The

Nova Scotia Medical Bulletin

OFFICIAL ORGAN OF THE MEDICAL SOCIETY OF NOVA SCOTIA CANADIAN MEDICAL ASSOCIATION NOVA SCOTIA DIVISION.

JANUARY 1941

Editorial Board, Medical Society of Nova Scotia.

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Published on the 20th of each month and mailed to all physicians and hospitals in Nova Scotia. Advertising forms close on the last day of the preceding month. Manuscripts should be in the hands of the editors on or before the 1st of the month. Subscription Price:—\$3.00 per year.

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Example of severe rickets in a sunny clime.

having a latitude between 37° and 42°, where the average amount of fall and winter sunshine is greater than that in the major portion of Canada. And yet such stigmata of rickets as genu varum and the quadratic head are plain evidence that rickets does occur under these conditions.

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The Prescription of Literature

GERALD B. WEBB, M.D.

Says Nature to Physic, what pity that we, Who ought to be friends, should so seldom agree.

With medical legions my humours they chase, Till pallid resentment appears in my face; Aperients, astringents, narcotics, combine To thwart and oppose me in every design; And by volleys of pills discharg'd at my head, My strength is exhausted, my energy dead. But Physic should know I am not to be taught By severe flagellation to do what I ought; That my faults may be mended by gentle correction To which science and talents must give the direction.

— Nature and Physic, Professional Anecdotes, 1825.

HE'S blooded, splinted, and strapped, my lord," says the physician in an eighteenth century story, "so pray do not suffer yourself to worry for him unduly. Everything has been done." The patient referred to in these words was a young man with a broken leg lying among strangers at a wayside inn; and since this was his situation, it is a fair question whether, despite his being blooded, splinted, and strapped, everything had been done. Having thus cared for the man's body, did the physician then leave him cursing his luck? Or did he make some shift to restore his patient's mind as well as his tibia? If the doctor sought also to set the spirit at ease, then I venture to say that he had recourse to literature as speedily as he thought the injured man able to attend to it. For among the many uses of literature not the least is that it may help us to forget our misfortunes, and in especial bring solace to us when we are sick. Accordingly there are many times when it is incumbent on the wise physician to prescribe, not a posset or a purgative, but an essay or a poem.

Perhaps that last statement may seem revolutionary to some members of our profession. Yet, it is not a new idea, and there have been periods in the past when it might even have been taken as axiomatic. Consider, for example, that famous writer and physician, Francis Rabelais. Besides being one of the earliest physicians to demonstrate anatomy by dissection, and besides being the inventor of a surgical instrument (the glottotome) wherewith he cut the tongue-tie of an inarticulate woman, Rabelais was, so far as I have been able to discover, the first physician whom we know to have prescribed literature to his patients. On the title-page of his books—and books were scarce in his day—he wrote in Greek, "The property of Francis Rabelais and of his friends." Curiously on the title-page of his Aldine Plato the latter part is changed to read, "and of his Christian friends." Is it possible

that the latter alone returned the books to the owner?

*Reprinted from the Transactions of the Association of American Physicians, 1930, vol. In Quest of a Perfect Book, by Orcutt—itself a perfect book—contains many interesting anecdotes, including some of Aldus and of the Aldine Press.

We have, then, rather good precedent for the suggestion that at times the physician prescribed literature. It is no flighty notion, but sound common sense, such as I like to think was exemplified by the good Rabelais himself in his treatment of the Cardinal du Bellay. This prelate, a friend of the physician, was suffering from a "hypochondriac humour," and requested a consultation of doctors. An aperitive (opening) decoction was prescribed by them. Rabelais, a better diagnostician and therapeutist than his colleagues who were called in, lit a fire in the yard, placed on it a kettle of water to boil, and filled the kettle up with keys. Asked what he was doing, Rabelais replied that nothing opened better than keys. When this merry jest was reported to the cardinal, it produced such a fit of laughter that a cure resulted. This anecdote brings to mind the sending of a patient, by Sydenham, to a fictitious physician in Inverness, and the cure of the patient by indignation. And in Rabelais's own immortal book we learn that Gargantua, suffering from insomnia, was put to sleep by reading of the Psalms! Coriat quotes Rabelais to the effect that the romances of Gargantua and Pantagruel were indeed written to divert and cheer his own patients.

If at first sight literature appears to fall without the province of the physician, let it be recalled that the title "doctor" was originally given to teachers of the liberal arts, and was first employed in its modern sense by Giles de Corbeil to denote the Salernitan masters, who combined sound medical counsel with a flair for poetry. In the middle ages the practitioners of medicine had belonged to the "ordo gratiosus"—the beloved order. The word physician is derived from the Greek meaning Nature, and, as Gairdner has pointed out, we have become designated by the tools of our art (drugs) rather than by the word "medicus," which in its original interpretation meant "healing." This has been, perhaps, unfortunate. In Pygmalion, or the Doctor of the Future, R. McNair Wilson foresees a great reaction in favor of the doctor, in the older sense of that much abused term. He will be a humanist, with the widest possible understanding of human motives; a cultured man with outstanding sympathy; a lover of the arts as well as a student of the sciences. Wilson looks forward to the time when the practice of medicine will include within its scope every influence of known potency over the human spirit, and when the practitioner, like Pygmalion, will look on his work and see, not disease and death, but the glowing lineaments of life. It was with this same idea in mind that Clifford Allbutt asked, "What are the most scientific physicians if they know all things save the human heart?" In the same vein Baglivi writes in his Praxis Medica, "The physician is the servant and interpreter of Nature. . . If anywhere, certainly in medicine, it is required to know much and to do little, especially in acute and complicated cases; and we should try to remove the prejudice of many patients who think their cure depends on the amount and variety of the drugs given them."

"But how can I prescribe more than drugs," I hear one recalcitrant member remarking, "to my patients of average mentality? If the intelligence tests made during the World War gave us even approximately true results, and if forty or more per cent of our citizens are at the mental level of twelve-year-old children, how in heaven's name can I suggest books to them? To these the writers of advertisements, the makers of tabloid newspapers, the producers of moving pictures cater; can I recommend anything to such minds?" In reply to such objections, I should say first that the term "twelve-year-old intelligence" is misleading to the uninformed. Sixteen-year-old intelligence

is, on the psychologist's scale, the intelligence of genius; ergo, on this same scale, twelve-year-old intelligence is not so hopeless as it sounds. And second, I should say this: even eight-year-old children read. It will require insight to give books to the twelve-year mind; but it can be done. It will require a knowledge of the field of literature which is not lightly come by; but this can be achieved also. I did not start this paper by saying that what I have to propose would set the physician an easy task; I only say it will set him a worthy one.

The problem of reading for this type of patient is one with which I shall not deal at great length at the present time, not because I think it presents more difficulties, but because my own practice has lain largely with persons who have possessed at least the potentiality of culture, and of them I can speak with more surety. That the higher intelligences present problems in this regard equal to the lower ones, I am convinced. There is a lamentable lack of logic in the best communities, as well as in the community at large, and many educated persons cling to the most absurd teachings. A few years ago a survey in one of our universities revealed, if my memory serves me, that some thirty per cent of the students believed in phrenology and kindred pseudosciences. And I am sure many of us have met otherwise intelligent members of a well-known sect that not only reject medical aid but claims disease is only an error of the mind. Since the members of that sect have asserted that this belief is founded on the Bible, by the way, they should be referred to II Chronicles, XVI, 12: "And Asa in the thirty and ninth year of his reign was diseased in his feet, until his disease was exceedingly great: yet in his disease he sought not to the Lord, but to the physicians!" Doubtless it has been the contemplation of such people as these which has led James Harvey Robinson to the melancholy statement that possibly only one in one hundred may allow his opinions to be altered by assiduous reading, or take pains to cultivate an insight into art and literature and scientific discoveries. With this extreme view I do not hold. Rather do I feel that often lack of time and lack of opportunity are responsible for error, and that illness offers the physician a means for overcoming it that is granted to no other profession. He cannot create intellect, but he can guide it, he can develop its scope, and he can augment the material with which it deals. That is, he can further knowledge and accurate thought. And the way is through books.

Where are your books?—That light bequeathed To beings else forlorn and blind!

—Wordsworth

-Wordsworth.

Direct your eye right inward, and you'll find A thousand regions in your mind Yet undiscovered. Travel them, and be Expert in home-cosmography.

—Thoreau.

It goes without saying that if he is to be of much assistance to them, a physician must familiarize himself with the literary pursuits of his patients. Especially is this true for convalescents and those with chronic disease. The greatest alleviation for these may come from a judicious choice of books; but left to themselves the majority of patients will be found occupied with newspapers, magazines, and novels. The deadly sameness of these may not be apparent to the man on his feet, and because of this desultory reading, progress in recovery may be retarded by a discontent which baffles the medical attendant. It is one thing to tell a man to read, however, and another to get him to do it. Suppose,

for example, that our young man at the inn is little used to reading. In that event it will be necessary to converse with him at some length in order to find where his interests lie. There are plenty of yachtsmen who never know what a number of books there are relating to their favorite sport; plenty of business men who may be pleasingly surprised to read of their own kind in a history of the East India Company. Books which deal with already existing interests, then, will generally be best to enlist the sympathies of those who have not the habit of reading. But one thing leads to another, and before your yachtsman knows it, he may be perusing a rollicking yarn about the Spanish Main; while your business man may be engrossed in a historical novel like Feuchtwanger's Power.

Many times the prescriber of literature may find himself in the situation of Rousseau, when he gave lessons on the flute. Hearing another flutist, Rousseau decided that he would take up the flute and earn money by giving lessons. He started with confidence and kept himself a day ahead of his pupils!

