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Fellows and Members of the Ulster Medical Society receive the Journal free. Subscription to non-members, five shillings annually.

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THE ULSTER MEDICAL JOURNAL

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DATES OF PUBLICATION

1st January, 1st April, 1st July, 1st October.

The development of anæmia during the course of this form of endocarditis is not uncommon. Indeed, it may assume such an intensity that it masks the cardiac lesion, and its true cause may only be demonstrated at post-mortem. There is usually some decrease in the number of red cells, with in some patients the appearance of nucleated reds. The usual picture is a hypochromic one. The number of leucocytes is variable. Counts up to 20,000 per cmm. may be encountered, but quite often no leucocytosis is seen. The present case showed no leucocytosis whilst under observation, and little importance can be assigned to the gradual appearance of leucopenia in the terminal stages. Actually the bone-marrow appeared hyperplastic, so that the terminal blood-picture was the result of failure of the numerous myelocytes to mature.

To summarise, therefore; a case of a young woman of twenty-four years suffering from subacute bacterial endocarditis is described. The endocarditis was superimposed upon an aortic valve already the seat of a deformity. The course of this disease process is discussed.

We are indebted to Dr. Foster Coates for the clinical summary.

THANKS

To the Editor of the "Ulster Medical Journal."

Sir,

I shall be glad if you will allow me to express in your columns the very warm thanks to the Chairman (Doctor J. S. Morrow) and members of the Belfast and County Antrim Branch Committee of the Royal Medical Benevolent Fund Society of Ireland to—

An anonymous donor who has sent five guineas "in affectionate memory of R. J. J.,"

The Resident Medical Officers of the Royal Victoria Hospital for their Christmas gift of two guineas, and

The eighteen ladies and gentlemen who have sent banker's orders or cheques amounting in all to £17. 14s. in response to my appeal entitled "An Old Minute Book" in the October number of the Journal.

It was at the chairman's suggestion that 260 copies of this appeal, together with banker's order forms, were posted to non-subscribers in Belfast and County Antrim. It is earnestly hoped that further responses to the appeal will soon be made. We are still a long way from our goal—that every man and woman who is earning his or her living in medical practice should subscribe to this—our own—Charity.

I am, Sir,

Yours faithfully,

ROBERT MARSHALL,
Hon. Secretary, Belfast and County Antrim Branch R.M.B.F.S.I.

9 College Gardens, Belfast.

THE ULSTER MEDICAL SOCIETY

THE MEDICAL INSTITUTE,
COLLEGE SQUARE NORTH,
BELFAST.

Dear Sir (or Madam),

If you are not a member of the Ulster Medical Society, we would appeal to you to give the question of joining your consideration. The Society has been in existence since 1862, and has always been active in keeping its members interested in the advances in medical science as well as in current professional affairs. The Medical Institute, situated in College Square North, belongs to the Society (through the generosity of Sir William Whitla), and is ideally adapted for meetings, committee meetings, and recreation. There is a library with current medical periodicals, and facilities for reference to medical literature are available in conjunction with the library at the Queen's University. There is also a billiards-room available to members, and lighter periodicals are also provided. An annual dinner is held each year in December, and a golf competition in June. Meetings are held at intervals of a fortnight during the winter months, and papers are contributed by members. Distinguished visitors are occasionally asked to contribute papers on subjects upon which they are specially qualified to speak. THE ULSTER MEDICAL JOURNAL, the official organ of the Society, is issued to all Fellows and Members free of charge.

The subscription to the Society is one guinea for Fellows and Members living in the country; two guineas for Fellows living in Belfast; and one guinea for Members living in Belfast who are not qualified more than seven years. The payment of a sum of twenty guineas entitles one to election to Life Membership.

May we, therefore, appeal to you to join the Ulster Medical Society, and so enable us to widen its influence and sphere of usefulness still further? Please make application to the Honorary Secretary, which will ensure your name being put forward for election to membership of the Society.

If you do not wish to become a member of the Society, will you consider entering your name as a subscriber to THE ULSTER MEDICAL JOURNAL? The subscription is five shillings per annum, payable in advance to the Honorary Treasurer.

We remain,

Yours faithfully,

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.....19.....

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THE
ULSTER MEDICAL JOURNAL

PUBLISHED QUARTERLY ON BEHALF OF THE ULSTER MEDICAL SOCIETY

VOL. VIII 1st JANUARY, 1939 No. 1

In the By-ways of Medicine

By J. M. McCLOY, M.D., D.P.H.

Presidential Address, delivered before the Ulster Medical Society, 3rd November, 1938

"EACH man's memory," says Aldous Huxley, "is his private literature, and every recollection affects us with something of the penetrative force of a work of art."

Among the early recollections of my childhood are a springtime dose of electuary, and seeing Sequah. The advice and the formula for the electuary were furnished by friends—needless to say not mine—and I believe the sticky mess was composed of treacle, cream of tartar, and flowers of sulphur. Then there was Sequah. Sequah was a large and imposing man with a powerful voice, a confident manner, and fluent in a strong American accent. He travelled round the town with a small but lusty brass band in a two-horse wagonette, and when he had attracted a sufficient crowd he drew up at a suitable corner and proclaimed in a long harangue the virtues of his Prairie Flower, a medicament of unparalleled value. He also guaranteed painless dentistry, but whether his promises were fulfilled we never, to the sorrow of our young hearts, could find out; as at the crucial moment the band always made its best effort and the victim would never tell.

Probably Sequah's greatest triumph was at a place in the south of Ireland, where one of his patients became such a valuable advertisement that he built him a little house and offered £5 for the best short poem suitable for painting over the door. The prize was won by a policeman for the following :—

"Here I lived and suffered pain,
Thought I'd never walk again;
Sequah, one day passing by,
Saw me suffer, made me try
Sequah's oil and prairie flower;
Now I live in Sequah's bower."

Since then I have seen other quacks, not so picturesque perhaps, but equally blatant, and have learned of other domestic remedies or folk-medicines esteemed for disorders which are not so serious as to require the attentions of a doctor; such as decoction of dandelion root for digestive trouble, infusion of chamomile flowers for feverishness, and a preparation of horehound and honey for coughs. I remember when it was no uncommon practice in Belfast for mothers whose children were suffering from whooping-cough to take them for a walk in the neighbourhood of the gas-works, where the condition of the air was supposed to be beneficial; but I have not heard of the custom of late, it may be that industrial chemistry has become so perfectly conservative that not even the smell of what was once a waste product is now allowed to escape. One of our members has quite recently recounted her own experiences as a patient undergoing this cure.

A somewhat macabre case was once related to me of a Tyrone doctor who lived about the middle of the nineteenth century. The story goes that a soldier, who had returned home from the Crimean war suffering from a skin complaint for which he had been unable to obtain any effective remedy, consulted the doctor, who prescribed that he should strip himself naked and encase himself in the skin of a freshly slaughtered bullock and have himself buried up to the neck for some hours in a pit in the ground; the procedure is said to have been followed by a speedy cure.

Treatment of illness by other than purely material means is widespread though not prevalent throughout Ireland; and many of you may have a greater knowledge of these quasi-magical methods of charming than I have. The charms consist in the performance of some act and the observance of some rite with or without an incantation. Lady Wilde, the wife of a fashionable Dublin oculist of the last century, collected and published many of these charms; and Dr. Eileen Hickey, in the last number of our Journal which appeared a few days ago, describes several in a very interesting fashion.

The latter mentions the part played by a donkey in the performance of a therapeutic charm for whooping-cough. One of a prophylactic nature in which the ass takes a part was narrated to me about a week ago by an ecclesiastical dignitary whose father was rector of a remote parish in County Monaghan some sixty years ago. He told me that he and all his brothers and sisters except one were stripped naked by their old nurse and passed three times over and under the body of a female ass in the name of the Trinity while the ass was given a piece of bread to eat, the crumbs which fell from the animal's mouth being put in the mouths of the children. And he said that what had chiefly impressed the ceremony on his mind was the apparent success of the charm; for all the family except the boy who had not undergone this process of magical immunisation escaped the common ailments of childhood, while he contracted all the usual infectious diseases.

Even the harness of an ass is employed in some charms; for instance, as a cure for mumps a donkey's winkers are put on the head of the patient while he is led three times round a spring well. A former Member of Parliament for Tyrone told me that the country people living near him sometimes came to his house and asked

permission to perform this charm in a scullery where it was possible to perambulate round a running tap. Care, however, has to be exercised by all the persons at the ceremony that silence is observed; for if anyone should laugh while it is in progress, the disease will pass to him.

One of the numerous charms for warts is to rub on the warts nine knots of straw, wrap the knots in a piece of paper and drop the package on the road, when the warts will be transferred to the finder. It is noteworthy that Marcellus, a fourth century physician of Bordeaux, described a similar cure, using pebbles instead of straw and an ivy leaf instead of paper. This same Marcellus was evidently as good at business as he was at medicine. His cure for a tumour was to cut a root of vervain in two and hang one piece round the patient's neck and the other over his own fireplace; as the latter dried up the tumour shrank, but if the patient forgot to pay his fee, Marcellus threw his piece into water, and as the root swelled up again the tumour reappeared.

You, like myself, may have seen a strip of eel-skin applied as a bandage to cure a sprain. It is hard to say what its curative properties were supposed to depend upon, but the treatment may have had its origin in imitative magic, as the eel is a very supple fish.

In the old churchyard at Raymunterdoney in Donegal there lies flat an immense stone cross with the base separate from the shaft. The story is that the cross was carved for St. Columcille to erect on Tory Island, but that a boat big enough to take it from the mainland could not be found. The belief is held locally that a piece of earth taken through the hole in the base is an infallible cure for toothache if applied to the seat of the pain; and the gap in the ground beneath indicates that the belief is not infrequently put into practice. Not only in the churchyard soil, but in the plants growing in it, is there reputed power, for a decoction of nettles gathered in a churchyard is believed to be a cure for dropsy.

Reputed cures of a general character are associated with the holy wells of which there are so many throughout Ireland. Often a votive offering is left by the suppliant, but few are of such an intimately personal nature as at St. Bride's Well in County Cork, where the visitants seeking relief from their dolours cut off tresses of their hair and fasten them to the thorn bush which overhangs the well.

This country is rich in mystic customs, believed in firmly or loosely or altogether discredited, according to the vein of superstition in the individual. The observance of the majority of these practices is designed to avoid ill-health or ill-luck generally; they consist in an act, a form of words, or the wearing of an amulet. Such beliefs may be considered as foibles or whims and regarded with tolerant amusement or indulgent incredulity; but they nevertheless in moments of reflection arouse speculation as to their origin. The majority of us do not willingly walk under a ladder, and few of us object to the throwing of a slipper after a newly-wedded couple unless the missile has been badly aimed. We are careful even when perfectly well to reply to the question "How are you?" by saying "Not so bad," lest an evil spirit lurking nearby might overhear and strike a blow to our health or prosperity. You will recollect the recent trial of a man living not fifty miles

from here who was accused of assaulting a neighbour, and who gave as his excuse that the neighbour had blinked his cattle. Perhaps you carry a St. Christopher mascot in your car to ensure your safety when travelling—you are by no means unique. The newspaper account of the Queen Mary's captain and his St. Christopher, by whose aid he brought his ship into dock last month, is still fresh in our minds.

I mention merely to dismiss such upstart talismans as a potato or a nutmeg carried about in the pocket, and an iodine locket at half a crown or a guaranteed one at three shillings and sixpence.

Much of our folk-medicine finds its counterpart and possibly some of its origin in antiquity; but naturally this audience will see such curiosities of therapy as these against a background of certain studies which present fashion groups together as anthropology. It is no longer enough to point to a resemblance between some old wife's cure in Ireland and an African tribal custom. It is no longer enough to derive one from the other or even to point to a common origin for both dating back in time. For the modern student of these things the controversy about Diffusionism has assumed a less simple form. It is no longer merely a question of whether civilisation had its source in one place or whether it arose spontaneously in different parts of the world, as Frazer and the older anthropologists imply. At the present time we are faced with accepting or rejecting the theory that civilisation, instead of being part of the normal biological struggle to survive, is rather the result of a deviation from an older and easier flow of life, something as yet inexplicable which made a break with man's existence at a lower level.

Amulets appear to have been originally chosen on account of their rarity or their uncommon appearance or shape, and many of the articles of modern personal adornment have had their origin in talismans.

Laban had his teraphim and Jacob his strange gods. The Egyptians of the Sixth Dynasty wore an amulet representing two eyes against the evil eye. The ancient Greeks do not appear to have used amulets to any extent; but pagan and Christian incantations, amulets, and other magic were prevalent in Rome in the fourth and fifth centuries. The beautiful Irish hymn known as St. Patrick's Breastplate is an example of a pagan charm transformed for the purposes of Christian devotion. Some of the verses even in Mrs. Alexander's modern translation, display evidences of the prophylactic and therapeutic uses of the Breastplate or Lorica:

"Against the wizard's evil craft,
Against the death-wound and the burning,
The choking wave, the poisoned shaft,
Protect me, Christ, till Thy returning."

The Lapis Variolosus, a stone with marks on its surface resembling the pitting of smallpox and found in the valley of the River Durance in Provence, was worn as a protection against the disease. Precious stones had reputed virtues, the diamond against plague and the carnelian for the blood, and the wine-coloured amethyst was worn at the symposia of ancient days so that the pleasure of drinking deeply of wine would not be marred by any subsequent crapula. Iron

finger-rings recently had some vogue in this country as a preventive of rheumatism; ancient finger-rings were reputed to have similar qualities, and some were set with stones which had their own peculiar virtues. The gold coin which accompanied the royal touch may perhaps be looked upon as an amulet.

Some amulets bore inscriptions which had their own special significance. The Jews often wore amulets engraved with texts of scripture, as for example :—

"Thou shalt not be afraid of the terror by night;
Nor for the arrow that flieth by day;
Nor for the pestilence that walketh in darkness;
Nor for the destruction that wasteth by noonday."

The Syrian inscribed charms, Shebriri and Abracadabra, appear to have been both preventive and curative, the former for eye diseases and the latter for fevers; the cure being effected by the patient first pronouncing the whole word and then the remainder, dropping letter by letter. The story is told of a sixteenth century physician applying this formula to a patient, then causing him to eat the written word and pay a fee of fifteen pounds.

From a recent copy of an Indian newspaper I could quote a whole page of testimonials to a talisman sold at two rupees and eight annas, and warranted to cure everything from influenza to early decrepitude; nor are its uses solely therapeutic, as witness the testimonial of a young surgeon in a Benares hospital :—

"Your talisman, which I used myself, gave me great benefit indeed; I was a sub-assistant surgeon, and now by God's grace I am promoted to the rank of assistant surgeon. Your talisman is really a wonderful thing."

From the time when man could first count there has been a peculiar fascination in the magic of numbers, even prevailing to the present day but not altogether invested with the same mystic importance. We have the lucky numbers 7 and 3 (has this any significance in the familiar t. i. d.?), and 13 is of peculiarly sinister import: I only encountered the number 13 on a hotel bedroom door once. The ancient Chinese and Pythagoras and his pupils devoted much time and ingenuity to the philosophical consideration and the mystical application of numbers and magic squares, and amulets often bore such emblems. And Albutt observes: "Galen relied on critical days, a doctrine which if a remnant of magical numbers, was fortified by the periods of pneumonia, typhus, and malaria"; and that "Dioscorides was not free from all magic, for in recommending cinquefoil for malaria he advises the use of the three-leaved sort for tertian and the four-leaved for quartan fever."

Astrology, amulets, and numbers, with their bizarre attributes, came from the East, and spread with other branches of knowledge westwards. The practice of astrology was widespread in Europe in the fourteenth century, and formed a subject of the regular medical education till the sixteenth century, after which it waned. But there are still to be found everywhere many believers in astrology, and horoscopes are cast every day, not only for the simple and superstitious but even for persons eminent in the world of letters. Our greatest living poet, W. B. Yeats, is the author of a treatise on astrology which he calls "The Vision." Some

schools of literary criticism seem to detect in this intellectual revival of astrology an attempt to supply the political doctrine of Facism with an esoteric philosophy. Evidences of the survival of a popular interest in astrology are to be found in the columns of our newspapers and the ready sale which a well-known almanac given to prophecy commands.

A large number of the fantastic or occult theories of hygiene which have had or are having their day derive from oriental sources and are associated with astrology. Rudolf Steiner, who died some years ago but whose organisation still survives, devised a system of cosmology which he named Anthroposophy. He drew largely on Eastern notions, and features of his teaching are the stress he laid on the food value of crops planted at certain phases of the moon and his condemnation of artificial manures.

Various westernized forms of the Hindu system of Yoga are practised, often in conjunction with astrology, in England and America at the moment, and are increasing in popularity if one can judge from the output of literature on the subject and the number of well-known people who claim to have benefited by Yogic therapy. The physical features of Yoga—repose, posture, muscular exercise, and special dietary—have appealed more to its votaries in these countries than the philosophic ends for which these practices were primarily devised, and they have most interest from a medical point of view. The familiar attitude in which Buddha is usually represented is one of the Yogic postures, but there are others which suggest the professional contortionist rather than the seeker after bodily and mental health. To such an extent is the control of the muscles and groups of muscles developed by the adept that lavage of the rectum can be effected by voluntary relaxation of the sphincter ani and movements of the abdominal muscles; while cleansing and massage of the stomach can be performed by slowly swallowing as many as twenty-two feet of a three-inch bandage and gradually withdrawing it after about twenty minutes, during which the diaphragm and the recti abdominis have been kept in constant and regulated motion. Such perfection as this, which has been described by the Hindu Dr. Behanan of Yale University in his book on Yoga, is unlikely to be attained outside its country of origin where the greater part of a lifetime is often spent in acquiring proficiency.

There are still believers in the influence of the moon on lunatics; and some people do not like to catch the first glimpse of the moon through trees, but consider that their good luck is assured if they possess an old horse-shoe hung with its prongs upwards—not a very obvious association with the moon, but said to be derived from the emblem worn by the priestesses of Diana.

We physicians have discarded the use of astrology, but on more scientific grounds retain our trust in the sun, even to the extent of keeping little images of it in our consulting rooms for the treatment of patients.

The psychological influence of occult treatment on the comfort and sense of well-being of a patient is largely dependent on his faith in its efficacy. As Budge says: "A dose of medicine might be regarded as an amulet applied internally, the effect of the matter which composed the dose being supplemented by the spell

of the pagan or the prayer of the Christian; but the power and the effect of faith by the recipient cannot be over-estimated."

Even that saturnine philosopher, Thomas Carlyle, had unbounded faith in medicine, at least for other people, for it is recorded of him that on hearing of a friend's illness he took the sick man an unfinished bottle of medicine which had done his wife good, although he did not know the nature of the disease from which his friend was suffering.

Our scientific souls may wince in yielding to the request of a patient for a bottle of medicine when we know that he needs no medicine, but we may be comforted by the reflection that we are encouraging and reinforcing the will to get well.

Faith-healing has been an integral part of medicine from the earliest times; without faith one would not consult a doctor even now. It was almost the sole foundation upon which primitive medicine rested, and from time to time even since the introduction of rational medicine, faith-healing has exercised a sway to which it is not legitimately entitled: we have it on good authority that "faith without works is dead." Within our era it was fostered for centuries by Christian mysticism, nurtured by oriental magic, and stimulated by the ineptness of medieval medicine arising from lack of research and from irrational drug-therapy.

Faith-healing cults were numerous in the United States particularly about the end of the last century: one of the exponents of the art going so far as sending blessed handkerchiefs through the post, and thereby incurring the intervention and the ban of the government.

