, and Spinoza presently found the expense too great for his slender purse. He accordingly removed to a house on the Paveliœn Gracht near at hand, occupied by a painter called Van der Spijck. Here he spent the remaining years of his life in the frugal independence which he prized. Colerus gives particulars which enable us to realize the almost incredible simplicity and economy of his mode of life. He would say sometimes to the people of the house that he was like the serpent who forms a circle with his tail in his mouth, meaning thereby that he had nothing left at the year's end. His friends came to visit him in his lodgings, as well as others attracted by his reputation—Leibnitz among the rest—and were courteously entertained, but Spinoza preferred not to accept their offers of hospitality. He spent the greater part of his time quietly in his own chamber, often having his meals brought there and sometimes not leaving it for two or three days together when absorbed in his studies. On one occasion he did not leave the house for three

[1] The title of the Latin original ran—*Renati des Cartes Principiorum Philosophiæ pars i. et ii. more geometrico demonstratæ per Benedictum de Spinoza Amstelodamensem. Accesserunt ejusdem Cogitata Metaphysica.*

months. "When he happened to be tired by having applied himself too much to his philosophical meditations, he would go downstairs to refresh himself, and discoursed with the Van der Spijcks about anything that might afford matter for an ordinary conversation, and even about trifles. He also took pleasure in smoking a pipe of tobacco; or, when he had a mind to divert himself somewhat longer, he looked for some spiders and made them fight together, or he threw some flies into the cobweb, and was so well pleased with the result of that battle that he would sometimes break into laughter" (Colerus). He also conversed at times on more serious topics with the simple people with whom he lodged, often, for example, talking over the sermon with them when they came from church. He occasionally went himself to hear the Lutheran pastor preach—the predecessor of Colerus—and would advise the Van der Spijcks not to miss any sermon of so excellent a preacher. The children, too, he put in mind of going often to church, and taught them to be obedient and dutiful to their parents. One day his landlady, who may have heard strange stories of her solitary lodger, came to him in some trouble to ask him whether he believed she could be saved in the religion she professed. "Your religion is a good one," said Spinoza; "you need not look for another, nor doubt that you will be saved in it, provided that, while you apply yourself to piety, you live at the same time a peaceable and quiet life." Only once, it is recorded, did Spinoza's admirable self-control give way, and that was when he received the news of the murder of the De Witts by a frantic mob in the streets of The Hague. It was in the year 1672, when the sudden invasion of the Low Countries by Louis XIV. raised an irresistible clamour for a military leader and overthrew the republican constitution for which the De Witts had struggled. John De Witt had been Spinoza's friend, and had bestowed a small pension upon him; he had Spinoza's full sympathy in his political aims. On receiving the news of the brutal murder of the two brothers, Spinoza burst into tears, and his indignation was so roused that he was bent upon publicly denouncing the crime upon the spot where it had been committed. But the timely caution of his host prevented his issuing forth to almost certain death. Not long after Spinoza was himself in danger from the mob, in consequence of a visit which he paid to the French camp. He had been in correspondence with one Colonel Stoupe, a Swiss theologian and soldier, then serving with the prince of Condé, the commander of the French army at Utrecht. From him Spinoza received a communication enclosing a passport from the French commander, who wished to make his acquaintance and promised him a pension from the French king at the easy price of a dedication to his majesty. Spinoza went to Utrecht, but returned without seeing Condé, who had in the meantime been called elsewhere; the pension he civilly declined. There may have been nothing more in the visit than is contained in this narrative; but on his return Spinoza found that the populace of The Hague regarded him as no better than a spy. The town was full of angry murmurs, and the landlord feared that the mob would storm his house and drag Spinoza out. Spinoza quieted his fears as well as he could, assuring him that as soon as the crowd made any threatening movement he would go out to meet them, "though they should serve me as they did the poor De Witts. I am a good republican and have never had any aim but the honour and welfare of the state." Happily the danger passed off without calling for such an ordeal.

