hospitals abroad, and also to the wives of Government officials and other settlers. Its sphere will be limited to houses in which the European mistress herself does the cooking, or at least personally supervises it, because the native likes to do things in his own way, and objects very forcibly to be interfered with in such matters.

MEDICINE AND WITCHCRAFT IN THE DAYS OF SIR THOMAS BROWNE.

By JOHN KNOTT, M.A., M.D. UNIV. DUB., M.R.I.A.

(Concluded from p. 961.)

ACCORDING to the ancient cosmic system, then, the universe was formed by twelve concentric spheres, beyond the circumference of the outermost of which was the immobile empyrean, the abode of the ineffable Deity. The terrestrial division of this series, which was destined for the abode of man, was formed by the superimposed elemental strata of earth, water, air, and fire—in order of gravity. Each of the seven planets—in the order already referred to—was set in the transparent wall of a crystalline sphere, by the diurnal revolution of which it was carried round the central earth. A single crystalline shell was made to function as supporting frame to the whole "heavenly host" of the fixed stars. The rotatory movements of each and all of the series were regulated by the investing *primum mobile*. Being thus placed at the centre of a mysterious universe of unthinkable vastness, and very obviously influenced by the powers residing in its remote regions, it is easy to understand how man, as soon as he began to exercise his uniquely characteristic function of *sursum aspicere*, was led to believe in the individual and collective influence of the heavenly host on matters mundane. Also, how—aided by the dictates of the universal prevalence of human vanity—he came to regard himself as an actual microcosm, a "picture in little," of the immeasurable vastness of which he formed the centre. Radii from every point of the circumference of the *cosmos* met at a focus in his person. Hence the genesis and subsequent development of the idea of the human *microcosm*, and the presiding influence of the various planets and constellations on special regions and organs of the human body, on the passions and moral qualities of the mind, and on the whole life—pilgrimage and fortunes of the individual. The ancient Egyptian by the banks of the Nile, to whose annual supply of mud he looked for the means of existence, the Chaldaean shepherd on his scorched or storm-swept plain, and the speculative Persian on his inspiring mountain summit, studied the mysterious movements of the starry host, and tried to spell out the influences which governed man's chequered course in life. They all saw the continuous struggle between good and evil upon earth, and the corresponding contention between light and darkness in heaven. Heat and cold, storm and calm, pain and pleasure, agitation and rest, were obviously destined to perpetual opposition and contrast. There is, indeed, little reason to be surprised on finding the primitive amateur theologian formulating a fixed belief in the co-existence of the dual principles of good and evil, as the only conceivable explanation of the course of events which formed the daily, and universal, experience of life. The longer he observed the prevalence of cruelty and injustice on earth, the more he felt constrained to centre his only hopes of bliss on things above, and to nourish the consoling idea of the immortality of the soul. With the course of ages, the notion came to be definitely formulated that everything sub-lunar was essentially and hopelessly bad, that there was no attainable beatitude below the sphere of the moon. There were not wanting in the early ages of Christianity some anarchical leaders of thoughts heretical, who announced that the omnipotent Deity, after he had ejected Lucifer from heaven for his rebellious pride, permitted that fallen angel to construct a world of his own, where he was allowed to exercise his untrammelled discretion in the management of matters moral and political. Our globe was the product of this licence; and the framers of the hypothesis triumphantly pointed to it as the only one which could satisfactorily account for the facts of the daily experience of human life!

Spiritual emanations were specially suggested by observation of the rays of the sun, and the effects of the movements of the invisible wind. There undoubtedly permeated each of the principal pagan systems to which I have referred a notion of the origin of all such spiritual agents from a great over-