If the patient is led to new interests in this way, one of the great ends of our literary prescription has been achieved. For the most distressing fact of present-day life is that as the world becomes smaller, competition becomes keener and the time allotted to liberal studies becomes correspondingly shorter. For this reason it may often transpire that a long illness may give a man the first chance in his adult life for leisurely reading and thinking. Thus a confinement to bed, by releasing a man from the pace of the world around him, can prove a blessing in disguise. In a recent article Warwick Deeping says of his father, a country doctor: "In such a practice as this he might be twelve hours on the road, visiting outlying villages; and yet I have a feeling that he saw more than the modern doctor sees. He had more time to observe things crops, birds, trees, and the sky and its moods. He had more leisure to be in touch with his environment. He loved poetry and could quote it while handling his reins." Against such a man as this, our age militates despite all its wonders, and cannot compensate for his loss. Therefore anything which contributes the leisure for the making of such a one should be cherished. know many professional men—and among them not a few university professors -who could greatly profit from a half year's stay in bed! Was it not Huxley who wished "release from distraction and complete freedom from those lethal agencies which are commonly known as the pleasures of society"; and Huxley exclaimed to a friend, "If I could only break a leg, what a lot of scientific work I could do". The Life and Letters of Thomas H. Huxley recounts a struggle against ill health in the form of relapsing pleurisy and neurasthenia, which cannot fail to convey courage and determination.1

But perhaps it is too much to expect the sick room to turn into a college of liberal arts. Even if this is so, the ultimate cultural value of sick-bed reading is for us secondary to its immediate curative effect. Whether such reading results in fixed good habits or not—and obviously in many cases it will be foolish to expect it to do so—the present pleasure which it may give remains of paramount importance. Dr. Johnson's dictum that all reading should be for pleasure is doubly true for the sick; and in the vast storehouse of the world's literature there are books which will give that pleasure to every type of intelligent mind. It is not always easy to find the appropriate works at once; but if one search diligently enough, eventually he should find his treasure. In such a search the physician can be of great help, if he but devote a little

^{1.} Alexander Borodin, professor of chemistry at the Petrograd Academy of Medicine and Surgery, could only find time to compose music when indisposed. So friends meeting him expressed the wish, not that he was well, but that he was ill! (Wilm.)

thought to the temperamental requirements of his patient. This question of temperament must be the chief factor in any attempt to prescribe books. Not only will different men need different books; besides that, the same books can not be counted on to affect all men in the same way. Aristotle, the founder of literary criticism, went to some length to explain the effect of high tragedy; but we cannot be sure that the purging of the passions which he describes will be the result of tragedy on all members of the audience. Some men—especially those with a fine feeling for the struggle of the drama—will be exhilarated by a reading of Jude the Obscure; others will most certainly be depressed by this spectacle of man being overwhelmed by fate. Indeed, I suspect that there are many who might read Hardy with no ill effects when well, who would find him too gloomy when read in a sick bed. Perhaps for most persons it would be safer to prescribe Dickens than Hardy, Galsworthy than Dreiser, Thomas Mann than Arnold Zweig.

It is not merely books that depress, however, which it may seem advisable to keep from some patients. If the emotions are easily aroused, certain works may equally well be prohibited because they stimulate in the wrong way. Offhand, Huysman's La Bas, a truly remarkable book, does not recommend itself for sick-bed reading; and the same may be said of certain of the works of Anatole France, and even of Balzac, although any of these writers will make excellent reading if the right selection is made. Again, there are persons otherwise stable, who are emotionally upset by some subjects out of all proportion to their ordinary importance. Individual prejudices of this sort cannot be ignored: if the patient feels too strongly about the Church, it will be better not to hand him the ecclesiastical essays of Arthur Machen; if he feels too strongly about the Civil War, it will be better not to lend him a highly controversial biography of Ben Butler.

The Bible has always been and still is the greatest book for the solace of the sick. Some, however, will be found analysing the history of the Old Testament and wondering where the wife came from that Cain "knew," and why Cain built a city when there were only five people in the world! And as a

physician I have been called upon to explain these statements.

In an exquisite chapter of Ecclesiastes, you may read: "And moreover, because the preacher was wise, he still taught the people knowledge; yea, he gave good heed, and sought out, and set in order many proverbs."

"Wycherley," as Connely states in a recent clever biography, "had learned

to patch pain with proverbs."

While occupations, interests, and temperaments differ, yet there are common grounds on which all can meet, and one of these, and the most satisfying, is the reading of biography. There is nothing so helpful as to read of the struggles and triumphs of successful people. It is not enough for a physician to recommend a certain book; if possible he should bring it to the patient himself. As a result of such kindness the book is apt to be read, and the patient becoming interested, the good effect of the visit is continued until the next, when discussion adds again to the value of the visit.

Necessarily the physician must have familiarity with his prescription, for it might not be wise to take *The Life of Romanes*, the subject of which probably had a glioma, to a man suffering from brain tumor; or Mrs. Gaskell's *Bronte Family* to those afflicted with tuberculosis. The latter biography is perhaps the most pathetic that can be read, six children perishing from phthisis.

The lives of Emerson, Voltaire, and Ruskin, who lived to advanced ages in spite of tuberculosis, are encouraging. The life of Sir James Mackenzie (Wilson's The Beloved Physician), the Life of Pasteur, by Vallery-Radot, and the Life of Michael Angelo, by Grimm, should prove helpful and inspirational to all. Pasteur triumphed in early manhood over an attack of apoplexy, and Michael Angelo did much of his immortal work when handicapped by rheumatoid arthritis.

The reading of one good biography creates a craving for others. For instance, numerous copies, from my library, of *The Romance of Isabel, Lady Burton* have been worn out. A lady from New York took pity on my last copy and returned it to me bound in exquisite red leather! The charm and interest of this romance leads to requests for Burton's *Pilgrimage to Mecca*, and for *The Life of Sir Richard Burton*. Such continuity of reading is a great satisfaction and should be encouraged. It was upon Burton's return from Mecca, and eighty years before he knew of the *Rubaiyat*, that he wrote an exquisite gem of Oriental poetry, the theme of which was that self-cultivation, with due regard to others, was the sole and sufficient object of human enjoyment. One reads:

"Eat not thy heart," the sages said,
"Nor mourn the past, the buried past;
Do what thou dost; be strong, be brave;
And like the star, nor rest, nor haste."

It is impossible to enumerate the countless biographies which have proven their worth. Among those which have entertained many patients I recall Froude's Lord Beaconsfield; Lytten Strachey's Victoria, and his Eminent Victorians; Jeanne Bordeux's Eleanore Duse; M. James's The Raven (the story of Sam Houston); E. T. Cook's Florence Nightingale. For the musical—of whom there are, alas, too few among us —there are Romain Rolland's Beethoven the Creator, as well as his many essays on composers; Newman Flower's Franz Schubert, Hussey's Life of Mozart, and Mary Lawton's fine life of Schumann-Heink, called The Last of the Titans. Biographies tend to be large books, and at times the weight of the volume must be considered in the light of the patient's condition. "Every man," saith Seneca, "thinks his own burthen the heaviest." When such extremists are women, The Life of Marie Antoinette, by Belloc, or The Life of the Marquise de Lafayette, by Marguerite Guilhou, may bring them comfort; while the trials of some husbands may be alleviated by reading Ludwig's Napoleon, or the story of Socrates and Xanthippe! Nor should one leave this field without recalling the fine autobiographies which are available, notably those like Trudeau's, Victor C. Vaughn's, Goethe's, Benjamin Franklin's, or Benvenuto Cellini's.

There may be some minds which may be improved by such books as Catherine the Great by Hodgetts, Lady Hamilton by Gamlin, The Immortal Ninon by Cecil Austin, or Unruly Daughters by Noel Williams, and Lady Mary Wortley Montagu, by Melville, and the story of her extraordinary son in A Gallery of Eccentrics. Such reading at least is historical.

Biographical writing will be excellent fare for nervous persons who are too easily upset by the things they read. There are other types of literature as well, which may be counted upon to induce calm. For the lover of poetry there is no problem at all; the state of mind which one must bring to the perusal of Spenser or Marlowe or Coleridge is in itself exaltedly calm, and the

verse of these men will not disturb it. Readers of poetry, it is true, are few indeed, although as I hope to point out later, they should be many; but those whose fare must in the main be prose can find prose works which will in general have this same effect. The informal essay from Lamb to Kenneth Grahame is good food for these minds; and perhaps they can be led from the nineteenth century back into the eighteenth and made to develop a fondness for Aubrey or Addison or Steele. Personally, I find Washington Irving one of the most urbane and soothing of writers, and one especially adapted to long hours of reading. There are many others like him, all the way from Thomas Browne to Stevenson, men who, not so much from the things they avoid as from their essential sanity of outlook, make equable reading.

Informative writings may be of much benefit to the kind of reader we are now discussing. There is something placid in facts dispassionately presented; the interest in them is usually intellectual and seldom emotional. Mr. Mencken once advised bored Americans to take up science for a hobby. The idea is a sound one. Our sick man need not limit himself to science as the term is now narrowly used. Any part of knowledge may become his province, from Mexican archaeology to a history of the English language; and if anyone thinks that such material must be dry in the presentation, let him read Spinden on Maya art or Jespersen on our tongue. It is a fact that the average text is dull; but almost every subject has scholars who can write interestingly of what they know. It is for us to seek them out, because many who are slow to appreciate literature for its own sake may get from them their greatest enjoyment.

Of all the branches of informative writing, that which will probably enlist the sympathy of the greatest number of persons with the greatest ease is Nature study. A patient on a trying rest regime, to whom the lights of Broadway had been her only joy, was one day found watching a garden spider. Interest was at once awakened when she was told that this spider would create two webs a day, that the females of some species devoured their husbands after the nuptials (this may have reminded her of life in New York), and that some spider mothers gave their infants daily sun baths. As a result of this interest the patient soon gave the lie to the lines found in one of Beaumont and Fletcher's plays:

Nature too unkind, That made no medicine for a troubled mind

by proving that Nature had given her just that medicine.

How neglected Nature study has been in our schools and colleges, pledged as so many of them still are to a traditional curriculum which in many ways no longer deserves the name of humanistic! The study of Nature touches man at every point; biographical writing is indeed but a variant of it, and reveals how versed in the knowledge of natural phenomena have been most great men. How wide the implications of this branch of science are, one can learn from a penetrating essay by Dean Inge, in which he upholds the contention that the advance in natural knowledge since the nineteenth century impels us not only to a new view of the origins of life, but to a new ethic as well.

Viewed in this light, how important for our future legislation is Nature knowledge among our citizens. And who better than the physician can cultivate the gardens of his patients' minds in respect to Nature, and incidentally develop thereby a better appreciation of his own work. The field of Nature

literature is vast, and entrance may be made into it by many routes. Among such I should recommend Fabre's works on insects and astronomy, J. Arthur Thomson's Ways of Living, F. W. Gamble's The Animal World, and Lord Grey's The Charm of Birds. The book by Gamble is printed in the Home University Library, which offers a number of scientific works of a popular kind at low prices. Books which picture the romance of scientific achievement, like De Kruif's Microbe Hunters and Hunger Fighters, are of great value in arousing interest. It is a far cry from these to such heights as Whitehead's Science and the Modern World and Eddington's Nature of the Physical World; but these heights may be scaled by some.

