

Part Played by Doctors in Time of World War

— Dr. Charles H. Mayo's Address on Country's Educational Requirements, Prohibition, and Need of Physician in the Cabinet

IN the course of his inaugural address, delivered in this city on Tuesday evening last, Dr. Charles H. Mayo of Rochester, Minn., President of the American Medical Association, asserted that our country should secure a medical Cabinet officer in the near future; said that national prohibition would be welcomed by the medical profession and that alcohol had been displaced in medicine by better remedies; declared that the American nurse had distinctly elevated the nursing of the world; put the American dentist ahead of all others, and lauded the achievements of the great American pioneers of modern medicine and surgery. His address is printed in full in the current issue of *The New York Medical Journal*. Here are some extracts from it:

"The medical profession should feel proud of the position it has attained in the affairs of the world. It has been second to none in its progress, and medicine has now become nearly an exact science.

"The medical profession was first to mobilize, and has been signally honored by the Government in having been given the first flag to be carried abroad, thus signifying our country's active entrance into the war. No worthier representative of the profession could have been chosen as standard bearer than Dr. George W. Crile, who has done so much to develop the base hospital idea. These accomplishments give us a right to discuss Americanism.

"The great industries have in the past unnecessarily destroyed thousands of human lives and turned on the public many more thousands of cripples dependent on public charity. It has been cheaper for these industries to let Europe pay the cost of bringing individuals to maturity and to replace the injured and lost with new human material than to go to the trouble and expense of providing suitable means for protecting the lives and limbs of employes. Today we are face to face with the truth that we must arise and rebuild our own people. The economic law of supply and demand has gradually been brought into force, and the waste of human life must cease. We hear on every hand of projects and efforts for the conservation of human life, a movement which is the outcome not of any philanthropy or sentiment but of necessity. Men can no longer be replaced with the old time ease, and their individual value to the community has increased accordingly.

"The by-products of human deficiencies, mental, moral, and physical, are a clog and a burden to the State. In our great hospitals for the insane we find that much effort is being made by highly organized and expensive methods to reclaim the mentally affected. These institutions have become not the madhouses of the past, but hospitals for the mentally sick. The expense is great, the percentage of cures small, but well worth the effort. University and State hospitals are needed for the care of the poor, for curing blindness, and for restoring cripples and defectives from birth and injury to health and usefulness. Now that the war is producing injuries by the thousands, a new impetus is given this work, that by training in special employment and artificial aids such persons may be as happy as possible and self-supporting, and not mentally disabled and a drag on the community. It is through organized effort in the medical profession that so many of these great things in the world's work have been accomplished. Within half a century many years have actually been added to the average life of man. This has been largely accomplished by preventive medicine as well as by advances in the cure of disease.

"The American Medical Association's Advisory Committee, under Dr. Alexander Lambert, is investigating the question of compulsory health insurance for the information of the profession. Such laws being meant for the general good of the people, physicians should not obstruct but should discuss and help in devising

methods whereby the needy will receive aid, the middle classes not be pauperized, and this without detriment to the medical profession. Anything which reduces the income of the physician will limit his training, equipment, and efficiency, and in the end will react to the disadvantage of the people.

"One of the greatest functions of a State is the development and control of its educational system. Compulsory school attendance and child labor laws have been necessities. It will soon be generally recognized that the citizen is best made when a child. Compulsory school attendance through the seventh grade and a general knowledge of the English language are necessary to this citizenship. Other languages than English are special studies. Private schools should be encouraged, but all should be subject to State inspection and control. Private schools conducted by hyphenated Americans should be subject to Government inspection to remove them from the protective influence of local and State politics.

"The lack of unity of our nation is largely due to lax educational laws which allow emigrants to develop community and educational interests in the language of their fatherland and not to live up to our Constitution. As a people our prestige in the world has been injured most unfortunately by the petty jealousies and the local interests which have been made general through intrigue and political effort. Especially have we decried to the world the acts of Government officials whom we ourselves have placed in power. More good would come to our country through tongue control than birth control. Our best people must come to the fore, and, if necessary, by self-sacrifice, do their part in the political management of the local, State, and general affairs of our country, if democracy is to survive."

After enumerating the more important products of American inventive genius, Dr. Mayo continued:

"I bring up these things here because the great medical profession of this country has not stood as a united body for that which is American in medicine. Many, while abroad, have apologized for medical conditions at home, and for personal advancement have often written and discussed as remarkable European discoveries that are trivial. Many important discoveries in medicine in America have not been accepted here until they have been appropriated by Teutons and returned to us with the stamp 'Made in Germany.' Our country has done much for the advancement of the medical profession through the enactment of just laws requiring standards of education. Through the efforts of the Committee on Medical Education, of which Dr. Arthur D. Bevan is Chairman, our profession has largely aided in the standardization of medical colleges. Through the work of this board, many of the inefficient medical colleges have been forced to close, to the great ultimate good of medical science and of the people served by their graduates.

"The added requirements of preliminary education and increased years of medical study were so great, however, that with the elimination of 40 per cent. of the colleges, and the years of study more than doubled, we have little more than one-third as many students of medicine now as in 1900. Fewer doctors, better-trained nurses to take some of their work, better-educated people, and preventive medicine to reduce sickness maintain an even balance, however. Now will come a hysterical demand to lower the bars of educational medical requirements under pretext of the necessity of war. It must not be permitted. If ever we needed educated men it is now and hereafter.

"To our credit it may be said that today our graduates in medicine by education and training are equal to those of any country, and better than those of most countries of the world.