seeing first cause. In the grandly mystical systems of the Hindus, the Chaldaeans, and the Egyptians, of Zoroaster and of Plato, the *anima mundi* was an emanation of the ineffable and unknowable Supreme Power, and the *anima microcosmi* was an offshoot of the *anima mundi*. The messengers (angels) of the Supreme Power descended to the earth along the rays of the sun (or the steps of Jacob's ladder). The messengers of the Evil Principle tried to make up for lesser power by greater activity. Collisions often took place in the air. The enlistment of human agents was, of course, always most actively pursued. There was no denying the fact of the existence of large numbers of men of distinctly evil disposition, who were spiritually and physically enemies of their kind. And, ever since the fatal episode connected with the forbidden fruit, an idea has largely prevailed throughout the ages and nations, and—I incline to think—a majority of individuals, that the evil spirit more easily obtains an entrance into the human female than the male. On this very account, the number of witches has always been greater than that of the masculine practitioners of sorcery and necromancy. The periodic (menstrual) uncleanness of the human female functioned as a most productive germ in the culture and expansion of the witchcraft doctrine. The following extract from an anonymous authority on such mysteries in the palmy days of the "black art" tells a plain story, if not a convincing one:

Of these, the first is menstuous blood, which, how much power it has in sorcery, we will now consider:—First, if it comes over new wine, it will turn it sour; and if it does but touch a vine, it will spoil it for ever; and, by its very touch, it renders all plants and trees barren, and those newly set die; it burns up all the herbs in the garden, and makes fruit fall from trees; it makes dim the brightness of a looking glass, dulls the edges of knives and razors, dims the beauty of polished ivory, and makes iron rusty; it likewise makes brass rusty, and to smell very strong; by the taste, it makes dogs run mad, and, being thus mad, if they once bite any one, that wound is incurable; it destroys whole hives of bees, and drives them away, if it does but touch them; it makes linen black that is boiled with it; it makes mares cast their foals by touching them with it, and women miscarry; it makes asses barren if they eat of the corn touched by it. The ashes of menstuous clothes cast upon purple garments, that are to be washed, change their colour, and likewise take away the colour of flowers. It also drives away tertian and quartan agues, if it be put into the wool of a black ram, and tied up in a silver bracelet; as also if the soles of the patient's feet be anointed therewith, and especially if it be done by the woman herself, the patient not knowing what she uses. It likewise cures the falling sickness; but most especially it cures them that are afraid of water or drink after they are bitten by a mad dog, if only a menstuous cloth be put under the cup. Likewise, if a menstuous woman shall walk naked, before sun-rise, in a field of standing corn, all hurtful things perish; but if after sunrise, the corn withers; also, they are able to expel hail, rain, thunder, and lightnings, more of which Pliny mentions. Know this, that if they happen at the decrease of the moon, they are a much greater poison than in the increase, and yet much greater if they happen between the decrease and change; but if they happen in the eclipse of the sun or moon, they are a most incurable and violent poison. But they are of the greatest force when they happen in the first years of the virginity, for then if they but touch the doorposts of a house no mischief can take effect in it. And some say that the threads of any garment touched therewith cannot be burnt, and if they are cast into a fire it will spread no farther. Also it is noted that the root of piony being given with castor, and smeared over with a menstuous cloth, it certainly cureth the falling sickness. Again, let the stomach of a hart be roasted, and to it be put a perfume made with a menstuous cloth; it will make crossbows useless for the killing of any game. The hairs of a menstuous woman, put under dung, breeds serpents, and if they are burnt will drive away serpents with the fume. So great and powerful a poison is in them that they are a poison to poisonous creatures.

The perusal of this extract demonstrates to every reader the presence, in the opinion of certain professors of wisdom of the past centuries, of a vast magazine of power—potential and actual, curative and destructive—in the menstrial blood. It was, at least when under proper supervision, controllable during the period of its natural (physiological) formation and discharge from the body. But when the "change of life" arrived, and the elimination of this strangely powerful agent—for good or for evil—ceased to be carried out, the human female became, if evil influence came to obtain the ascendancy, an agent (or rather mainspring) of the most malevolent capabilities and tendencies. Hence the suspected witches were usually found among females who had passed the menopause.