I cannot leave this subject without a reference to a purely fictitious naturalist who has given me untold pleasure. I refer to Hugh Lofting's character, Dr. Dolittle; and in particular do I recommend the volume of that remarkable man's adventures entitled, Dr. Dolittle's Voyages. There is a rare treat in store for the person who has not yet read of Dolittle's efforts to learn the language of the shellfish, or of his famous observation of the beetle on Spider Monkey Island! Books like Lofting's bring to mind another store of Nature literature, the type in which a story or personal reminiscence is placed against a natural background which is really the most vital element in the narrative. To this type belong the Puget Sound stories of Emma Lindsay Squires and the sketches of Herbert Ravenal Sass. It is to many a fascinating kind of writing, one which treats Nature in fiction somewhat as history is treated in the historical novel; but possibly with more truth, for it is easier to be true to Nature than to history. Then there are books, which, because of their fantasy, are universal favorites. Such a one is Alice in Wonderland. There is repeated amusement in refreshing one's Alice, when ill! Lewis Carroll is inimitable in his satire on literary style; and in The Hunting of the Snark his ridicule of all types of people will always amuse.

I have said that I consider the readers of poetry too few. There are those who say that they cannot be increased. Some critics maintain this to be a prose age, one in which it is idle to expect a widespread reading of verse. Whether this be true or not—and I am not at all ready to admit it—it does not apply to our present problem, because the patient is temporarily out of his age. He is free to wander in fields hitherto foreign to him; no longer does his own time restrict him and impinge upon him at every turn. He can bring to a reading of, for instance, the great Hindu ethical poem, The Bhagavad-Gita, of which a new and beautiful translation by Arthur Ryder has just appeared, a detachment it may be impossible for him to attain in his usual life. And in truth, if he is led to an appreciation of poetry, it will no longer have its old power to bind and enslave the mind.

Although no anthology is wholly acceptable to any but its maker, anthologies will perhaps offer the best means of initiating the novice into verse. The exposure to a large number of authors and a variety of forms may lead to an interest in a few of them. From the puns and charms of Thomas Hood—who, by the way, related his improvement after a doctor's visit when they chatted of literature—to the sublimity of Keats an infinite variety is to be found. Take, for example, An Anthology of World Poetry, compiled by Mark Van Doren, wherein all nations are represented. Here one may turn from a sonnet by Petrarch or a lyric by Heine to this from the Greek:

THE SWAN AND THE GOOSE

A rich man bought a Swan and Goose—That for song, and this for use.

It chanced his simple-minded cook
One night the Swan for Goose mistook.
But in the dark about to chop
The Swan in two above the crop,
He heard the lyric note, and stayed
The action of the fatal blade.

And thus we see a proper tune Is sometimes very opportune.

And if the patient should prefer this to Petrarchian sonnets, let us not be moved. We can be sure that only a few will attain to an appreciation of poetry as a pure art; but many will find in it lesser values, suited to them and equally lasting.

Robert Haven Schauffler has published an anthology called *The Poetry Cure*, in which different poems are recommended for various mental afflictions—a valuable book both for its selection and for the originality of its approach.

Robert Graves is quoted to the effect that "poetry is no more a narcotic than a stimulant; it is a universal bitter-sweet mixture for all possible household emergencies. . A well-chosen anthology is a complete dispensary of medicine for the more common mental disorders, and may be used as much for prevention as cure."

Schauffler omits, however, Longfellow's Light of Stars, which has often rendered me great service. Few can escape benefit by reciting to themselves daily such stanzas as these:

O star of Strength! I see thee stand And smile upon my pain; Thou beckonest with thy mailed hand, And I am strong again.

The star of the unconquered will,
He rises in my breast,
Serene and resolute, and still,
And calm, and self-possessed.

Oh, fear not in a world like this,
And thou shalt know ere long
Know how sublime a thing it is
To suffer and be strong.

As Aretaeus said, it is the physician's sad lot to mourn with his patients. Many times have I comforted those under my care with these lines of Ben Johnson's:

THE NOBLE NATURE

It is not growing like a tree
In bulk doth make man better be;
Or standing long an oak, three hundred year,
To fall a log at last, dry, bald, and sere:
A lily of a day
Is fairer far in May,
Although it fall and die that night;

Is fairer far in May, Although it fall and die that night; It was the plant and flower of light; In small proportions we just beauties see; And in short measures life may perfect be.

After poetry, probably the kinds of literature least read in this country—except by scholars—are letters and memoirs. They are most admirably

suited to leisurely reading, whether they be the worldly reminiscences of a St. Simon or the naively beautiful missives of an Emily Dickinson. It is generally the recollections and correspondence of political figures which attain to much circulation, and these take their interest chiefly from the background of events. The revelation of striking personalities however, comes more often in the informal writing of literary men; and many who would be interested never find it. Few who read Whitman or Byron, for example, know the reminiscences of the one or the letters of the other.

An interest in letters and memoirs will supply a good foil to those whose chief reading must be novels and stories; for the tendency of most readers will probably be to go in too strongly for fiction. Yet even here they may indulge themselves greatly if they can be interested in the great novels of which Europe has produced so many. The curse of present-day fiction reading is the magazine. It has resulted from a demand for a kind of writing which is suited to overtired bodies and minds. The worker, with one-half hour to spare at the end of his day, may derive a certain contentment from a story which carries him as far as the toothpaste advertising and makes no demand on anything but his eyes while so doing. But the sick-bed reader will find that this kind of writing—trite, mechanical, and circumscribed—becomes downright dull in a very short time. And ofttimes he will remain bored simply through lack of knowledge of the succor which lies at hand.

Well I remember the remark of an old man whom I used to visit, who during the last years of a long life was confined to his chair. "I am never lonely," he said. "I have never been lonely, for I have lived countless lives. I have always had Dickens." And indeed the world which Dickens peopled with such living characters had long ago assumed for this man reality equal to the one which lay around him. It is because writers like Dickens, Thackeray, Trollope, Stevenson, and Hawthorne have created such worlds that it is better to recommend them rather than "one-book men" like Norman Douglas, Somerset Maughn, and the ill-fated George Douglas (Brown). For while South Wind, Of Human Bondage, and The House with the Green Shutters are great novels, the reader may be disappointed in others by the same authors; whereas the opulent writers we first mentioned can be read for weeks on end without exhausting them.

Many patients may enjoy short stories, and here one may find excellent examples not only among the classic short-story writers like Poe, Chekov, de Maupassant, Hoffman, and Bierce, but among contemporary masters as well. The short story has assumed great importance in our own day, and writers like Irvin Cobb, Don Marquis, Ring Lardner, and Kathleen Norris are adepts in the art. Where the patient is limited to brief periods of reading, this may be the best form of fiction to prescribe. Yet one must beware of overworking the short story. It is a limited form—perhaps the most limited form—and one may tire quickly of short stories if he reads them too often without relief.

Perhaps throughout this paper we have seemed too insistent upon books which have stood the test of time, preferring the classic to the contemporary, the lasting to the ephemeral. While this is in the main our position, we do not wish to carry it to extremes. Always we come back to the individual prescription, and question: what is best for this patient? If P. G. Wode-

^{1.} Vide: Cobb, Old Judge Priest; Marquis, When Turtles Sing; Lardner, Roundup; Norris, The O'Callaghans and the Murphies.

house, that funniest of men, is what he needs, by all means give him Fish Preferred. If a mystery story seems indicated—and many are the intellects which have found relief in them, as for example, Wilson and Balfour—give him Milne's Red House Mystery, Bailey's stories of Mr. Fortune, Chesterton's Man Who Knew Too Much or his stories of Father Brown, Leroux's Mystery of the Yellow Room, Connigton's Case With Nine Solutions, or Berkeley's Layton Court Mystery. If he prefers the type of detective story where a semblance to reality is preserved at the expense of ingeniousness of plot, recommend Fletcher or Crofts. If he wants the sheer thriller, let him pick his own! Even this sort of book can sometimes yield information to the reader, for one may get much history in The Overbury Mystery, which concerns a famous trial in the time of Queen Elizabeth. Bolitho's Murder for Profit and Pearson's books on crime come in this same class. It must be apparent to all, however, that the greatest enjoyment of mysteries will come to those who read them as a contrast to weightier things. All we have just said of short stories applies even more cogently here; it is most easy to get "fed up."

Some patients, far from being depressed by being reminded of their physical misfortunes, actually enjoy a search of literature for symptoms or disease similar to their own. One of my patients discovered correctly from

Shelley's lines:

I could lie down like a tired child And weep away this life of care Which I have borne and still must bear.

that the poet had tuberculosis. These lines, by the way, were favorites of Oliver Wendell Holmes, who, with his New England contemporaries, is not read as much today as he should be. Another patient detected, by reading Carlyle's advice to his friend, John Sterling, that this poet also had phthisis. And recently MacLaurin's Post Mortems of Mere Mortals had great interest for a patient who could be intrusted to indulge himself in this manner, when he read therein the account of Pepys, who had a case of kidney stone similar to his own. We must not forget, however, Jerome K. Jerome's Three Men in a Boat, where one member had walked into a reading-room a happy, healthy man. He crawled out a decrepit wreck, because he had read a medical work and decided he had every disease described except housemaid's knee. Three Men in a Boat will refresh any invalid. The first chapter alone should be a cure for hypochondria.

Attending a sick physician, I found him—unfortunately a rare exception—reading Shakespeare. A doctor is likely to discuss his hobbies with his patients, so I told him I had often wondered if Shakespeare could be connected with Bacon through Harvey, who had been Bacon's physician. My patient quickly adduced evidence against this by referring me to the Galenic ideas of

Shakespeare, where King John, in speaking of the blood, exclaims:

Or if that surly spirit, melancholy, Had baked thy blood, and made it heavy, thick, Which, else, runs trickling up and down the veins.

For recreation in the original sense of the word, have your patients who are interested in Shakespeare read Sydney Lee's biography and such critics as John Masefield or Sidney Lanier.

Proud of their professional brethren who have excelled as litterateurs, physicians will take delight in recommending the lives and works of men like

Rabelais, Oliver Goldsmith, Keats, Thomas Browne, Robert Bridges, Oliver Wendell Holmes, Weir Mitchell, and many others. Nor must we forget to suggest the writings of our present colleagues, such as Medical Leaders by Lambert and Goodwin, Fear and Foursquare by Oliver, American Medical Botanists by Howard A. Kelly, Old Age, and The Creed of a Pathologist, by Warthin, What Men Live By, by Richard Cabot, various books by Joseph C. Collins, poems by W. S. Thayer and by Merrill Moore, and the many biographies of physicians by physicians, such as John McCrae, by Sir Andrew Macphail, The Life of Sir William Osler, by Harvey Cushing, and the Life of Sir Clifford Allbutt, by Sir Humphry Davy Rolleston. To Begin With, by the well-known biologist, Raymond Pearl, may also be passed around with advantage.