Last year when passing through Kent, by the mere accident of mistaking an address, I found myself at an Elizabethan house in a beautifully wooded demesne, where a cult of this sort flourishes. A number of elderly and very prosperous-looking ladies and gentlemen, the former wearing bright blue smocks and the latter blazers of the same cheerful tint with differently coloured crosses on the breast-pocket to indicate their function within the Society, live here and receive patients and guests. The patients are submitted to a system of healing by prayers in which five members of the society join at one time. There is also a treatment by passes performed over the organs in the patient's body which are supposed to require healing. It is preferable for the sufferers to be present for treatment by the Seekers, as they call themselves, but where this is not convenient the patient is given a number and told a time when he must retire to a secluded room in his own home so that he will be able to yield himself to the efforts of the Seekers, who will meet at the appointed hour to deal with his case. These Seekers assemble in one of the small rooms called chapels arranged in a sort of cloister about a beautifully kept garden. The out-buildings of the original mansion have been adapted for this purpose. The benevolent and obviously sincere member of the community, a retired colonel, who acts as guide to visitors, pointed out that one of the chapels was reserved for prayers about financial difficulties, because to pray for these in the chapels used for healing would disturb the "metaphysical rays." This mystified us as much as our guide's other statement that "there is nothing religious about it at all." I may add that this kindly gentleman who had re-

linquished the profession of arms for the pursuit of metaphysical rays, although he had no idea that I was a medical man, declared his admiration of the kindness and honesty of doctors, and only deplored their ignorance of the more enlightened methods of treating the sick.

There is in Belfast at the present time a society of spiritualists at the meetings of which Dr. Smithson, who practised at Greystones about the middle of the last century and is now dead, transmits through a man-medium the diagnosis of illnesses and prescribes treatments for the believers and their friends.

The laying on of hands for the exorcism of devils no doubt gave rise to the practice of the royal touch in Gaul and Spain for jaundice, plague, and insanity; and in Britain for scrofula. St. Thomas Aquinas is reported to have cured a blind man by allowing him to kiss his foot. The touch of a seventh son was formerly held in Ireland to be effective against many maladies. We all know the esteem in which the doctor with the "lucky hand" is held throughout our country for attendance on women in childbirth.

St. Augustine in the fifth century attributed all diseases of Christians to demons; and as late as the seventeenth century Charles II of Spain insisted on his confessor and two friars sitting by his bedside while he slept, to keep away demons.

According to the "Annals of the Four Masters," the plague which broke out in Connacht in 1084 was blamed on demons from the north.

In England until about a century ago a wheel-like instrument was used in madhouses; the patient was strapped to this and spun round at a terrific rate so as to cause the demon to be cast out. But demons were not always so rudely turned out into the void, they were sometimes provided with alternative accommodation. However, ejected by violence or persuasion, the services of a magician using visible or invisible means were almost invariably essential—the witch-doctor of antiquity or the witch and the exorcist of later ages. The witch has always been unpopular, having acquired the reputation of exercising her powers for evil and of being allied with the devil himself. Many are the tales in folk-lore and fairy-legend of the conflict between the good fairy and the witch; but there are also many stories of a sinister character telling of the malignity of reputed witches and of the savage ferocity with which they were repressed. That witches were not always wholly successful in the practice of their arts is indicated by the following account from Frazer :—

"In 1590 a Scotch witch of the name of Agnes Sampson was convicted of curing a certain Robert Kers of a disease laid upon him by a westland warlock when he was in Dumfries, whilk sickness she took upon herself and kept the same with great groaning and torment till the morn, at whilk time there was a great din in the house. The noise was made by the witch in her effort to shift the disease from herself to a dog. Unfortunately the attempt partly miscarried; the disease missed the dog and hit Alexander Douglas of Dalkeith, who dwined and died, while the original patient was made whole."

Witch-doctors of the sixteenth and seventeenth centuries in Scotland claimed to be able to cause and to prevent an easy childbirth and to cast the labour pains

on an animal or a human being; and, as Lévy-Bruhl remarks, husbands who were made the victims were particularly incensed against these midwives.

This belief in the transference of ills is of hoary antiquity, and is exemplified in a number of the so-called charmings still practised by superstitious persons. Lady Wilde records a charm for mumps being carried out by rubbing the child's head on the back of a pig and so transferring the disease to the animal. Wickwar tells a story of an old man crippled with rheumatism attending a wake in Donegal, going over to the corpse and taking its hand and laying this on his shoulder, arm and leg, and saying, "Take my pains with you, Thady, in the name of God."

One day some years ago, when in Arboe, looking at the beautiful old stone cross there, my eye was caught by the strange appearance of the trunk of a nearby tree, the bark of which appeared to be growing a beard of bristles. On closer inspection I found that these were pins—common pins, safety pins, drawing pins, and pins of every conceivable variety—literally thousands upon thousands of them. Inquiry revealed that this was a holy tree upon which suppliants while inserting pins wished away their ills and besought benefits. The ancient Romans somewhat similarly drove nails into a column in the temple of Jupiter. After they had done what they could and all else had failed, they symbolically pinned the responsibility for the final outcome upon the god of the sacred tree or upon Jupiter himself.

Until comparatively recently the application of orthodox medicine was confined within narrow limits. The services of physicians were inaccessible to the vast majority of the people, as doctors were few in number and naturally enough frequented cities and other centres of learning. The scattered communities outside these areas had no resort when ill but to the native folk-medicine or perhaps to the medicine-chest of the chief of the clan, or in later years of the local squire or clergyman; or they fell an easy prey to the vagrant quacks and itinerant drug-vendors.

The patrician medicine as exemplified by Cato of old was illustrated even in the life of the present British Prime Minister, who, according to an account in a Sunday newspaper of recent date, when running a plantation in the Bahamas treated the wounds and illnesses of his workers and showed his resource when the anti-rheumatism remedy ran out by substituting anti-insect bite lotion.

Lord Herbert of Cherbury, the seventeenth century philosopher and ambassador to the Court of France, gives in his autobiography an interesting account of his amateur adventures in medicine, from which the following extracts are quoted :—

"It will become a gentleman to have some knowledge in medicine . . . as this art will get a gentleman not only much knowledge but much credit. It will also become him to know not only the ingredients, but doses of certain cathartic or emetic medicines . . . Besides I would have a gentleman know how to make these medicines himself, it being the manner of apothecaries so frequently to put in the succedanea, that no man is sure to find with them medicines made with the true drugs which ought to enter into the composition when it is exotic or rare; or when they are extant in the shop, no man can be assured that the said

drugs are not rotten. I have studied this art very much, and have in cases of extremity ministered physic with that success which is strange." He then describes some of his cures, and goes on to give his sources of information, mentioning among others the London, Paris, and Amsterdam Pharmacopœias, "for as they are set forth by authority of the physicians of those several countries what they all ordain must necessarily be effective." We may note this tribute to our profession by a gentleman who before undertaking the treatment of a patient always assured himself that the physicians had given up the case. One would like to attribute this to an observance of etiquette, but the context engenders a suspicion of personal vanity.

Quackery has existed in every country and at every time since any distinction was drawn between regular practitioners of medicine and pretenders to the art. It cannot have been unknown in the far-off pre-Christian days in Ireland, as the Brehon Law imposes a penalty on any unauthorised person treating illness without disclosing first that he is unqualified. I have no means of knowing how much the ancient Irishman shared in the now widespread enthusiasm for the unqualified practitioner. Indeed the veneration in which unorthodox medicine is held simply because it is unorthodox offers a field for inquiry and speculation. You may have noticed an account of a case which came before a court in Hungary last year. A young man practising as a quack was prosecuted for signing a death certificate; he admitted the act and reluctantly revealed a closely guarded secret—he was really a qualified doctor who had failed to attract patients, so he had moved to another address and, while continuing to use his medical knowledge quite properly, had built up a successful practice on the prestige that comes from being non-academic and non-scientific.

Quackery was found in Greece and prevailed in Rome. In the ninth century of our era Rhazes of Bagdad commented on the success in Western Asia of quacks and charlatans in securing popularity often denied to the competent and qualified physicians. The extent of quackery in the Middle Ages is indicated by Henri de Mondeville, surgeon to Philippe le Bel, who wrote in the beginning of the fourteenth century : "Kings, princes, prelates, dukes, noblemen, and burgesses dabble without knowledge in dangerous surgical treatments of the eye. The vulgar say that these have their knowledge infused into them by the pure grace of the Creator."

Some of the present-day lay writers on medical subjects possibly derive their inspiration in the same way. One is inclined to wonder, however, if it was pure grace that inspired a distinguished musician last year to publish an attack on the medical profession in a book with such chapter headings as PECULIAR PSYCHOLOGY OF DOCTORS, NURSING HOMES A MENACE TO INVALIDS, THE GERM FETISH, and THE CAUSE OF CANCER DISCOVERED BUT IGNORED.

That quacks frequented London in the fourteenth century and that their presence was not always welcome is evident from Stow's Chronicle which was written in 1382, and which records that "a counterfeit physician was set on horseback face to tail with a collar of jordans about his neck led by the hangman through London

with the beating of basons and then whipped and banished."

Notwithstanding the edict of Henry VIII in 1511 for the regulation of the practice of medicine and for the suppression of quacks, and the imposition of imprisonment and fines, quackery was not quelled; and the proclamation of James I accompanied by similar punishments was little more effective.

The golden age of quackery in England was centered in the Stuart times, and many of the quacks in London gained not only notoriety but even attained to the favour of royalty, the patronage of the nobility, and the notice of the great writers of the day. One obtained a licence to practise from the Archbishop of Canterbury, another from the Bishop of London. Three became oculists to royalty, and two were knighted. Another appears to have the distinction of publishing the first synopsis of medicine in English, as prior to this time orthodox books on medicine had been written in Latin. Indeed the practice of quackery had become so profitable that even a licentiate of the College of Physicians abandoned legitimate medicine for the art of the quack.

The claims of some of the quacks for their nostrums do not appear to have been too extravagant for the credulity of their dupes, although they are sufficiently amazing. The one just mentioned sold "a pill scarcely discernible without a microscope, yet so mighty in its operation that it will raise the weakest out of his bed and make him strong enough in two minutes to encounter conscience, death, and the devil," and a pulvis vermifugis that brought away "worms as long as the maypole in the Strand, though confessedly not so thick." Another who lived about the same time advertised that he had obtained the recipe for his preparation from Paracelsus, who had tried the medicine on an old hen and then on his aged housekeeper with the result that youth and all its functions were restored.

There were also some notable exponents of quackery among the women of those days. Sarah Mapp, the daughter of a country bonesetter, achieved fame and fortune in London in the first part of the eighteenth century, and one of her patients was the niece of Sir Hans Sloane. Johanna Stephens must have been a remarkable woman, as she succeeded in persuading the British Parliament in the year 1738 to pay £5,000 for the secret of her quack remedy for the stone. This consisted of preparations of eggshell, snails, soap and honey, and a few vegetable ingredients such as hips and haws—a poor return for the money.

Royalty even does not appear to have wholly escaped the lure of dabbling in quackery. James IV of Scotland, who had a leaning towards medical knowledge, seems to have performed operations for cataract—not always successful, for there is a record relating to his payment of thirteen shillings to a blind woman who, it may be presumed, had suffered at his hands.

Quackery is far from extinct. Human nature is as easily gulled to-day as ever by bold assertions. The advance in education has brought with it methods equally advanced. The picturesque adventurer with his voluble harangue and his flamboyant bills has been replaced by a nebulous group using the more subtly psychological newspaper advertisements, and the rewards have multiplied exceedingly.

As Bridges the physician poet-laureate wrote in "The Testament of Beauty":

"Time eateth away at many an old delusion,
yet with civilisation delusions make head."

Many even of the official remedies in the Stuart times and early Georgian days astound us now, and the first London Pharmacopœia published in 1618 must have read like a museum catalogue, with its swallows, vipers, scorpions, worms, ants, and so on. The apothecary's shop too must have been a veritable den of curiosities, for Garth, the physician and poet, writes:—

"Here mummies lie most reverently stale,
And there the tortoise hangs her coat of mail;
Not far from some huge shark's devouring head
The flying fish their finney pinions spread;
Aloft in rows large poppy heads are strung,
And near a scaly alligator hung."

Not only did the physicians believe in treating their patients with what seem to us startling remedies, but they often gave these in full measure and flowing over. Charles II during his fatal illness, which lasted about a couple of days, was bled and cupped repeatedly; treated with purgatives, emetics and sternutatories; dosed with two score medicines and Raleigh's antidote, which contained as many more; then with powdered bezoar stone, and finally with a remedy which he had often prepared in his private laboratory—essence of human skull; so medical science having like the patient become exhausted, he expired with a blister to the crown of his head and a plaster of burgundy pitch and pigeon's dung to the soles of his feet.

On the other hand, an equally remarkable parsimony was sometimes exhibited. The "everlasting" pill, composed of a small globule of metallic antimony, was believed to have the property of purging as often as it was swallowed. A story is told of a lady who, having taken one of these and being alarmed at its non-appearance, received the comforting reassurance from her physician that it had already passed through a hundred patients without difficulty.

However, as authority was questioned and as knowledge was advanced by scientific investigation, the Pharmacopœia was from time to time cleared of its obvious blemishes. Remedies derived from the animal kingdom are now few, but a slight increase in the number was made in the last two editions, not however until the most searching investigation had demonstrated their worth.

Still, modern science sometimes surprises us by finding justification for an old treatment which we have been disposed to scorn. The ancient Chinese gave powdered toads for heart-disease; we have recently discovered that powdered toad contains a lot of adrenalin. Science now tells us that vibrations can be stilled by counter-vibrations, and that toothache which is due to vibrations can be counteracted by vibrations transmitted through a headphone fitted over the mastoid; so perhaps old Sequah's band had some therapeutic value after all.

"Our knowledge," says Gerald Heard, "has frowned upon idle curiosity, thus canalizing our energies until they can only attend to what pays. To-day we see

the pressing and ever more pressing need of pure interest." It is only as a matter of pure interest that I have offered you some results of my idle curiosity, my wanderings in some of the by-ways of medicine, and especially where those by-ways cross and re-cross the shifting border between magic and the natural sciences, between imagination and reality. The most grotesque guess of yesterday may be an established truth to-morrow.

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REVIEW

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Peaks of Clinical Medicine

By J. T. LEWIS, B.SC. M.D., F.R.C.P.(LOND).

Opening Address of the Belfast Medical School, delivered at the Royal Victoria Hospital

JUST over one hundred years ago Robert Graves, in an address to medical students, wrote these words :—

"Be assured of this, that however accurate be your knowledge of anatomy, however skilful you may be in chemical theories and manipulations, however extensively you may have mastered botany, however well you are acquainted with the nature and properties of drugs—be assured, I say, that you have acquired all this knowledge in vain, unless you have diligently studied symptoms at the bedside of the patient."

It is with this study of clinical or bedside medicine which I wish to deal this morning.

I think we will gain a better appreciation of its importance if we look at it from a distance, for true perspective is seen only at a distance.

When one watches the receding coast line from the deck of a ship, the view, at first blurred and confused, becomes clearer, the little hills drop out of sight and the peaks come up against the sky.

I will ask you to look, with me, at the peaks of clinical medicine as they stand out against the sky of history, and in doing so we cannot fail to realise that, in many cases, the peaks of clinical study were also the peaks of medical knowledge, and that the influence of those who kept to the bedside has been one of the greatest factors in the growth of modern medicine.

The history of medicine is as old as the history of man—and man is very old. Civilization, as we know it, is a mere fringe on the history of the human race. For countless thousands of years man has lived, sickened, and died in a world very different from ours. As Osler puts it: "What upstarts of yesterday are the Pharaohs, in comparison with the men who followed the Glacial periods."

In this dim distant age the art of medicine must have had its place, and there can be no doubt that it arose from the primitive instinct of sympathy and the desire of man to help his fellows.

How did primitive man attempt to equip himself for this task? Probably by generations of, what we would now call, clinical observations.

That fever often followed wounds, that chills might cause pain in the side, difficulty in breathing and even death, that movement increased pain in an injured limb, and many other similar causes and effects would all be remembered and handed down, so that in the course of time, definite groups of symptoms would be built up.

Treatment also must have been the result of observation and experience; perhaps the relief of headache following a spontaneous nose-bleeding, may have led to

the practice of venesection, although Pliny gives a more amusing theory in his story of the hippopotamus :—

"This intelligent animal," he writes, "finding himself plethoric, goes out on the bank of the river and there searches for a sharp reed, which he runs into a vein in his leg, and having got rid of a sufficient amount of blood, closes the wound with clay."

The use of plants was one of the outstanding points in primitive medical treatment. You will remember Kipling's lines :

"Anything green that grew out of the mould,
Was an excellent herb to our fathers of old."

The choice of suitable plant remedies was not altogether mere chance, but must have arisen by generations of clinical experience, and perhaps as some would have us believe, from a study of the effects of plants on animals—the use of emetics is said to have been learned by observing the habits of dogs.

Side by side with this growth of clinical experience, another factor was creeping into medicine, which was to thwart its progress all through the ages, and is not extinct to-day. I refer to the theurgic or supernatural theory of disease.

To primitive man, Nature and its phenomena were wonderful; the sunset, the storm and the thunder all suggested the existence of some power beyond his ken, and it is natural that he should have regarded disease in the same light. Since primitive man tended to personify his ideas, these inexplicable happenings were personified, and the belief in all-powerful gods and demons became part of his philosophy.

For thousands of years this idea of the supernatural origin of disease held sway, reaching, perhaps, its peak in Roman times, when :

"God by god flits past in thunder, till his glories turn to shades,
God by god bears wondering witness how his gospel flames and fades."

So the belief became established that disease was due to an invading evil spirit, which had to be driven out by some member of the community specially trained for this purpose. Man therefore turned from his first method of observation and experience, to take refuge in the medicine man, and later in the priest-physician.

In searching for early authentic medical records, it is natural that we should turn to the cradle of our civilization—to the land in which was born so many of our sciences—to Egypt.

From papyri which have been deciphered we can form some idea of Egyptian medicine from about 1700 B.C. It was a thing of charms and superstitions, governed by the priest-physician, who conducted his practice by a set of rigid rules. This physician must be "expert in reciting incantations and skilful in making amulets," and it was only when the evil spirit had been defeated that he might use drugs to repair its ravages.

In papyri dated 1700 to 1500 B.C. we find the earliest clinical records. There is a description of forty-eight cases, consisting of a title, an account of symptoms, diagnosis and treatment, which, while very imperfect, does suggest an attempt at clinical examination.

The section dealing with tumours shows some advance; it is suggested that they be tested with the fingers for fluctuation, and if it is found, they consist of fluid and should be incised. Various ulcers and what is apparently a malignant growth, are fairly well described.

The idea of treatment by the priest rather than the physician is very prevalent; in a passage dealing with fractures we read that the patient is advised to consult a skilful priest, but "if such a priest could not be found and if the patient were not afraid of death, the physicians should be called in"—or again we read: "the patient is treated by the physicians in an inferior way, but may nevertheless recover."

The Egyptians made their chief contributions to our art in the realms of surgery and anatomy and in enlarging the pharmacopœia, into which they introduced many useful drugs, e.g., as emetics they used copper salts and squills, castor oil was given as a purgative disguised in beer, and pomegranate was the remedy employed for the expulsion of worms.

But on the other hand it must be remembered that they were the originators of the practice of prescribing the secretions and parts of animals, e.g., saliva, urine, dried and powdered worms, etc. These remedies were in common use down to the seventeenth century A.D., and it is interesting to note that in the Middle Ages the Egyptians themselves were used as drugs, because powdered mummy was believed to be most effective in certain diseases. One writer tells us:— "Mummy has become merchandise, and Pharaoh is sold for balsams."

The most striking fact about Egyptian medicine was its non-progressive quality. The methods were rigid and definitely prescribed according to fixed rules. There was little or no original observation of disease and it cannot be said that Egypt contributed much to the advancement of clinical medicine. The popular idea that Greek medicine owed a debt to Egypt is open to considerable doubt.

A study of the scanty records of Babylonian and Assyrian medicine does not yield much which is of interest from a clinical point of view. According to Herodotus, they had no regular physicians. "They bring their sick into the market-place," he writes, "for they have no physicians. Then those who pass by the sick person confer about his disease to discover whether they themselves have been afflicted by a similar complaint, or have known others so afflicted. And so they advise him to have recourse to the same treatment as that which cured others."