To the details of mischief which were effected by witches—not only upon human beings, but on various animals and plants—there was, as might be expected, practically no limit. I have already mentioned the principal types of disease which were attributed to their influence, and details would but weary the reader. But the perusal of the description of some of the special remedies used by a noted expert has an illuminating

interest in this connexion. The famous astrologer, William Lilly, was born three years before Thomas Browne, and died one year before him. His reputation was such as to induce the Dean of Westminster (in 1634) to employ him to use his occult powers for the purpose of discovering hidden treasure in the cloister of Westminster Abbey. This was in the year before Browne wrote his *Religio Medici*. Lilly obtained a position of influence and credit in the England of his day which was reached by very few of his medical contemporaries, if by any. He published his *Christian Astrology* in 1647, the year after the appearance of Browne's *magnum opus*, the *Pseudodoxia Epidemica*. This volume contains, among its innumerable gems of seventeenth-century wisdom, the following: "Naturall Remedies for WITCHCRAFT. Having by the Figure discovered and described the Party, either by that Planet who is Lord of the 12th, or posited in the 12th, and doth behold the Lord of the ascendant with a malicious aspect, you must let one watch the party suspected, when they goe home to their owne house, and presently after before any body goe into the house after him or her, let one pull a handfull of the Thatch, or a Tile that is over the Doore: and if it be a Tile, make a good fire and heat it red hot therein, setting a Trevet over it, then take the parties water, if it be a man, woman or child, and poure it upon the red hot Tile, upon one side first, and then on the other, and againe put the Tile in the fire, and make it extreemly hot, turning it ever and anon, and let no body come into the house in the meane time."

If they be Cattle that are bewitched, take some of the Haire of every one of them, and mix the Haire in faire water, or wet it well, and then lay it under the Tile, the Trevet standing over the Tile: make a lusty fire, turne your Tile off upon the Haire, and stir up the Haire ever and anon: after you have done this by the space of a quarter of an hour, let the fire alone, and when the ashes are cold, bury them in the ground towards that quarter of heaven where the suspected Witch lives.

If the Witch live where there is no Tile but Thatch, then take a great handfull thereof, and wet it in the parties water, or else in common water mixed with some salt, then lay it in the fire, so that it may molter and smother by degrees and in a long time, setting a Trevet over it.

Or else take two new Horse-shoes, heat them red hot, and naile one of them on the Threshold of the Door, but quench the other in Urine of the party so Bewitched; then set the Urine over the fire, and put the Horse-shoe in it, setting a Trevet over the Pipkin or Pan wherein the Urine is; make the Urine boyle, with a little salt put into it, and three Horse-nailes untill it's almost consumed, viz. the Urine; what is not boyled fully away poure into the fire: keep your Horse-shoe and nailes in a cleane cloth or paper, and use the same manner three severall times; the operation would be farre more effectually, if you doe these things at the very change or full Moon, or at the very hour of the first or second quarter thereof. If they be Cattle bewitched, you must mix the Haire of their Tails with the Thatch, and moysten them, being well bound together, and so let them be a long time in the fire consuming. These are naturall experiments, and work by sympathy, as I have found by severall experiments: I could have prescribed many more, *Multa creduntur ratione experientiae, non quod videntur verae vi rationis*.

The various theological ways and means of dealing with witchcraft were far too complex for more than a passing allusion. One remarkable fact in this department of science deserves to be noted: "It is somewhat more difficult to conjure the devil out of one bewitched than out of one possessed, because in the bewitched he is double, in the other single." When all attempts at conjuration and exorcism failed, reasons were promptly provided in either case. It is no matter for surprise, too, that such efficient reasons formed a series of seven:

First, for that the faith of the standers by is naught; secondly, for that theirs that present the party is no better; thirdly, because of the sins of the bewitched; fourthly, for the neglecting of meet remedies; fifthly, for the reverence of virtues going out into others; sixthly, for the purgation; seventhly, for the merit of the party bewitched;

and it need hardly be added that, with so formidable a barrier of excuses every failure could be effectively defended from vulgar attack.