The mind, like the body, will thrive best on a mixed diet, and he who experiences the variety of a number of literary forms will derive from his reading a satisfaction free from the dangers of ennui. For even Homer nods, and the man with untold hours to spend in the company of books may well get too many of one kind. A little easy precaution, however, will obviate this difficulty; if Emerson be followed by Melville, and Melville by Poe, the likelihood is that none of them will pall. Out of the legion of books, literary, scientific, and philosophic; out of novels, poems, and dramas; out of histories, biographies, and memoirs; out of treatises, travels, essays, and letters; out of all these and many more which submit to no categorical classification, every intelligent reader should be able to find two or three kinds which, alternated with one another, will cause continuous felicity.

In the second oldest book in the world, written 2550 B.C., we read: "Live, therefore, in the house of kindliness, and men shall come and give gifts of themselves."

This address I joyfully dedicate to the many friends and patients who in return for my literary ministrations have showered me with wonderful books.

The good life is one inspired by love and guided by knowledge.

-Bertrand Russell.

At a dinner party the hostess, during a lull in the conversation, was unfortunate to emit a loud rasping hiccup. A Frenchman, sitting by her, immediately apologized profusely, as if he had committed the faux pas. When the ladies had left the dining room, an American asked the gallant son of Gaul why he had acted in this manner.

"As monsieur knows, we are a chivalrous people," was the reply. "I saw that madam was embarrassed, so I tried to throw the blame on myself."

Presently the gentlemen joined the ladies upstairs. After a little while the American found himself in conversation with his hostess in the middle of a group of guests. Suddenly the alarming incident was repeated—the hostess hiccuped again. The American turned quickly to the assembled guests and announced with an engaging smile, "Folks, this one is on me!" —Reformatory Pillar, St. Cloud, Minn.

Report of Seventeen Cases of Cerebrospinal Meningitis, with Special Reference to Treatment

G. A. BLACK and K. A. MACKENZIE

Medical Services of the Department of Pensions and National Health, Halifax, N. S.

CASES of cerebrospinal meningitis are to be expected where individuals are in intimate communal contact, such as army camps, barracks and other crowded quarters. This report covers cases which began in the early summer and are still occurring in the autumn and winter months. Seventeen cases were treated in the Rockhead Hospital under the supervision of the medical staff of Camp Hill Hospital. Seven came from the army and from various parts of the Province, and ten from the Navy or Merchant Marine.

Symptoms in this group followed the usual text-book description. The onset, sometimes preceded by malaise, a tired feeling, and general weakness, was characterized by chilliness, vomiting and severe headache. Later there was drowsiness, irritability, head retraction and stiffness of the neck, positive Kernig, hyperaesthesia, and sometimes photophobia, diplopia and herpes. Pyrexia was moderate, usually not over 103. Rashes were rare; one severe

purpura was observed. The meningeal cry was noted frequently.

Twelve patients were treated with sulphapyridine and anti-meningococcic serum, the latter given to eight by the intrathecal route and to four intravenously. Five had sulphapyridine alone. All did equally well. were no deaths. In suspected cases a spinal tap was done on admission. If the spinal fluid was under pressure and cloudy, 30 to 50 cc. of fluid was withdrawn and a slightly lesser amount of warmed anti-meningococcal serum injected by the gravity method. This was repeated daily or oftener until the spinal fluid was clear, free from organisms and the pus cells markedly reduced. The average case required only two or three doses. In the group getting serum intravenously the dosage varied from 30 to 60 cc., given with the usual precautions attendant on the intravenous use of horse serum. No case received more than two injections. All patients received sulphapyridine, and the same dosage was used whether serum was given or not. In the more severe cases two doses of sulphapyridine were given as follows: diluted up to 10 cc. of normal saline intravenously and one gramme intramuscularly. The latter was given deep in the muscle of the buttock to avoid necrosis due to alkalinity. When considered able to retain the sulphapyridine by mouth, two grammes were given every four hours, reverting to the Intramuscular method if nausea or vomiting occurred. In the milder cases the intravenous method was not used. Subsequent dosage was determined by the condition of the patient, and after the subsidence of symptoms a maintainance dose was continued for some time. When sulphapyridine was used alone, spinal puncture was occasionally done for the relief of pressure. There were no untoward symptoms except nausea, which was not common or persistent.

In the first few days of illness dehydration due to low intake and vomiting was corrected by giving 10% glucose intravenously in amounts varying from

1500 to 2000 cc. daily. Catheterization was often necessary and repeated every eight hours in order to prevent urinary infection. Pain, headache and restlessness were controlled by morphine or soluble sodium luminal. Patients were protected from noise as far as possible and unnecessary handling avoided. The average case was afebrile in three days. Sulphapyridine was reduced in five days and discontinued on the tenth day. Patients were well enough to leave hospital after two weeks, and three months' convalesance recommended before return to duty.

Formerly untreated cases of cerebrospinal meningitis had a mortality of 80%. Spinal drainage alone reduced the figure to 55%. Following the use of serum the mortality dropped to 20% or less. While there were no deaths in this series, the general mortality is still 5 or 10%. It appears, therefore, that chemotherapy has introduced remedies which constitute a real advance and it may be possible to do away with the use of serum altogether. It is too soon to make dogmatic statements.

Relapses and recrudences occur in about 20 or 30 per cent of cases. Sometimes there are complications, such as nerve deafness, otitis media and arthritis; rarely are there any permanent residual effects. There were no relapses in the present series, and the only complication was a polyarthritis, which

promptly recovered.

The axiom that successful treatment depends on the adequate use of correct remedies at the earliest possible moment holds good here. As soon as a clinical diagnosis is made, chemotherapy should be used, and the most satisfactory drug is sulphapyridine. It would appear that the continuance of the maintainance dose is of value in avoiding relapses and lessening the risk of complications. This is analagous to similar experiences in the treatment of pneumonia with sulphapyridine. The conjoint use of serum with sulphapyridine is still of value in severe cases.

An instruction letter re cerebrospinal meningitis issued by the Director of Medical Services, Treatment Branch of the Department of Pensions and

National Health, was used as a guide in the treatment of these cases.

In addition to the above, nine cases have been treated by the Department under the supervision of Dr. N. B. Coward. All have received serum and sulphapyridine and all have recovered, making a total of twenty-six cases without a death.

When he was a young man, Lord Eldon was "junior" to Mr. Dunning in a lawsuit heard in London. Mr. Dunning opened, and Lord Eldon became more and more astonished as his leader developed very powerful arguments against his own client! At last he attracted his attention and whispered to him that he was speaking for the wrong person.

"Why didn't you tell me sooner?" snorted Dunning; then, recovering his composure, continued his speech: "What I have said so far, gentlemen of the jury, is all that can be said for those opposing me. How slight is their

case I now propose to show you . . ."

And this he did, completely demolishing the arguments he had previously put forward!—Belfast Telegraph.

Britain Fortifies Its Food*

By Special Correspondence from London.

HEN Robert Boothby, Parliamentary Secretary to the Ministry of Health, made his maiden speech as a member of the government, he sprang a startling surprise on Parliament and people alike. He announced that the government intends to "fortify" white bread by the addition of synthetic vitamin B₁, and calcium. A fifth of a gram of B₁, in the form of aneurin (known as thiamin chloride in the U.S.—Ed.), the pure crystalline vitamin, and 100 grams of calcium will be added to each sack of flour at the mill or, in the case of imported flour, before distribution to bakers. Experiments, it is claimed, have shown that aneurin is completely inert, and it will have no effect on the dough, the volume of the loaf or the consistency of the crumb; it is stable, and there will be no loss in doughing and baking. The "dose" of aneurin will be mixed with ½ oz. of flour, and this concentrate added to the sack of flour. Machinery for the proper admixture of this small quantity is already in existence, while the thiochrome test for proper admixture is claimed to be accurate within 4 per cent.

The present cost of aneurin in Great Britain is about £3 a gram whole-sale, or about £1360 (over \$5000) a pound. On this basis, the measure would cost some £12,000,000 a year. A large factory for the production of aneurin on a mass basis, however, is now in course of construction, and this is expected to come into production in January, 1941, when costs will naturally be appreciably diminished. In the meantime, sufficient stocks of aneurin are on hand to allow the distribution of "fortified" bread in certain selected areas. According to Mr. Boothby's estimate, the cost for the addition of aneurin on the completion of the new factory will be in the nature of 1/20th of a penny per 2-lb. loaf. (In U. S. currency this is equivalent to slightly less than one-

tenth of one cent.)

The adoption of "fortification" is not primarily a war measure, although the advent of war, and the inevitable restrictions on consumption of certain foods has increased its importance. Research work in connection with the addition of B₁ to bread was commenced over four years ago by the Advertising Committee of the Millers' Mutual Association. The committee, as a result of its contacts with nutrition experts during its "Bread for Energy" propaganda campaign, had been convinced of the importance of B₁ and of the deficiency of white bread in this connection. On the basis of this research, in which the Research Committee of British Flour Millers assisted, definite proposals were made which, after approval by the government's Scientific Food Committee, were officially adopted by the government.

The symptoms of a deficiency of B₁ have been known since 1897. A startling demonstration of the widespread effects of B₁ deficiency was shown in the Russo-Japanese war, when there were 200,000 cases of beri-beri in the army and none in the navy. The rations were approximately the same, except that the sailor's ration contained approximately 10 oz. of whole barley,

which contained the preventive factor.

^{*}From Food Industries, published by the McGraw-Hill Publishing Company, Inc., 330 West 42nd Street, New York, December, 1940.

In the World War, the British troops who capitulated at Kut were suffering from beri-beri due to a deficiency of B₁. The Indian troops in Kut who ate "atta" and "dahl" (wholemeal flour and chickpea) did not have the disease. And in the later stages of the siege certain of the English troops recovered from beri-beri as a result of eating the Indian rations when their own white flour was exhausted.

The Italians also suffered severely owing to inadequate diet, and the collapse at Caporetto was heavily influenced by this factor. They profited by the lesson. Sir Aldo Castellani, the Harley Street physician, who was Mussolini's chief medical adviser in the Abyssinian War and who has returned to Italy to help him in the current war, has revealed the remarkable health record among Italian troops in that campaign. Only one case of beri-beri was due to deficiency of B₁, and that developed after the termination of the war, and was treated in Rome.

In this present war, the Germans, according to reports, have supplied the troops, about to go into battle with pure vitamin B₁ to give them energy and courage. Whether this use of B₁ as concentrated "dope" is effective or

safe is open to question.