It has been suggested that the words of the prophet Jeremiah are related to this practice:—

"Is it nothing to you, all ye that pass by? Behold and see if there be any sorrow like unto my sorrow, wherewith the Lord hath afflicted me."

In spite of this statement, some type of medical practice must have existed, for we have a record as old as 2000 B.C. in which a scale of fees is laid down. One may be mentioned—

"If a doctor has treated a gentleman for a severe wound with a bronze lancet and

has cured the man, he shall take ten shekels of silver. But if he has caused the gentleman to die, one shall cut off his hands."

Would the surgeon of to-day think the ten shekels worth the risk?

Later on the Babylonians developed a complicated medical system based on their religion and full of superstition and magic. It is to them we owe the origin of the belief in the influence of the stars on health, and the wide circulation of Old Moore's Almanac and other similar publications, indicates that this faith in astrology is not extinct to-day.

I have been unable to find any record of clinical study in their medical story, but something more may come to light when the sands of the desert yield up further secrets of this vanished Empire.

Across the Himalayan snows a different race was working out its history, and in studying the early medicine of India, one finds much which is almost modern.

About 1000 B.C. Indian medicine was the usual mixture of magic and charms, and treatment consisted of spells and incantations, but towards the beginning of the Christian era a remarkable change took place under the guidance of two distinguished physicians. Inspection, palpation, and even auscultation were practised, and many diseases were studied with astonishing clinical accuracy. Diabetes mellitus was first described, and these observers noted that flies were attracted to the urine of the patient—"by reason of its sweetness." The clinical features of enlargement of the spleen are recorded in the following terms—"An enlarged spleen, which distends the left side, is hard as a stone and arched like the back of a turtle."

Careful clinical observation is also noticeable in their descriptions of apoplexy, consumption, tetanus, and various skin diseases. Malaria is attributed to the mosquito, and people are warned to desert their houses when "the rats fall from the roof, jump about and die"—this is probably the earliest reference to the relationship of rats to plague.

That these physicians realized to the full the value of bedside medicine is amply proved by many passages from their writings, such as the following :—"He who is versed only in books will be alarmed and confused when confronted with active disease; but he who combines reading with experience proceeds safely like a chariot on two wheels." Again, the student who obtains his knowledge solely from books is likened to "an ass carrying a bundle of sandal-wood, for he knoweth the weight but not the value thereof."

Two thousand years ago Indian physicians were emphasizing the same principles which we are still attempting to teach to-day, and the high noon of Indian medicine coincided with the times when men tried to break away from superstition and mere book learning and to study disease at the bedside. With the Mohammedan conquest, Indian medicine passed under the sway of Arabia and lost its individuality.

Now, in the words of Osler, "let us come out of the murky night of the East, heavy with phantoms, into the bright daylight of the West, into the company of men whose thoughts made our thoughts and whose ways made our ways."

There are many possible reasons for the extraordinary impetus given to medical study by the Greeks, but the most important from our point of view was the cult of Aesculapius. Aesculapius, whose snake is still the badge of our art, was probably no mere legendary figure, although the stories of his birth and upbringing are mainly mythical. He is mentioned by Homer as a chieftain fighting in the Trojan Wars, and he apparently served as a surgeon to the army as well. In him the Greeks personified their idea of the perfect physician, and he became their God of Medicine.

Temples to Aesculapius sprang up at many centres in the ancient world. They were primitive hospitals, and it was here that the germs of clinical study appeared. It is probable that these temples were served by two types of physician—the priest-physician who worked in the temple, and whose practice consisted of a mixture of auto-suggestion and simple hygiene, and the ordinary physician who resided near the temple and instructed pupils. Excavations at Epidaurus have brought to light records of the temple medicine with accounts of cases, but they are not impressive and do not represent a great advance on the Egyptian type of medical practice. On the other hand it is probable that the case-histories accumulated by the physicians working outside the temple walls served as the basis for the brilliant examples of bedside observation soon to come.

On the island of Cos, off the coast of Asia Minor, there stood in 460 B.C. a flourishing temple to Aesculapius. Here was born HIPPOCRATES, the son of an Aesculapiad and descended from a long line of distinguished physicians. He naturally turned to the profession of medicine, studying in the temple and in the school which had arisen in its neighbourhood. He also travelled widely, as was then the custom. Of his professional life we know little, but we do know that this man and his assistants in the short space of fifty years laid down the principles which have guided medicine through the centuries. He left the foundation on which modern medicine has been built—a foundation which survived the downfall of Greece and Rome and the chaos of the Middle Ages, a foundation not of theories and philosophies, but consisting of the one simple fact—that the only road to a knowledge of the healing art is by the study of the sick man at the bedside. The works of Hippocrates and his school stand out in isolated grandeur amid the ruins of the ancient world. They are based on accurate clinical observations, and hampered by no tradition, deflected by no theory, deceived by no theurgy, they record only the facts of disease.

In studying the Hippocratic Collection, one notes, I think, three outstanding facts.

In the first place, Hippocrates discarded the idea of the supernatural origin of disease. This is clearly brought out in many instances, but perhaps most definitely in his Treatise on Epilepsy, called in his time the Sacred Disease, and firmly believed to be a manifestation of divine wrath. He writes :—"It is thus with regard to the disease called Sacred, it appears to me to have a natural cause from which it originates like other affections. Men call it divine from ignorance and wonder. Its origin is hereditary like some other affections."

Having grasped the idea that disease is a natural process, he proceeded to study it like other natural phenomena. He studied it as a botanist would study botany or an anatomist anatomy, not by working out hypotheses, but by practical observation, by carefully examining the patient, noting the signs and symptoms, the progress of the disease and the results of treatment. That physical signs were studied is evident from the account of auscultation which appears in his writings. He noted the splash of fluid in the chest—Hippocratic succussion, and he described the creak "like leather" in pleurisy, and what we would call fine râles were likened to "the noise of boiling vinegar."

This brings us to the second outstanding feature of the Hippocratic collection—the clinical records of cases. There are forty-two of these, and they are unlike anything that had appeared before. In each one finds a concise and graphic description of the case, so that in many it is easy to recognise the disease and quite evident that the notes were taken at the bedside. Time will only permit me to mention a few of the most striking examples. His description of the appearance of the fatally ill has come down to us as "the facies Hippocratica"—"The sharp nose, the hollow eyes, collapsed temples, the ears cold, contracted, and their lobes turned out. The colour of the whole face greenish or dusky." Again he writes :—"Respecting the movements of the hands, I have these observations to make. If the hands are moved before the face, hunting through empty space as if gathering bits of straw or picking the nap from the bed-clothes, all such symptoms are bad and deadly."

You will not be long in practice before you realize the truth of this observation. In the case of "Philescos who lived by the wall, and who was taken ill with an acute fever and died on the sixth day," the physician notes : "The respiration throughout was slow and large and like that of a person recollecting himself." Across twenty-two centuries Hippocrates joins hands with the great Dublin clinicians, for surely this is the first description of Cheyne-Stokes respiration :—"like that of a person recollecting himself."

The account of a case of middle-ear suppuration, evidently followed by cerebral abscess, is extraordinarily vivid; and cases of mumps with complicating orchitis are faithfully described.

His writings on surgical matters show the same close attention to clinical detail. His account of the signs and treatment of dislocation of the hip was unequalled till the last century, and it may interest orthopædic surgeons to recall that in his views on club-foot, he was twenty-three centuries ahead of his time.

I have not time to deal with his aphorisms—those crystalised expressions of clinical wisdom, which were described by a writer living centuries after Hippocrates as "a performance surpassing the genius of man."

Just as his descriptions were derived from observation, so his treatment was the result of experience—and this leads me to the third outstanding point in his practice, his belief in the curative powers of Nature. "Nature," writes one of his School, "is the physician of disease." Rest, fresh air, simple diet, and general

hygiene were his methods, with the use of well-tried drugs when the indications were clear.

After centuries of quackery, venesection, and polypharmacy, we are gradually returning to the Hippocratic idea.

No one had a higher opinion of the dignity of the profession than he, and the Hippocratic Oath has been described as the "high-water mark of professional morality." Respected throughout the ages by Arab, Jew, and Christian, this oath remains the watch-word of the profession of medicine.

Without the vast scientific heritage which is ours to-day, with only a small number of observations to assist them, surrounded by all manner of superstitions and beset by that genius for speculation which was typically Greek, these Hippocratic physicians remained patient observers of fact, not theorising beyond their data, calm and effective servants of the sick—living up to their master's immortal words: "Where the love of Art is, there is also the love of Man."

After the death of Hippocrates in 375 B.C. the story of clinical medicine seems to come to a stop. The Greek habit of theorising rapidly established itself, and we find medicine split into sects, each one emphasising the importance of this or that doctrine. The accounts of the Dogmatists, the Empiricists, and the Methodists make dull reading. As we trace the story into Roman times we catch, here and there, a glimpse of clinical study.

ARETAEUS, who flourished in the reign of Nero, may be considered to rank next to Hippocrates in the graphic accuracy of his writings. His descriptions of tetanus, diabetes, asthma, and diphtheria are models of clinical observation. On the etiology of tetanus he writes: "These cases are apt to supervene on a wound of muscle, and for the most part the patients die, because"—and here he quotes a Hippocratic aphorism—"spasm from a wound is fatal." He describes the convulsions with an attention to detail not excelled in any modern textbook.

GALEN, whose opinions, especially on physiology, dominated medicine for more than one thousand years, contributed little that was original to clinical subjects. It is true that he wrote copious commentaries on the works of Hippocrates, but he did not display the same disinterested accuracy in describing his own cases. Hippocrates tells us briefly and clearly what he observed, but the clinical anecdotes of Galen were mainly designed to show how superior he was to other physicians or to support one of his many theories. Hippocrates separated medicine from philosophy, Galen strove to unite them, believing in the motto of the Dogmatic School that "the physician who is also a philosopher is god-like."

With the fall of the Roman Empire in the West, medicine suffered a corresponding decline, and we have to look to Arabia for evidence of a resumption of clinical study.

RHAZES of Bagdad, who lived in the ninth century A.D. must be considered as one of the great original portrayers of disease. His lasting monument is his treatise on smallpox and measles, the first authentic account in medical literature, and, in the words of Garrison, "so vivid and complete that it is almost modern." He was a true disciple of Hippocrates in his insistence on bedside observation.

The Western Caliphate also produced outstanding physicians at the medical schools of Seville, Toledo, and Cordova.

ALBUCASIS may be chosen as a typical example of this group. He was evidently a keen observer of the phenomena of disease, and one reads with interest his description of a condition which we can recognise at once, as the first account of hæmophilia on record.

AVENZOAR, who first described scabies and the itch-mite, and AVICENNA, styled "the Prince of Physicians," were also brilliant ornaments of the great Arabian clinical school.

With these exceptions, the tide was at a low ebb—everywhere there was quackery, astrology, and an absurd polypharmacy based, not on experience, but on theories and superstition. The medicine of the Middle Ages is a "dreary record of the desolation which can overtake a once flourishing product of man's hand and mind."

The sun of the Renaissance breaking through the mists of the western world gave a new impetus to medicine, but the results on the clinical side were not immediately apparent. To men like Vesalius and Harvey we owe the foundations of our knowledge of the structure and functions of the human body, but for a time there was no one to proclaim the great truth that all the anatomy and physiology in the world will not, by themselves, make a student a physician. The object which he must study in his profession is not an anatomical model, but a sick and suffering patient.

The first physician in England whose writings show that he devoted himself to clinical observations, was THEODORE DE MAYERNE—physician to James the First and later to Charles and his Queen. His most famous case is that of Henry, Prince of Wales, and from the notes it can readily be seen that the Prince died from typhoid fever. The continued type of the fever, the rose spots—"like flea bites," and the tendency to intestinal hæmorrhage, are all faithfully described. His memoir on the health of James the First is full of shrewd observations on that unattractive monarch.

About this time the School of Leyden was attracting attention as a clinical centre. Among the early teachers of the subject was SYLVIUS, whose name will be familiar to you from the aqueduct in the brain. In 1664 he wrote:—"I have led my pupils by the hand to medical practice, taking them daily to visit the sick in the hospital. There I have put the symptoms of disease before their eyes and have let them hear the complaints of the patients."

Here, in a few words, we find the reason why Leyden was to occupy such an important place in medical teaching in the seventeenth and eighteenth centuries, and I do not think there could be any finer epitaph for a clinical teacher than those words of Sylvius—"I have led my pupils by the hand to medical practice."

These, however, were isolated instances, and in general the practice of medicine was still stultified by the traditions of centuries, still based on weird conceptions of anatomy, physiology, and superstition, and the hind leg of a rabbit killed in a graveyard during the full moon was a sovereign remedy for many diseases.

The following anecdote will give some idea of the prevailing type of medical treatment.

On a dull February day in 1685 Charles II lay dying in Whitehall. He had fallen into the arms of his valet shortly after rising. Fourteen physicians were quickly in attendance, they bled him thoroughly, they scarified and cupped him, they shaved and blistered his head, and they gave him an emetic, a purgative, and two pills. Later they administered fifty-seven different drugs, and towards evening a cordial containing forty more.

In the case report it is quaintly recorded that—"The emetic and purge worked so mightily well, that it was a wonder the King died."

Yet while this barbaric practice was in progress in the Palace, there was living on the other side of St. James' Park, one who was destined to light a lamp of clinical observation and rational treatment in England which has never since died out—the British Hippocrates—THOMAS SYDENHAM.

In the Manor of Wynford Eagle near Dorchester, Thomas Sydenham was born in 1624. His family had strong Puritan opinions, as was common in Dorsetshire at that time, and Sydenham grew up in an atmosphere of revolt against authority which had a profound influence in his life.

At the age of 18, in 1642, he entered Magdalen Hall, the centre of Puritanism in Royalist Oxford, but Civil War was in the air, and in a few months Oxford was garrisoned for King Charles. Sydenham thereupon returned to his native county, joined the Parliamentary forces, and for the next four years he took part in the bitter fighting which characterised the Dorsetshire campaign. In 1646 Oxford surrendered to Fairfax, and the first Civil War was over. Sydenham resigned his commission and prepared to return to the University.

On his way through London he met with "the learned Dr. Coxe" and, in Sydenham's own words: "He asked me what profession I was preparing to enter. I had at that time no fixed plans, nor was not even dreaming of the profession of medicine; but moved by the recommendation of so great a man and in some way, I suppose, by my own destiny, I applied myself seriously to that pursuit."

The story of Sydenham's degree is a curious one. Oxford at that time offered few facilities for medical study. The Professor of Medicine read a lecture twice weekly from the text of Hippocrates or Galen, there was some teaching in botany and anatomy, but no clinical instruction of any kind. Yet in 1648 Sydenham was created M.B. by command of the Earl of Pembroke. This was common at the time, for degrees were frequently conferred by "actual creation," i.e., by recommendation of the Chancellor or some other important person. This method, while excellent for selecting candidates for honorary distinctions, would hardly be considered to-day a suitable, though no doubt popular, method of selecting students for the M.B. degree. For the next few years he lived quietly at Oxford continuing his studies of botany and anatomy, and attending the classical readings of the Professor of Medicine. In 1651 there was an interruption, Charles II had landed in Scotland, and Cromwell marched north to oppose him. Sydenham left Oxford and took the field again as a cavalry officer. During this campaign he was

severely wounded, his brother being killed. For his services he was awarded £600 by the Commonwealth, which enabled him to settle in London in 1656. It was about this time that he visited Montpellier and came under the influence of Barbeyrac, who was then teaching the importance of clinical study.

He definitely started practice in London in 1661. The outlook was gloomy, for the Restoration had taken place, and ex-officers of Cromwell's army were not likely to be looked on with favour. Sydenham was not discouraged; with a scant knowledge of the principles of medicine, with little or no book-learning, he set out to teach himself his art at the bedside. Rejecting all authority, he put into practice the doctrine that medicine rests on the observation of, and not on hypotheses about, disease. "True practice," he writes, "consists in the observations of Nature; these are finer than any speculations."

In 1666 he published his "Method of Curing Fevers"—this was epoch-making, no such book had appeared before in English medicine. Instead of appealing to ancient authority and neglecting his own observations, Sydenham's descriptions of cases were painted from Nature with the instinct of a great clinician. In the Preface he proclaims his creed, which I feel I must quote :—

"The more I observed the facts of this science with an attentive eye, the more I became convinced in the opinion that the art of medicine was to be properly learned only from its practice and exercise; and that he would be the best skilled who had most accurately attended to the natural phenomena of disease. In writing the history of a disease, every hypothesis should lie in abeyance, the natural phenomena only should be noted. The practical value of such a history is above all calculation. By the side thereof the subtle discussions with which the books are stuffed full, even *ad nauseam,* are of no account."

In a lighter vein he expresses the same idea when asked by Sir Richard Blackmore what books he should use for the study of medicine :—

"Read Don Quixote, sir," replied Sydenham, "it is a very good book; I read it still."

And when Hans Sloane was introduced to him as a "young man well versed in botany and anatomy," we can almost hear the snort of anger in Sydenham's retort : "Botany, sir; anatomy, sir; nonsense, sir. You must go to the bedside, it is there alone that you can learn disease."

Sydenham will be remembered by his treatise on gout—a masterpiece of clinical observation, by his account of measles, scarlatina, and chorea, and many other common diseases. Through them all runs the repeated insistence on bedside study above all else.

It must not be thought that this teaching was immediately accepted. It was received with scorn by many of the leading physicians of the time, and the fact that Sydenham was never on the staff of a hospital, never a Fellow of the College of Physicians, and a Puritan among ultra-Royalists, did not add weight to his opinions.

But Sydenham was not concerned about his reputation : "I have weighed in a nice balance," he writes, "whether it is better to serve men or be praised by

them, and I prefer the former. It is my nature to ask less whether the world agrees with me than whether I agree with the truth, and to hold cheap the applause of the multitude."

His views on treatment were guided by the same principles. His rule was—"What is useful, is good," and in another place he makes a remark which you should bear constantly in mind—"It is a mistake to suppose that Nature always stands in need of assistance, and in certain cases I have consulted the safety of my patient most effectively by doing nothing at all." This was a return to the Hippocratic doctrine of the Healing Power of Nature.

His influence extended far beyond the British Isles, for among his pupils was Archibald Pitcairn, who, following the fortunes of the exiled James Stuart, became Professor of Medicine at Leyden and was the teacher of Boerhaave, who through his students established the clinical schools of Vienna and Edinburgh.

Sydenham died in 1689, but a year earlier from his windows overlooking St. James' Park, the old Puritan must have contemplated with some satisfaction the spectacle of the Dutch Guards of William of Orange completing the downfall of the House of Stuart.

Over his grave in St. James' Church, Westminster, there is a tablet erected by the College of Physicians in 1810, bearing these words :—*"Medicus in omne ævum nobilis"*—a physician famous for all time.

So we take leave of Thomas Sydenham, described by Locke as "one of the master builders in the Commonwealth of Learning," reckoned by succeeding generations as second only to Hippocrates, a rugged genius who unaided laid the sure foundations of clinical medicine in England.

There is a noteworthy resemblance between the century following Sydenham and that following Hippocrates, because both were the ages of the theorist and system-maker. Many absurd ideas about disease were put forward and bitter controversies raged. These disputes so convulsed the University of Göttingen that the rival professors and students fought it out in the streets and had to be separated by a troop of Hanoverian horse.

Yet in such a stormy atmosphere the method of clinical study was slowly spreading. In England one could quote many names to show that the teaching of Sydenham had taken root. One of the greatest of these was WILLIAM HEBERDEN, whose lifetime covered nearly the whole century and whom the celebrated Dr. Johnson referred to as "ultimus Romanorum—the last of our learned physicians."

