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Address

THE ART OF MEDICINE.*

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Amost all the phases of medical thought are so thoroughly discussed in the books of specialists and in the periodical press that the general practitioner who has neither time nor opportunity to pursue new lines of investigation finds difficulty in selecting a theme which will not be already familiar to the members of this learned society. I have, therefore, chosen a subject which may invite criticism and which shall be suggestive, even if not instructive. Is the art of medicine improving? This question would be answered affirmatively, at first thought, by the majority of physicians. Yet there are many thoughtful men who, while admitting that scientific medicine has made wonderful progress during the last half century, are still constrained to believe that the Art as distinguished from the Science has deteriorated.

SCIENTIFIC RESEARCH AND MEDICAL PROGRESS.

Until recently the path of medical investigation might be compared to a plateau without obstructions, where the wheels of progress were unimpeded and where progression, though rapid, was often in a circle, ending where it began, or so near it that actual advancement was scarcely discernible. It is obvious that in the cycles of the ages substantial gains have been secured. In recent years the growth of the sciences has been so luxuriant that achievement has been slow, sometimes impeded and always laborious.

Isolated facts in biology, histology, chemistry and bacteriology have been collected with such industry and rapidity that an attempt to classify them and to draw practical conclusions causes discouragement and leaves the mind in doubt and uncertainty.

The medical journals teem with discussions of scientific subjects and devote little space to matters pertaining to the treatment and cure of disease. One who would venture to say that he did not believe in the germ theory of disease would be considered as an archaist, and yet none of us believe that a germ is the etiologic factor in all diseases. There are comparatively few maladies in which the specific germ has been isolated, and, therefore, our boasted scientific progress has only shed light on a few of the problems which daily claim our attention. Most of our useful knowledge has been gained from the accumulated experience of our ancestors and contemporaries and not from modern research.

What is disease? The Century Dictionary gives this definition: "A marked, painful or otherwise distressing physical condition, acute or chronic, which may result either in death or in a more or less complete return to health; deviation from the healthy or normal condition of any of the functions or tissues of the body."

What we know about disease of the nervous system has been chiefly acquired by close observation of the clinical symptoms, aided by scientific methods of investigation. Disorders of the chylopoietic viscera manifest themselves by their syndrome, and do not readily yield their secrets to microscopic, bacteriologic or *x*-ray investigation. The pathologic conditions resulting from disorders of the ductless glands may be studied scientifically, but such study has hitherto shed little light on their etiology or treatment. Skin diseases come in the same category, except the few of parasitic origin. Functional derangements elude instruments of precision and often baffle the experienced physician.

For preventive medicine scientific reasearch has done much; for the art of medicine the triumphs of modern investigation are limited. Eliminate diphtheria antitoxin and perhaps antitetanic serum and the other remedial agents which have been used on account of the discovery of specific germs are of questionable utility. When germs are known to be the etiologic factor, science and common sense have suggested methods more or less successful for preventing their entrance and for neutralizing the effects of the toxins which they produce. So far as we are enabled successfully to accomplish these objects, we acknowledge that science has blazed the way for our guidance, but she has contributed nothing which has shortened the duration or lessened the morbidity of scarlet fever, measles, whooping cough, influenza, typhoid fever, etc. What vaccination has done for smallpox is the result of observation and experience, not the result of the discovery of scientific facts or their application to the prevention or cure of disease.

Therefore, I question the wisdom of so framing the curricula of medical colleges that a large part of the time which might profitably be spent in the study of the symptomatology of diseases and perverted functions is devoted to a study of the multiform and varied appearance of germs, which as yet have been proved to be the cause of but few of the maladies which affect humanity.

For the treatment of these distempers accumulated experience is our only reliable guide; and the time which should be given to appropriating this experience is devoted to bacillus hunting or to that which yields infinitesimal results in enabling the student to battle with the many problems which will engage his attention in practice. What use can be made of the physician's knowledge of *Staphylococci, Streptococci* or *B. pyocyaneus* in his diagnosis or treatment of neurasthenia, hysteria or neuritis? What benefit will the various theories of immunity be to him or his patient in making a differential diagnosis between gastric ulceration and

* Oration on Medicine before the Iowa State Medical Society.

cholelithiasis? How can he apply his theories of phagocytosis in differentiating mitral insufficiency from aortic regurgitation?

The study of the side chains of immunity is interesting, but it affords no assistance in distinguishing one from another the numerous family of skin diseases. Scientific research has done little to elucidate the disorders of the special senses, and less to enable us to understand the pathologic changes which affect mentality. How mental states affect bodily functions and how physical conditions react on mental processes seems to be beyond the pale of science, and yet how perplexing are the problems which they present for our consideration. Until we understand the force evolved in procreation, science will grope in the dark when grappling with cellular or nervous dyscrasiæ. Until we know something of the mind, or until it can be shown that it has a material organism discernible by the physical senses, science will avail nothing in elucidating the influence of mind over matter.