With smaller deficiencies of the vitamin, more subtle symptoms are shown. Sir Robert McCarrison showed in 1918 to 1919 by experiments on animals that a deficiency of B₁ caused diseases of the alimentary tract. In a lecture to the Royal College of Surgeons in 1931, he said: "Of all the faulty diets I have used, that composed of white bread, margarine, tea, sugar, jam, preserved meat and scanty, overcooked vegetables—a diet in common use by many people in this country—proved to be one of the worst and most likely to be associated in rats with many of the morbid states I have mentioned, especially diseases of the lungs and the gastro-intestinal tract."

An important aspect is the psychological effect of B₁ deficiency. Sir John Orr, in "Feeding the People in War-time," states: "An outstanding characteristic of this form of malnutrition is nervous debility and lethargy. There is a saying in the East which expresses the progressive psychological deterioration of those suffering from this dietary deficiency: 'It is better to walk than to run; it is better to stand than to walk; it is better to lie than to stand; it is better to sleep than to wake; it is better to die than to live.' People suffering from even a minor degree of deficiency of vitamin B₁ have

no stomach for a fight."

While there is general agreement that vitamin B₁ deficiency occurs fairly widely in Great Britain, there is less agreement as to its seriousness. In the first place, no definite figure can be given for the average man's requirements of B₁. The League of Nations' Technical Commission on Nutrition estimated that the average requirements of B₁ for an adult man were 300 International Units (I.U.) a day. Later research has tended to increase this figure, and the most recent survey, published by T. Moran and R. G. Booth after the government announcement, gives 700 I.U., assuming average energy requirements of 2810 calories for whole population, or 420 I.U. if children and pregnant and lactating mothers are excluded. The consumption of bread varies widely, and in the last war reached from less than 4 oz. a head for the wealthier income levels up to 1½ lbs. per head per day for manual workers.

Straight run flour (73 per cent extraction), as used at present, contains an average of 0.30 I.U. of B₁ per gram, against 0.75 and 1.3 grams, respectively, for 85 per cent extractions and genuine 100 per cent wholemeal. The 1-lb.

loaf made from white flour of about 70 per cent extraction gives 80 to 160 I.U. of vitamin B₁, while that made from flour of 80 to 85 per cent extraction would give 300 to 450 I.U. Here again, however, the B₁ content of flour may vary from 0.6 to 3.3 I.U. per gram according to the type of wheat used.

In view of the many variables involved, it is probably impossible to get any closer than the round figure of 300 I.U. a day put forward recently as an estimate of the average intake of B₁ in this country; this figure would seem to be borne out to some extent by Sir John Orr's estimate in 1936 that half the population was below the deficiency line, and Moran and Drummond's very recent confirmation that not only was this so, but the remaining 50 per cent was only just above it.

Moran and Drummond estimate that the proposed "fortification" of bread will add 100 I.U. to the average daily intake of B₁ and ensure an average daily intake of 0.60 grams of calcium. On the above figures, this should bring the average intake up to the standard line, while efforts to increase the consumption of bread will, no doubt, also affect the lower consumption levels.

In announcing the government's decision, Mr. Boothby claimed that it would "be hailed by scientists all over the world as a great advance on anything ever yet achieved in this field." Actually, it is more than that. It is obviously the first step in a scientifically planned national food policy. Mr. Boothby knows the value of vitamins; before he took office, he was managing director of a company that manufactured them. (He has now, under British law, severed all connections with the company). He directly fostered the addition of vitamins to margarine, and today "Marcom," the one pooled brand of margarine on the market, is now "fortified" with vitamins A and B to give it the vitamin value contained in good summer butter.

Further developments of this policy are of necessity shrouded in secrecy. A number of pointers, however, may be noticed. In a recent book, "Science at War," a number of scientists, anonymous but vouched for by the highly respectable firm of publishers issuing the work, suggested that "the minimum daily requirement of each of the ten or so more important vitamins, together with a few important minerals (such as calcium, iron and a trace of copper), could easily be incorporated in a biscuit which would be distributed free or at a very low price to the whole population. The annual cost would be less than £2,000,000, and the saving in health and efficiency immeasurable. This figure of £2,000,000 should be contrasted with the vast sum (approximately £50,000,000) that is being spent in subsidising British agriculture to an extent that is inadequate to provide these vitamins."

The addition of calcium is also of considerable interest, since calcium is not normally an important constituent of bread, and most of the calcium intake of the average man comes from other sources. A precedent has thus been set for the introduction of iron—a mineral in which the average British diet is extremely deficient—and other minerals not normally contained in bread.

On the purely organizational side, plans are being prepared for the more economic distribution of bread. It is understood that these will be on lines similar to those already proved successful in the dairy industry, where, under heavy government pressure, the trade is now busily working out a "one-roundsman, one-street" programme, and exchanging customers between themselves to ensure this.

EDITOR'S COLUMN

184 College Street
Toronto 2, December 1940

To Secretaries of Divisions

Dear Doctor:

Re Income Tax

We are pleased to announce that in connection with the Income Tax Memorandum we sent you, the Commissioner of Income Tax has advised us that in Article 2, Sub-section (h), the maximum cost of motor cars on which depreciation will be allowed has been changed from \$1500 to \$1800.

Yours sincerely

T. C. ROUTLEY
General Secretary

Rotation of Medical Officers in the Army

To the Editor

The Nova Scotia Medical Bulletin.

Dear Doctor Schwartz:

During the last year there have appeared a number of articles in the BULLETIN dealing with military matters, or, to be more exact, the relation of the medical profession to the army. Some of these letters contained good, sensible suggestions, but like all ideas coming from this part of Canada, they fell on barren ground.

A few evenings ago the conversation came around to the doctor who had signed up, the sacrifice he was making and the difficulties he would face getting started again when Hitler and his followers have been thoroughly beaten by

the British Commonwealth of Nations.

It is a fact that many physicians enjoy the army life and would prefer it to civilian practice. But the majority offered their services from a sense of duty to Canada and their King. What can be done to help them re-establish themselves in practice when the war is over? If the army would establish a policy of rotating medical services it would, without doubt, solve this difficulty. This would be difficult and not necessary in some cases, but could be offered to those who have given up lucrative practices to take on army work. They could be allowed leave to return to practice after a certain time in service. There is no need to dwell further on the idea nor to go into detail. I offer this suggestion, which is not my own, as a means by which any physician can do his bit for his country and not necessarily be forced to start all over again when Hitler is defeated.

I entertain little hope that this suggestion will be accepted with alacrity, but feel that it will do no harm to bring it before the physicians throughout the Province.

Yours sincerely, H. G. GRANT.

A critical and somewhat indignant letter was received recently from a relative of a physician whose obituary appeared in the Bulletin. Although not for publication, it gave a very fine biographical sketch of the activities of this former colleague for whom all his associates entertained a sincere regard. We had to explain that the Bulletin did not have a reportorial staff, but had to depend for news items on contributions from relatives and intimate friends, together with items from provincial newspapers, all of which we take for the sole purpose of securing "personal interest notes."

Keeping in mind the transient character of this present life, it is being suggested that you write without delay a coneise autobiography and leave it stamped and addressed with instructions to your heirs and successors to mail it to the Bulletin along with any additions they may see fit to make.

To satisfy yourself of the desirability of doing this, ask some member of your family where you were born, where did you receive your preliminary education, where and in what year did you graduate, were you the gold medalist and where did you serve as an intern, when and where did you carry on postgraduate study, what higher qualifications do you hold and when were they received, in what societies do you hold membership, and with what offices have you been honoured by your associates? Did you serve with the Armed Forces-in which corps, where and when? What decorations was His Majesty persuaded to confer on you—if any? What efforts, in a literary way, have you made, and were they published in professional journals, popular magazines, or in the more select, or did they culminate in a book? Did you teach—what, where, and when? If your wife, son or daughter-taken individually, collectively, jointly or severally-can answer such questions and many more of the same general tenor without a moment's hesitation, that will be all that is necessary, but if they stumble and differ then you had better get it all down on paper and save them and the Bulletin from embarrassment.

We are not asking that you indulge in the vulgarism of "tooting your own horn," but merely to place on file strictly historical data. If after you have "shuffled off this mortal coil" and any friend wished to edify and warn those of us still in the flesh by expressing an opinion, you of course, can no

longer be held responsible.

H. W. S.

There have often been rumors of differences of opinion between Mussolini and Balbo. According to one story Balbo received a letter from Mussolini thanking him for his past services and informing him that his resignation had been accepted. He handed the letter back with the remark that it must have been sent to him by mistake. Another version of Balbo's reply was: "When you have been, like myself, one of the four founders of Fascism, you are killed, but you are not dismissed."—Martin Moore in "The Fourth Shore," (Routledge).

CASE REPORTS

Sulphapyridine in Cerebrospinal Meningitis

PIDEMIC cerebrospinal meningitis, or spotted fever, is a disease which is dread-sounding to both physician and family. It has a case mortality which in untreated cases may attain 75 per cent, and although it tends to occur more frequently in winter and spring, sporadic cases may occur at any time. Now, with present war conditions bringing into being crowded sleeping accommodations, which is known to be intimately connected with the dissemination of the meningococcus, it is not hard to account for the increased prevalence of the disease. That there is an increased prevalence is shown by the number of notifications in England for the week ending February 24, 1940. At this time there were 586 notifications, which was more than the whole year's total in 1927 (469). It is also interesting to note that there has been nothing comparable since the winter of the first year of the last war, when the highest weekly total was 209.

During the last three months, five cases of cerebrospinal meningitis have been treated at the Victoria General Hospital, with no fatalities. Although these few cases prove nothing, they were treated on lines similar to those given by the Ministry of Health of England in a memorandum on cerebrospinal fever. The gross death rate of sixty such treated cases was 13.3 per cent in1 one series and 6.3 per cent in another series of eighty cases, in contrast to the 70 per cent case mortality in untreated cases, or even the 30-50 per cent in serum-treated cases. In these the drugs used were sulphapyridine and sulphanilamide. No other infection responds so constantly and so dramatically to high dosage with these drugs as does cerebrospinal meningitis, and their success in this disease is one of the high lights in modern medicine. The two essential points are early administration and adequate dosage. Early diagnosis is extremely important, and the disease is now a true medical emergency.

2"As soon as the diagnosis is suspected on clinical grounds, a full dose of sulphapyridine should be given without waiting for confirmation by lumbar puncture. The practitioner should give this dose pending the admission of the case to hospital, and should send a note stating the amount, route and time of administration of the drug. The further treatment by drugs alone is on these principles:

- (1) An initial period of about two-and-a-half days, on the following daily dosage: 9 grammes for an adult, 6 grammes for a child of ten years, $4\frac{1}{2}$ grammes for a child of five years, and $2\frac{1}{2}$ -3 grammes for an infant.
- (2) A succeeding period of five or six days, during which the dose is gradually lowered to zero, the whole period of administration not exceeding seven to nine days.
- (3) Administration at four hourly intervals day and night for the first period, and four hourly or six hourly intervals, as convenient, in the second.
- (4) In acute fulminating cases the first two doses are best given by intravenous and intramuscular injection of the sodium solution of sulpha-

¹ Lancet: 1940: 1.42. 2 B. M. J., March 9, 1940, p. 396.

pyridine. For example, for an adult one gramme by each route for each of these first two doses.

