

The Boston Medical and Surgical Journal

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The Massachusetts Medical Society.

ANNUAL DISCOURSE.

NOTE.—At an adjourned meeting of The Massachusetts Medical Society held Oct. 8, 1860, it was
Resolved, "That The Massachusetts Medical Society hereby declares that it does not consider itself as having endorsed or censured the opinions in former published Annual Discourses, nor will it hold itself responsible for any opinions or sentiments advanced in any future similar discourses."
Resolved, "That the Committee on Publications be directed to print a statement to that effect at the commencement of each Annual Discourse which may hereafter be published."

THE SOCIALIZATION OF THE PRACTICE OF MEDICINE.*

BY MYLES STANDISH, M.D., S.D., BOSTON.

By the phrase, "The Socialization of the Practice of Medicine," I mean the tendency of the community as a whole to take over the care of the individual when he is ill.

Social, scientific and economic changes have come with great rapidity in the last few decades. They have already notably modified the practice of medicine and promise to do so to a much greater extent in the future. It is the socialistic tendency of these changes that I am about to consider in this discourse. We who practise medicine at the present time scarcely appreciate how recent are the conditions under which we do our daily work.

Until the establishment of the Massachusetts

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General Hospital in 1811, such an institution was unknown in New England. There were, it is true, pest houses, or lazarets, and almshouses, but these cannot truthfully be said to have been for the care of the sick; they were, rather, places for the segregation of cases of smallpox, the insane, etc., and were for the protection of the community rather than for the treatment of the persons who were compulsorily placed therein. Such places were managed by individuals to whom the town had practically auctioned off the job, the lowest bidder receiving the contract.

Not until 1830 did the Commonwealth undertake to care for any group of its citizens in need of medical care. In that year the State built the Hospital for the Insane at Worcester, and began to take this class of unfortunates from the almost inhuman conditions under which they were held in the almshouses.

Even then the idea of caring for people who were ill was not clearly accepted, as this institution was called an "asylum."

From the establishment of these two institutions we must date the great growth which has since developed in the care of the sick by the community in this Commonwealth. Both institutions were, in principal intent, for the housing as well as the medical care of the patients.

Previous to that, the Boston Dispensary had been established, in 1796, for the medical relief of the poor, in order that the sick might be attended and relieved in their own houses, and that those who had seen better days might be comforted without being humiliated; that is, treated as paupers. It was incorporated in 1801, and by 1825 bitter complaints of its operations as a medical charity began to be voiced by the profession.

The next step was when, on the same day in 1846 that ether was first used as an anesthetic for a surgical operation at the Massachusetts General Hospital, the Board of Trustees of that institution gave formal recognition to an out-patient service which must have sprung up unauthorized before that date, because the Trustees voted that records should be kept of patients living outside who came to the hospital for treatment. Since that memorable day in 1846 the number of hospitals with out-patient services has rapidly increased. There are now 20 such hospital clinics in Boston, and the total number of individuals treated in a year is about 300,000. Of course, a certain proportion of these patients are either "rounders" or the same individuals going to different clinics for various complaints, but still it is probable that there are at least 270,000 people who receive medical treatment free of expense to themselves in this city every year—a large percentage of the total inhabitants of the city.

Suburban and other cities are rapidly reproducing this condition in their own communities, having about 33,700 individuals attending out-patient departments of hospitals in a year.

In 1864 the City of Boston established a hospital for the care of its own citizens, at the public expense, if necessary. This hospital in the fifty odd years of its existence has grown to be a great institution of 1088 beds, and received in 1916 an appropriation of nearly \$800,000 from the money raised by taxes.

An out-patient department was immediately established at this institution, and soon had a very large clientele. Since that date many other large cities and towns have, directly or indirectly, established hospitals for the treatment of their citizens when ill.

In 1895 the State, which had already increased its institutions for the care of the insane from one to four, also established a hos-

pital for dipsomaniacs and other drug addicts at Foxboro.

The institution at Tewksbury had changed its character, largely, from an almshouse to a large modern hospital for the treatment of such chronic cases as fell into the care and support of the Commonwealth.

In 1895, also, the Boston City Hospital established the first separate hospital for the treatment of infectious diseases, which, under the pressure of the Board of Health, tends more and more to receive a large and increasing proportion of all such cases in the community and which will undoubtedly in the future take care of all infectious cases excepting only such persons as can, by means of their wealth, or better housing conditions, give the best of care and isolation to their sick.