In 1673 Spinoza received an invitation from the elector palatine to quit his retirement and become professor of philosophy in the university of Heidelberg. The offer was couched in flattering terms, and conveyed an express assurance of "the largest freedom of speech in philosophy, which the prince is confident that you will not misuse to disturb the established religion." But Spinoza's experience of theological sensitiveness led him to doubt the possibility of keeping on friendly terms with the established religion, if he were placed in a public capacity. Moreover, he was not strong; he had had no experience of public teaching; and he foresaw that the duties of a chair would put an end to private research. For all these reasons he courteously declined the offer made to him. There is little more to tell of his life of solitary meditation. In 1675 we learn from his correspondence that he entertained the idea of publishing the *Ethics*, and made a journey to Amsterdam to arrange matters with the printer. "But, whilst I was busy with this," he writes, "the report was spread everywhere that a certain book of mine was in the press, wherein I endeavoured to show that there was no God; and this report found credence with many. Whereupon certain theologians (themselves perhaps the authors of it) took occasion to complain of me to the prince and the magistrates; moreover, the stupid Cartesians, because they are commonly supposed to side with me, desiring to free themselves from that suspicion, were diligent without ceasing in their execrations of my doctrines and writings, and are as diligent still." As the commotion seemed to grow worse instead of subsiding, Spinoza consigned the manuscript once more to his desk, from which it was not to issue till after his death. His last literary work was the unfinished *Tractatus Politicus* and the preparation of notes for a new edition of the *Tractatus Theologico-Politicus*, in which he hoped to remove some of the misunderstandings which the book had met with. The *Tractatus Politicus* develops his philosophy of law and government on the lines indicated in his other works, and connects itself closely with the theory enunciated by Hobbes a generation before. Consumption had been making its insidious inroads upon Spinoza for many years, and early in 1677 he must have been conscious that he was seriously ill. On Saturday the 20th of February he sent to Amsterdam for his friend Dr Meyer. On the following day the Van der Spijcks, having no thought of immediate danger, went to the afternoon service. When they came back Spinoza was no more; he had died about three in the afternoon with Meyer for the only witness of his last moments. Spinoza was buried on the 25th of February "in the new church upon the Spuy, being attended," Colerus tells us, "by many illustrious persons and followed by six coaches." He was little more than forty-four years of age.

Spinoza's effects were few and realized little more than was required for the payment of charges and outstanding debts. "One need only cast one's eyes upon the account," says his biographer, "to perceive that it was the inventory of a true philosopher. It contains only some small books, some engravings, a few lenses, and the instruments to polish them." His desk, containing his letters and his unpublished works, Spinoza had previously charged his landlord to convey to Jan Rieuwertz, a publisher in Amsterdam. This was done, and the *Opera Posthuma* appeared in the same year, without the author's name, but with his initials upon the title-page. They were furnished with a preface written in Dutch by Jarig Jellis, a Mennonite friend of Spinoza's, and translated into Latin by Dr Meyer. Next year the book was proscribed in a violently worded edict by the states of Holland and West Friesland. The obloquy which thus gathered round Spinoza in the later years of his life remained settled upon his memory for a full hundred years after his death. Hume's casual allusion to "this famous atheist" and his "hideous hypothesis" is a fair specimen of the tone in which he is usually referred to; people talked about Spinoza, Lessing said, "as if he were a dead dog." The change of opinion in this respect may be dated from Lessing's famous conversation with Jacobi in 1780. Lessing, Goethe, Herder, Novalis, and Schleiermacher, not to mention philosophers like Schelling and Hegel, united in recognizing the unique strength and sincerity of Spinoza's thought, and in setting him in his rightful place among the speculative leaders of mankind. Transfused into their writings, his spirit has had a large share in moulding the philosophic thought

of the 19th century, and it has also been widely influential beyond the schools. Instead of his atheism Hegel speaks of his acosmism, and Novalis dubs him a God-intoxicated man. Schleiermacher's fine apostrophe is well known, in which he calls upon us to "offer a lock of hair to the manes of the holy and excommunicated Spinoza."

Spinoza's personal appearance is described by Colerus from the accounts given him by many people at The Hague who knew him familiarly. "He was of a middle size, and had good features in his face, the skin somewhat dark, black curled hair, and the long eyebrows of the same colour, so that one might easily know from his looks that he was descended from the Portuguese Jews." Leibnitz also gives a similar description: "The celebrated Jew Spinoza had an olive complexion and something Spanish in his face." These characteristics are preserved in a portrait in oil in the Wolfenbüttel library, which was probably the original of the (in that case unsuccessfully rendered) engraving prefixed to the *Opera Posthuma* of 1677. This portrait has recently been photographed for Dr Martineau's *Study of Spinoza*. In 1880 a statue was erected to Spinoza at The Hague by international subscription among his admirers.