- (5) In complete comatose cases, intramuscular injections must be used when swallowing is impossible, or drug and fluids must be given by pharyngeal tube passed through the nose.
- (6) Three or four pints of fluid daily should be given, if necessary by rectal, intravenous, subcutaneous or intraperitoneal routes.

(7) If repeated vomiting occurs, the drug should be changed to sulphanilamide in the same dosage. Serum treatment is still used by many physicians and may be of some value when low dosage of the drugs is employed.

There is no clinical evidence of its value, however, when combined with high dosage of the drug. There is little to be said in favour of intrathecal treatment. If it is used, it should be limited to one administration of serum,

and sulphapyridine should never be given by this route."

In none of the five cases treated in the Victoria General Hospital was serum given. In none was more than two lumbar punctures made. Some had only one, and that was made on admission, to confirm the diagnosis.

The results of three of the cases are as follows:

Case No. 1. A white male, age 19, was admitted on October 26th, 1940, with a temperature of 100°, pulse 75, respiration 32. He was very dull, and unable to answer questions. A history was obtained from his father of having been ill for two days with headache, drowsiness and vomiting. He went to bed on the night of October 24th, not feeling well and awakened at 2 a.m. with a very severe headache. This continued all night and in the morning he began to vomit. He vomited many times during the day and remained in bed with increasing headache and mental confusion. The doctor who saw him gave him some pills (sulphanilamide), but as his condition became worse the next day, he was admitted to hospital.

His family and personal history was negative.

Physical examination revealed a husky male adult with flushed face, tossing about in bed and apparently having pain.

Head, Neck and Eyes—Left lateral, external strabismus. Pupils dilated and equal, reacting to light and on accommodation. Photophobia present.

Ears, Nose and Throat—Negative.

Cardio-vascular System—Heart rate slow and with an occasional extra systole, otherwise negative.

Lungs and Abdominal Examination—Negative.

Cutaneous-No rash.

C. N. S.—Mentally dull.

All reflexes brisk and equal. Marked neck rigidity. Kernig's sign and Brudzinski's sign not present. No ankle clonus or positive Babinski.

Urine—Negative. R.B.C. 3,600,000. Hb. 70%. W.B.C. 24,000. B.P. 124/80.

Lumbar Puncture—Pressure 650 mm. H₂O. Fluid thick and turbid. 20 c.c. was removed, which brought the pressure down to 350 mm. H₂O: Quickenstedt's test normal. Smear stained and meningococci demonstrated.

Laboratory Report—Fluid very turbid. Protein 1,500 mg. per cent. Chlorides 710 mg. per cent. Copper reduction, none. Abundant pus cells

and meningococci. Six c.c. solution dagenan given intramuscularly; repeated in four hours. Six c.c. solution dagenan was given every four hours intramuscularly, and on October 27th, after noting some improvement, another lumbar puncture was made, lowering the pressure from 320 down to 200 mm. H₂O. Neck rigidity was still present, but headache was very slight, and mentality much clearer. This fluid was turbid with many pus cells and some meningococci.

On October 31st vomiting ceased, the solution dagenan was discontinued and dagenan gr. XV every four hours started. His temperature was normal, and during the remainder of his convalescence only reached 100° on two occasions, usually being practically normal, as were his respirations. Pulse varied from 90-60.

His condition rapidly improved, and on November 2nd dagenan was reduced to gr. VII s.s. every four hours. Neck rigidity was absent. On November 4th dagenan was discontinued. November 6th W.B.C. 10,950: R.B.C. 3,100,000. Ferrous sulphate started and patient was up on November 11th and discharged November 12th, with no complaints. Total dosage of solution dagenan and dagenan equivalent to 630 grains of dagenan.

Case No. 2. A white female child aged six years was admitted on October 29th, 1940, with a temperature of 103°, pulse 160 and respirations 40, complaining of headache and vomiting. Her illness started on October 27th with vomiting and pains in the head. The following day the doctor was called, who found the patient very restless and still having headache and vomiting with a temperature of 101° and pulse 120. There were no definite physical signs.

On a visit the following day the symptoms were the same, but neck rigidity was present as were Kernig's and Brudzinski's signs. She was admitted to hospital and no further signs or symptoms were noted. W.B.C. 26,000; R.B.C. 4,250,000; Hb. 75%. A lumbar puncture showed meningococci present and solution dagenan was started equivalent to 18 grains of dagenan every four hours. The following day the temperature was down to normal, pulse 100, and respirations 20. She was much brighter, and the dagenan was reduced to grains $7\frac{1}{2}$ by mouth.

The laboratory report on the spinal fluid was: Fluid very turbid, impossible to do cell count; protein 150 mg. per cent; chlorides 680 mg. per cent. Copper reduction, none. Mastic and Kahn, not done. Numerous polymorphs and a few meningococci.

The temperature varied during the following days but never going above 100°, and the pulse and respirations gradually approached normal. On November 3rd she was much brighter and dagenan was reduced to grains 4 every six hours. The following day a white cell count was 12,000. Her condition rapidly improved and the dagenan was discontinued on November 9th and patient was discharged on November 10th, 1940. The total dose of dagenan in this case was 352 grains.

Case No. 3. A white male aged 42 was admitted to hospital on November 11th, 1940, with a temperature of 101°, pulse 120, respirations 30, complaining of headache, vomiting and pain in the back and legs. He was very dull and restless. R.B.C. 4,020,000; Hb. 80%; W.B.C. 20,150. On November 10th he had had a headache, but went to work as usual. The following day he started work with a very severe headache, nausea, vomiting and pains in his back and legs. These symptoms increased until he was forced to call a doctor, who sent him to hospital.

Physical examination revealed neck rigidity, head retraction and photophobia. He lay in bed in a semi-comatose condition with knees flexed and appearing in severe pain. There were numerous petechial spots over his chest, back, abdomen and limbs that varied in size up to approximately ¹/₄". He was very sensitive to external stimuli and all the superficial and deep reflexes were increased. Kernig's and Brudzinski's signs were positive. The rest of the

physical examination was negative.

Lumbar puncture revealed fluid under 520 mm. H₂O pressure, and very turbid. Solution dagenan 30 grs. three times a day was started. The laboratory report on the fluid was very turbid, with aclot in one tube. Cell count not done as too many cells were present. Polymorphs and many meningococci seen. The following day temperature, pulse and respiration were normal, and the temperature never went above 99°, except on the eighth day, when he developed arthritis of the left knee joint; on that day the temperature reached 100°. On November 13th his lips and face around the mouth and nose were showing signs of herpes. The following day dagenan by mouth, grs. 15 every four hours, was started and the herpes were very pronounced. Dagenan was reduced to grs. $7\frac{1}{2}$ every four hours on November 16th, with W.B.C. 9,200. Herpes very abundant. A moderately severe arthritis of the left knee developed that remained fairly acute until November 23rd, when it began to improve. On November 27th dagenan was reduced to grains 7½ three times a day, and discontinued eight days later, at which time there was only slightly impaired movement of the left knee joint. Patient was discharged on December 9th, walking. The total dose of dagenan was 1,120 grains.

J. W. Reid, M.D., Halifax, N. S. G. W. Turner, Interne

Toxic Nodular Goitre with Post-Operative Complications of Asthma and Auricular Fibrillation.

Mrs. S. D., 37 years old, married white Canadian woman, was admitted July 14, 1940, with the complaints of asthma, lump in the neck, nervousness, tremor of the hands, popping red eyes, and voracious appetite.

Family history was non-contributary. Past history revealed that as a child she had measles followed by asthma. Whooping cough and scarlet fever, with good recovery. Atropic rhinitis in 1926. Tonsillectomy in 1930.

No other illness or operations.

One year ago (August, 1939) she noticed a protrusion of the eyes, dysponea on exertion, and nocturnal dysponea. Following this her appetite became voracious, but she lost weight, never actually weighing herself. One month later (September, 1939) a tremor of both hands was noted. At this time she became very nervous and irritable; an increased tolerance to cold, accompanied by excessive perspiration, developed. She had a noticeable lump in her throat for the whole year, which increased in size at her menstrual periods. Her periods had changed from the 2/25-28 day type to the 3/25-28 day type, with greater flow per day.

Physical examination revealed a restless, fairly well developed middle-aged woman with a bilateral exophthalmos, smooth and moist skin. She was neither apprehensive nor in discomfort. There were no wrinkles in her fore-

head, and the palpebral fissures were wider than normal. Bilateral exophthalmos with a marked lid-lag was present, and accommodation was diminished. Discs and retinal vessels were normal. Thyroid gland was definitely enlarged and hard, right lobe being nodular and larger than the left. Bruits were absent.

Heart—M.C.L., 8.5 cm. L.B.D., 11.5 cm. A2 equal to P2. Harsh systolic murmur in the mitral area, not transmitted. Blood pressure 145/75. Pulse pressure 70. Sounds regular.

Chest, abdomen, and reflexes were negative for pathology.

A fine passive fibrillary tremor was present in both hands.

B.M.R. was plus 66, with a pulse of 112.

She was then given Lugol's Solution Min. x T.I.D. and Phenobarbitol Gr. ss T.I.D. & h.s. In the following days her metabolic rate came down as follows:

Date	Rate	Pulse
July 15, 1940	. plus 66	112
July 21, 1940	. 40	80
July 27, 1940	. 23	92
Aug. 4, 1940	. 23	74
Aug. 11, 1940	. 18	70

She was blood grouped and cross matched as a Group II (A). Kahn and

Eagle negative.

August 16, 1939, 34 days after admission, a right hemi-thyroidectomy was performed with very little blood lost. Following operation she was given Lugol's drams one, and digitalis drams one. 1000 cc. 5% glucose and saline intravenously. Lugol's min. x T.I.D. by mouth continued. Another 1000 cc. glucose 5% and saline intravenously at noon and another in the evening.

August 17, 1940, at 4 a.m., 20 hours after operation, she developed an asthmatic attack. T. 102.4 F.; P. 120 (regular); coarse bubbling; sonorous, and musical rales heard all over chest. Attack was controlled by morphine.

August 18, 1940, 48 hours after operation, her heart was fibrillating—a fast fibrillation. Heart rate 180; radial pulse 150; T. 104 F. Pulse was very thready and she was given one ampule of coramine. She was then put on quinidine sulphate gr. III T.I.D. Glucose was administered in fruit juices as often as possible, and Lugol's was increased to min. xx T.I.D.