A Cambridge graduate, Heberden closely resembled Hippocrates in his descriptions of disease. His writings are full of minute clinical details collected at the bedside, and when seventy-two years old he published his "Commentary on the History and Cure of Disease," which was the result of a lifetime of patient clinical research. In this work he established as a clinical entity the condition known as "angina pectoris."

The nineteenth century may be described as the "coming of age" of clinical medicine. It was the period of Bright and Addison, Hodgkin, Gee and Osler—men who devoted their lives to bedside study and raised English medicine to heights never before attained. But it is not of them that I wish to speak; rather

of two who brought fame to our own island, and established Irish medicine as second to none in Europe—Robert James Graves and William Stokes.

ROBERT GRAVES was descended from an officer of Cromwell's army who had acquired estates in Limerick. He studied in Dublin and obtained his M.B. degree there in 1818. He then made an extensive tour in Europe, visiting the medical schools of Paris, Vienna, and Berlin. Vienna was one of the foremost clinical centres in Europe, and here Graves came in contact with physicians practising bedside teaching. A few months spent in Edinburgh concluded his post-graduate travels.

In 1821, shortly after settling in Dublin, he was elected Physician to the Meath Hospital, where he was to labour for over thirty years. At that time Dublin was a school of elementary anatomy and textbook medicine, clinical teaching scarcely existed, and it was possible to obtain a degree without ever having seen a patient at close range. Graves was profoundly dissatisfied with this state of affairs.

"Under the present system," he writes, "experience is only gained at the expense of human life; this is because we are turning out practitioners who have never practised."

He adopted and introduced into his wards a method, familiar to us now, but unique then—he gave the senior students charge of certain patients, requiring them to report on the nature and progress of the disease, while in the lecture room he discussed the cases in more detail. This is real clinical teaching, and to Graves belongs the honour of having first introduced it into the British Isles.

The Edinburgh method had not the same value, because there the patient was demonstrated to large classes who had not the opportunity of examining the case. Of this Graves writes: "It is indeed very useful, and nothing can be better devised for the beginner, but for the senior student it is by no means sufficient, nor is it calculated to give him practical experience, without which all other acquirements are of no avail." In another place he remarks: "Students should aim not at seeing many cases each day: no, their object should be to study a few cases with diligence and attention."

He strongly disapproved of the habit of discussing diagnosis and prognosis at the bedside, especially in hopeless cases: "I cannot help feeling," he writes, "that it is scarcely justifiable to lecture upon a patient's disease in his presence. I have often watched the expression of despair settling on his countenance when the prognosis was too clearly announced."

In these wise and kindly words there is a lesson for us to-day, a lesson which we must always remember, because such indiscretions are, unfortunately, too common.

Graves' reputation as a great clinician rests not only on his teaching, but also on his writings. His "Clinical Lectures on the Practice of Medicine" would alone be sufficient to ensure his fame. Let me give you the opinion of Trousseau, the brilliant Paris physician, on these lectures. He writes:—I have incessantly read the work of Graves, I have become inspired by it in my teaching, and I have

endeavoured to imitate it. I entreat my pupils to consider it their breviary. Graves is, in my acceptance of the term, a perfect clinical teacher."

In the forty-ninth lecture of this series you will find a description of the condition now known as exophthalmic goitre, and it was Trousseau who suggested that it should be called "Graves' disease."

He will, of course, be remembered for his work on fevers; he discarded the lowering treatment of starvation, purging, and bleeding, and he fed them. Of this he says:—"You may think it unnecessary to give food, as the patient does not call for it—you might as well think of allowing urine to accumulate in the bladder because the patient feels no desire to pass it."

He died in 1852, at the early age of 58, but he has left a memory honoured wherever Irish medical men meet, a memory of one of the greatest exponents of bedside study—another Hippocratic physician.

WILLIAM STOKES was a member of a family which for generations had occupied a prominent place in Irish life. His father, Whitley Stokes, was Professor of Medicine in Trinity College and a man who took an active interest in the political and scientific life of his time. William Stokes was born in 1804. He adopted the profession of medicine, and, after some preliminary study in Dublin, he went to Glasgow and finally to Edinburgh. Here he came under the influence of Professor Alison, who first introduced him to clinical medicine. Alison was a well-known teacher in his day, and he apparently took a special interest in young Stokes, allowing him to assist in his private practice. Later in life Stokes could write:—"Alison was the best man I ever knew. It was my good fortune to be closely associated with him during my student days at Edinburgh, and to attend him in his visits to the sick poor of the city." There can be no doubt that the study of disease at the bedside, in the company of this wise old physician, was of the greatest possible service to Stokes, and under this tuition his powers of observation rapidly developed.

About this time the work of Laennec on auscultation was arousing interest in medical circles. Stokes immediately grasped the importance of the discovery, and while still a student he published a small book on the "Use of the Stethoscope." This brought him immediate recognition as an original observer. In 1825 he obtained his degree and returned to Dublin. In the next year he was appointed physician to the Meath Hospital, on the resignation of his father, and had as his colleague, Robert Graves. Thus began the Stokes-Graves partnership, and these two made Dublin one of the three great medical centres of Europe. I have already referred to Graves' methods and ideals; in everything he was ably assisted by Stokes. They did not load the student's mind with masses of facts suitable only for examinations, but they showed him how to teach himself, how to make observations at the bedside and to learn from the book of Nature rather than the printed page. As Sylvius of Leyden had done, two hundred years earlier—"They led their pupils by the hand to medical practice."

Without the advantages of the many mechanical devices which aid us to-day in the diagnosis of disease, assisted only by their senses of sight, touch, and

hearing, they accomplished enough to make their names immortal. But Stokes did more than teach—he wrote.

His two masterpieces—his "Treatise on Diseases of the Chest" and his "Diseases of the Heart and Aorta," produced a profound sensation. These books were entirely different from the ordinary works of the time. They were written as the result of bedside observation and contained many original sketches of disease, they brought home to the medical world for the first time the importance of auscultation in the study of diseases of the chest.

In 1854 appeared his account of the type of respiration now known as Cheyne-Stokes respiration, first noted by Hippocrates twenty-two centuries earlier, forgotten and rediscovered by Stokes, who drew attention to its serious significance.

In his book on the heart he described the syndrome which we call Stokes-Adams disease. One cannot read this without being struck by the accuracy of the observations, made without any instrumental help.

He must have lived a life of intense activity, spending many hours daily at the hospital and carrying on a widespread practice. It is difficult to understand how he found time for all he accomplished, but he once remarked: "My father left me one legacy—the blessed gift of rising early."

His home formed a nucleus for the intellectual and musical society of Dublin, and distinguished visitors were specially welcome. When Thomas Carlyle visited the city, Stokes invited him to dinner, but the evening does not appear to have been a great success, because Stokes used to say that during his life he had met many men who were in every sense of the word, "bores," but that Carlyle was "hyperborean."

As he grew older honours were showered on him; he was appointed Professor of Medicine in Dublin University as early as 1845, and in 1876 the German Emperor conferred on him the Prussian Order "Pour le Mérite," a rare distinction only twice before awarded to an Irishman.

He died in 1878 at the ripe age of 74, but his spirit must surely live on, an inspiration to all teachers and students in the Irish Medical Schools.

We have now come to the end of this, I am afraid, rather disconnected account of clinical medicine, and there is just one last point I should like to impress on you. Do not let us survey our present position with undue complacency. I am not sure that we have grounds for complete satisfaction in our clinical studies. I feel that the pendulum is swinging again away from the bedside—not perhaps to the stars and magic, but to the sparkle of the X-ray tube and the magic of the test-tube.

Are we not making a mistake in relying too much on instruments of precision? Are we not forgetting that we too have hands and eyes and ears, perhaps a bit of common sense and, in due time, a little experience?

Let us avoid the recourse to special methods as a short cut to diagnosis. The educated hand and eye and ear will tell the student all he requires to know about most diseases. Specialism is for the specialist; he alone can tell us, for example,

whether the waves on an electrocardiogram are produced in the heart-muscle, or due to a nearby vacuum cleaner or a passing tramcar. You will find that these devices will not help you when you are confronted with disease far from the resources of a modern hospital. The only thing that matters is whether or not you have taken heed to the lesson first taught in the Eastern Mediterranean over two thousand years ago, repeated again by the old Cromwellian captain—"the trooper turned physician," emphasised almost in our own hearing by the Dublin clinicians, and the lesson is this :—

"Go to the bedside—there, and there alone, can you learn disease."

I beg to acknowledge my debt to the following sources of information, from which I have drawn freely in the preparation of this address.

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FIRST AID. By Halliday Sutherland, M.D. Fortieth Edition. 1938. Edinburgh : E. & S. Livingstone. Pp. 64. Price 6d.

With First Aid and A.R.P. classes reaching almost a social status, this little book should have an extensive circulation. It is short, concise, and to the point, and as it can easily be carried in the waistcoat pocket, should be an "ever-ready" for every first-aid student. A useful addition to the present, fortieth, edition is a section on air-raid gases and their treatment. The sane outlook in the whole book is expressed in the last paragraph of this section, where it states: "Apart from panic, danger of 'gases' to life and limb is infinitely less than from high explosives." It can be warmly recommended as a safe guide to every first-aid student and worker, and its small price puts it within the reach of all.

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From the Case-Book of a Medical Psychologist

By Douglas B. M. Lothian, M.B., Ch.B., F.R.C.P.E., D.P.M.
Resident Medical Superintendent, Down Mental Hospital

An Address given to the Ulster Medical Society

It is unusual for a paper to a Medical Society to deal with a special branch of medical practice as a whole, instead of focussing upon a part. I have, however, decided to deal with the whole field of the practice of psychological medicine, in a general manner, by describing cases illustrating the different types of problem with which one is called on to deal. I do this because, while those dealing with general medicine know much of every other speciality, as a rule they know little of psychological medicine, not because they are not interested in it, nor because they do not often come in contact with cases which would benefit by it, but because their pre-graduate training has been so inadequate in regard to it. The medical student is taught about insanity, but, at least until very recently, nothing about the neuroses, nothing about mental deficiency, nor about child guidance. He will not be long in practice, however, before he has a case which calls for knowledge of one of these things.

This lack of training in psychological medicine is all the more to be deplored, because, since every novelist has a smattering of the Freudian theories, the general public now talks largely, but without understanding, of complexes and repressions, etc., and demands some knowledge of psychology from medical men; and these, if they do not study it after graduation, are too apt to take refuge in dismissing it as nonsense, with the result that the sufferer, having been told that there is nothing the matter with him, and not being directed to a medical psychologist, seeks help from some correspondence college which promises him command of his personality, or goes to some layman who is dabbling in psychology. Such cases often reach us too late for treatment. I frequently get cases who have suffered from mental abnormalities for ten to twenty years before getting in touch with anyone with knowledge of their problems. I do not know of any other speciality in medicine where the general practitioner so seldom calls in expert advice. Of course I recognise that one difficulty is that those of us who practise psychological medicine are commonly associated with mental hospitals, and that is apt to be alarming, but we are not likely to advise admission unless it is absolutely necessary for treatment. Our object is prevention—to keep patients out rather than to take them in.

It is particularly deplorable that there should be this neglect of psychological medicine, for its path and that of general medicine, for long parallel to one another, are now tending more and more to converge, and it is a mutual convergence, for, on the one hand, general medicine now recognises that many symptoms of disease, of whatever etiology, are brought about through the action of the sympathetic and parasympathetic branches of the nervous system, and that

in many cases the etiology is directly due to mental causes as in the symptom complexes; worry and anxiety, gastric ulcer; and anxiety and spastic constipation. Diabetes and exophthalmic goitre also appear sometimes to result from emotional stress, and it is clear that there is a close connection between the hypothalamus and the endocrine glands.

On the other hand, psychological medicine recognises that many types of insanity are caused by organic diseases, e.g., pernicious anæmia, syphilis, etc. Kretschmer too has shown that certain body types, due in their turn to a certain combination of endocrine factors, are directly associated with definite mental types, and prone to definite types of insanity.

Again, it is not as if the field of psychological medicine were small. In 1935 Dr. Halliday of the Department of Health for Scotland found that the incapacity for work in a group of 1,000 insured persons referred for examination, was, in 33.5 per cent., due to psycho-neurosis; and Bruce Pearson, in 1,297 cases referred by their doctors as general out-patients to Guy's Hospital, found psycho-neurosis in 16 per cent. These figures, of course, do not give us the incidence of neurosis in the general population, but competent observers have put it as high as one in thirty.

Now let us consider the portion of the population who are suffering, or have suffered at one time in their lives, from a psychosis. During the last twenty years 1,305 patients have been discharged from Down Mental Hospital. As the bulk of patients discharged are young enough to have an average expectation of life of over twenty years, most of these are probably still alive, but I have allowed twenty per cent. for loss by death, which I think large enough. Some have again been admitted as patients, but have again been discharged. About forty have been re-admitted, and are still in the institution. It is therefore probably not an overestimate that one thousand are still alive and outside the mental hospital. Some will have left the county, but we may fairly assume that an equal number of people, who have been discharged from other mental hospitals, will have taken their places. There are at present 910 patients in the institution, so that gives us a total of 1,910 people alive in the county, who are being, or have been, treated in a mental hospital. The population of County Down is 210,680, so that one person in every 110 either is suffering or has suffered from insanity. This is, I believe, certainly not an overestimate of the incidence of insanity, for it takes no account of those who are at present insane and will later be admitted, and it is quite common for cases to go on for years before coming to our notice.

Then we have mental deficiency. The Wood Committee in England and Wales found it necessary to conclude that there were eight mental defectives per thousand of the population, and we have no reason to suppose that Northern Ireland is better off. If we take the figures together, then we find that out of one thousand of the population fifty have received, or should receive, the attention of a medical psychologist—one in every twenty of the population.

The all-round practice of our speciality involves dealing with the psychoses, the neuroses, alcoholism and drug addiction, mental deficiency, child guidance, and

understanding of motives of, and in some cases treatment to cure, the criminal; I propose now to take some cases illustrating each of those branches, except alcoholism and drug addiction.

The first case is one of a psychosis—insanity proper.

Miss W., aged 31, was the daughter of a colonial personage, whose wife and daughters were on a visit to England. A distant relative of theirs in Ireland, a Mr. T., called on them. He was a bachelor aged 68, and he had the typical Irish charm of manner and gallantry. He had paid Miss W. many compliments when he met her in London, and had since corresponded with her. She was a shy and retiring type, unaccustomed to male society, and of considerable artistic ability. She had become very fond of Mr. T., and shortly before she was due to leave England she had reminded him of a possible invitation to Ireland. He responded by inviting her to come to his home, and her mother and sister sailed without her—the arrangement being that Miss W. would follow by a later boat. It was not till later that I had access to the correspondence between Miss W. and Mr. T., but it will help if I give the sense of it here.

Briefly, it showed that Miss W. was deeply in love with him. On his part it showed that he enjoyed this, was flattered by it, and would not discourage her, but on the other hand he continually made out that he was in poor health and an old man, and quite obviously was a confirmed bachelor, set in his ways, and not at all likely to appreciate marriage. It was obviously a dangerous move on his part to invite her to stay with him. She stayed for two months; then quite suddenly she spoke one day to Mr. T.'s doctor, telling him Mr. T.'s sister was hostile to her and the whole household was persecuting her. She was agitated, and would not stay in bed at night. The doctor asked me to see her. For two nights previous to this she had run about the house screaming. When I asked her what was wrong, she said she had a bad taste in her mouth and a twitching of the left eye, that she feared a nervous breakdown, that at times she could not recollect what had happened to her, and that she had had a "brainstorm." Finally after much questioning she said Mr. T.'s sister was under the domination of a "lower mentality," and when I followed this up, she said this was the maid, who, she said, had drugged her food and drink. Actually there was no hostility to her whatever in the house.

On further conversation she said she had a stabbing pain in the pelvic region, and a feeling of fullness in the right side of the abdomen. I asked her then if she thought she was pregnant. She said she was, and that she had been sexually approached by Mr. T. while asleep or unconscious, as she woke with a feeling of moisture in the sexual region. She said her belongings had been searched, and her jewellery and diary stolen. She wished to leave the house and go into a nursing-home till she got over her "nervous breakdown," though she said, with some hesitation, she was sure her mental integrity was unimpaired.

I considered she was suffering from a paranoid psychosis, and that it was obvious her stay in her relative's house could not be considered. Her doctor agreed with me that a nursing-home was not suitable for her treatment, and after

a talk with Mr. T., it was agreed she should be taken to Down Mental Hospital.

I at once did two things. I had an Aschheim-Zondek test done, which showed she was *not* pregnant, and I wrote her relatives abroad giving a full account of the circumstances, stressing the gravity of the case, and advising that one of them should return to this country.

When she was admitted she was frightened and suspicious of everyone. She seemed dazed, and did not know where she was. She constantly imagined she heard the voice of Mr. T. speaking to her, and wished to run out of her room to see where he was. She refused her food, and was with difficulty spoon-fed. Later she said she could live without food. In a few days she believed she was married, but was still suspicious of persecution. She said that if you went to any phone in the house, you could hear that the Church in Ireland had crucified Christ. On another occasion she remarked that the Church of Ireland was a man, and the Roman Catholic Church a woman. I thought that this remark had an inner meaning, and, on investigation, found that her father was a Protestant, and her mother a Catholic. She herself had never definitely decided to which Church she would belong.

It was with great difficulty that we got her to take enough food to keep her alive, and at one time she had to be tube-fed. She sat staring in front of her in a dreamy way, and when spoken to, it took a long time before what was said penetrated her consciousness, and still longer before she could manage a reply. At other times she lay with a fatuous smile, listening to the imaginary voice of Mr. T. She talked of feeling herself changed, and of being unsure as to whether she was the same person as she was before.

She was diagnosed as a case of schizophrenia, the type which has perhaps the worst prognosis of all psychogenic illnesses. The mental cause of the illness, however, was clear enough—that she had fallen in love with Mr. T., and that, while he enjoyed flirting with her, he was not able to face changing his set bachelor habits, or to contemplate marriage. He had not, however, had the courage to tell her this outright, but had endeavoured to appear in her eyes as a self-sacrificing person, who loved her too well to let her marry an aged and infirm man. In fact, he was far from infirm. He and she for a time were able to keep up this fiction, and to feel that they were the world's typical unhappy lovers, never to become united, but when Miss W. actually stayed for two months in his house, it had gradually become clear to her that there was really no reason why Mr. T. should not marry her, except that he did not want to. This fact she had been unable to face, and had therefore fled from the world of reality into the world of phantasy, where she could still believe that he wished to marry her, but was prevented from doing so by a sinister plot. At the same time her recognition of his faults of character, and her wish for a child by him, were merged together in the delusion that he had seduced her in her sleep, and that she was pregnant. I began to tackle her case psycho-therapeutically from this point of view, by explaining to her the connection between this conflict in her mind and the delusions and hallucinations she laboured under. It was a slow and painful process, for access to her

conscious mind was difficult. I had to sit day after day with her, repeating over and over again these explanations, while she dreamt away. Gradually, however, it began to work, and the hallucinations finally vanished after some months. The delusions, however, were still present, and she was still apathetic, vague, and dreamy. At this juncture her mother and sister arrived from abroad. She told them the delusion of the pregnancy and the sexual assault. The mother was a foolish hysterical woman, and, while prepared to accept that her daughter was not pregnant, was inclined to believe in the sexual assault, in spite of the fact that it bore every mark of being delusional. For Miss W. had no memory of such a thing: she merely said it must have happened in her sleep, or while she was drugged, because she had wakened with moisture on her sexual parts, and, to clinch it, she had the belief that she was pregnant, which had been disproved. I had the greatest difficulty in preventing Mrs. W. from starting a vendetta against Mr. T.