Spinoza's philosophy is a thoroughgoing pantheism, which has both a naturalistic and a mystical side. The foundation of the system is the doctrine of one infinite substance, of which all finite existences are modes or limitations (modes of thought or modes of extension). God is thus the immanent cause of the universe; but of creation or will there can be no question in Spinoza's system. God is used throughout as equivalent to nature (*Deus sive natura*). The philosophical standpoint comprehends the necessity of all that is—a necessity that is none other than the necessity of the divine nature itself. To view things thus is to view them, according to Spinoza's favourite phrase, *sub specie æternitatis*. Spinoza's philosophy is fully considered in the article CARTESIANISM (see vol. v. p. 152 *sq.*).

Literature.—The contents of the *Opera Posthuma* included the *Ethics*, the *Tractatus Politicus*, and the *De Intellectus Emendatione* (the last two unfinished), a selection from Spinoza's correspondence, and a *Compendium of Hebrew Grammar*. The *Treatise on the Rainbow*, supposed to be lost, was published anonymously in Dutch in 1687. The first collected edition of Spinoza's works was made by Paulus in 1802; there is another by Gfrörer (1830), and a third by Bruder (1843-46) in three volumes. Van Vloten's volume, published in 1862, *Ad Benedicti de Spinoza opera quæ supersunt omnia supplementum*, is uniform with Bruder's edition so as to complete it by a supplementary volume. It contained the early treatise *De Deo et homine*, the *Treatise on the Rainbow*, and several fresh letters. A complete and authoritative edition has only recently been achieved by Dr Van Vloten and Professor J. P. N. Land. The work was undertaken by them for the Spinoza Memorial Committee formed in Holland to celebrate the bicentenary of the philosopher's death; the funds remaining after the erection of the statue mentioned above were devoted to the publication of this handsome edition (2 vols., 1882-83). An English translation of *The Chief Works of Spinoza*, by R. H. M. Elwes, appeared in 1883, and a separate translation of the *Ethics* by W. H. White was published in the same year; previous translations were unscholarly in execution. The main authority for Spinoza's life is the sketch published in 1705, in Dutch, with a controversial sermon against Spinozism, by Johannes Colerus. The French version of this *Life* (1706) has been several times reprinted as well as translated into English and German. The English version, also dating from 1706, has been reprinted by Mr Frederick Pollock at the end of his work, *Spinoza, his Life and Philosophy* (1880). Mr Pollock's book and Dr Martineau's *Study of Spinoza* (1882), both admirable pieces of work, are in a manner complementary, and may with advantage be studied together. In his introduction Mr Pollock gives a list of the biographical sources, and also some account of the early literature relating to Spinoza. The Spinoza literature in more recent times has become so extensive as to forbid quotation. A. van der Linde's *Benedictus Spinoza: Bibliografie* (The Hague, 1871) is a classified catalogue as nearly as possible complete down to that date. (A. SE.)

SPIRES (Germ. *Speyer* or *Speier*), the chief town of the Rhenish palatinate, Bavaria, and formerly a free imperial city, is situated on the left bank of the Rhine, at the mouth of the Speyerbach, 21 miles to the south of Worms. The principal streets are broad but irregular, and the general appearance of the town little corresponds to its high antiquity, owing to the fact that it was burned by the French in 1689. The only important ancient building that has survived the flames is the cathedral, a very large and imposing basilica of red sandstone, and one of the noblest examples of Romanesque architecture now extant. Beyond the general interest attaching to it as one of the old Romanesque churches of the Rhineland, Spires cathedral has a peculiar importance in the history of architecture as probably the earliest Romanesque basilica in which the nave as well as the side arcades was vaulted from the first. Built in 1030-61 by Conrad II. and his successor, this church has had a chequered history, its disasters culminating in 1689, when the soldiers of Louis XIV. burned it to the bare walls and scattered the ashes of the eight German emperors who had been interred in the kings' choir. Restored in 1772-84 and provided with a vestibule and façade, it was again desecrated by the French in 1794; but in 1846-53 it was once more thoroughly restored and adorned in the interior with gorgeous frescos at the expense of the king of Bavaria. The large cathedral bowl (Domnapf) in front of the west façade formerly marked the boundary between the episcopal and municipal territories. Each new bishop on his election had to fill the bowl with wine, while the burghers emptied it to his health. The heathen tower to the east of the church, on foundations supposed to be Roman, was probably part of the town wall built in 1080 by Bishop Rudger. Of the Retscher, or imperial palace, so called because built after the model of the Hradschin at Prague, only a mouldering fragment of wall remains. It was in this palace that the famous diet of Spires met in 1529, at which the Reformers first received the name of Protestants. The Altpörtel (alta porta), a fine old gateway of 1246, is a relic of the free imperial city. Among the modern buildings are several churches and schools, a museum and picture gallery, &c. Spires, although rebuilt in 1697, has never recovered from the cruel injuries inflicted by the French in 1689. Its trade is insignificant, although it still has a free harbour on the Rhine. Its manufactures include paper, tobacco and cigars, sugar, sugar of lead, vinegar, beer, and leather. Vines and tobacco are grown in the neighbourhood. The population in 1880 was 15,589 and in 1885 16,228.

