SCIENCE NEWS

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ADDRESS OF THE PRESIDENT OF THE AMERICAN MEDICAL ASSOCIATION

MEDICINE of the future will probably be less romantic, but more practical than the brilliant generation of achievement just past, was the opinion expressed by Dr. Jabez N. Jackson, of Kansas City, in his presidential address before the American Medical Association which opened on May 17 at Washington, D. C.

The future will hold less thrills than the present age of science, that has through its discoveries added fifteen years to the span of human life within the memory of men still living, Dr. Jackson said. The age of the pioneer is always exciting, for "facing uncharted fields with uncharted paths, each day is a new day and its future in 'the laps of the gods.' But let us remember that the builder is equal to the hewer, the organizer more important finally than the discoverer. The paths of progress have been blazed, but progress must be ever onward."

The really acute problem in modern medicine, according to Dr. Jackson, is hospital care for the class that makes up the great bulk of the population, the people with only moderate incomes. Modern hospitals with laboratories and trained assistance cost money. Unfortunately as the demands of science increase, the expense of everything connected with a hospital increases in proportion. Forty years ago the income of $300 from an endowment of $5,000 was enough to support one bed with hospital service constantly occupied for a year, less than a dollar a day. Now the cost of care of a patient in a city hospital ranges from $4 to $8 a day. This does not include the expense of special nursing, nor the doctor's bill.

The rich can afford this service and endowed charity hospitals are open to the very poor, but when the man in the street falls ill he recovers only to struggle with an avalanche of bills.

"What the public must learn is that for the protection of the middleman endowment is also a necessity—endowment that will at least provide for the expense of purely scientific service, modest compensation for the purely scientific laboratory expert who has no other source of remuneration and yet whose aid is a necessity to all who practice; endowment that will meet the expense which the generation of science has brought to medical service. Men of wealth have contributed most generously to the endowment of institutions for research, and we bow in acknowledgment of such wonderful contributions for the future good of mankind. The appeal of charity has likewise touched the heart and reached the pocket of men for contributions to absolute charity. And for such we give praise. But is there not possibly a higher service still: a service which unseen and unnamed is rendered to the man who is a man, though neither rich nor pauper—the fellow who builds a world, generous to rich and to pauper alike?"

MEDICINAL LIQUOR RESTRICTION

DR. WENDELL C. PHILLIPS, retiring president of the American Medical Association, in his address to the House of Delegates at the opening of the annual meetings of the association, called the attention of the medical profession to the recent decision of the Supreme Court supporting the action of the Congress to secure the enforcement of the Eighteenth Amendment that "arrogated to itself (Congress) the functions of the medical profession and the pharmacologist."

Medical men feel that there is active danger in legislation designed to regulate the practice of the art of healing which will place the mere opinion of untrained men and women on a par with the findings of impersonal research. Such a condition, he affirmed, whereby instances may arise when the fiat of the Congress may be in direct opposition to the trained judgment of a physician, holds a serious threat to public health.

Dr. Phillips exhorted fellow physicians to put up a united front on this important subject. The House of Delegates of the American Medical Association has expressed its disapproval in the past of those portions of the Volstead Act which interfere with the proper relation between the physician and his patient in prescribing alcohol medicinally.

"Individual opinions may vary; but individual opinions and convictions should not have a place or be given publicly, as representing the majority opinion of the members of the American medical profession" in connection with this matter.

Preventive medicine, not as a matter of sentiment but of sound business, was another measure urged by the medical leader. The public, which really pays the bills, he said, must be convinced that the medical profession is worthy of its trust as the initiators of a policy of disease prevention that will require, if it is to be effective, the expenditure of many millions of dollars.

"The medical profession should throw off its mask of reticence and its shrinking attitude toward reasonable publicity concerning health education. Professional policies narrowly conceived can never successfully oppose the rightful interest of the public. It is time to strike the shackles not only from the shrinking attitude of the medical profession toward the public espousal of educational programs, but also from its attitude toward the lay press, the radio and great assemblies of truth-seeking people. The physician has no right to conceal from non-medical readers the great body of news of the highest importance which is his to communicate."

PHYSICIANS OF THE UNITED STATES

REPORTS from all fields of medical activity were presented to the House of Delegates of the association prior to the opening of the scientific sessions later in the week. The United States has more doctors than any other country, with 133 physicians to every 100,000 persons, according to a statement made by Dr. Arthur Dean Bevan, of Chicago. Great Britain has 92 physicians per 100,000 people, while Germany has only 51. France lags behind with 35.

The increasing demand of people everywhere for periodic physical examinations by their physician is a significant indicator of the trend of public opinion toward preventive medicine, according to Dr. Olin West, of Chicago, secretary of the association. Eleven state medical associations and 120 county associations have adopted a plan proposed by the association a year ago whereby cooperation with the Red Cross makes medical relief immediately available in times of disaster.