The State has passed laws which, in theory at least, compel each and every town, or group of towns, to maintain an isolation hospital for smallpox, and doubtless this law will be eventually broadened to include all other infectious diseases. Such a widening of the scope of all institutions for the care of the sick is the undoubted tendency of the day.

From 1895 to 1898 the Commonwealth established its great hospitals for the care of the tuberculous.

In 1906 the City of Boston established a municipal hospital for the same purpose, and in 1907 the Commonwealth passed a mandatory act compelling each city and town, or group of small towns, to maintain also a hospital for the tuberculous. The fact that in ten years the State has so largely taken over the care of the tuberculous is an illustration of the rapidity with which such revolutionary changes are adopted in recent years.

In the course of time the out-patient clinics, finding that the giving of medical treatment consisted in something more than the writing of prescriptions, and that they were at a disadvantage, as compared with the private practitioner, who through his domiciliary visits was able by demands, tact and management to control the surroundings and activities of his patients, established the social service personnel of their clinics. The Massachusetts General Hospital was the first and prime mover in this addition to the Hospital Staff. The Social Service at that institution was established in 1905, and has been the means of largely in-

creasing the efficiency of the Out-Patient Clinic, and more firmly and widely establishing public care of the sick. The example of the Massachusetts General Hospital has been widely followed by hospitals, both in Massachusetts and elsewhere.

The most recent example of this assumption by the community of the medical care of an ever-increasing proportion of the population is the establishment in 1916 by the Massachusetts General Hospital of a pay consultation clinic, to which physicians can bring their patients. The fee is small, the number of eminent consultants large, and there are whispers in medical circles that some of these gentlemen have found the burden excessive when the need of finding some time in which to support themselves and their families was considered. This service has at present been discontinued owing to the draft of the medical men into the military service. In this connection, it is interesting to note that the Boston Dispensary maintains a pay clinic for the examination of the eyes for errors of refraction.

There is also a constant tendency for public hospitals to erect private wards for the care of people of means.

The socialization of medical practice is again well shown in the changes or, rather, the additions to the services of boards of health. Our municipal boards of health and the State Department of Health, under certain conditions, maintain laboratories which give free service in the matter of bacteriological diagnosis, blood examinations, etc. The State Department of Health, at the demand of local boards of health, has for years furnished expert consultants to the local physicians in doubtful cases of smallpox, poliomyelitis, local epidemics, etc. It also distributes free, and in some instances itself manufactures, certain biological products used for medical treatment. In the first three months of 1917 it distributed diphtheria antitoxin, smallpox vaccine, typhoid vaccine, paratyphoid vaccine, antimeningitic serum, and silver nitrate ampoules. The latest extension of its service contemplates the division of the State into districts and in each one establishing a center for the care of venereal diseases. That such an arrangement is likely to become an active, widely extended, and eventually a compulsory service will be believed by anyone who has watched the trend of events in the

assumption by the Government of the care of dangerous infective diseases.

Hospitals and boards of health are by no means the only institutions which have taken a part in this socialization of medicine. The public schools have had added to their staffs physicians and a corps of nurses whose duty it is to examine the children for defects or diseased conditions, to advise their parents to have them properly treated and to see that the advice is followed.

This latter element will ultimately be found to have no other result than the eventual assumption of such care as it advises. Indeed, a beginning has been made in at least one city in this State, where the examination of the school children's eyes and the furnishing of glasses at a discount from the ordinary retail price, and when necessary entirely free of expense, has been assumed by the community.

Free dental care of school children has been widely discussed and earnestly advocated, and the establishment of the Forsyth Dental Infirmary for school children in Boston is the first step in this direction and, in all probability, will not long remain unique.

The economic conditions of the 270,000 people who attend hospital out-patient clinics in Boston is indicated by the fact that the report of the special commission, created by the Commonwealth to study the question of social insurance, states that 45% of them earned from \$15 to \$20 per week in 1916, and that 7% of the Out-Patient Department patients of the Boston Dispensary and 11% of the out-patients of the Massachusetts General Hospital were earning from \$20 to \$25 per week.

The lengths to which the communistic conception of medical practice is already advocated is well illustrated in the so-called Framingham Experiment.

This town was taken by the National Association for the Study and Prevention of Tuberculosis, as a representative town with a fair proportion of manufacturing, commercial and residential population; and because it was already well organized socially and medically, one hundred thousand dollars was donated to carry on the work, and the community was to be stimulated to use every means to combat disease. In this experiment all the inhabitants, or certain large groups of them, were to be examined as to their physical condition. Indi-

viduals found to have impaired physical conditions were to be advised to undertake medical treatment. Salaried physicians were to be appointed to take charge of the school children, and everybody was to receive medical care and advice, either from their own physicians, or without expense to themselves. The people were requested to go to their physicians for examination, but as this alone would not bring about such a general examination as was desirable, physicians were brought into town to assist in the medical survey. The Society opened a free clinic for the tuberculous.