Before closing our series of descriptive quotations, there is one taken by Scot from the very curious volume, *De Fascinatione*, by Leonhardus Vairus, which is, I think, worthy of the perusal of all who are interested:

But this gift and naturall influence of fascination may be increased in man, according to his affections and perturbations; as through anger, feare, love, hate, etc. For by hate (saith Vairus) entereth a fiery inflammation into the eye of man, which, being violently sent out by beames and streames, etc., infect and bewitch those bodies against whom they are opposed. And therefore he saith (in the favour of women) that is the cause that women are oftener found to be witches than men. For (saith he) they have such an unbridled force of fury and concupiscence naturally, that by no means it is possible for them to

temper or moderate the same. So as upon every trifling occasion, they (like brute beasts) fix their furious eyes upon the party whom they bewitch. Hereby it cometh to passe, that whereas women have a marvellous fickle nature, what griefe soever happeneth unto them, immediately all peaceableness of minde departeth; and they are so troubled with evil humours, that out go their venomous exhalations, ingendred through their ill-favoured diet; and increased by means of their pernicious excrements, which they expel. Women are also (saith he) monethly filled full of superfluous humours, and with them the melancholike blood boileth; whereof spring vapours, and are carried up, and conveyed through the nostrils and mouth, etc., to the bewitching of whatsoever it meeteth. For they belch up a certaine breath, wherewith they bewitch whomsoever they list. And of all other women, leane, hollow eyed, old, beetlebrowed women (saith he) are the most infectious. Marry he saith, that hot, subtil, and thinn bodies are most subject to be bewitched, if they be moist, and all they generally, whose veines, pipes, and passages of their bodies are open. And finally he saith, that all beautiful things whatsoever, are soon subject to be bewitched, as namely goodly young men, faire women, such as are naturally borne to be rich, goodly beasts, faire horses, ranke corn, beautiful trees, etc.

The general belief in such phenomena as those of witchcraft, fascination, demoniacal possession, etc., was, in fact, shared by all in those ages except the very small minority, who, in a corresponding attitude in the twentieth century, would probably be designated as "cranks," but, in the more torrid mental atmosphere of Thomas Browne's day, were, whenever they ventilated their opinions, promptly branded as "atheists." In peculiarly troubled times, such as those of his generation, bewildered humanity has always tried to offer an explanation of the deplorable conditions which surround them, by attributing them to the activity of the supernatural agents of the Evil Principle. And let it not disturb the materialistic equanimity of the cocksure scientist of the twentieth century to have the fact indicated that strange coincidences do occur, which tend to keep alive the faith in the occasional interference of the supernatural powers in the course of matters mundane. Let the most accomplished astronomer and the most up-to-date geologist proceed, armed with charts and diagrams and lantern slides, to prove to the ruined Calabrian peasantry, whose earthly all has been submerged or wrecked by the recent earthquake, that there was no essential connexion between that catastrophe and the occurrence of the warning eclipse of the sun which had taken place nine days before, and I will confidently promise them that their scientific crusade will prove a complete failure. One of the specially vivid impressions of the boyish days of the present writer is that of the thrilling descriptions given by the devout Catholic peasantry of the West of Ireland of Donati's great comet, which formed so portentous a phenomenon night after night on the concavity of the heavenly vault during the winter of 1858-9. The prophetic reality of its significance was (to them) absolutely proved by the troubles which involved the head of the Church in a few months afterwards. The combined impression on the glowing Celtic imagination was sufficient, it was remarked, to give unrestful Ireland, in 1859, the only year of the nineteenth century in which it enjoyed freedom from "agitation"! In the winter nights of 1870, when the Prussian siege of Paris was in progress, there were seen on repeated occasions in the West of Ireland vast streaming *aurorae*, which actually covered the whole of the visible vault of the sky. No auroral phenomena of corresponding dimensions have been observed since that date, and aged spectators at the time declared with fervour that they had seen none such before.

The failure of Sir Thomas Browne to recognize the fallacies of witchcraft faith have been referred to as if that were a peculiarity of opinion. It should be remembered that twenty years before the occurrence of the trial at which he figured, the witch-finder, Matthew Hopkins, discovered (or invented) no less than sixty witches, in one year, within the precincts of a single English county, every one of whom was executed. The efforts of the Inquisition gave slender results compared with these; the agents of that body were accused of having caused the burning of 30,000 witches in the course of 150 years, but their harvest included all Christendom. The Puritanical movement in Great Britain is said to have numbered among its triumphs the execution of nearly 4000 witches in the period of twenty years which intervened between 1640 and 1660 (the date of the Restoration)! At Leith in 1664—the year before the Browne witch trial—nine women were burned together on one occasion; so that the comparative merciful and sceptical Charles II was not able to extinguish the practice, as he surely felt disposed to do. Sir Matthew Hale, who presided at that trial, was an enthusiastic amateur theologian, and declared that he based his judge-