The efforts of the medical profession to abolish quacks and non-medically qualified healers has found expression in a basic science act drafted by the bureau of legal medicine and legislation. Two states, Wisconsin and Connecticut, have passed such laws requiring all those who apply for permission to practice healing the sick to demonstrate their knowledge of fundamental branches of medicine.

Medical education is undergoing a revolution in response to the changes brought about by modern methods of treating disease. The handicap of a long and expensive course necessary before a young man can begin to practice is being removed by revision of grammar- and high-school courses to save time. Adoption of the quarter system by which students may study during the time now spent in long vacations offers another avenue for short cuts.

LONGEVITY AND HEART DISEASE

MORE deaths from heart disease is one of the penalties people are paying for the increased span of life achieved in the past thirty years, according to a statement made by Dr. Henry Albert, health commissioner of Iowa. One hitherto unconsidered reason for the prevalence of heart disease, which outranks all other causes of death in the United States, is the survival of larger numbers of people from the attacks of infectious diseases.

Scarlet fever, rheumatic fever and venereal disease have all been brought more or less under control in recent years, but they leave behind them a constitution weakened in various ways. The injury sustained by a person who has had scarlet fever may not be apparent for twenty years, when it may reveal itself as a disease of the heart, liver or other organs. About 25 per cent. of all deaths from heart disease have their origin in rheumatism and more are being maimed by its effects than there were twenty years ago.

The prevalence of these two diseases is practically the same as it has been in the last two decades, but the death rate has been materially reduced. This leaves an increasing proportion of the population in a condition likely to develop heart disease when the "heart disease age" of forty-five plus is attained.

Ways and means of bringing down the toll of heart disease, which is responsible for one fifth of all the adult deaths in the United States, were discussed. Dr. Paul B. White, of Boston, stated that relaxation from strain and regular habits of living were of prime importance in the treatment of this disease. Rest was held to be essential for disturbances of the heart associated with goiter. Effective rehabilitation has been accomplished in many moderately severe cases of rheumatic heart disease, according to Dr. L. A. Conner, of New York. The development of special classes of vocational guidance, employment bureaus and convalescent homes were considered as possible means of helping people overcome the handicap of this malady.

Heart disease occurs much less frequently in children who have had their tonsils removed than in those who have not, according to a report by Dr. A. D. Kaiser, of Rochester, N. Y., who has made a study of 50,000 school children. The results of this investigation show that the child who has had his tonsils removed is also less likely to succumb to rheumatism and scarlet fever.

NERVOUS AND MENTAL DISEASES

MERELY living in the complicated social system of today is responsible for increasing numbers of cases in the general hospital, says Dr. Groves B. Smith, neuropsychiatrist at the Henry Ford Hospital in Detroit.

In an address before the section on nervous and mental diseases of the association meeting he pointed out that much of psychoanalysis now practiced is an attempt to obtain from patients information the old-fashioned family physician knew about his patients merely from being a member of the community.

Emotional conflicts mask in many guises, and ill-advised medical or surgical treatment often results from failure to give such conditions sufficient consideration. The body and the mind have been looked upon as separate entities, but modern research in psychiatry is beginning to show that they are often very closely connected.

The popular idea entertained by lay persons and many physicians that control of nervous symptoms is a matter of will power is a misconception, according to Dr. Smith. He maintained that this was one of the most potent causes of increasing nervous tension. The solution of the problems of the neurotic person, he cautioned physicians, lay in unhurried examinations, humane understanding of social problems, tact and a frank recognition of the patient's inability to understand his own difficulties.

In the same section Dr. L. L. Cazenavette, of New Orleans, stated that mental disease in lepers is more frequent than is generally believed. He reported from a study of over 400 cases of leprosy in the National Leprosarium at Carville, La., covering a period of more than thirty years, that mental inferiority accounts for a large group of these disorders.

A working knowledge of the principles of mental treatment in all branches of medicine was strongly urged upon doctors by Dr. Cornelius C. Wholey, of Pittsburgh. There are several diseases encountered in general practice in which mental factors are of importance, he said, such as paresis, infection-exhaustion states, chronic anxiety and dementia praecox.

GERMS IN SWIMMING POOLS

WAS the old swimming hole less of a hazard than the modern sterilized pool? Although strenuous efforts are made toward sterilization of water in swimming pools, infections have become so frequent in recent years that almost every family has been brought to grief in one way or another from swimming, according to Dr. Frederick E. Hasty, of Nashville, Tenn. The number of bac-

teria in public pools is often under control, but little consideration has been given to the kind of bacteria present.