No analyst or synthetist has yet succeeded in bringing within our purview the nature of the force generated by impregnating the female germ or discovered the potentiality thus inaugurated which starts the cellular multiplication necessary to produce the perfect plant or animal. No instrument of precision, however great its power, and no form of light, electrical or chemical, has enabled us to observe or detect the elements of which thought is composed. We can observe the phenomena which both life and mind exhibit, but we do not understand what they are. The physical effects which life and mind produce may be learned by observation and experience, not by test tube, crucible, *x*-ray or microscope.

The conclusion is, therefore, inevitable that much of the progress in the art of medicine must come from close observation as well as from the meritorious and painstaking work of the pure scientist.

PROVINCE OF SCIENTIFIC RESEARCH.

Let me be not misunderstood. I do not disparage the aid which the collateral sciences have contributed to medical advancement. Research has done much to explain the reasons for the effect of the means which had been used empirically in the treatment of disease. Science has shed light on problems which were unsolvable before modern methods of investigation were introduced; but she has not supplanted the knowledge gained through centuries of experience.

In my opinion, her province is to aid, elucidate and explain, but not to set aside what has already been established. For example, the beneficent effects of vaccination were proven before any theory of immunity was exploited. Quinin had long been employed and its uses well understood before the *Plasmodium malariæ* was discovered. Iodin was used to arrest suppuration before the pus-producing cocci or bacilli had been thought of and before the words toxemia and intoxication found a place in medical nomenclature.

My contention is not that the sciences should be studied less, but that symptomatology and therapeutics should be studied more, so that instead of waiting for the proofs and demonstrations of science our art may be promptly used for the arrest and cure of even the diseases in which the microbe has been proven to be the etiologic factor.

> "Science still stops to reason and explain,
> Art claps the finger on the bleeding vein."

Our diagnosis is made from subjective and objective symptoms in 95 per cent. of our cases, and when scientific methods are invoked they generally confirm the conclusions reached by the old, reliable methods. To delay action until our opinions are confirmed by the scientists often causes us to lose the golden opportunity for combating and arresting disease. The symptoms of diphtheria are so pronounced that deferring treatment and not enforcing quarantine until a return can be obtained from the state bacteriologist is so fraught with danger that it might be characterized as criminal negligence. If in typhoid fever the proper dietetic and hygienic methods are not enforced until proof is afforded by the agglutination test or finding the bacillus, the mortality of the disease will be greatly increased.

The best results in the treatment of pulmonary tuberculosis are obtained when treatment is instituted before the bacillus has made its appearance, and this treatment should not be abandoned or relaxed even when the microscope negatives the diagnosis based on subjective symptoms and the knowledge gained by percussion and auscultation. During the last six months I succeeded in restoring a patient to health in whom a learned physician denied the existence of consumption, because he could find no bacilli. I have seen a patient die of tuberculosis within the last year when frequent examinations by the state bacteriologists gave negative results. I experienced the greatest sorrow of my life because two competent bacteriologists gave negative reports in my daughter's illness. I had diagnosed consumption; but, accepting the dictum of the time, "No bacilli, no tuberculosis," my efforts were relaxed and mourning and sorrow followed.

From these facts and hundreds of others which could be adduced it is obvious, I think, that it is better for the physician and safer for the patient to rely on the evidence gained by close observation, trained special senses and accurate knowledge of the symptoms of disease than to pin his faith solely to the revelations of the test tube, the *x*-ray or the microscope. These last have their uses in confirming opinions already formed or in causing us to reject opinions based on insufficient evidence, but they should not supplant the old and long-tried methods of investigation.

The tendency of the age is to extol the new and decry the old. A new fad or fancy propounded in a modern postgraduate school is seized with avidity, and too often influences practice to the detriment of the patient and the injury of the profession. As proof of this I might instance the indiscriminate use of the coal-tar preparations in recent times. I have seen them used with fatal effects in pneumonia, typhoid fever, smallpox, measles, diphtheria and septicemia.

IS THE ART OF MEDICINE DECLINING?

The practice of medicine is but the exercise of common sense, educated by acquisition of the learning and experience of our predecessors, fostered and strengthened, but not displaced, by modern methods. A knowledge of the functions of all the organs of the body is the first requisite. A knowledge of their derangements is the second, and a knowledge of the best methods of restoring them to their normal condition is the third and last, but not the least, in importance. Is our art improving or declining in that last most important particular?

I am saved from the necessity of answering this question by the timely publication of an address by Dr.

Billings[1] and the symposium on the proprietary medicine and the nostrum evil before the Chicago Medical Society.[2] To these articles I would direct the attention of all who are practicing medicine and prescribing remedies not in accordance with the teachings of the standard works on therapeutics and the directions of the Pharmacopeia, but in accordance with the literature supplied by the manufacturing chemists and the wise (?) and confident instructions of their traveling salesmen. Wisdom and experience which has not been gathered within the last decade is seldom accredited. Unless the views of the great authorities, like Watson, Austen Flint, Sr., Sir Astley Cooper or Valentine Mott, are reinforced by the teachings of some postgraduate professor or other evanescent luminary, their great names would soon pass into oblivion. The commercial instinct of some manufacturer might save them from such a fate by attaching their names to the recommendation of a nostrum or to a "patent medicine" advertisement. This growing disposition to ignore experience, together with the modern craze for bacillus hunting, and the manifest ambition of so many young practitioners to become great surgeons, even when they could not differentiate a dermatitis from smallpox, or measles from chickenpox, are, I think, among the causes which lead so good an authority as Sir Dyce Duckworth to say: "The art of medicine is fast declining."