Spires, known to the Romans as *Augusta Nemetum* or *Nemetæ*, and to the Gauls as *Naviomagus*, is one of the oldest towns on the Rhine. The modern name appears first, under the form Spira, about the 7th century. Captured by Julius Cæsar in 47 B.C., it was repeatedly destroyed by the barbarian hordes in the first few centuries of the Christian era. The town had become an episcopal seat in the 4th century; but heathenism supervened, and the present bishopric dates from 610. In 830 Spira became part of the Frankish empire, the emperors having a "palatium" here; and it was especially favoured by the Salic imperial house. The contentions between the bishops and the citizens were as obstinate and severe as in any other city of Germany. The situation of the town opposite the mouths of several roads through the Rhine valley early fostered its trade; in 1294 it rose to be a free imperial city, although it owned no territory beyond its walls and had a population of less than 30,000. It enjoyed great renown as the seat of the imperial supreme court from 1527 till 1689; it was fifth among the free cities of the Rhine, and had a vote in the Upper Rhenish diet. Numerous imperial diets assembled here. From 1801 till 1814 it was the capital of a department of France; but it was restored to Bavaria in the latter year. By the peace of Spires in 1544 the Hapsburgs renounced their claims to the crown of Sardinia.

SPIRITUALISM. The term "spiritualism" is used by philosophical writers to denote the opposite of materialism. It is also used in a narrower sense to describe the belief that the spiritual world manifests itself by producing in the physical world effects inexplicable by the known laws of nature. The belief in such occasional manifestations has probably existed as long as the belief in the existence of spirits apart from human bodies, and a complete examination into it would involve a discussion of the religions of all ages and nations. In 1848, however, a peculiar form of it, believed to be based on abundant experimental evidence, arose in America and spread there with great rapidity and thence over the civilized world. To this movement, which has been called "modern spiritualism," the discussion in the present article is confined. The movement began in a single family. In 1848 a Mr and

Mrs Fox and their two daughters, living at Hydeville (Wayne), New York, were much disturbed by unexplained knockings. At length Kate Fox discovered that the cause of the sounds was intelligent and would make raps as requested, and, communication being established, the rapper professed to be the spirit of a murdered pedlar. An investigation into the matter seemed to show that none of the Fox family were concerned in producing the rappings; but the evidence that they were not concerned is insufficient, although similar noises had been noticed occasionally in the house before they lived there. It was, however, at Rochester, where the two Fox girls soon afterwards went to live with a married sister (Mrs Fish) that modern spiritualism assumed its present form, and that communication was, as it was believed, established with lost relatives and deceased eminent men. The presence of certain "mediums" was required to form the link between the worlds of the living and of the dead, and Kate Fox and her sister were the first mediums. Spiritualists do not as yet claim to know what special qualities in mediums enable spirits thus to make use of them. The earliest communications were carried on by means of "raps," or, as Mr Crookes calls them, "percussive sounds." It was agreed that one rap should mean "no" and three "yes," while more complicated messages were—and are—obtained in other ways, such as calling over or pointing to letters of the alphabet, when raps occur at the required letters.

The idea of communicating with the departed was naturally attractive even to the merely curious, still more to those who were mourning for lost friends, and most of all to those who believed that this was the commencement of a new revelation. The first two causes have attracted many inquirers; but it is the last that chiefly gives to modern spiritualism its religious aspect. Many came to witness the new wonder, and the excitement and interest spread rapidly. "Spirit-circles" were formed in several families, and other mediums discovered, exhibiting phenomena of various kinds (see below). The interest in mesmerism and the phenomena of hypnotic trance, which was widely diffused at this time both in America and Europe (see MAGNETISM, ANIMAL, vol. XV. p. 277 *sq.*), was favourable to the new idea. Information about other worlds and from higher intelligences was thought to be obtained from persons who could be put into the sleep-waking state, of whom Andrew Jackson Davis was in America the most prominent example. His work, *Nature's Divine Revelations* (New York, 1847), was alleged to have been dictated in "clairvoyant" trance. Many reputed "clairvoyants" developed into mediums. The movement spread like an epidemic. There is very little evidence to show that it arose anywhere spontaneously[1]; but those who sat with the Foxes were often found to become mediums themselves and then in their turn developed mediumship in others. The mere reading of accounts of seances seemed to develop the peculiar susceptibility in some persons, while others, who became mediums ultimately, did so only after prolonged and patient waiting.