A month or two later the sexual delusion also cleared up under my psychological explanation of it, but Miss W. remained vague and dreamy. She was unsure of her personality, thought that her face was not her own when she saw it in the mirror, and would take no interest in anything. She had had a slight secondary anæmia on admission, which was resistent to treatment, and I began to suspect some toxic agent which was preventing her full recovery. Finally, after other attempts to trace it, I got Dr. J. C. Smyth, our dentist, to take an X-ray of her teeth, which looked perfect. There were two granulomata at the base of the upper incisors. I had again great difficulty in persuading the mother to allow the teeth to be removed, but finally, after much delay, permission was granted, and they were removed. A culture showed pure growth of streptococcus viridans. Thereafter the anæmia cleared up, and Miss W. made a complete recovery from her mental symptoms.

This case is interesting in that the primary cause was a psychological one, which was dealt with by means of psycho-therapy, but in which the patient may have been rendered more susceptible owing to physical impairment, and in which the illness was certainly kept going owing to toxæmia. Complete recovery was only brought about when the physical, as well as the mental, cause was removed.

The following is also a case of psychosis:

"A." was a married man aged 34. He was admitted to Down Mental Hospital as a voluntary patient. When I interviewed him on his admission, he was depressed and hypochondriacal. He thought he was suffering from heart disease, and rushed forward, opening his shirt, and demanding to be examined at once. Pale, with his eyes starting from his head, he said he feared he might drop dead at any minute. Actually he was a big husky fellow of superior physique. He told me he had been to one doctor after another, but, as each one informed him he had nothing the matter with him, he deserted that doctor for the next. I examined his heart, found there was no organic disease, and told him so, but added that I knew the idea that he had heart disease was as serious a matter to him as if he really had it, and that if he would come in as a voluntary patient, we would

cure him of that idea. He at once expressed a doubt, struck a he-man attitude, and said, "I am a man of great strength of mind and body in spite of my suffering, and I can fight it myself." "Very well," I said, "I have given you my advice." At once he caught hold of me like a frightened child and said, "It is terrible. Won't you help me, doctor?" He alternated between these two attitudes for a considerable time, before he made up his mind to come in.

In the first few days he handed in his notice to leave, daily, and as quickly withdrew it again. Whenever one entered the ward, he would demand that one felt his pulse, and took his blood-pressure. Whenever he was told he should stay, he would draw himself up, his eyes would flash, he would bend his shaggy eyebrows, clench his fists in a frightening manner, and say, "If I had stayed at home I could have fought this," but next minute would cling to one, sob, and demand help. He asked to be allowed to work on the hospital farm, but after an hour's work, said he was dying, and had to be taken indoors. Then he fell into deep despair, and refused food. This was followed by an outburst of violence, in which he jumped out of bed looking the picture of a dangerous lunatic, rushed at a window, and smashed it with his fists, shouting furiously, and then lay and wept in bed. For a month he had to be tube-fed, and it was a desperate fight to keep him alive. At the end of eight months he had made a complete recovery, and was discharged.

At first sight this sort of thing seems incomprehensible. The layman shrugs his shoulders, says "Of course he's *mad,*" and considers *that* an adequate explanation, but there is always a reason, even in insanity, for every act of abnormal conduct and every symptom, do we but search carefully enough for it.

I inquired into his past history, interviewing every available relative, and questioning the man himself. What emerged was this : From infancy his mother had coddled him. He was always clothed in twice the usual number of garments, lest he catch cold. He wasn't allowed out of the house for fear he would fall and cut himself. He wasn't allowed to play with other children for fear he would be hurt. When he was very small he accepted this, and was timid and shy. When he was adolescent he suddenly turned the opposite, and was known as the daredevil of the neighbourhood. No feat of daring was too difficult or mad for him to attempt. He was regarded by the youths of the district as a leader and hero, though they were afraid of his recklessness. Then he fell in love. His mother disparaged the girl, forbade him to have anything to do with her, and, for a time, he tamely acquiesced. A few years afterwards he suddenly ran away from home, and married the girl. His mother never forgave him. A few more years, and his mental illness commenced. The connection is clear. The phase of fear and dependence in his illness corresponded to the dependence on his mother and her training. The refusal of food meant, "I'll make you sorry. You'll be sorry for what you've done when I'm dead." Everyone knows how children use this refusal of food to alarm parents, to attract care, attention, and affection, and to get what they want. The heroic attitudinising, "My head is bloody but unbowed," as Henley put it, corresponded to the reaction against his mother's re-

striction of his activities, shown by his mad exploits and his running away from home; but the attitude of timidity was the more firmly ingrained. The whole illness was a recapitulation, a sort of symbolisation of his earlier life and the mental conflicts engendered by it.

He was cured by pointing out to him, day in day out, the connection between these facts, and by insisting on his standing on his own feet.

I used to say to him, "I can't cure you by giving you a bottle of medicine. I *can* help you by pointing out to you the cause of your illness, and by encouraging and helping you to make an effort to master your own failings. You are neither a coward or a hero, but an ordinary man, and when you accept yourself as such, instead of being discontented with reality, and striving and pretending to be your ideal he-man, you will be well." Gradually he came to see this, and *be* well.

What is the moral here?—the havoc caused by a mother's attempt to shield her child from life, by a training which is the perfect antithesis of the proper one.

The next two cases are cases of mental deficiency, in both of which offences against the law were committed; but they differ in this, that, in the first one, as in the case of insanity just described, the real cause of the abnormality in conduct was the faulty upbringing by the mother, whereas in the second case the abnormal conduct was more directly due to the mental deficiency.

The first one was that of a man in his early twenties. He was a public school boy whose parents were in comfortable circumstances. The father was easygoing, and left the upbringing of the boy entirely to the mother. When he was six years old, he heard his mother say she would like to have a camera, so he walked into a shop, and took one for her. She told him how good it was of him to think of her like that, but he must not take things out of shops. At eight he stopped going to school, and for a time no one knew he was going out each day and wandering about the town, for he wrote excuses with a colourable imitation of his father's signature, and sent them to the school. Finally, after many episodes of a similar kind, his father, in despair, got him into the Air Force as a mechanic. He deserted. He was sent out East to a rubber plantation, but made a mess of it and came home. Then he took to frequenting hotels, and stole jewellery from bedrooms. At the same time it became evident that his sexual inclinations were directed towards his own sex, instead of towards the other. He was caught robbing an hotel bedroom, and offered violence, but was overpowered.

His parents did everything to get him off. He was examined by a mental specialist, who tested him, and said he had the mental capacity of a child of 10. While awaiting removal to an institution, he developed appendicitis, was taken to a London hospital, and there operated on. While the operation wound was still unhealed, he ran away from the hospital, but was later found, and brought to the institution where I saw him. If he had been sentenced for his robberies, he would have had a few months stay in prison; as a criminal defective he was liable to detention for life. Both he and his parents soon perceived this, and he asked to see me, told me that he had faked the mental examination by the specialist, and declared that he was mentally normal. I tested him and found that he *had*

faked the tests. Now that he was trying to pass them, he tested higher, but not high enough. He was still liable to detention as a mental defective. He was strong and athletic, with an easy polished assurance, and a complete conviction that society owed him what he could take from it. It was easy to see that he was sexually abnormal, for his eyebrows were plucked, his eyelashes artificially darkened, and his cheeks powdered and rouged.

Shortly afterwards I interviewed his mother. She was about 60 years of age, but made up to an extent that not even an elderly chorus girl would affect. It was completely nauseating to see her with the boy. At one moment she would treat him like an infant, talking baby talk to him, and writing him letters of a similar character. At another, one might have thought from seeing them together that they were lovers rather than mother and son. When her husband was present, she completely ignored him for her son. In fact, it was maternal affection overlapping all bounds of common sense. She found excuses for all his wrongdoing: the fact that he loved her was sufficient to outweigh everything, and, to hear her talk, was to be assured that the whole world was created for her son to do what he liked with it. The boy was careful to keep within the rules of the institution, or at least not to be caught breaking them. His mother, of course, constantly accused the staff and the authorities of ill-treating and humiliating her son, and in fact encouraged him to rebel, but he was more far-seeing than she, persisted in his careful conduct, was finally transferred to another institution for mental defectives, and from there escaped. A little later I saw in the newspapers that he had been arrested for an hotel theft of jewellery valued at three thousand pounds. On this occasion he carried a revolver. This time mental deficiency was not pleaded, and he went to prison.

Now, in this case there was the same sort of upbringing—an unreasoning exercise of maternal affection—as in the last case, but it resulted, not in insanity, but in crime. As a child this boy got everything he wanted; when he grew up, therefore, and found everything he wanted did not fall into his hands, he believed he was entitled to take it, and did so. Furthermore, since all the affection he had for the opposite sex was absorbed by his mother, he became a homosexual, and in his person modelled himself on his mother.

That a similar cause led in one case to a mental breakdown, and in another to criminal conduct and sexual abnormality, strengthens my belief that crime and sexual abnormality are not alone offences against society, which merit punishment, but that they are often forms of mental disorder due to psychological causes, for which the individual is not responsible, and that he requires cure by psychological treatment rather than punishment, though I do not deny that punishment is itself psychological treatment, and may be useful in certain cases. I do deny, however, that it is helpful in all.

The second man, aged 28, was brought to me in the following circumstances: He had been a butcher's assistant in a provincial town, had bought a small business in Belfast, and had taken to courting a girl. After a time he told his sister he had received threatening letters, and one day he sent a message by a

stranger to his landlady that he had been assaulted in the street. The police were informed, and found him with a torn and dusty coat. He was taken to the Royal Victoria Hospital, and found next morning to have no injuries. He put in a claim for compensation. He made contradictory statements to the police, and was accused of effecting a public mischief.

On the face of it, it appeared to be a clear case. However, I saw his sister first, and she told me he had always avoided difficulty or responsibility. When he could not get his father or mother to shoulder his difficulties, he passed them on to his sister; e.g., when his eldest brother in the colonies sent for him to come out to assist him, he would not decide, asked his mother to do so, and finally gladly let his younger brother go. It was not until the death of his father and mother that he embarked on business for himself.

He admitted to me at once that the assault was fictitious, and that he had cut his overcoat himself. This had been at once obvious to the police—he had the scissors in his pocket!

It was difficult to get him to talk, but finally the whole story came out. He had never been able to manage his assistants—he had not sufficient authority—and finally he felt he could not face the responsibility of carrying on his business, and wished to close it down, but what would his sister and his girl think of him?—he would be disgraced—a failure, so he sought for an excuse. First he broke the scales in his shop. No one thought much of that. Then he told them he had received threatening letters—still no one said "close the shop," so he hit on the idea of an assault on himself. It had never struck him that the police would be called in to investigate; he had merely hoped his sister and his girl would say—"you must no longer expose yourself to danger, but must close down the shop."

But what about the claim for compensation? That seemed to disagree with the new interpretation of the circumstances. When I went into it, I found it was not he who had had the idea of a claim for malicious damage, but his girl's brother who had pressed him to make it.

This then was very different from the idea of the police that the whole thing was staged to make money. The ineptitude of the affair made me at once think of mental deficiency. I tested him by the Binet-Simon tests, and found he had the intelligence of a normal boy of 12 years and 7 months.

I gave evidence to this effect in court. He was sentenced, I think, to three months imprisonment. I thought I had failed entirely, until I heard the same judge, the same day, pass a sentence of double that amount on a similar charge, remarking that, in this case, there was no evidence of mental deficiency.

The next three cases are cases of psychoneurosis—the first of which led to criminal conduct.

He was a public school boy who was arrested for arson. He had burnt hay-stacks, a sports pavilion, and, I think, a motor-lorry. When he was admitted to the institution in which I was then serving, his reputation for setting things alight was so serious that he was not allowed to smoke, and he was searched several times a day to ensure that he had no matches. He was then 16. He was

worried about his impulses, could discuss them quite well though he was rather dreamy, but could not account for them at all beyond saying they were irresistible. He simply had to have a blaze. When I inquired into his home life, I found that he had been rather a failure at school. His parents had been disappointed in him, and were never tired of saying how clever his sister was. Here then was one reason. He could not attract the attention of his parents by his good conduct; well then, he could cause excitement, and get attention, by bad; but it didn't seem a sufficient reason, and why did he choose arson in particular?

I inquired further, and found that his father had been a Church of England clergyman, but had changed his religion, and been received into the Church of Rome. He had been followed somewhat reluctantly by his wife. There were, of course, material difficulties, since the father, being married, was only a lay member of the Church, and had lost his livelihood.

At first the boy had been enthusiastic about the change of religion, and had clamoured to become a priest, but later on gave up the idea. At the same time his mother was thinking of returning to the Church of England. It was at this juncture that the boy began to set things on fire. It is easy to see that he had a mental conflict. Should he adhere to his mother's or his father's ideas? But still that did not explain why his mental conflict resulted in arson. I gave him a word association test. That is, you read, one by one, a list of words, some significant and others not, and the subject responds by giving the first word that comes into his mind. The normal time taken for a response is known, and, by any variation of this, and by means of any peculiarity in the response given to a word, one gets a clue as to what is going on in the subconscious mind.

This was followed by a free association test, in which the subject is encouraged to start from any of the significant points, and to go on in a dreamy state simply saying what ideas follow one another in his mind. As a result of these tests the whole thing became clear. The blaze and crackling of fire symbolised the seething inferno of his mental conflict, which he could not solve, since he loved both his father and his mother, but which he sought to exteriorise by the actual creating of fire. When he understood this, he at once began to improve. At the same time it was discovered that he had some talent as an amateur actor, and he was encouraged to act in plays given by the patients, and, in particular, in a Nativity play. He had been allowed to choose, by this time, with the consent of his parents, which religious service he would attend, and had chosen Church of England—of which actually the chaplain tended to the Anglo-Catholic standpoint—and so he had attained a compromise. His parents were informed of his acting ability, and he had thus succeeded in getting admiration from them, for behaviour that was not bad. At the same time he was given permission to smoke, which he did not abuse, and after a period to be sure his conduct was stabilised, he was discharged—his parents being told to give him a training at a dramatic academy.

Mrs. B. came to see me last year along with her husband. She was aged 59. When I shut the door of the office, she at once asked for it to be opened again, and said she could not stay in a closed room. She had been unable to do this for

many years, and for the last nine had been unable to sleep without a light in the bedroom. A classical case of claustrophobia.

She then told me all her symptoms with great gusto. Her throat got dry and her mouth blistered—she could not swallow solids, as her throat was narrowed—she had a "drawing up of the face and left eye," and she felt weak "whenever she lost interest"—the usual mixing of physical and mental symptoms so common in neurosis. This sounded a beastly mixture to disentangle, but I set about it by asking what was the first symptom, and when. She answered catarrh and narrowing of the throat sixteen years ago. When I asked if she remembered any event of significance which happened then in her life, she could recollect none, but luckily her husband did.

He had been running a bus business, and his wife always ran the financial part of it. Owing to a combination of circumstances it failed in 1921, but he continued to run a lorry business, which finally failed some years later. These events caused a great change in Mrs. B.'s circumstances, and she had to leave a fine house, and go back to a cottage. Mr. B. now worked as a motor mechanic for others.

The case was now plain sailing, for it was obvious that Mrs. B.'s symptoms coincided with these events.

I therefore, impressively and at great length, told her that the claustrophobia, which she described as feeling the walls pressing in on her, was the pressure of events which she resented, and to which she refused to face up. That the narrowing of her throat and inability to swallow solids meant, "I cannot swallow or stomach what fate has done to my husband and myself." For a moment there was silence, then her husband said, "*By jings,* that's it," and, a little later, she herself said she saw it now. There was a marked transference, i.e., evidence of attachment to the psycho-analyst; she said how much she had to thank me for, and that she would like to come to see me each week. She has never come back.

Mr. Y. was brought to me complaining of a pain in his penis and a constant desire to pass water, which made him miserable and depressed. His doctor had made repeated examinations, and could find nothing organic. When I saw Y. it was obvious that he was both depressed and anxious, but, as often happens, it was the physical complaint that he stressed. However, when I asked him to tell me about himself, he said that he was anxious about everything. He could not make up his mind even about trivialities, and he was unable to carry out his work as a farmer. He was forty-eight years of age. He had a facial deformity, due to having been left alone by his aunt, and falling into the fire, when one year old. His scars were the result of the burns. His mother had been in Down Mental Hospital as a result of a suicidal attempt by drowning—had been removed on his own responsibility by Y.'s father, and later on his father had committed suicide by drowning. Y. felt that he himself was going to commit suicide by drowning. Asked about his family, he said his wife had heart trouble, and he thought his daughter had inherited the family tendency to mental trouble, but, when pressed, could give no evidence of this except "flightiness" on her part. I

wrote his doctor the same day two and a half years ago, saying that I thought psychotherapy would be unlikely to cure Mr. Y., but I thought I could get him well enough to avoid suicide, and to carry on with his work. To-day he still has his symptom, but is running his farm. His wife is much better in health, for much of *her* "heart trouble" was due to anxiety neurosis, set up by her husband's behaviour and condition. It was, however, an uphill fight to keep him out of a mental hospital, and yet to prevent suicide. I treated him once a week for a year, with occasional interruptions, and he has come back on odd occasions since then. I find, on looking over my notes, that I wrote his doctor after the first visit, giving as a provisional interpretation of the pain in the penis the following, viz. : That Mr. Y. feared that he would transmit mental instability, and that this caused the localisation of the symptom in his genito-urinary tract, so bringing about a cessation of sexual intercourse. This interpretation was later borne out by dream analysis, but it was soon found that the symptom was not the important thing, but the depression and fear of giving way to the suicidal impulse, and this was what I later concentrated on. There was also a hatred of the aunt, who had, by her carelessness, caused his facial deformity. He said that if anyone showed him a small favour, or if he felt slighted in any way, he could cry. This was due to his feeling that his parents' abnormality, and his aunt's inattention, had led to his being starved of affection, so that either the withholding of it or the granting of it even by a stranger, produced a powerful emotional reaction. He was 13 when his mother attempted suicide, and 16 when his father succeeded in committing suicide.

His neurosis, of course, acted as an excuse for his inability to carry out his work properly, and his wife was really carrying on the farm till she broke down. His clinging to the neurosis as an excuse was explained to him, and accepted by him, but he was never strong enough to discard the physical symptom, even when he was well enough to succeed at his work. Though he discarded the anxiety symptoms and the depression, he kept the physical symptom as an excuse to fall back upon, should failure occur, much as a man recovering from a fracture keeps his crutches by him long after they are unnecessary. When he first came to me he was leading his wife a dreadful life, but after I had pointed out to him that he was making her suffer because he had a grudge against others—his parents and his aunt—he improved in this respect at once. He then confided in me that he felt even a grudge against God—a modern Job.

I tried him first with the word association tests. When we came to the word "whisky" I got the first result of value. He could give no reaction word. I therefore tried him with free association, and we came to an uncle who drank. He showed signs of having hated this man, so I finally got the story. After he married, his mother was still insane, and he arranged with his aunt to look after her, for which he paid seventy pounds a year. This uncle was one who insisted on his paying a larger sum than he had wanted to do. His mother died after he had paid the aunt £1,800, and his mother left all her money—a large sum—to the aunt.

It was not till his fifth visit that I got the evidence that showed that my first explanation of the symptom affecting his genitalia was correct. I was talking to him of his sexual life, asking him about masturbation, for many people have in their youth been warned by doctors that it leads to insanity, and insanity was what he was afraid of, when he suddenly went off at a tangent, and began to talk of being afraid that suicide was hereditary, and that his daughter would tend that way, and said that his wife and he had made up their minds not to have children, and in fact had at first taken precautions against it. I then explained to him that the symptom affected his penis because he felt guilty at having a child in these circumstances, and to prevent him having others.

He then said he had already had that idea in his head. This is a common habit of neurotics, to tell you, when you have, after a tedious psycho-analysis and against much mental resistance on the part of the patient, uncovered the cause of a symptom, that they had already thought of it. It is, of course, not true, but not wholly untrue, for the thought is often just below the conscious stratum of the mind, and sometimes comes to the surface in dreams, so that they have a faint inkling of it.