The Incompetent Diagnostician.—This opinion is incidentally confirmed by Dr. Frank Billings,[1] of Chicago, who says:

> A large number of the medical profession do not practice medicine rationally. They have no clear conception of disease process. They do not study and examine the patients. No diagnosis is made at all or only from subjective conditions. Symptoms are treated. Headache, backache, indigestion, albuminuria, cough, constipation, dysmenorrhea, insomnia, nausea, dyspnea, etc., all call for drugs with no attempt to get at underlying causes.

This unscientific, not to say irrational, tendency is fostered, if not engendered, by the vast number of nostrums "strictly ethical" advertised extensively in medical journals and forced on the attention of the profession daily by those who make their living and the fortunes of their employers out of our credulity. Thus, we have headache tablets, cystitis tablets, gonorrhea tablets, dyspepsia tablets, heart tonics, liver tonics, etc., etc., besides medicines with the many uses of Frelich's tonic, for instance, which is advertised to cure "paralysis, vertigo, epilepsy, Bright's disease (early stages), neurasthenia, debility, debilitating losses, mental failure, spinal weakness, nervous dyspepsia, all trouble affecting the brain nerve centers and spinal cord, and as a safe and powerful aphrodisiac." These specifics or antidotes to so many diseases are, I fear, becoming antidotes to thought and reasoning and observation, which are the essential qualifications of the medical practitioner.

LOSS OF LOVE AND ESTEEM OF PATIENTS.

The art of medicine is, I think, declining also in the very essential element of winning and holding the love and esteem of our patients. Without this love and esteem we can not exert the psychical influence so essential in sustaining the hopefulness and fortitude of the suffering and afflicted. An important function of the family physician is to amuse and support the spirits and hopefulness of the patient, so as to give Nature the best opportunity for curing the disease.

1. "The Medical Profession and the Medical Journals in Relation to Nostrums," published in THE JOURNAL A. M. A., March 10, 1906, pp. 715-719.
2. THE JOURNAL A. M. A., May 5, 1906, pp. 1333-1345.

It is unlikely, I think, that the waning affection of the people for their family physician is caused by the want of assiduity or the lack of interest of the medical attendant. No one except the patient and his family is so deeply interested as the physician. No one gives the thought and endures the anxiety which he does; and yet it can not be denied that the gratitude and affection which he once received is not given with the ungrudging generosity with which it is given to the trained nurse. The payment of the fee, or the refusal to pay, discharges the obligation to the physician, and gratitude, if any is bestowed, assumes the form of a "lively sense of benefits to come."

The best years of his life may be given in the most self-sacrificing manner to the service of the people of any community and his departure will bring no manifestations of appreciation. His skill and motives may be questioned by those he has benefited, without their being told, in the words of Whitcomb Riley, that they are "the most ungratefull'est of men." The oldest and most painstaking physician may die and there will be no general manifestations of sorrow to equal that described by Will Carleton:

> There's a gathering in the village, that has never been outdone
> Since the soldiers took their muskets to the war of '61;
> And a lot of lumber wagons near the church up on the hill,
> And a lot of country people, Sunday-dressed and very still.
>
> . . . . . .
>
> But perhaps it still is better that his busy life is done;
> He has seen old views and patients disappearing, one by one;
> He has learned that death is master both of Science and of Art;
> He has done his duty fairly, and has acted out his part.
>
> And the strong old country doctor,
> And the weak old country doctor,
> Is entitled to a furlough for his brain and for his heart.

What are the causes for this waning affection? Is it that we fail to bring the philanthropic aspect of our labors before the notice of the public? We do not parade our philanthropy, but let a great calamity, like the San Francisco horror or even the Pomeroy cyclone, come on us and the services of the whole profession will be given gratuitously. Is it not possible that the personal services which we once rendered and which are now relegated to the trained nurse had much to do with cementing the bonds of friendship between ourselves and our patients?

Perhaps our devotion to science and our desire to ascertain the cause of suffering lead the friends to surmise that our interest is greater after the death of their loved ones than it was before. It may be that our delay in reaching conclusions and not applying remedies until we have exhausted the resources of science in discovering the cause of the symptoms leads them to think that we are more interested in the scientific aspect of the case than we are in the welfare of the patient.

However this may be, let us remember that our mission is to save life when possible, prolong it when we can, and, if we can not cure, to alleviate pain and suffering, to "soothe the pillow of the dying and smooth the pathway to the grave."

> "This be our task; Henceforth our path is straight,
> Wherever anguish is, or grief, or pain
> There be our places; Then let us do our part,
> Striving to antidote death's deadly bane
> By our divine and ever-blessed Art."

Treatment of Obesity.—P. H. Sunde, Los Angeles, in the *Southern California Practitioner*, declares that to give medicines in obesity and to disregard the diet and other modes of living, is simply ridiculous. Medicines at best, he states, must only be regarded as secondary measures.