There seems to have been little practical interest in spiritualism in Europe till Mrs Hayden, a professional medium from Boston, came over in 1852. It spread like wildfire within a few months of her arrival,—its first development being in the form of a mania for table-turning, which seems to have prevailed all over Europe in 1853. Daniel Dunglas Home, the next medium of importance who appeared in London, came over from America in 1855. But it was at Keighley in Yorkshire that spiritualism as a religious movement first made any mark in England, and it was there that the first English spiritualistic periodical, the *Yorkshire Spiritual Telegraph*, was started in 1855. The extent to which the movement has spread and the present number of spiritualists are very difficult to estimate. Vague calculations have from time to time been attempted: in 1867 one spiritualist estimated the number in America at 11,000,000 or two-fifths of the population, and another has held 3,000,000 to be an extreme estimate (see *Spiritual Magazine* for 1867). The periodicals devoted to spiritualism may perhaps be taken to indicate the present state of the movement. There are in England two weekly newspapers, *Light* and *The Medium and Daybreak*; one of these has advertisements of Sunday meetings in sixty different towns and in eighty different rooms. The spiritualistic journals outside Great Britain number about 100, though probably only about a quarter of these are of any importance. Of these 30 are in English (26 published in America and 4 in the Australian colonies), 15 to 20 in French, and 6 in German. But nearly 40 are published in Spanish in Spain and South America. Private circles which meet regularly are believed to be numerous in England; and there are numerous public and semi-public trance-speaking and clairvoyant mediums, especially among the miners in the north.

In the present article it is impossible to give an exhaustive catalogue of the phenomena and modes of communication of modern spiritualism. Many have not now appeared for the first time in history, though it is difficult to suppose any historical connexion between the new developments and the old. Perhaps the most striking parallelism is that between the proceedings at modern seances and those connected with the later Greek oracles.[2] The greater part of the phenomena may be divided into two classes. To the first and earliest developed class belong what may be called the physical phenomena of spiritualism,—those, namely, which, if correctly observed and due neither to conscious or unconscious trickery nor to hallucination on the part of the observers, exhibit a force hitherto unknown to science, acting in the physical world otherwise than through the brain or muscles of the medium. The earliest of these phenomena were the raps already spoken of and other sounds occurring without apparent physical cause, and the similarly mysterious movements of furniture and other objects; and these were shortly followed by the ringing of bells and playing of musical instruments. Later followed the appearance of lights; quasi-human voices; musical sounds, produced, it is supposed, without instruments; the "materialization" or presence in material form of what seem to be human hands and faces, and ultimately of complete figures, alleged to be not those of any person present, and sometimes claimed by witnesses as deceased relatives; "psychography," or "direct writing and drawing," asserted to be done without human intervention; "spirit-photography," or photographing of human and other forms invisible to all but specially endowed seers; unfastening of cords and bonds; elongation of the medium's body; handling of red-hot coals; and the apparent passage of solids through solids without disintegration. The phenomena observed at Tedworth belong to this class. Somewhat similar was the Cock Lane ghost in 1762.[3] A practice of causing heavily loaded tables to rise by "magic" seems to have existed among the German Jews in the 17th century.[4] Kerner records movements

[1] It is possible that the family of Dr Phelps were unaware of the "Rochester knockings" when the disturbances began in his house at Stratford, Connecticut, in 1850 (see Capron's *Modern Spiritualism, its Facts*, &c.); but these disturbances, as recorded, have a closer resemblance to the ordinary occurrences at a spiritualistic seance than those which took place at Tedworth in 1661 (see Glanvill's *Sadducismus Triumphatus*) and at Slawensik in 1806 (see Kerner's *Scherin von Prevorst*), and others too numerous to mention.

[2] See *Essays Classical*, by F. W. H. Myers, 1888.

[3] See *Gentleman's Magazine*, 1762.

[4] Von Harless, *Aegyptische Mysterien*, 1856, pp. 130-132.