August 19, 1940, Temp. 101.2 F; heart rate, 128, fibrillating slower;

radial pulse 120; quinidine increased to gr. V T.I.D.

August 20, 1940, 12.40 a.m. Heart stopped fibrillating and was regular at 124; T. 100° F. She looked less restless and felt better. But an hour later she developed another asthmatic attack. Heart remained regular and the attack was controlled with morphine.

August 21, 1940. Heart regular at 96. T. normal. Quinidine stopped. Three days later, August 24, 1940, the skin clips were removed from the facision in her neck. By August 29, 1940, she was out of bed, having a normal

temperature and a regular pulse of 90.

September 2, 1940, she was discharged, having a regular full pulse of 90, with instructions to return in six weeks for the second stage of the operation; to do no work and rest in bed at least sixteen hours daily, avoiding any excitement or mental strain.

The pathological diagnosis was nodular goitre with hyperplasia, some areas of involution being present. No evidence of malignancy.

I would like to thank my interne, Mr. H. A. Chisholm, for helping me

prepare this report.

H. K. MACDONALD, M.D.

Halifax, N. S.

Ruptured Urethra

H. M., a fourteen-year-old white Canadian school boy, was admitted for the first time, August 19, 1940, at 12 noon, following an accident occurring at 9 a.m., when he had been struck across the lower abdomen by a glancing blow by the rear wheel of a passing motor truck. Past and family histories

were non-contributory.

Physical examination revealed a small but well developed, pale, redheaded boy, who was quite shocked, being cold and shivery, with a blood pressure 80/60, and a pulse of 160. There was a laceration of the skin in the right upper quadrant of the abdomen and a deeper one on the superior medial aspect of the right thigh, into which his penis rested. A bruise was noticed above the left inguinal ligament. There was very little bleeding from either laceration. Diffuse tenderness and slight rigidity were present in both lower quadrants. Neurological examination revealed absent tendon reflexes at the left knee and ankle, but a plantar flexion response was present. There was an inability to dorsi-flex the left foot, but plantar flexion was normal. On further questioning, he complained that his left leg "was asleep from the knee down." However there were no objective changes in sensation. Head and neck, chest and heart were negative for abnormal signs.

Haemoglobin at 1 p.m. was 60% (Tallquist). His lacerations were cleaned and covered with sterile gauze dressings. He was given combined anti-tetanic

B. Welchi sera, after being found negative for anaphlaxis.

1.30 p.m., $1\frac{1}{2}$ hours after admission, on trying to get a routine specimen of urine, he was unable to void. The blood on the glans penis at this time was thought to have come from the thigh laceration.

4 p.m., 4 hours after admission, haemoglobin had dropped to 55% (Tallquist). He was then grouped and cross-matched for a blood transfusion.

6 p.m., 6 hours after admission, he had not yet voided, and blood was again present on the glans penis, so he was catheterised and 6 ounces of reddish brown blood were obtained. Haemoglobin had now dropped to 50% (Tallquist).

9 p.m., 9 hours after admission, two large subcutaneous haematomas had appeared, one in either lower quadrant, above the inguinal ligaments. His condition seemed weaker; his pulse was thready. Following a consulta-

tion with the Urological service, it was decided to operate.

10 p.m., 10 hours after admission, a mid-line abdominal incision was made, and a large extra-peritoneal haemorrhage was encountered. The bladder was opened and explored; nothing but clear urine was found. The peritoneum was then opened, but no ruptured viscus was found. A sound was then passed through the penis and its end was found between the neck of the bladder and the pubic arch in the pubo-vesicular, extra-peritoneal recess. There was a complete rupture of the urethera at the neck of the bladder. With some difficulty a catheter was manipulated into the bladder and stitched to the end of a supra-pubic catheter. The extra-peritoneal pubo-vesicular recess

was packed with gauze and a rubber drain left in. Abdomen closed with silk worm gut. Transfusion of 500 cc. whole blood carried out during the operation.

Following operation, for the next four days nothing but supportive treatment was carried out. Both catheters were irrigated twice daily with boracic acid and later with potassium permanganate; but in spite of this the penile catheter became clogged and had to be changed on September 10, 1940. At this time, 22 days after admission, the supra-pubic catheter was removed. After operation, his temperature was abnormal, reaching 101° F. daily, so he was given a course of sulphanalimide.

His neurological signs began to clear up three days post-operative, and by September 10, 1940, 22 days after accident, sensation, both objective and subjective, and reflexes, had returned to normal. Muscular power was at

this time equal to the other leg.

The supra-public opening was slow in closing, but eventually did so. Shortly afterwards, September 22, 1940 (34th hospital day), urine began to seep through along the sides of the penile catheter. On September 24, 1940 (36th hospital day), the penile catheter was removed. By September 26, 1940 (38th hospital day), he was urinating voluntarily through his penis and able to control micturation.

September 30, 1940 (42 days after accident), gum elastic bougies were passed up to size No. 16, without difficulty. He was then discharged to the care of family doctor, with recommendations that sounds be passed bi-weekly for two weeks; weekly for two weeks, then once every second week for two months; after that as thought necessary.

I would like to thank Mr. H. A. Chisholm, my interne, for helping meprepare this report.

H. K. MACDONALD, M.D.

Halifax, N. S.

Vitamin E, known as the fertility vitamin from wheat germ, is being hailed in medical circles in London as a probable cure for hitherto hopeless diseases of muscle weakness and nerve degeneration.

It is also seen as a possible means of protecting children against infantile paralysis and adults against one horrible result of syphilitic infection, locomotor ataxia.

Striking results in treating more than a score of human patients suffering from incurable and even fatal muscle weakness and nerve degenerative diseases with Vitamin E are reported by Dr. Franklin Bicknell, honorary physician to the Farringdon Dispensary in London. (*The Lancet*, Jan. 6).

"Our diet may in some cases be on the edge of a Vitamin E deficiency," Dr. Bicknell charges, pointing out that the most important food source of this vitamin, wheat germ, "is to all intents and purposes never eaten" because it is removed from the wheat flour in ordinary milling processes. Other foods containing small amounts of the vitamin may lose it in the course of storage and preparation.—Science News Letter, Washington.

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PERSONAL INTEREST NOTES

R. SIDNEY GILCHRIST, of the North Nova Scotia Highlanders, was the guest speaker at the regular weekly meeting of the B.Y.P.U. at Sackville early in December. Dr. Gilchrist is a returned medical missionary from Angola, Africa. His address, which was illustrated with lantern slides, was indeed interesting to an audience of more than seventy persons. Dr. Gilchrist stated that he was gratified to see that the American missionaries are taking over the work of the English missionaries, who are now hard pressed for funds on account of war conditions in England. The first of the pictures was a map of Africa on which the speaker pointed out the position of Angola, stating that at present it was a very hot spot, due to the fact that not only is it near the equator, but that its southern neighbour, Southwest Africa, belonged to Nazi Germany before the last Great War. There were pictures of native churches made of adobe brick and thatched with grass; congregations of more than a thousand were not unusual. Until the last missionaries penetrated the country, the sheep had no wool. The white people brought sheep from home and crossed them to produce wool-bearing sheep in order that the natives might have wool for clothing. Dr. Gilchrist mentioned that his work had been chiefly among the lepers; and that the missionaries' work is done amid the most trying circumstances, with very little of the necessary equipment for such labour. The diseases of the natives are many and varied; including tuberculosis, tropical ulcers, dysentery and goitre. Before the coming of the white doctors, the African tribesmen consulted the witch doctors in times of sickness. Even now, in remote regions where the white man has not been heard of, the witch doctor plays a most important part in the lives of the natives. These fancy-dressed, hideous-looking creatures do far more harm than good, actually no good at all. As a rule, when a native patient comes to seek the aid of the white doctor, he is still wearing around his neck the charms which were placed there by the witch doctor. Dr. Gilchrist said that when one comes to understand the meaning of the witch doctors' symbols and charms, only then can one begin to penetrate the mind of the African native.

Following the address, Rev. Mr. Herman warmly thanked Dr. Gilchrist for his extremely interesting talk. The meeting was dismissed by the pastor with a prayer for the better understanding of the need for missions and the

better support of the missionaries.

Dr. T. T. Monaghan, who has been practising his profession in Sherbrooke for some years, has closed out his practice there and gone to Grand Falls, Newfoundland.

The second clinic for the immunization of school children in the three toxoid t eatments for diphtheria was held at the Central School of Pictou the middle of December, with Dr. G. A. Dunn and Dr. M. R. Young in attendance.

Congratulations to Dr. and Mrs. R. A. Moreash, of Berwick, on the birth of a son on December 26th, 1940.

The marriage was celebrated on December 16, 1940, at Halifax, of Miss Christine Claire, daughter of Mr. and Mrs. John A. MacDonald, of Halifax,

and formerly of Iona, Cape Breton, to Dr. James Emmett Donahoe, of Mont Tremblant, Quebec, son of Mrs. Donahoe of Souris, P. E. I., and the late Dr. R. A. Donahoe. Dr. Donahoe graduated from Dalhousie Medical School in 1937 and has since completed a three-year post-graduate course in surgery at St. Mary's Hospital in Montreal. Mrs. Donahoe is a graduate of the Victoria General Hospital, and has been on the staff for the past two years. Dr. and Mrs. Donahoe will reside at Mont Tremblant, Quebec, for the winter months, where Dr. Donahoe is the resident physician at the Lodge there. They will reside in Montreal in the spring.

Surgeon-Lieutenant Walter C. MacKenzie, M.D. (Dal. '33) of Edmonton, was honoured at a banquet at the MacDonald Hotel in Edmonton in December, prior to his departure for active service with the Royal Canadian Navy. Dr. MacKenzie is the only son of Mrs. Anna MacKenzie of Great Falls, Montana, and the late J. K. MacKenzie of Baddeck. After taking a post-graduate course at the Mayo Institute, Rochester, N. Y., he settled in Edmonton.

Hospitalization Plan Extended.

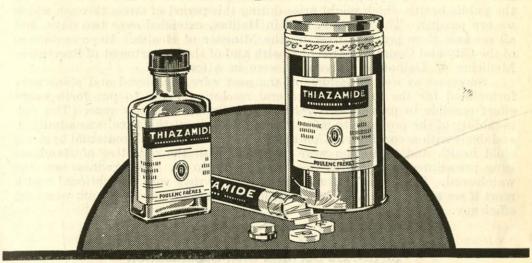
A comprehensive report of the year's work by the secretary-treasurer, Miss Rachel MacPherson, featured the annual meeting of the Mutual Hospitalization Group held at Antigonish early in January. In the election of officers Miss MacPherson was re-appointed secretary-treasurer, while Mr. John MacMillan was elected president, and Mr. A. E. Whidden, vice-president. Organized first for the benefit of members of St. Ninian's Parish, the group has expanded so that now its members may be of any faith, and they may live outside Antigonish town and county.