ment regarding the truth of witchcraft on the direct testimony of Holy Writ. The eminent theologian of that day, Dr. Joseph Glauvil (1636-1680), is the most cogent of all writers on the subject of witchcraft, whose reality he strenuously defended against all comers; although he wrote very philosophically on the *Vanity of Dogmatizing*, and is believed by some to have anticipated Hume's famous *Theory of Causation*—and—the electric telegraph! Henry More (1614-1678), the most eminent scholar, according to the testimony of many, in the English Church of his generation; and Ralph Cudworth (1617-1688), who was unquestionably its most eminent philosopher by far, were both staunch supporters of the orthodox superstition. So was the accomplished divine and classical scholar, Meric Casaubon (1599-1671); and the Calvinistic Richard Baxter (1615-1691), the author of the famous volume on *The Saints' Everlasting Rest*.

Pretty exactly a century after the earthly pilgrimage of Thomas Browne followed that of the Apostle of Methodism, John Wesley (1703-1791). This relatively mild exponent of Christianity steadfastly maintained to the end of his life that to give up witchcraft was to give up the Bible. His belief in its appropriate treatment was, it need hardly be added, correspondingly orthodox.

But not only were the orthodox theologians and philosophers thorough believers in witchcraft and witches, but even the most responsible, grave, and prominently-placed physicians. In fact the treatment of the effects of witchcraft was so frequently called for in medical practice that almost every therapist had his own favourite *demonagogue*. The herbalist authorities all notice some plants which were believed to be of special efficacy. And many practitioners employed powerful cathartic and antispasmodic remedies, on the supposition of their possessing specific powers in this department. Dr. Thoner, a high authority in the seventeenth century, extols the powers of the *mercurius vitae* in expelling præternatural substances from the body. At the same time, he considers some special local application necessary to complete the extraction of the matter in which the *principium seminale* of the sorcery was lodged—for example, the bewitched bread or fruit given originally to the patient. In a case successfully treated by himself, which he reports with some display of honest pride, the local application employed by him was a cataplasm "*ex stercore maleficiati*." Dr. Mynsicht, whose famous *elixir* enjoyed a cosmopolitan reputation which extended over more than one century, cured various victims of witchcraft by means of asafoetida plaster. Two theories were advanced to account for the success of this application: that the devil thought himself insulted by the adoption of so loathsome an application, and abandoned the patient in scorn for the bad taste of the latter; or, that the dark-complexioned spirit, having quick eyes and ears, had also a sensitive nasal apparatus, and was induced to void the premises simply on account of the smell.

In the light of twentieth-century science, and in association with the recent discussion of Sir Thomas Browne's faith and practice, it is almost weirdly interesting to peruse the dissertation, *De Diaboli Potentia in Corpora*, of Friedrich Hoffmann, who may be regarded as the father of the modern theory and practice of medicine. This production was included in the collected edition of his works published by the author himself in 1747, 82 years after the date of the Browne witchcraft trial. The great Teutonic physician accepts in full the usual views of the demonologists: that the facts by which it was established were as reliably attested as any in history; that the devil notably rules in the atmosphere, where he can raise storms at his pleasure; that he possesses the power of creating insects; and that, in the case of the human organism, he is able to influence the animal spirits, and even the imagination, although he is unable to decipher our thoughts. In this connexion, Hoffmann takes the opportunity of displaying his high estimate of his sable majesty's intimacy with the facts of natural and physical science, based as it was on his prolonged experience: *summus opticus et physicus, propter diuturnam experientiam*. This epoch-marking physician paid special attention to the study of spasmodic diseases, and explained the genesis of a vast proportion, at least, of them by witchcraft influence. He regarded the witches pretty much as passive instruments, or transmitters, of demon power. Some of his illustrative cases are quaint indeed, as read in a generation of microscopic anatomy and microbic pathology. He tells us, for instance, of a woman who suffered from severe continuous headache from the date of her refusal to sell a calf's head to a reputed witch; and entertains no doubt that the suffering was an effect of the