On his next visit he was noticeably better, and told me that he used to complain every day about his illness to his wife, but had now given it up. On the following visit he discussed his failings of character, and ascribed them to his discomfort, but had to admit that they were present before it; whereupon I showed him he was using the symptom as an excuse. He sat silent for some time, and then said that it was true, for, though he wished to get rid of it, part of his mind clung to it, for it continuously concentrated his attention on it.

A few visits later it was obvious that a strong transference had occurred, for he entered into a long apologia, with great emotion, for piling all his troubles on my shoulders.

At this point I began a dream analysis—though for a long time he did not present much material for it—saying he did not dream, or that he had forgotten his dreams. This was, of course, due to repression, and I followed my usual practice by telling him to keep pencil and paper by the bedside, and to write down each dream as soon as he was awake. This is essential, as the dream otherwise becomes distorted by elaboration afterwards.

One of his usual dreams was that he was falling down a precipice—a common anxiety dream—but he felt also as if he stopped breathing. This was explained as symbolising his fear of suicide.

The next I will describe in his own words : "I was at Downpatrick, with a great big parcel—a burden—under my arm, and was wanting to find my way to some place. I could not tell where I wanted to go, but knew I was lost, and was looking at all the signposts."

The interpretation was that with the burden of his illness he was seeking his way in life, and had come to Downpatrick, that was, to me, to find direction.

The next dream was one which recurred several times. He was in a war—the Chinese and the Japanese were fighting each other—and he was fighting, some-

times one side, sometimes the other. This proved to mean that two parts of his mind were fighting each other, one to get rid of his symptom, one to retain it, and he himself as a conscious person sometimes fought on one side, sometimes on the other. The Chinese and the Japanese were chosen as symbols of the foreignness, the queerness of the split-off part of his mind.

A little later Mr. Y. told me he could not correct his daughter when she deserved it, as he did not wish her to suffer as he had done. It was explained to him that he was projecting himself into his daughter's personality and trying to compensate himself thus for his past miseries, and that, in fact, he was not regarding his daughter's interest in so doing. At another visit he said he now understood that all his reasons for not doing things were rationalisations, and that it was fear which was the trouble. He now felt his symptom as a background, and not as in the foreground claiming his attention.

Another dream: A man and himself were trying to do something—he didn't know what. After trying for some time, they could not get it done, and he thought it was because it was dark and they required a light. He then thought it was because his eyesight was bad because of his accident, and he left the job to the other man to do. Analysis showed that it meant that he and I were trying to cure his illness—the light that was missing was the light of knowledge, and he left the job to me because of his feeling of inferiority. At this visit he said that, though his symptom remained, he had not the same anxiety about it, and, in particular, felt confident it would not get worse.

At this stage he contracted influenza, and, after it, had a very acute exacerbation of depression and the suicidal tendency. It was the crucial point of his illness. I had to decide whether to have him admitted to the mental hospital or to take the risk of suicide, continue to leave him outside and go on with the treatment. I knew his character well by this time, and was convinced that if he were admitted to the mental hospital, even as a voluntary patient, he would give up all effort to help himself, and would remain permanently as a mental invalid. I had, moreover, a strong personal ascendancy over him by this time, and felt sure that I could use it. I told him bluntly that he was a fit subject for admission to a mental hospital, but that I would not take him in, that he would get over this stage, and that I trusted him not to let me down by harming himself. I made arrangements for him to leave his own home, and to stay with his cousins, who were understanding people, and to whom I gave instructions for his care.

When he came back to see me a fortnight later, he told me that if he had not received my help on his last visit, he would have committed suicide. At this point I should like to emphasise that in ninety-nine cases out of a hundred where there is a question of suicidal tendencies, the person should be treated in a mental hospital, and, even where the doctor knows the patient well, he should *not* take such a risk as I took in this case. I should never take it myself, except in a case that I knew through psycho-analysis, as I did here, and in which there was a strong transference, on which I played. I knew that he was so attached to me at this time that he would not kill himself, because, if he did, it would involve me

in difficulties. I feel sure that no other reason could at that time have kept him from suicide, and in fact he himself told me so. He received no medication except Metatone as a tonic. I had always refused to give him a "bottle" for his symptom, as, if I had done so, it would have reinforced the idea that it was of organic origin. He now felt much better because, of his own will, he had overcome the temptation to suicide, and about this time his wife said he had a new outlook on life. An extreme irritability had left him, and he would not now wildly strike a horse if it would not immediately do as he wished. He had previously been much worried about this tendency, which I had told him corresponded to the way a child projected its mishaps outwards, e.g., shouting "naughty door," and kicking it when it had bumped its head on it; or comparing his conduct to the man who goes out of doors after having a row with his wife, and falls to kicking a bucket about that he finds in his way.

He had two dreams which were of interest here. One that a hare came into his house and a dog killed it. When I tried out associations to the word hare I came upon the old story in which a witch turns into one. I therefore interpreted the dream as a death wish against the aunt who had harmed him. When this was put to him he said, "I often felt I could murder her." The second was that there was a slave-market in Ballynahinch, and that he was compelled to take his daughter there to be sold. I found that his daughter had been for two terms at a secondary school, and that he had brought her back home on account of his and his wife's illnesses. In talking of this he was very emotional and anxious to justify it at inordinate length. His guilt at having interrupted his daughter's career and having "enslaved" her was the meaning of the dream.

He dreamt also that along with another man he was trying to control a stallion which plunged and reared and finally broke away. When I asked him for a description of the other man, he gave me a very recognisable and life-like, though unflattering, description of myself. The dream meant that he and the psychoanalyst were attempting to control the wild and unmanageable primitive instincts and failing to do so.

He had a number of dreams like this, hitting at me for not having cured him. One went as follows: Two men were fighting outside his house, and the sergeant of police brought one inside. The other raged outside, and the sergeant was trying to shoot him through the window but did not seem able to get at him. When asked to describe the men, he described the one who was brought inside the house as *himself,* the sergeant of police as *myself,* and the man who raged outside as possessing all the qualities and physical attributes which he disliked about *himself.* It meant "I am being helped by Dr. Lothian, who is trying to save me from my worse self and to do away with the faults in my character, but he is not quite successful!"

At this time he had a recurrence of his battle dream, but now he had friends fighting on his side.

The next dream was significant of improvement. He thought he was watching a football match, and, after a bit, one side asked him for his permission for the

match to go on. He said he didn't mind. As an afterthought he said the match took place on the mental hospital pitch. I asked what colours the teams wore. He said the side which wished to continue wore green jerseys, and the others blue. I gave him a word association test and found green meant Roman Catholic, and blue Protestant to him. He himself is a "true blue Protestant," and so to him the green jerseys mean the wrong side. It was the wrong side, then, which wished to continue the match, which is again, of course, the conflict between the part of his mind wishing to retain his symptom, and the other which would relinquish it. The contest, however, is no longer the battle dream but something milder, a football match—hence the conflict is not so severe. He still, however, gives permission for it to go on, but it is a good sign that the contestants now have to ask him for permission. He has perceived he has the power to end it. He was much heartened by this when I explained it to him.

Up till shortly before this his transference to me was very marked. He regarded me as a superman, without fault. He consulted me about everything, even about farming matters, though intellectually he knew that my knowledge of such things was wholly theoretical. It now became necessary to break this transference in order that he should be able to stand on his own legs, so I showed him unobtrusively my own faults of character and shortcomings.

In the end, one day, he told me he had an invitation to go for a week with a friend to Donaghadee, and said he would not be able, if he went, to pay me his usual weekly visit. I told him to go. At once he began to talk in extravagant terms of what I had done for him, a swing back to his previous transference—but he went off for his week's holiday.

He had much better insight into his condition now, and could sometimes interpret his own dreams; e.g., he dreamt he was in a large crowd, all looking at him, and someone said there was something wrong with his glasses, which made him feel very uncomfortable. He interpreted this as his consciousness of his facial deformity, which was correct.

He now was delighted to feel that he was doing his work satisfactorily, and could take decisions himself instead of always consulting other people. As the time came near, under our financial arrangement, for his treatment to end, he became a little anxious, but I was pleased to find that he decided not to have a further course of psychotherapy, on my assurance that he could come back at intervals if he needed help.

Since his course ended a year ago he has, in fact, come back to me on one occasion for reassurance, and he and his wife brought their daughter to see me on another.

Mr. Y. looks a different man. He has lost his stoop and his careless and untidy look. He is dressed with care, holds his head up, and speaks with less diffidence. He still has a feeling of discomfort in his genitalia, but his whole outlook towards the symptom is changed, for he does not now hold *it,* but himself, responsible if things go wrong with his work. His wife tells me that he has taken full and successful control of the farm, and she herself is out of bed, and able to attend

to her domestic duties. His doctor tells me that he now has no fear of Mr. Y.'s committing suicide.

Though, as I thought at the beginning it would, the symptom still remains, I regard his case as a really successful one, for psychotherapy has saved this man either from suicide or permanent detention in a mental hospital, and has changed him from a man painfully conscious of his inadequacy in life, to one able to face its responsibilities. He himself has been pleased to hear that I am to use his case in this address, for he thinks many others would benefit by psychological treatment. His case illustrates the amount of material it is necessary to work over in giving thorough psychotherapeutic treatment. I find my case notes on him amount to thirty foolscap pages.

You will have noticed that, although in a number of these cases I have described to you, the mental abnormality, or its root cause, could be traced back to childhood, no steps were taken then to get expert advice. Nothing was done until the individuals got into serious difficulties later in life. But prevention is better than cure and as a rule costs less, besides obviating much unhappiness on the part of the individual concerned and of his relatives. There are in many parts of the country Child Guidance Clinics for this purpose—thirty-five in England and eleven in Scotland, but none in Northern Ireland nor in Eire.

Here is an account of a case I had to deal with, typical of the sort of thing one meets at such a clinic.

A boy aged three had always been well-behaved, had shown no sign of "nerves," had been brought up from the start to sleep in his cot by himself, and had done so quietly. Suddenly he had begun to scream in the night, and had refused to sleep by himself. At night he fell into a state of extreme terror when taken to his room; in fact it had become impossible to get him to sleep by himself, and he had been allowed to sleep in his nurse's bed along with her. In the first attack the boy woke up, screamed in panic, and shouted that a baby calf was under his bed. Actually he had always been interested in calves on the farm, and had been unafraid of them. The facts on investigation were as follows: The mother, about to have a second child, had gone with the boy to her parents' home, and, after leaving him there, entered a nursing-home for her confinement. It was on the night that she brought back the new baby to the house that the boy had his first nightmare. It was obviously enough the new arrival who had upset him, and likely that the baby calf under the bed symbolised this. When a second child is born, some of the affection previously lavished on the first is inevitably diverted to the second, and the first feels the change.

How was it to be dealt with? The child's terrors were really extreme.

Instructions were given. That night the father went upstairs with the boy, who, when he was going to bed, as usual fell into a panic and said a calf would come during the night. His father then said to him, "I don't like calves very much, it is you I like," and for the first time for a fortnight, the little boy went quietly to bed and slept. Later on, though no one ever compared the two, he was heard

to refer to his baby brother as a baby calf. I then felt justified in regarding my interpretation of the night terror as proved correct.

Summary.

Eight cases have been described, two of psychosis, two of mental deficiency with criminal conduct, three of psycho-neurosis—of which one with criminal conduct, and one of a phobia in a child.

They have been selected to show :

1. A typical cross-section of the work of a medical psychologist.
2. Typical examples of the causation of psychogenic mental disorders.
3. Typical examples of the causation of criminal conduct resulting from mental abnormality.
4. Typical methods of investigation into mental disorder and criminal conduct.
5. The methods of psycho-therapy applied, and their results.

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THE INTERNATIONAL SOCIETY OF SURGERY

Some details of a visit paid recently to the International Society of Surgery in Brussels might be of general interest. These meetings last over a period of four days, and are held every three years. Three subjects are usually discussed, in one or more sessions, with anything from thirty to fifty people taking part in each discussion. This year's meeting had been arranged to take place in Vienna, but six weeks before the time, it had to be changed suddenly for political reasons, and Brussels, with very short preparation, took over the responsibility.

The Society originated in Brussels. The first meeting was held there in 1905—the Journal is printed there, and the permanent officials, such as secretary and treasurer, live there.

The last few meetings—this was the eleventh of the series—have had interesting political connections. This one was held with the tension of a European war threatening and with Chamberlain flying to talk with Hitler. The last one, three years ago, was held in Cairo, and the delegates—especially the English—had great difficulty in getting into the meetings, on account of the anti-British demonstrations of the students, who kept up a continual cry of "a bas les Anglais !" The meeting before that, in 1932, was held in Madrid, and the atmosphere was somewhat strained, as the meeting followed closely upon the Revolution.

The meeting of 1929 was most memorable of all; it was held in Rome. It is customary to start with a solemn inaugural session, presided over by the King or other high official, and in Rome Mussolini presided. It was when going down the steps afterwards that he was shot and received a bullet in the nose !

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It is rather extraordinary that such incidents should all have happened at the tri-annual meeting of the Society. Japan, Mexico, and Sweden were all applicants for the next meeting, and it has been arranged for Stockholm in 1941.

The subjects for discussion are :—

1. Surgical shock considered from its various aspects.
2. The remote results of surgical operations for pulmonary tuberculosis.
3. The later results of operations upon the biliary passages.

The official language is French, but each speaker gives his paper in his own language. It was arranged that if this meeting had been at Vienna, each speech would have at once been translated into five languages—French, English, German, Italian, Spanish—and each delegate, with ear-phone in front, could listen-in to the speeches in any one of the five languages—a somewhat similar method to that adopted at the League of Nations Conferences in Geneva. This was not possible at Brussels,. and so each speech was printed beforehand, and with it was given a summary in the four other languages.

At the meeting this year some forty-seven nations were represented, and five hundred to six hundred delegates were present. In the afternoons various entertainments were arranged for the ladies accompanying the delegates, and in the evening some combined festivity. One of the most interesting of these was a Raout in the City Hall, where we were received by the world-respected Burgomaster Max, and we could not help but wonder when we saw many of his former enemies adorned with the Iron Cross, coming forward to shake him by the hand.

The subjects for discussion were :—

1. The surgical treatment of essential hypertension.
2. Surgical treatment of lung cyst and tumours.
3. Bone grafts, discussed from all angles.

In the first discussion Peet from Ann Arbor, America, described the results of his operations in 375 cases, and gave a follow-up extending over five years. He had fifty per cent. of his patients free from symptoms. The patient was in most cases young, 30 to 40 years, and the high blood-pressure quite free from any sign of degenerative kidney lesion. It was extraordinary how the choked discs, thickened arteries (due to spasm), and the blood-pressure subsided. The aim of the operation is to cut the first and third splanchinic nerves in each side, using a posterior approach. In Peet's hands the total procedure takes about one hour.

In the operating-theatres visited one was impressed by the preference for spinal anæsthesia, and with the great amount of gastric and duodenal ulcers there as compared with this country. In one clinic every perforated peptic ulcer is treated by an immediate partial gastrotomy.

In Belgium there are four University towns,. Louvain with three thousand students and two Universities (French and Flemish). Two thousand students are in Brussels and a few hundred in Ghent and Liege.

The meeting was a very successful one this year, and better attended by the English than usually.

I. F.

SIR ROBERT JAMES JOHNSTONE, B.A., M.B., F.R.C.S.ENG.

It is with profound regret that we have to record the death of Sir Robert Johnstone, at Newcastle, Co. Down, after a relatively short and trying illness. It is impossible in one short article to recapitulate the scope and extent of his many activities, and a brief summary must suffice. Seldom has it been granted to one man to achieve so many distinctions, and to adorn so many high offices. A Classical and Medical graduate of the Queen's University, he occupied the chair of Gynæcology for seventeen years. A member of the Senate, he represented his Alma Mater on the General Medical Council and the Dental Board. He has also been a Member of Parliament as representative of the University since 1921, and, at the time of his death, was President of the Queen's University Graduates' Association. It was only this year that the Senate decided to confer upon him the degree of LL.D. (*honoris causa*), the conferring of which unfortunately had to be postponed owing to his illness. His professional career was mainly devoted to his work as member of staff of the Royal Victoria Hospital from 1903 to 1937, though he was also deeply interested in the welfare of the Royal Maternity Hospital, which he served first as member of staff and later as chairman of the Committee of Management. He was a Founder Fellow of the British College of Obstetrics and Gynæcology, and acted on its Council. In 1936 he presided with his customary ability at the tenth British Congress of Obstetrics and Gynæcology, which was held in Belfast. He was a member of the British Medical Association for over forty years, serving as secretary and then as president of the North of Ireland Branch, and he finally received the highest honour in the gift of the Association in being elected president for the annual meeting in Belfast in 1937. His masterly conduct in the chair during that most successful meeting, is still fresh in the minds of us all.

The welfare of the Ulster Medical Society found in him an ardent supporter. He was a member for almost forty years, and he occupied the presidential chair in 1922-1923. There was no one who took a more practical interest in the success of the Society, and he was a regular attender at the fortnightly meetings. He was always prepared to undertake any duty, even at short notice, and he was equally obliging and efficient in proposing a toast at the annual dinner, which he rarely missed, or in gracefully moving a vote of thanks to a visiting speaker. His distinguished services to the medical profession and the Society were fittingly recognised last autumn, when the Council recommended, and the Society unanimously approved, that he be elected an Honorary Fellow of the Ulster Medical Society, a rare and greatly coveted honour. To the great regret of the president and members of the Society, he was prevented by an important engagement in London from being present at the annual dinner in February to receive his honorary fellowship in person. Few men have been endowed with so many and varied talents, and few have ever made better use of them. He had a rare gift for extempore speech, and his remarks embodied wisdom, lucidity, humour, and brevity. He was the author of many admirable scientific papers and some excellent

free verse. He was strictly honest in his thought and speech, and he detested sham and artificiality. His approach to every problem was logical; his appreciation of its merits or demerits was always fair, and he could admirably assess its value to the profession and the community.

He went straight to the heart of a written document, stripping it of its redundant verbiage, and exposing the essentials. His outlook was broad, and sane and sympathetic, and he could decide an issue, even where his personal interests were concerned, with complete impartiality. He was endowed with an all-embracing tolerance, not only in his dealings with his fellows, but in his general outlook on affairs. He was never guilty of any unkind word to a colleague, nor of a mean action.

His classical training had taught him the value and beauty of the simple things of life. He loved the country, a view of sunshine and shadow on a mountain-side, the roar of a mountain torrent in its rush to the sea, or the compelling beauty of a sunset after rain. He possessed an admirable self-control. Yet beneath a calm and unruffled exterior lay a lovable and simple personality, grateful for the affection and goodwill of his friends, and pleased by little acts of kindness and consideration.

It was in the ward kitchen, at the dinner-table, or round the fireside that his personality was most effectively revealed, and no one who was privileged to meet him on these occasions could fail to appreciate the natural charm, the spontaneous humour, the essential simplicity, and the inherent greatness of the man. He was generous to a degree, and his deep sympathy with those in suffering and distress was expressed not only in personal service, but in financial support for every good cause. He had a genius for hospitality, and a happy facility for putting his guests completely at their ease. He was at home in any company and could entertain complete strangers as successfully as his best friends. He rose to every emergency, as to his last, with unflinching courage and fortitude.

To Lady Johnstone, who shared so fully in all his interests and with whom he had enjoyed an ideally happy life, the deep sympathy of the president, fellows, and members of the Ulster Medical Society is affectionately tendered.