Through an arrangement with St. Martha's Hospital, the members of the group pay a quarterly fee of \$3, and this entitles them and dependent members of their families to free ward treatment for five weeks at a time at the hospital, or, if preferred, to 50 per cent reduction in the cost of a room. They get a 50 per cent reduction in the cost of operating room, or X-ray service, and free laboratory service and ordinary medicine. The group now has a membership of 105. Individual members may enroll for \$2 a quarter. Members falling behind in their payments must pay off arrears before becoming eligible for the benefits to which the group is entitled. To keep in good standing, members must pay their fees within a week after the beginning of the quarter.

Two other similar groups operate in this vicinity: the St. Andrew's Co-operative, and the St. Ninian's Council, K. of C.

The A. P., published from Chicago, reports the accidental discovery of a new vaccine against influenza. This has been verified by news from the Rockefeller Foundation and also the Connaught Laboratory of Toronto. The discovery was made by Dr. F. L. Horsfall Jr., and Dr. E. H. Lennette, of the Rockefeller Foundation. Although nothing so far is claimed for the vaccine, we understand that it produces an active immunity lasting for from three to four months. Samples of the vaccine have been sent all over the United States and Canada, and observations are now being made on its efficacy. We trust that these observations bear out the claims of the discoverers, for if they do the vaccine, properly used, will be as useful, or perhaps more so, than the ones that are now established beyond all doubt.

Announcing



THIAZAMIDE

SULFATHIAZOLE "POULENC"

Originally introduced as M. & B. 760

Thiazamide was first prepared in the research laboratories of May & Baker, England, early in 1938, shortly after the discovery of Dagenan, M. & B. 693.

Interest has been directed to Thiazamide chiefly as a result of reports of its value in the treatment of staphylococcic infections such as large boils or carbuncles, staphylococcal septicaemia, etc. Thiazamide has also shown some value in the treatment of urinary tract infections (gonococcal and nongonococcal). In pneumococcic pneumonia further studies will have to be carried out in order to properly assess its activity in relation to Dagenan.

HOW SUPPLIED

Tablets of 0.50 gram (7½ grains), in containers of 20, 100, 500 and 1000 tablets.

Laboratory Poulenc Frères

On January 8, 1941, the bureau heads of the Provincial Department of Health were called together by the Hon. Dr. Davis, Minister of Health, in order that the whole public health situation of Nova Scotia might be reviewed, and for the further purpose of formulating plans to meet any crisis touching the public health which might arise during this period of stress through which we are passing. The meeting, held in Halifax, extended over two days, and all sessions were presided over by the Minister of Health. Representatives of the City and County Boards of Health and of the Department of Preventive Medicine of Dalhousie University were in attendance.

Successes as well as failures of the past were considered and plans were formulated for the future, the general resolution being to put forth every effort possible to provide better health throughout the new year. The vulnerability of the province to infections of all kinds, at this time, was admitted, and dealt with accordingly. Communicable disease control, maternal hygiene, child health and sanitation were reviewed, with the objective of standardising procedures in so far as it is possible to do so. Preparedness was the watchword. It was felt that nothing must go wrong with our national health reort if we are to reach, as we assuredly must reach, our maximum war-time efficiency.

Birth-rate Declines with Urbanization

Birth-rates have decreased most rapidly in the past ten years in states in which the population is concentrated in urban areas, according to a study reported in the Statistical Bulletin of the Metropolitan Life Insurance Company. A block of states from New England to Nebraska, containing 50.2 per cent of the whole population of the country, showed decreases of 10 per cent or more. They include New Hampshire, Massachusetts, Rhode Island, Connecticut, New Jersey, New York, Delaware, Maryland, Virginia, Pennsylvania, Ohio, Indiana, Illinois, Missouri, Arkansas, and Nebraska. All the next group, with decreases of from 5 to 9 per cent in the birth-rate, are east of the Mississippi except California, Kansas, and North Dakota. In this group is found 25.9 per cent of the nation's population. Five sparsely settled and essentially rural mountain states-Montana, Idaho, Nevada, Arizona, and New Mexico—with Mississippi—recorded higher rates for the ten years. It is apparent then, the report pointed out, that the country's population growth depends on its rural non-industrialized element. "With this situation confronting us, it is obvious that our rural areas will need the guidance of child welfare and maternal aid agencies more than ever before if they are to continue as our chief source for population growth," the Bulletin concluded.— The Diplomate, April, 1939.

[&]quot;I see this medicine is good for both man and beast."

[&]quot;Yes," said the druggist.

[&]quot;Gimme a bottle. I believe that's the right combination to help my husband."

OBITUARY

DR. GEORGE W. BROWN, one of the oldest medical practitioners in the province, and one who endeared himself greatly to the residents of Cape Sable Island, to whom he ministered for forty-six years, died at Shelburne on January 3rd, 1941, at the age of 77, following a heart attack. His death removes not only a sterling citizen, but a humanitarian and physician of the old school. A family doctor of the horse-and-buggy-days, he was councillor and

friend, as well as a fine surgeon.

Dr. Brown was born at South Maitland, Hants County, in 1863, a son of the late Mr. and Mrs. George Brown, the former being a prominent shipbuilder. The family moved to Shelburne when Dr. Brown was a small boy. He attended Shelburne Academy, and in his early twenties left for Newfoundland, where he worked in a shipbuilding yard, arriving in the Old Colony in 1885. He was credited with having constructed the first dory ever built in Newfoundland. He returned to Shelburne a few years later and went fishing on the Grand Banks. He engaged in these two occupations to earn sufficient money to put himself through college. After a year of fishing he went to New York University, from which he graduated in medicine in 1893. He practised for a year thereafter at Cambridge, Mass., and then returned to Nova Scotia to set up practice at Clark's Harbour, where he remained for the next forty-six years; and retired in 1939 on account of failing health, and moved to his old home in Shelburne.

Dr. Brown is survived by his wife, the former Miss Augusta Bruce, of Shelburne, and five sons and three daughters—Dr. Alfred, of Melrose, Mass; Dr. Bruce, of Hilo, Hawaii; Edward, mining engineer at Bankfield, Ont.; William, electrical engineer at Peterborough, Ont.; and George, in San Diego; Mrs. Walter Greenwood, in Jemseg, N. B.; Evelyn, a registered nurse, Brookline, Mass.; and Mrs. Harry Bell, Montreal; also by five sisters and one brother, Dr. S. R. Brown, Hilo, Hawaii.

Dr. Alexander Edward Kennedy died at his home in Mabou on January 8, 1941, at the age of 78. Dr. Kennedy was born at Kenlock, in the parish of Broad Cove, a son of Mr. and Mrs. Angus Kennedy. The Kennedys were noted athletes, and the doctor was a magnificent physical specimen. It was a decided asset for a doctor in country practice, and Dr. Kennedy, following his graduation from Baltimore Medical College in 1893, served the people in the rugged and extensive Mabou district for forty-five years. A capable physician and a man of high character, he commanded the affection and confidence of the people he served. He had been in poor health for the past couple of years. There were no children. His wife died a few days before Dr. Kennedy. She was the former Catherine Cameron, daughter of Hugh Cameron, M.D., Mabou, for many years federal member of Parliament for Inverness county.

Dr. Smith Layton Walker, former well-known medical practitioner, died on January 8, 1941, at the Maritime I.O.O.F. Home in Pictou, where he had resided for the last three years. He suffered a stroke about three years ago, which left him partially paralyzed, and also suffered from a heart condition, but he was in fairly good health until a few days before his death. Dr. Walker was born in Truro 76 years ago, graduated from Bell Hospital Medical College in 1890, and practised in Truro until he went overseas in 1925, where he served with the R.C.A.M.C. After his return he was connected for a time with the D.S.C.R. at Camp Hill Hospital, and served as Red Cross Commissioner from 1923 to 1926. At the annual meeting of the Medical Society of Nova Scotia, held in Truro, on September 28, 1921, authority was given the Organization Committee to engage Dr. Walker as Associate Secretary, which position he occupied until 1926, when he was made Secretary, and continued as Secretary until his resignation in 1933. The Nova Scotia Medical Bulletin was started by Dr. Walker in 1922, and has grown from a small typewritten primer as a medium of keeping the doctors of Nova Scotia in touch with each other to its present status. Dr. Walker was a member of Phoenix Lodge, No. 50, I.O.O.F., Truro. He is survived by his wife, residing in the United States, and one son, Dr. Arthur, in Africa.

Dr. Zebud MacKay Flinn, who graduated from Dalhousie Medical School in 1932, died recently at Albuquerque, New Mexico, where he practised since graduation. Dr. Flinn was a son of Mrs. and Mr. John W. Flinn, native Nova Scotians, and was forty years of age. Details of his death were not learned.

Dr. Frederick Barrington Holder, of Halifax, died as a result of cerebral haemorrhage on December 8, 1940. Dr. Holder was born in Georgetown, British Guiana, and studied at McGill University, and Queen's University, from which he graduated in 1919. He had been practising in Halifax since 1922, and took a deep interest in affairs of his community, and was one of the founders of the coloured educational centre. He leaves his mother in Georgetown, British Guiana, and a son, Frederick, in Halifax.

The Bulletin extends its sincere sympathy to Dr. H. W. Schwartz, the editor-in-chief, in the death of his mother, Mrs. William E. Schwartz, who died at her home in Halifax January 3, 1941.

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(Answers to Exam Question in Physiology 1)

Question (one of 25, to be answered as concisely as possible)—"Describe a useful method of giving artificial respiration."

Answers-

1-Place patient in prone position with head sideways resting on one arm.

2-Clear slime out of throat with finger.

- 3-Pull tongue forward, wrap up and hold onto it with a handkerchief.
- 4—If swallowing occurs, pierce it with a nail or any instrument (at disposal).

5-Pressure on back at rate of 15/min. to force diaphragm down.

6—Continue, if alone, as long as you can until aid comes or until signs of rigor mortis sets in.

7—If you can get a doctor and a respirator, do so at once.

8—Call police department, fire department or telephone operator for help.

9—Continue working, even after you figure it is all over with.

If muscles are relaxed, put your mouth on patient's and blow your warm, CO₂-laden moist breath into his lungs. The CO₂ acts on the centre, tends to start the muscular rhythm of diaphragm and cause faster breathing.

(With some people this might lead to the contraction of a virile venereal

disease—knowledge of patient would be of value.)

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