witch's malignant power of revenge. And an incident still more memorable in the history of the progress of human opinion was the publication, in 1775, by Antonius de Haen, one of the most prominent physicians of Vienna, of a volume *De Magia*, specially written in defence of the reality of the old and orthodox views of magic and witchcraft. This was 110 years after the witchcraft trial, at which Thomas Browne gave his expert testimony in favour of the same view; and an additional item of interest is added to the expression of opinion by the fact that de Haen is said to have been the first physician who systematically employed the *clinical thermometer* in the study of fever. This item of evidence alone proves that he was a man of progressive views and practice in some directions, especially in the domain of physical science, and not a mere fossilized conservative.

In presence of such a cloud of witnesses, who can accuse the great Norwich physician of either cruelty or ignorance?

I have now brought under the reader's notice some of the strange groupings of mental fancy-work and creations of luxuriant imagination by which contemplative man, in the ages which preceded the birth of modern science, endeavoured to puzzle out for himself the ever-present and ever-bewildering riddle of the universe. It had been well recognized that the principle of evil which infected the whole sublunar space included within the realm of its influence the mental and moral qualities of all dwellers on the face of our world. Plato's first man, in common with the privileged spirits which emanated directly from the Supreme Divinity, was admitted to the enjoyment of all knowledge. Man's present ignorance is an encrusting shell representing the deposits due to impure contact. Wherever it is broken off, the original enlightenment is allowed to appear; "all knowledge is but remembrance." The ill-mated union of matter and spirit produced all the evils of man's physical and mental existence. The spiritual emanations from the Divine Being of the Pythagorean and Platonic systems had the power of passing through all forms of matter without any appreciable opposition whatever. There would almost seem to be some unconscious—although self-inflicted—sarcasm in the adoption of the *ἡ πέμπτῃ οὐσία* by modern physicists as their ether, and their endeavour to explain previously inexplicable phenomena by its agency as a medium. A closely-correlated item of satire upon the claims for the march of intellect, based upon the evidence of materialistic progress, is the adoption of the view of the atomic structure of matter, which is said to have been evolved from the inner consciousness of one Moschus before the date of the siege of Troy, and was certainly preached by Democritus and Epicurus, and sung by the philosopher-poet, Lucretius. The previously ultimate atoms having been badly shattered by the fusillade of twentieth-century "radiations," we are landed (in a backward direction) on a borderland between the physical and metaphysical domains, in which the spiritual emanations of the latter almost seem to dovetail with the radiations of the former.

The subtle spiritual emanations recognized in the grand old philosophic systems were, of course, luminous before they became obscured by contact with matter. The *anima microcosmi*, derived from the *anima mundi*, was the active agent in the conveying and maintenance of life and heat in all forms of the animal kingdom. It was the "vital spark of heavenly flame" which is so familiar to readers of Pope—and so seldom understood in his meaning. The *flame of life*, according to Plato, was continually burning in the left ventricle of the heart. Philip Melancthon was thoroughly saturated with Greek philosophy; and he, accordingly, recognized that the *spiritus vitalis*, which presided over all the functions of life, with its special activity and characteristic heat-production, was continuously generated within the heart, and from the purest blood: therefore in the left side of the organ. The bond of spirit and matter was always destined to be a more or less galling one. And when Death set free the soul, it hastened to fly beyond the sublunar precincts—when the recording angel saw no special reason to forbid. Some of the apostles of the Manichaean heresy displayed remarkable ingenuity, indeed, in their speculations in this connexion. The escaped soul was allowed to pass through the sun's rays, which washed away any adherent traces of earthly stain. On escaping beyond the range of the sublunar sphere, it regained its luminosity, and took up a temporary abode in the moon. From this transitory residence there was a monthly discharge towards the sun; hence the succession of the moon's phases! The sun was the seat of the second person of the Trinity; of the throne of the Redeemer, and his accompanying host of angels. After having passed the scrutiny of the latter, and

received the all-saving favour of the former, ratification was complete; and the saved soul was allowed to take up its eternal abode in the *Lux Zodiacæ*. Such was the history of the "invisible light," with the doctrine of which Thomas Browne was so familiar in his day.