Sir Robert was to have had the degree of LL.D. *honoris causa* of Queen's University, Belfast, conferred upon him last July, but illness prevented him from presenting himself at the ceremony. On that occasion Professor Montrose, Dean of the Faculty of Law, had proposed to say :—

"Sir Robert Johnstone's life has been dedicated, to a great extent, to the solution of problems of maternity, but it presents his biographer with the problem of deciding his academic paternity, for he was a graduate of Arts as well as of Medicine. The biographer may well consider that Sir Robert's dignified bearing, serene temper, and judicial mind proclaims him to be by nature a son of the classics, his love of which has been shown by continued reading throughout his busy career, and by the building up of his excellent library. By vocation Sir Robert has been to medicine a good and faithful servant, as witness his manifold labours for his pupils, his profession, and his patients. A mere catalogue of his

activities is sufficient to indicate the magnitude of his achievement. At Queen's he has been demonstrator, lecturer, professor, and was chosen by his colleagues as their representative in the Senate and on the General Medical Council. By the members of his profession he was elected President of the Ulster Medical Society and Chairman of the Irish Medical Society. He has also held the high office of President of the British Medical Association. He has devoted much effort and thought to the work of hospitals, and as Honorary Gynæcologist to the Royal Victoria Hospital was indeed the obstetrix to the Royal Maternity Hospital, whose new buildings have been appropriately named after him. To the advance of medical knowledge he has contributed many articles in the learned journals. In the public life of Ulster he has played a prominent part : he has been member of the Northern Ireland Parliament for Queen's since 1921 ; he was a member of the Lynn Committee on Education, and since 1924 he has been Chairman of the Committee on Local Government and Public Health. In recognition of his services in so many fields he has been knighted by His Majesty.

"We do honour to-day to this proud record, which has brought distinction to Queen's and to Northern Ireland. But it is also fitting, on this occasion where the array of academic costume blazes over our fellowship of learning, to say how beloved a member of that community is our Emeritus Professor. You, my Lord Chancellor, are about to cause to be inscribed in the roll of Honorary Doctors of Law the name of Sir Robert James Johnstone. May I say that he possesses qualities of character which have inscribed 'R.J.' on the hearts of his colleagues."

NEW OPERATING-THEATRES IN THE MATER INFIRMORUM HOSPITAL, BELFAST

A new operating-block has been added to the Mater Infirmorum Hospital, Belfast. This is a two-storey building with two theatres and a sterilising-room situated on the ground floor. The walls of the theatres are finished with a pale green tile, rising to an ivory frieze and ceiling, the whole blending harmoniously with a green tinted terrazzo floor. Wash-basins with the latest mixing valves are fitted for the surgeons' use. The operating-tables and other theatre equipment are made of stainless steel. Lighting is through large bay-windows, into which is fitted a triplicate glass, providing the maximum reflection of daylight. Artificial lighting is by shadowless electric lamps, which are fitted with a dual supply from the mains and from a battery, so that if during an operation the mains current fails, the battery will function instantaneously. Ventilation is principally by electric suction.

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REVIEWS

DR. FUTUER. By Toller. 1938. London: A. H. Stockwell. Pp. 304. Price 7s. 6d. net.

Since Dr. Cronin made a financial success of "The Citadel," numbers of imitators have arisen with the hope that they will share in his success. Dr. Fütüer would appear to be one of these, but its author, being at a loss to find suitable material for a full-length novel on the failings of medical practice, fills over two hundred pages with his own autobiography, and leaves less than one hundred pages for the subject with which he hopes to attract a circulation.

These first chapters do not suggest any great respect for the author's desire for correct details, or any great diligence in the search after truth: he describes Stormont Castle as "the residence of the Governor-General of the North of Ireland"; Belfast as "surrounded by mountains," and that "sloping down to the sea can be seen the mountains of Mourne," all of which are erroneous; while his views on the position of *pithecanthropus erectus* in the human stem are at least forty years out of date.

The smaller section of the book is devoted to an attack on panel practice and panel practitioners, and a eulogy of the abilities of the author. But when he states that after failing three times in the examination for membership of the Royal College of Physicians (Ireland), and that he hopes "to continue to enter for this examination, and perhaps shall continue to fail through showing how clinical problems can be solved by mechanical medicine," his lack of confidence in his own abilities does not dispose one to accept his views on practice without further inquiry.

The author's views, summed up, are that what he calls "mechanical medicine" should be available for panel patients, and that these appliances should be supplied by the Government to panel practitioners: X-ray apparatus, electro-cardiographs, electro-encephalographs, to name but three. He states that hospital attendants use these instruments by merely pressing a button; but surely if he knows anything about these delicate instruments, he knows that the real test is the interpretation of the photographic pictures taken after "pressing a button." Interpretations of such photographs can be made with any degree of certainty by physicians only after prolonged study and training, and to give such training to every undergraduate medical student would be impossible, for alas, there are still only twenty-four hours in the day. The author of Dr. Fütüer apparently does not realise this fact, for he clearly shows his own lack of knowledge in many statements. For example, he writes: "Early cancer can be at once recognised by the mere taking of an X-ray picture, and early tuberculosis can be as readily diagnosed." Two statements that no physician of any experience would accept.

If the author had set out to advocate an extension of the present panel system, to a national medical service for all, from general practice to laboratory diagnosis and specialised treatment, he would have had the whole-hearted support of the medical profession. But in that case he would have been merely supporting the present published policy of the British Medical Association, and not bringing forward any new sensational ideas.

MENTAL NURSING IN OBSERVATION WARDS. By I. M. Sclare, L.R.C.P.S.Ed., with a Foreword by A. S. M. MacGregor, O.B.E., M.D., D.P.H.(Camb.). Edinburgh: E. & S. Livingstone. 1938.

This book is intended primarily for mental nurses, but should also be of great value to all who are interested in mental disease, whether from a medical or psychological standpoint; and indeed it provides material which the purely theoretical psychologist might profitably study. Because of the great clarity with which the early signs and symptoms of mental disorder are described, and the equally clear descriptions of the history and treatment of many typical cases, it should be as great an asset to the general practitioner as to the professional staffs of mental hospitals. In general practice it should make for the avoidance

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This example must suffice to show the great value of Dr. Sclare's analysis of cases, the skill with which he avoids undue emphasis on either the physiological or the psychological factor in mental illness, and his refreshing freedom from anti-psychological bias.

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This is a valuable book. It is a rarer thing—it is a readable book. In all little over three hundred pages it covers a field ranging from genetics to air-raid precautions. Beginning with a chapter on inheritance, an excellent exposition of those often unintelligible things, dominants, recessives, sex-linked and autosome inheritance (though it comes as a shock to find progressive muscular atrophy mentioned as a dominant), the individual is followed through his "seven ages," with all the environmental factors which play upon him, and especially those enactments by which Government seeks to avert the hazards of existence. The book is not intended for D.P.H. candidates, and the various Acts are dealt with but briefly, yet the important provisions relating to education, factories, and industrial diseases, have been included—and, more important for the average medical man, explained. The practical working of the National Health Insurance Act is much more fully and clearly dealt with than is usual in a textbook of hygiene.

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Studies from the Institute of Pathology

CASE IV—A2305.

A Patient with Subacute Bacterial Endocarditis.

Clinical History: The patient, a young woman of twenty-four years, was admitted to the Royal Victoria Hospital on 8/10/38, complaining of general malaise, breathlessness on exertion, and swelling of her ankles. There was a history of "rheumatic pains" in the joints for over five years. Recently she has suffered from pain under her finger-nails, and from pain in the right side of her abdomen (two weeks ago). Three weeks before admission she began to notice the occurrence of small hæmorrhagic points in the skin.

On admission the patient looked pale and ill. She showed some flushing over her cheek-bones. Her respiration-rate was slightly increased. There was a slight cyanotic tinge in her lips and ears, and petechial hæmorrhages over her arms and legs. She ran a spiky temperature varying between 99° and 102°C. Nothing of note was found on examination of the lungs. The heart-rate was increased. The heart-sounds were faint. There was a double aortic murmur and a presystolic and systolic murmur in the mitral area. Blood-pressure 150/0 mm. Hg. Spleen was palpable and tender. Tenderness was also noted on palpation of the right kidney. The nervous system appeared normal.

On blood culture the streptococcus viridans was isolated.

Examination of the blood showed 6,250 white cells on 24/10/38, 1,800 white cells on 1/11/38, and on the day of death no white cells were found in the film.

The patient was treated by prontosil and May & Baker's 693, without any marked benefit.

She died on 3/11/38.

POST-MORTEM EXAMINATION (TWO HOURS AFTER DEATH):

The body is that of a small adult female. Rigor mortis has not yet developed. The pupils are equal and dilated. There is no discharge from eyes, ears, or nose. The distribution of bodily hair is normal. Striæ gravidarum are present over the abdomen. The ankles are slightly swollen, and pit on pressure.

Body cavities: The pericardial sac is distended with clear amber coloured fluid (10 oz.). Both pleural cavities contain 40 oz. of similar fluid, and a smaller quantity is found in the peritoneal cavity.

Heart: This appears somewhat dilated. The epicardium is smooth. The coronary vessels appear normal. The right auricle shows no lesions. The right ventricle possesses a rather pale flaccid musculature. The tricuspid and pulmonary valves

are thin and competent. The left auricle is normal. The muscle of the left ventricle shows an extreme pallor, especially marked in the subendocardial fibres. There is one small vegetation on the mitral valve (aortic cusp). This is soft and friable. The mitral valves are not thickened, but an aneurysm of the aortic cusp is seen, measuring about half an inch in diameter. The aortic valve is bicuspid. The left cusp shows a perforation, and a large firm vegetation, from which the infection has become implanted on the ventricular surface of the mitral valve, leading to the aneurysmal formation already noted. The right cusp is not longer than normal, but at its basal attachment a slight dimple denotes the point of fusion of two cusps into one. Its free margin is covered by soft red vegetations, but its substance shows no thickening.

Lungs: The pleura is smooth. The large bronchi contain a frothy fluid, but are lined by a pale mucosa. On section small hæmorrhagic areas are seen, and the lung tissue is everywhere œdematous.

Liver: This is enlarged. Weight 4½ lb. The common bile duct and cystic duct are patent. The gall-bladder is normal. On section the liver lobules are distinct with pallor of the peripheral zone.

Spleen: Weight 1 lb. The capsule is thin, except for a small area adherent to the posterior gastric wall. Two small areas of yellow discolouration are seen on the surface. On section the spleen cuts easily, leaving a relatively smooth surface. The Malpighian corpuscles are not distinct. The pulp is red, surprisingly firm. The yellow areas noted on the surface are found to be small wedge-shaped infarcts.

Pancreas: This is of normal size. The ducts are patent, and on section the acinar tissue shows no lesions.

Adrenals: These appear quite normal.

Kidneys: These are normal in size. The capsule strips readily, leaving a smooth surface studded with petechial hæmorrhages. Several small irregular yellowish areas with a congested margin are seen. On section, the cortex is swollen, the glomeruli can be distinguished, and the medulla is pale. The pelves and ureters show no lesions.

Bladder: This is small, contracted, and lined by a pale mucosa.

Uterus: This is of normal size. The endometrium is pale. There is an erosion on the posterior lip of the cervix. The tubes and ovaries show no lesions.

Neck organs: The larynx, trachea, and œsophagus appear normal. There is no enlargement of the tonsils. The thyroid is of normal size, and on section is a normal colloid-containing gland. The parathyroids are not enlarged.

The aorta is small, with a thin elastic wall.

Bone marrow: The femoral marrow is red and hyperplastic. The vertebral marrow appears normal.

MICROSCOPICAL EXAMINATION.

Heart: The vegetation from the aortic valve shows a core of hyaline tissue in which fibroblasts and large mononuclears and a few binucleated cells are present.

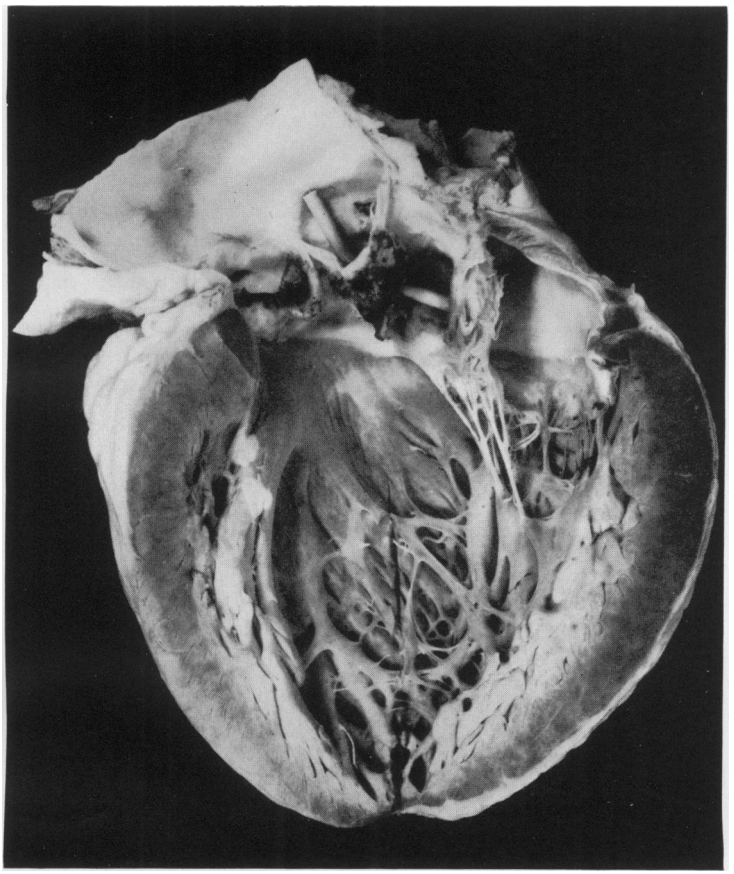

Fig. 1

Figure shows the opened left ventricle of the heart. Note the bicuspid aortic valve. The cusp on the right is perforated, and the vegetations have been implanted on the ventricular surface of the anterior mitral cusp, with resultant aneurysm of the valve.

Fig. 2
Section of heart-muscle from the left ventricle, showing minute area of necrosis secondary to embolism from the vegetations.

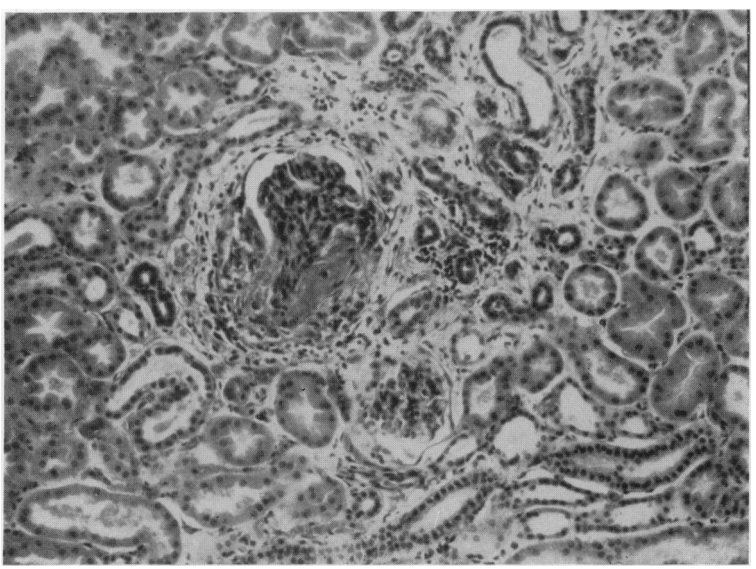

Fig. 3
Section of kidney showing necrosis of several glomerular tufts following the impaction of minute emboli. Focal embolic nephritis.

Photographs are by Mr. D. McA. Mehaffey.

This core is covered by a large number of organisms, and these in turn by a meshwork of fibrin and polymorphonuclear leucocytes. Sections show no evidence of previous rheumatic lesions in the valves or cardiac muscle. Small areas of necrosis associated with capillary thrombosis and some inflammatory infiltration are scattered throughout the myocardium. The coronary vessels appear normal.

Lungs: The alveoli are distended with œdema fluid. There are a few small areas of hæmorrhage with necrosis of the alveolar walls, suggesting minute infarcts. Such areas show clumps of organisms, but no marked inflammatory reaction.

Liver: There is a central necrosis in every lobule. This is associated with a central congestion. The radicles of the portal veins and bile ducts are normal.

Spleen: The sinuses are dilated. The pulp is richly infiltrated by red cells, but shows little of the cellular proliferation usually seen in streptococcal infections. A few large basophilic mononuclears are present round the Malpighian corpuscles. The cells lining the sinuses are swollen, and appear to be more numerous than usual. There are several small infarcts.

Pancreas: This shows no lesions.

Adrenals: These are normal.

Kidneys: The glomeruli and tubules for the most part appear normal, except for a little swelling of the cell protoplasm. Scattered glomeruli show embolic lesions of isolated tufts with the development of adhesions to Bowman's capsule, and, in the less recent lesions, fibrosis.

Bacteriology: Post-mortem cultures of the heart's blood and spleen confirm the presence of the streptococcus viridans.

Anatomical diagnosis:

Bicuspid aortic valve.
Subacute bacterial endocarditis of aortic valves (streptococcus viridans).
Ulceration.
Aortic regurgitation.
Implantation of vegetations on aortic cusp of mitral valve.
Aneurysm of this valve.
Infarcts spleen, kidney, and heart.
Focal embolic nephritis.
Petechiæ of skin.
Zonal necrosis of liver.
Oedema of lungs.
Hyperplasia of marrow.

Commentary:

Subacute bacterial endocarditis is by no means an uncommon cause of death, and whilst there exist those cases which conform, as this patient did, to text-book descriptions of the clinical syndrome, other cases may reach post-mortem without the diagnosis being established. Any elevation of the temperature may be absent (i.e., A2319). The presenting symptoms may vary, so that attention is not

directed to the heart. Thus we have seen patients suffering from this pathological process in which the clinician was primarily attracted by the resultant anæmia, or more rarely by the malfunction of the kidneys.

Most cases are the result of an infection by the streptococcus viridans of cardiac valves which have been previously distorted by rheumatic fever. It is important, however, to realise that a history of rheumatic fever cannot always be obtained from these patients. Some will give only a history of slight joint pains, "growing pains," etc., which we have learnt to respect as the slighter clinical manifestations of this process. In others, however, even these minor manifestations have escaped the attention of the patient, and the rheumatic lesion in the heart has progressed by a series of recurrent attacks, concerning which the patient has apparently been completely unaware.

In the present case, however, the clinical history is complete with a history of "rheumatic pains" in the joints, and yet examination reveals no stigmata of any previous rheumatic carditis. There are no recent Aschoff nodules, and no evidence of fibrosis which might be interpreted as healed rheumatic lesions. We have been impressed by the not-infrequent simultaneous occurrence of recent Aschoff nodules and subacute bacterial endocarditis, and it appears not unreasonable to suggest that the streptococcus viridans may more easily attack the rheumatic endocardium of the valves where these are the seat of recent rheumatic vegetations. It has been suggested by others, who have also noticed this association of subacute bacterial endocarditis and histological evidence of a recrudescence of the rheumatic lesion, that the occurrence of the bacterial infection stimulates the rheumatic agent to reactivity.

The absence of histological evidence of rheumatic fever in the present case is therefore all the more remarkable. It is, however, well known that streptococcus viridans may also settle in hearts which present any congenital abnormality. Case A2142 shows such an endocarditis in a heart where the only lesion is a patent interventricular septum. The role of bicuspid aortic valves in predisposing to infection by these streptococci has been stressed by Osler, and more recently by Lewis and Grant (1923). It was appreciated, however, that not all bicuspid aortic valves were of congenital origin. Some could be and are the result of previous inflammatory lesions. Gross (1937) has indeed maintained that the great majority of bicuspid aortic valves in adults, and more especially when unassociated with any other congenital abnormalities, are of rheumatic etiology. He bases these conclusions on the concomitant presence of other healed or healing lesions of rheumatic fever in the heart. However this may be, the present case fulfils Osler's criteria for the congenital nature of the lesion—the absence of any corpus Arantii in the fused cusps, the poor development of the raphe, and the equality in size of the two cusps. The presence of any other rheumatic lesions in a careful histological survey of the heart also tends to support the congenital nature of the deformity in this patient, and renders the clinical history of rheumatic pains of somewhat doubtful significance.