Guinea pigs inoculated with bacteria recovered from water from pools that had undergone various processes of sterilization developed practically every bacterial type of infection of the upper respiratory tract. The severity of the guinea pig infections was found to vary in proportion to the severity of the colds prevalent in the neighborhood at that particular time.

"Water gets into the nasal chambers of most swimmers, carrying with it the contamination of the pool and at the same time adding to the pool whatever bacteria may be present in the particular swimmer's nose.

"I have observed a number of boys who got sinus infection from one pool as a result of being required to duck ther heads," Dr. Hasty said. "Without an exception the infections cleared up in the course of a few weeks after leaving off swimming. Persons who have suffered from paranasal sinus infection or nasal obstruction are likely to develop acute attacks following swimming. The high percentage of frontal and ethmoidal sinus infection is due to virulent foreign bacteria reaching the vulnerable part of the nose and to a lowered local and systemic resistance."

ITEMS

THE black cloud of typhoid still hangs over the South. Country districts and towns with a population of less than 5,000 furnish 80 per cent. of the cases, Dr. D. G. Gill, of the state board of health of Alabama, reported to the American Medical Association. Unprotected water supplies are still the rule rather than the exception in the rural South and are responsible for many of the epidemics. Typhoid carriers, however, in Dr. Gill's estimation, are the source of most outbreaks through the direct spread of infection. Ten per cent. of the persons who have typhoid become carriers.

NEVER before has the world manifested so much interest in the welfare of its children. Clinics for crippled children established by the state, fraternal organizations and civic clubs have been an outstanding factor in the development of the branches of surgery designed to correct deformities, said Dr. J. P. Lord, of Omaha, speaking before the American Medical Association. State provision for handicapped children, clinics at state fairs, cooperation of county and district medical societies, and private benefactors have all enabled surgeons to acquire an enormous fund of experience.

IN spite of being one of the most progressive countries, the United States still leaves much to hope for with respect to its maternal death rate. Dr. S. Josephine Baker, of Stamford, Conn., pointed out in the section of obstetrics that this country has a higher death rate for mothers in childbirth than any other except Chile. The rate is one third higher than that of England and Wales, and more than twice as great as that of Denmark, Italy, Japan, the Netherlands, New Zealand and Sweden.

AGITATION is on foot to provide graduate training for general practitioners. Dr. George E. Shambaugh, of Chicago, stated that few universities are equipped to offer an efficient type of instruction to practitioners who are afraid that the tide of scientific advances in medicine is leaving them behind. He urged that other plans be brought forward to meet this demand.

TWELVE million dollars for state parks is the ambitious program projected for California by a number of civic organizations of this state. Bills now before the legislature provide for a bond issue of $6,000,000 to be matched by an equal amount from private gifts and other outside sources. A considerable part of the areas expected to be set aside under the new program will be in the famous California redwood country. These trees, closely related to the famous "big-trees," constitute a remnant of a once world-wide distribution of tree giants that flourished before the last great ice age. Individual trees now standing have been in existence since long before the beginning of the Christian era. For historic and scientific interest as well as for the sake of their scenic beauty a strong and fairly successful effort has been going on for some years, to save a part of the redwood forests from cutting.

IN a paper read before the National Academy of Sciences by Dr. Frank E. Denny, of the Boyce Thomson Institute, Yonkers, N. Y., it was explained that potato tubers when freshly harvested are dormant, and will not sprout if planted at once under growing conditions, the rest period lasting from 1 to 4 months in different varieties of potatoes. This period of inactivity may be shortened by treating the tubers with various chemicals. The gain in time of sprouting is about 2 to 6 weeks, depending on the variety of potato and the stage of dormancy at the time the treatment is applied. Twigs of apple, grape, lilac, also have this dormant period in autumn, and the buds of these species can also be forced into early growth, the gain in time of budding or blooming ranging from 1 to 9 weeks. The chemicals used by Dr. Denny include thiocyantes, thiourea and ethylene chlorhydrin.

Erratum: In the section of Science News in the issue for May 6, on page X, the last paragraph of the first column should read as follows:

"The fossilized implements are described by Dr. Osborn as of apparent human origin and of symmetrical shape. Among them are skin dressers for cleaning animal hides, pointed awl-like implements evidently used in sewing, neck ornaments made of strung bones and a kind of comb that seems to be a tattooing implement. Eighteen of the types of tools have been matched with counterparts found in the ruins of cliff dwellers of the arid regions of the Southwest and one type can be nearly duplicated by a much more recent implement from the shell heaps of eastern America. But unlike the implements of Europe which are usually weapons and hunting tools, the Nebraska artifacts are nearly wholly related to the peaceful arts. Further investigations are to be carried on this summer."