"From a medical standpoint we must be proud of our country and our great

dead. The work of McDowell of Kentucky, who performed the first ovariectomy in 1817, and the impetus to medicine given by Gross, Rush, Simms, Emmett, Senn, Davis, and J. B. Murphy, our former President, and a host of other distinguished dead who added so much to our knowledge of medicine, is known to the world. What a debt we owe to Long for his discovery of ether, which made surgery possible and childbirth easier!

"The graduating age of twenty-nine in medicine is four years too late, as the most productive and ideal period of thought is thereby limited to too short a time. The graduate's best work must be accomplished in the next fifteen years, when his brain cells are most energetic and receptive. It is well to remember that death overtakes the average physician at the age of fifty-eight. The intellectual man and woman marry late or not at all, and the resulting birth rate does not exceed one-third of their original number. In order that the physician may be graduated at the age of twenty-five, his vocation should be chosen in the seventh year of school life in order that special lines of study may be begun, and the eighth grade, the work of which is a review, should be eliminated. A revision of the time devoted to a study of the classics is necessary. The work of the last year of high school and preparatory school should not be reviewed in the first year of college, thus saving two years. By proper specializing in a six or seven year combined course of general education and medicine, the student should be entitled to two degrees, such as are now given in the University of Minnesota.

"Medicine has been divided into many branches and, of necessity, diagnostic team work has developed, with the result that both the rich, who can pay, and the very poor, who cannot pay, secure the best possible service. To secure equally good service for the great bulk of the people, however, some change in diagnostic methods by the establishment of centralized plants, hospitals for diagnosis, or combinations of those engaged in specialties to care for the extraordinary cases is necessary.

"War has always had a great influence on medicine, first developing the priest physician, then the barber surgeon, and later the army medical officer. In wartime Paré devised the ligature for arteries, although he was not the first to employ it. Napoleon, who was often at a loss to supply his army with food, made awards, which from an empiric and practical standpoint developed canning and the preservation of food before bacteria were known. The American medical profession will ever be under obligation to our army medical officers for their services to the world in the discoveries of numerous diseases, their causes and prevention. Our army medical officers stand pre-eminent in science.

"Under Surgeon General George H. Torney was instituted the first compulsory vaccination for the prevention of typhoid. This was made possible by the discoveries of Chantemesse and Widal in France and Sir Almoth Wright of England, though to Major Frederick F. Russell of America is largely due the credit of its development. On the Mexican border Major Russell has vaccinated more than 20,000 United States soldiers at one time and put a stop to typhoid.

"To understand fully what this means, we must realize that the medical army service is as much a specialty in the care of soldiers as any specialty can become. Under most unfavorable conditions and surroundings to prevent and care for disease and infections, employ all of the serum and vaccines known, and be fully conversant with all sanitary and hygienic laws require, indeed, special training. During the Spanish-American war 20,000 cases of typhoid occurred among our troops in training camps between May and September, 1898. Of the volunteer soldiers, 90 per cent. acquired typhoid within eight weeks of camp life. Investigations by Major Walter Reed, Major Victor Vaughan, a former President of this association, and Edward Shakespeare

did much to demonstrate the methods by which diseases are transmitted by flies and human carriers, and also by utensils and camp pollution. In our volunteer army in Cuba, 450 soldiers were killed and 9,853 died of disease.

"The benefit to our country after the present war in having some thousands of medical officers trained in sanitation, hygiene, and the prevention of disease will be incalculable. Through lax examinations of recruits and the natural effects of prolonged living and overcrowding in trenches and underground structures, tuberculosis will become a menace to our soldiers, as it is today in France.

"The present war is one of remarkable proportions, and the medical service has assumed an importance such as it never had before. The old army hospital gangrene is a thing of the past. A knowledge of the care of infections, prevention of tetanus, vaccination for smallpox and typhoid, the cause and prevention of typhus, the old camp fever, also cholera, the plague, and fevers of all sorts, including the new trench form, is a training requirement of the army medical officer, and results in the restoration to duty of a high percentage of the injured.

"The requirements of our profession have been raised from within, and not forced from without. The American College of Surgeons deserves great credit for establishing its high standards for the science of surgery and the honesty of the surgeon. Through immediate necessity, hospitals are rapidly being classified and standardized that they may become more efficient for the people and for the training of nurses and future physicians. As a body, no profession has more power if wisely used. We have at once jumped past the period of discussion with fanatics and cults as to the cause and prevention of disease, a long period in medical history, for today disease can be checked by order. Our country should secure a medical Cabinet officer in the near future. The great problems which now occupy men's minds make those of the preceding few years seem trivial and even hysterical.

"We must aid in all that will conserve and elevate the general standard of the American citizen. Prohibition is a war measure the value of which is beyond discussion. That disease was frequently water borne is a practical observation that has existed for many centuries. To a large extent among the Orientals the danger of such transmission was overcome by the drinking of tea and coffee purified by boiling. In Europe the same results were obtained in the manufacture of weak wines, brews, and liquors, the fermentation and yeast germs of which destroyed the virulent bacteria. Now that we know how and why water was dangerous, the necessity especially of alcoholic drinks has been removed in every community in this great country by an abundance of pure water.

"No one except the policeman sees more of the results of overindulgence in alcohol, demonstrated by pauperism, sickness, immorality, and crime, than the physician. Medicine has reached a period when alcohol is rarely employed as a drug, being displaced by better remedies. Alcohol's only place now is in the arts and sciences. National prohibition would be welcomed by the medical profession.

"American dentistry has made a place for itself in the world, and America stands at the head of all countries in the care of the teeth. We are all proud of the work of American dentists. We may pay our tribute also to the American nurse, who has distinctly elevated the nursing of the world and care of the sick. Her experience and training make her the best wife and mother and a leader in support of the best in education and discipline in her community.

"Medical men, your country needs you now and always. You must remember that the State is permanent and does not exist for the good of the individual, but that the individual exists for the good of the State."