There is no evidence, either clinical or pathological, of the site of entry of the

organism. The oral cavity appears to be the common source for this type of streptococcus, and poor teeth or tonsils are not infrequently present in patients with subacute bacterial endocarditis. The teeth and pharynx of this patient appeared healthy. (Contrast with Case A2026, in whom the endocarditis developed in a patient following the removal of a tooth and was associated with pyorrhœa.) However, there is a certain amount of evidence that even in apparently perfect health we may suffer from waves of bacteræmia of short duration.

Having once established itself on the valves, the infection has run an indolent course. From the resultant vegetations, organisms are showered into the blood-stream. This does not appear to happen all the time, for it is quite possible to obtain negative blood-cultures from time to time. The clinician, therefore, often takes his culture when the occurrence of a rigor suggests an exacerbation of the disease process. The histological structure of the vegetations gives some evidence of the indolence of the process. The base of the vegetation is seen to be composed of organising blood-clot—fibroblasts and new capillaries are present. However well marked this healing process may be, the surface is seen to be covered with fibrin and red cells overlying large masses of organisms.

From this soft friable infected surface it is not surprising that small fragments are frequently washed away, to produce the almost invariable finding of infarcts in other viscera. These are shown clinically by the occurrence of pain and tenderness over the organ affected. Such infarcts are rarely septic, in spite of the infected nature of the emboli. This finding is explained by the low pathogenicity of the streptococcus viridans, and the high anti-bacterial titre of the blood which is found in these patients. The covering of fibrin is supposed to protect the organisms present in the vegetations from the action of these anti-bodies, and so prevent the ultimate sterilisation of the vegetations.

The petechial hæmorrhages in the skin and the pain below the finger-nails are also due to capillary emboli.

In addition, however, to these generalised lesions, the infection of the valves leads to the development of still further deformities of the valves themselves. Here there has been produced a perforation of one aortic cusp, and erosion of the free edge of another, so that regurgitation has occurred. This deformation of the aortic valves forms the basis for the aortic murmurs and the low diastolic blood-pressure.

The heart also shows a lesion which is not uncommonly seen in these patients. The infected aortic cusps have come in contact with the anterior mitral cusp, and where contact has been made a new crop of vegetations arises. These new vegetations on the ventricular surface of the anterior mitral cusp have led to inflammatory softening of part of this cusp, so that when called upon to withstand the systolic pressure, the weakened cusp is found wanting, and an aneurysm has been produced. This aneurysmal pouching of the mitral cusp probably forms the basis for the mitral murmurs, though the toxicity of the heart-muscle has led to dilatation of the mitral ring, and this would also play some part. This toxic change is most marked in the subendocardial layers of the myocardium.

The development of anæmia during the course of this form of endocarditis is not uncommon. Indeed, it may assume such an intensity that it masks the cardiac lesion, and its true cause may only be demonstrated at post-mortem. There is usually some decrease in the number of red cells, with in some patients the appearance of nucleated reds. The usual picture is a hypochromic one. The number of leucocytes is variable. Counts up to 20,000 per cmm. may be encountered, but quite often no leucocytosis is seen. The present case showed no leucocytosis whilst under observation, and little importance can be assigned to the gradual appearance of leucopenia in the terminal stages. Actually the bone-marrow appeared hyperplastic, so that the terminal blood-picture was the result of failure of the numerous myelocytes to mature.

To summarise, therefore; a case of a young woman of twenty-four years suffering from subacute bacterial endocarditis is described. The endocarditis was superimposed upon an aortic valve already the seat of a deformity. The course of this disease process is discussed.

We are indebted to Dr. Foster Coates for the clinical summary.

THANKS

To the Editor of the "Ulster Medical Journal."

Sir,

I shall be glad if you will allow me to express in your columns the very warm thanks to the Chairman (Doctor J. S. Morrow) and members of the Belfast and County Antrim Branch Committee of the Royal Medical Benevolent Fund Society of Ireland to—

An anonymous donor who has sent five guineas "in affectionate memory of R. J. J.,"

The Resident Medical Officers of the Royal Victoria Hospital for their Christmas gift of two guineas, and

The eighteen ladies and gentlemen who have sent banker's orders or cheques amounting in all to £17. 14s. in response to my appeal entitled "An Old Minute Book" in the October number of the Journal.

It was at the chairman's suggestion that 260 copies of this appeal, together with banker's order forms, were posted to non-subscribers in Belfast and County Antrim. It is earnestly hoped that further responses to the appeal will soon be made. We are still a long way from our goal—that every man and woman who is earning his or her living in medical practice should subscribe to this—our own—Charity.

I am, Sir,

Yours faithfully,

ROBERT MARSHALL,
Hon. Secretary, Belfast and County Antrim Branch R.M.B.F.S.I.

9 College Gardens, Belfast.

ULSTER MEDICAL SOCIETY

THE opening meeting of the Society was held on the 3rd November, when the retiring president, Professor W. W. D. Thomson, introduced Dr. John McCloy to the chair. After thanking Professor Thomson and the fellows and members of the Society for conferring the honour of presidency upon him, Dr. McCloy then referred to the losses which the Society had sustained during the previous year from the deaths of members and fellows.

Malcolm Brice Smyth, who died on the 21st December, 1937, was the son of a doctor and one of a family of doctors, all distinguished members of their profession in Belfast. After graduating in Dublin University, he returned to his native city, where, notwithstanding the calls of an extensive practice, he gave generously of his time and skill to the Maternity and the Children's Hospitals as one of the honorary visiting staff. Not much interested in public affairs, his occasional hours of leisure found him out with a rod or a gun. He held a high place in the esteem and affection of his patients and friends.

The long and useful life of Thomas Kennedy Wheeler, who died on 29th December, 1937, in his ninetieth year, formed a link between past and present generations of Ulster medical men, in more senses than one, for he was the son of a doctor as well as the father of doctors. Three years after his father's term of office as president of this society, Thomas Kennedy Wheeler took his M.D. degree in the old Royal University. He was very successful in a large general practice as well as being on the surgical staffs of the Royal Victoria Hospital and the Ulster Hospital and acting as Medical Officer to the Methodist College. Esteemed for his ability by patients and colleagues alike, he combined a dry detached humour with a gentleness that endeared him to patients : and those who knew him will remember his courage in personal sorrow and the spirit which enabled him in a time of failing health to continue his interest in his favourite game of bowls.

John Rusk, a former vice-president of this Society, died on the 26th January in his seventy-fifth year. After graduating in the Royal University, he spent some time doing post-graduate work in Vienna, and then returned to Belfast, where his ability gained him an extensive practice. He served for a time as Lieutenant in the Royal Army Medical Corps during the Great War, although he was then over age. He was devoted to literature; and as a bowler had an international reputation; and he had a popularity that extended far beyond the wide circle of his personal friends.

James Joseph Murray, a graduate of our university, died on the 4th April last. He was medical officer of the dispensary and the union infirmary in Downpatrick, where he had also a large private practice. He was quiet in manner and amiable in disposition, and was held in affectionate esteem by his colleagues and by his patients rich and poor.

David Peter Gaussen, who died last May, was a descendant of an old Huguenot family. After passing through the Royal University with distinction, he did some post-graduate work in London, and then settled in Dunmurry, where he quickly gained a fine practice and was appointed dispensary medical officer. Before retiring

from private practice a few years ago and going to live in County Tyrone, he was an active member of our Society and held the office of president during the session of 1906-7. Although over age, he did his bit in the Great War as temporary officer of the Royal Army Medical Corps in the hospital ship Britannic. The affection and esteem in which he was held by colleagues, patients, and friends were founded on his professional ability, his sterling character, and his goodness of heart.

Our hearts are full of sorrow at our most recent loss, and I cannot speak of it without a feeling of pain. Sir Robert James Johnstone died on the 26th October. He was talented above most, and he gave of his gifts widely, generously, and unsparingly. Outstanding in professional ability, eloquent in speech, grave in manner but with a saving grace of humour, kind and sympathetic in disposition, he was notable wherever he went. He possessed an individuality, but an individuality of that rare type which blended well in the society of fellow-men, and he inspired not only esteem but affection. Well-read in literature and in the book of life, and wise in counsel, such was the quality of the man that a decision was rarely taken on any matter of professional importance without first seeking his advice. The mortal man has gone from amongst us, but he has left a cherished and undying memory.

One of his oldest friends has likened him to the doctor as described in this passage from Robert Louis Stevenson:

"There are men that stand above the common herd: the soldier and the sailor not infrequently; the artist rarely; the surgeon or physician almost as a rule—He is the flower of our civilisation; and when the stage of man is done with and only remembered to be marvelled at, he will be thought to have shared as little as any in the defects of the period and most notably exhibited the virtues of the race—Generosity he has such as is possible to those who practise an art, never to those who drive a trade; Discretion tested by a thousand secrets; Tact tried in a thousand embarrassments; and what are more important, Heraclean cheerfulness and courage; and so it is that he brings air and cheer into the sick-room, and often enough, though not as often as he wishes, brings healing."

The president then proceeded to the subject of his opening address: "In the By-ways of Medicine." The full text is published elsewhere in this number of the Journal. At the conclusion of the address a vote of thanks was proposed by Dr. Gardner Robb and seconded by Professor W. J. Wilson.

The second meeting of the Society was held on the 17th November, the president occupying the chair. The title of Professor Biggart's address was "Diabetes Insipidus." He said that the history of our knowledge of diabetes insipidus dates from the time of Willis (1674). Since then theories about the origin of this symptom have passed through several distinct phases. Following the observations of Claude Bernard that polyuria of low specific gravity followed piqûre of the floor of the fourth ventricle, it was at first considered to be the result of lesions in the posterior cranial fossa. Then the experiments of Schafer, Magnus, and Hering (1905-10) suggested that "pituitric" had an effect on the renal output, and whilst there was

doubt, until the clinical observations of Farrier and Van der Helden (1913), as to whether the syndrome was the result of hypo- or hyper-acidity of the posterior pituitary, post-mortem findings showing lesions in the neighbourhood of this gland began to accumulate. Whilst the idea that deprivation of pituitrin was responsible for the polyuria, was gaining weight and some experimental support, Camus and Roussy reproduced the syndrome in dogs by puncture of the floor of the third ventricle. At the onset of this research, therefore, the position was that the syndrome could be reproduced by a lesion of the nervous system, but could be generally controlled by the administration of pituitrin. Following a review of the anatomy of the pituitary and hypothalmus, the anatomical findings in eight human cases were summarised. In five of them the pituitrin controlled the polyuria. In these five the lesions found were localised in a position to interrupt the supraoptic-hypophyseal nervous tract to the pars nervosa, and had destroyed completely this part of the pituitary gland. In two of these cases the damage to this nerve pathway had resulted in marked atrophy of the pars nervosa, suggesting that this pathway had a definite influence on this structure. In these patients the polyuria was not controlled by pituitric, and in these the lesion involved not only the anterior hypothalmus, but extended to destroy the nuclei of the tuber cinereum.

The syndrome has been experimentally reproduced in fourteen dogs, and the findings in these animals support the suggestion arrived at from a study of the human material, that contemption of the supraoptic-hypophyseal tracts results in a cessation of the manufacture of the anti-diuretic hormone. Studies of human cases and experimental material also show that the anterior pituitary plays an important rôle in the development of the syndrome.

At the conclusion of Professor Biggart's address there was a discussion among fellows and members, in which the following took part: Dr. Boyd Campbell, Dr. R. Marshall, Prof. C. G. Lowry, Prof. Barcroft, Dr. W. A. Anderson, Mr. G. A. B. Purce, Mr. C. H. G. Macafee, Dr. F. B. Elwood, and Dr. H. Hilton Stewart.

The third meeting of the Society was held on 1st December, the president taking the chair. Dr. Douglas B. M. Lothian read a paper entitled "From the Case Book of a Medical Psychologist." A full account of this appears elsewhere in the present number. The paper was followed by a discussion, in which the following took part: Dr. J. A. Smiley, Dr. Carlyle-Gall, Dr. R. S. Allison, Dr. Olive Anderson, Dr. F. B. Elwood, and Dr. H. Hilton Stewart.

The fourth meeting of the Society was held on the 8th December, the president again occupying the chair. The following fellows presented short papers on case reports: Mr. G. D. F. McFadden, "Torsion of the Appendages of the Testis"; Mr. Ian Fraser two cases, (a) "Pubertas Præcox" and (b) "Diphallus"; Professor J. H. Biggart, "Cushing's Syndrome"; Dr. J. A. Smiley, "Regional Sweating." At the conclusion, the subjects of the addresses were then thrown open for discussion, and the following fellows and members spoke: Dr. F. M. B. Allen, Dr. R. S. Allison, and Dr. R. H. Hunter.

R. S. Allison,
Hon. Editorial Secretary.

University Square, Belfast.

BELFAST MEDICAL STUDENTS' ASSOCIATION

THE Belfast Medical Students' Association continues to be the foremost club in Queen's. The office-bearers for the year 1938-39 are as follows—President: Mr. Ian Fraser, M.D., M.Ch., F.R.C.S.Eng. and I.; Vice-Presidents: Messrs. A. G. Buick and B. E. McConnell; Hon. Secretary: Mr. G. I. W. Lusk; Hon. Treasurer: Mr. W. J. D. Cooper.

The meetings held since the opening of the present term began with the presidential address, "Foreign Bodies." This was an interesting, instructive, and amusing account of various types of foreign bodies which had entered the body by "intention, accident, or surgical assistance." The speaker interspersed his address with numerous cases from his own experience. It was followed with the keenest interest.

The second meeting of the term was a Services Night, held on 10th November. The speakers were Air-Commander Tyrrell (R.A.F.), Lieut.-Commander F. A. MacLaughlin (R.N.V.R.), and Major Emerson (R.A.M.C.). Each speaker put before the meeting the aspects of life in the various branches of their respective Services. It was indeed a great honour for the Society to welcome back in his Alma Mater that distinguished Queensman, Air-Commander Tyrrell, and he was given a great reception.

A very amusing meeting was held on 29th November, when the subject was "Specialisation" and the speakers were Professor C. G. Lowry, Professor J. H. Biggart, Dr. Robert Marshall, and Dr. Hunter (Dunmurry). The hall was packed to capacity, and the audience enjoyed the repartee and banter of the speakers, who entered into the spirit of the sub-title, "Here's tae me—wha's like me?"

Dr. Donlan, President of the College of Surgeons, is to address the Society on 13th January, 1939, and the annual dance will be held on Friday, 27th January, in the Students' Union. It promises to be an unparalleled success.

G. I. LUSK, *Hon. Secretary.*

BRITISH MEDICAL ASSOCIATION NORTH-EAST ULSTER DIVISION

THE first meeting of the Division was held in Coleraine on 24th October, 1938. Dr. J. M. Hunter, chairman, presided. The question of arranging a course of lectures on A.R.P. work was postponed indefinitely, pending further information from the Northern Ireland Branch.

A letter from headquarters regarding further steps to be taken in connection with the local emergency committee formed at the last meeting was read, and after discussion it was decided to leave the matter in the hands of Dr. Huey of Bushmills. The programme of future meetings was discussed. The chairman then gave a most interesting address on "Medical Practice Through the Ages."

The second meeting of the Division was held on 21st November, 1938, in Coleraine. A vote of sympathy to Lady Johnstone on the death of Sir Robert Johnstone was passed, the members standing. Dr. Huey reported that he had taken no further steps regarding the recently formed emergency committee. The secretary submitted a letter from headquarters, asking for volunteers to lecture on the Association's general medical services, but none of the members present was prepared to undertake the work. A letter from the Northern Ireland Branch regarding the establishment of a central sanatorium for the Six Counties was discussed. The following resolution was passed unanimously: "That the present arrangements for the institutional treatment of patients suffering from pulmonary tuberculosis are unsatisfactory. It is the opinion of the meeting that a central sanatorium for Northern Ireland should be built, or alternatively that three separate sanatoria should be provided. In the latter event the sites and scope of the institutions should be determined by the appropriate public bodies after giving full consideration to the recommendations of the tuberculosis officers."

Two films were shown by courtesy of Petrolager Ltd.: "Emergency Operations" and "Colles' Fractures." A silver collection was taken in aid of Ratheane Hospital.

Hanover Place, Coleraine.

G. BATEMAN, *Hon. Secretary.*

BRITISH MEDICAL ASSOCIATION NORTHERN IRELAND BRANCH

THE opening meeting of the session took place on 24th November last, when Dr. T. B. Pedlow introduced Mr. S. T. Irwin as the new president of the Branch. He referred to Mr. Irwin's outstanding position in the surgical world, not only in Ulster but in Great Britain; to his place in the realm of sport, and to the esteem in which he is held among his colleagues. Mr. Irwin's first duty was to make suitable reference to the loss by death of distinguished members during the past year. He spoke in feeling terms of the deaths of Dr. Malcolm Brice Smyth, Dr. T. K. Wheeler, Dr. R. Watson, Dr. J. Rusk, Dr. J. J. Murray, Dr. J. G. Cooke, Dr. D. P. Gaussen, and Sir Robert Johnstone. Mr. H. L. Hardy Greer then mentioned a letter which he had received from Lady Johnstone, explaining that when Sir Robert had been presented with a cup at the conclusion of the Annual Meeting of the Association in 1937, he had expressed the wish that it should eventually become the property of the Branch. Lady Johnstone hoped, as the Branch did not possess a chain of office, that the cup would be accepted and handed on from president to president at the opening meeting of each session, and be in his possession during his year of office, and be displayed at meetings and on formal occasions. Lady Johnstone's gift was much appreciated, and Mr. Irwin accepted the custody of the memento for his year in the presidential chair.

Mr. Irwin then proceeded to the topic of his address, and explained that it was

to take the form of a cinema film largely prepared with the enthusiastic co-operation of his colleague, Mr. R. J. McConnell. The film showed the preliminary stages of the operation of treating fracture of the neck of the femur by the Smith-Petersen Nail, dealing with the identification of important anatomical features, anæsthetic, etc. The placing of the guide-wire in position as checked by radiography, and the insertion of the nail, were shown very clearly. There followed a most interesting series of pictures of patients who had been treated by this particular method, demonstrating the comfort experienced by elderly patients within forty-eight hours of operation, and the successful restoration of function within a few weeks. The Whitla Institute was filled to capacity, and the large audience joined in the appreciation as expressed by Mr. A. B. Mitchell and Dr. David Gray, who proposed and seconded the vote of thanks to Mr. Irwin.

Members of the Branch have been interested in the series of articles which appeared in the "Belfast Telegraph" during October and November, and which were contributed by members of the Branch. The publication of these articles in their final form was facilitated by the services of Mr. A. W. Haslett, the Public Relations Officer of the Association at Headquarters, and by the courtesy and consideration shown by the editorial staff of the newspaper. Negotiations are proceeding towards obtaining the series of articles in pamphlet form for distribution to members and others who would be interested in them. Should this be feasible, it is proposed to send a copy of the British Medical Association's scheme of a General Medical Service for the Nation along with it.

The international crisis last September brought forward the value of the voluntary register prepared by the Association of the present position of medical men and women and their intentions in the event of a national emergency. The use to which this register can be put in such an event became obvious, and, had events not taken a different course, there is no doubt that valuable use could have been made of it. It is hoped that every doctor will by now have replied to the request for up-to-date information, so that there may be a one hundred per cent. response. Actually a record as to ninety-five per cent. of the medical profession is available in the registers.

An interesting decision was made by his Honour the Recorder of Belfast, that the whole of the subscription to the funds raised for the financing of the 1937 annual meeting is allowable as an expense in making income tax assessments.

The Branch has had under consideration the subject of the treatment of tuberculosis in Northern Ireland, and has obtained views from the Divisions in Northern Ireland as to the re-organisation of the service on lines which would provide the most modern treatment to all patients throughout the Six Counties.

It is many years since the Branch held a meeting outside Belfast. This session it is hoped to revive the custom of holding one of the meetings in Londonderry. The date and programme have not been finally settled, but it is suggested that an afternoon meeting towards the end of March would be most suitable.

F. M. B. ALLEN, *Hon. Secretary.*

73 University Road, Belfast.

JANUARY, 1939

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