I will now express the concluding hope that I have not entirely exhausted the patience—or the interest—of my readers by the length of the story of the spirit, and the trinity, and the witchcraft, with the lore of which the learned atmosphere of Browne's generation was so thoroughly saturated as almost to exclude the light of the (physical) understanding. Yet a closer investigation may, perhaps, give the materialistic scientist more scope for modesty than he seems usually disposed to assume. If no hypothetical medium is now spoken of as the "invisible" light, it is none the less glaring a fact that the "potential" light of the twentieth-century physicist is the same mysterious fluid, whose vibrations are made the agency of its transmission. The assumption is as completely artificial in the one case as in the other. The physicist of the present day can no more *prove* his ethereal hypothesis of the transmission of light by transverse vibrations, than could Plato have proved the emanation of the human soul from the Divine essence and its perpetual drag in the direction of return. The only thing that has been established in either case is the adaptation of a theory to the explanation of the great bulk of the known facts, *not to all*. And now that the atoms, which were adopted from pre-Trojan hypothesis, and made to fit in so well with the mathematical and chemical physics of the nineteenth century, have been so badly shattered by the radio-active emanations of the twentieth, we find hypothetical entities of another dreamy idealist called out in order to be made the tenants of the newly-formed scientific pigeon-holes. There is, perhaps, after all, about as much circular as rectilinear movement in the progress of science; some would say even more in that of the human understanding.

If I have made this communication an exceptionally prolonged one, my sole motive—and, of course, my only possible justification—is the desire to contribute my mite towards the cosmopolitan tribute of admiration of one of England's most justly celebrated medical men. Much of the literature with which Browne's mind was saturated has been almost entirely lost sight of. Accordingly, his modes of thought and points of view can be appreciated only by those who have taken the trouble, or the interest, to make themselves familiar with such sources of forgotten lore as those from which I have culled the above rather chaotic collection. If I find reason to believe that I have aided the average reader who is desirous to form a just opinion of a true Christian, an earnest physician, and a high-minded philosopher, I will consider that the (already pleasant) labour expended in this task has been more than amply rewarded.

ENTRANCE SCHOLARSHIPS.

THE competitions for entrance scholarships at the various medical schools in London have resulted in the following awards:

St. Bartholomew's Hospital.—At this school six exhibitions and scholarships to entrants have been allotted. Of these, Messrs. J. L. Joyce and R. Crawford gained the two Senior Entrance Scholarships in Science (each being of the value of £75). The Junior Entrance Scholarship, also in Science (of the value of £150), was divided between Messrs. K. Brewer and W. C. Dale; the Preliminary Scientific Exhibition (of £50) went to Mr. R. Pearse; the Jeaffreson Exhibition in General Education (value £20) to Mr. C. H. Prada; and the Shuter Scholarship (of £50) to Mr. R. B. S. Sewell.

Charing Cross Hospital.—The successful candidates at this medical school are Mr. E. G. H. Cowen, the Epsom Scholarship (of the value of 100 guineas), Mr. R. H. Harrison, the Livingstone Scholarship (also of the value of 60 guineas), and Mr. M. A. Parr, the Huxley Scholarship (of the value of 55 guineas). In addition two University Scholarships (each of 72 guineas) were awarded to Messrs. F. S. Poole and W. A. Powell, as well as two University Exhibitions (each of the value of 36 guineas) to Messrs. A. V. Poyser and J. P. Hornsey; finally, an open Entrance Scholarship of 40 guineas was won by Mr. M. B. Bayley.

St. George's Hospital.—Two Entrance Scholarships in Anatomy and Physiology have been awarded at this school, one of the value of 70 guineas going to Mr. A. G. Atkinson

and another of the value of £50 being won by Mr. G. D. H. Carpenter.

Guy's Hospital.—The Senior Science Scholarship for candidates from the universities has been allotted to Mr. C. G. Douglas, B.A., late of Magdalen College, Oxford; it is of the value of £50. A certificate in connexion with the same competition was also awarded to Mr. H. G. Chapple, B.A., late of St. John's, Cambridge. Of the two Junior Science Scholarships, the first, value £150, was won by Mr. A. E. Duvivier, while the other, of the value of £60, was divided between Messrs. T. D. M. Strut and A. Neville. The winner of the First Entrance Scholarship in Arts, of the value of £100, was won by Mr. H. L. Hopkins, of Owens School, Islington, and that of £50 by Mr. A. H. Todd from Sherborne School. In the competition for the Entrance Scholarship in Dental Mechanics, of £20, Messrs. E. J. Archer and W. E. Guidling were declared equal.

King's College.—At the medical school of King's College Hospital, the Epsom Scholarship, conferring free tuition, was won by Mr. H. L. Burton; while the Medical Entrance Scholarship, confined to the competition of candidates from the universities, and of the value of £50, went to Mr. J. S. Owen. The successful candidates for the two Warneford Scholarships (each of £100) were Messrs. A. L. Burke and R. H. Hodges. Finally, the Sambrooke Exhibition in Science, likewise of the value of £100, was won by Mr. H. M. Burke.

The London Hospital.—At the medical school of this hospital the three Price Science Scholarships have gone respectively to Messrs. George Taylor, E. O. Lindsay, and T. W. George; the first is of the value of £120, the second of £60, and the third of £25. The Price Scholarship in Anatomy and Physiology, which is only open to candidates from the universities, went to Mr. M. W. Flack, of Oxford; its value is £60. Of the two Buxton Entrance Scholarships in Arts, the first, of the value of £30, went to Mr. E. Clouston, and the second, of £30, to Mr. C. W. Wilson. For the Epsom Scholarship the successful candidate was Mr. G. V. Bakewell.

St. Mary's Hospital.—At the medical school of the hospital there are four Open Scholarships in Natural Science, of the value of £145, £78 15s., £52 10s., and £52 10s. respectively. On this occasion the competition resulted in Messrs. T. Hare and D. Scurllock being declared equal, so the two first scholarships were equally divided between them; while the two 50 guinea scholarships went to Mr. J. Menzies and Mr. A. G. H. Lovell. Two University Scholarships, competitors for which must be graduates from universities, were also awarded, one to Mr. A. Hamilton, of Christ's College, Cambridge, and the other to Mr. R. Knowles, of Downing; each is of the value of £60.

Middlesex Hospital.—Four scholarships open to new entrants have been awarded at the medical school of this hospital. Of the two entrance scholarships, the first, having the value of £100, was won by Mr. F. W. Hamilton, and the second, value £60, by Mr. H. Rountree. The successful candidate for the Freer Lucas Scholarship, which confers free tuition, and is open to those who have been educated at Epsom College, was Mr. W. H. Eggar, while the University Scholarship went to Mr. W. H. F. Eales.

The Royal Free Hospital.—At the London School of Medicine for Women which is attached to this hospital, the St. Dunstan's Medical Exhibition was gained this year by Miss H. M. Hood Barrs. Its value is £60 a year for either three or five years. The successful competitor for the School Scholarship (value £30) was Miss G. M. Dobrashian.

St. Thomas's Hospital.—At this medical school the scholarship open to candidates from the universities was won by Mr. G. R. Girdlestone, of New College, Oxford. The other entrance scholarships at the school were not awarded at all, the work of none of the candidates being deemed to be up to the requisite standard of merit.

University College Hospital.—The winner of the Bucknill Scholarship of £30 for four years in the medical school connected with this hospital was Mr. E. E. A. Rigg, of Victoria College, Wellington, N.Z. Of the two Exhibitions of £30, the one went to Mr. F. J. F. Barrington, of the Grammar School, Lynn; the other was equally divided between Messrs. J. R. C. Canney, of Christ's College, Cambridge, and J. Lewis, of University College, Cardiff. Two Exhibitions of £60 each were also allotted, one going to Mr. G. E. Shattock, of University College, London, and the other to Mr. C. J. Rogers, of Brighton Grammar School.

Westminster Hospital.—The successful candidates for scholarships open to entrants to the medical school attached to this hospital were Messrs. R. Spence, S. Hoyte, A. J.