Dr. D. B. Armstrong, in charge of the experiment, in an article published in the *Journal of the American Medical Association*, September, 1917, states that there had already been established a permanent full-time medical and nursing service for the school children, with a general supervising nursing service by the Board of Health; a full-time medical and nursing service for at least half of the industrial population; provision for a full-time secretary with plans for nursing and relief service under the auspices of a local civic league. The same gentleman, in an article in the *BOSTON MEDICAL AND SURGICAL JOURNAL*, February, 1917, also suggests a dispensary service, built on the clinic for the tuberculous already established, which might be placed on a pay and self-supporting basis, that would include not only tubercular cases, but also general medical, school medical, infant welfare, and, perhaps, dental services. He says, "It is the hope of the Committee that further developments of the work will demonstrate that on a community basis, disease may be prevented and health created, thereby laying a permanent foundation for future social, economic and spiritual evolution," and further says, "that it ought also to be significant perhaps in its bearing upon the future of medical service in general."

It will need no argument on my part to convince this assembly that if half of the community were given a free medical and nursing service under a popular government, there would inevitably arise a demand from the voting population that the same benefits be extended to the entire people.

All the extensions of the community care of the sick, so far considered, have their origin in the humanitarian, that is to say, the medical side of the question; but for the last two dec-

ades a demand for governmental aid and authority in the extension of medical service has been pressed from the economic side, the argument, summed up in a phrase, being that the health and efficiency of the community was an economic asset of great value, and therefore the law should compel manufacturing corporations and the people themselves to provide for the prompt restoration of health to the incapacitated.

This demand in Massachusetts has resulted, as it has in many other States, in the compulsory insurance by employers of their employees against industrial accidents. This law was passed in this Commonwealth in 1911, and has been amended annually by each Legislature elected since that date.

The law, for the purposes of this discussion, is essentially this: It compels the employer to insure his employees against accident, and the insurance company pays, among other things, for the medical and hospital care of the injured. This at first resulted in the insurance company contracting with a physician in each district to care for all such cases and refusing, except under certain conditions, to allow payments to other physicians. This arrangement pleased neither the patients nor the great body of practising physicians, and in 1917 the law was amended to allow the selection of the physician by the patient, if he chose to exercise that privilege.

The State appointed an Industrial Accident Board, which awards the amount of compensation that should be paid each injured person, and determines the amount of the fee that shall be paid to the physician who had the care of the case. The Board shows the prevailing tendency of the times in the community care of the sick or injured in its liberal interpretation of what constitutes an industrial accident. It has decided that an injury received in a fist fight between longshoremen is an industrial accident, as longshoremen are necessarily rough fellows. Also that an optic atrophy supervening in case of tabes was due to the afflicted man's occupation as a fireman in a boiler room.

The communistic advance of the medical service idea was much in evidence a year ago, when an attempt was made to pass a radical compulsory health insurance act in this and other States.

The essential features of this proposed act, from the point of view of this discussion, were that all wage-earners, except agricultural employees and domestic servants, who earned \$25 a week or less, should be compelled to join a local association for health insurance; that indemnity funds should be provided in part by the employers, in part by the employees, and in part by the Commonwealth, from moneys received from taxes. Other individuals, whose earnings were \$25 a week or less, could voluntarily join these associations.

These local carriers, as they were called, were empowered to contract with a physician or physicians for the care of the sick, to provide medicines and nurses, orthopedic apparatus, eye glasses, etc., to the members of the association, and, with certain limitations, to the members of their families. They were also directed, when able, to build hospitals and sanatoria. This law, by the way, came over from our friends the enemy, as you will see later, and was taken bodily, except that it went higher up the wage scale than the German system.

What proportion of the community would be beneficiaries under the Health Insurance act proposed in this State, I do not know. I have heard it variously estimated as from 30% to 70% of the population of the State. But, whatever the actual number may be, there is no doubt that it would be a very large proportion in any industrial community and would cause a great disruption of the practice of all medical men in manufacturing centers.

This progressive tendency toward the socialization of the practice of medicine has not been peculiar to Massachusetts or America, but has become from decade to decade more and more apparent in Europe.

In England, early in the 19th century, there were mutual aid societies formed among wage-earners to insure themselves against various financial disasters which may happen in the lives of people whose income is such that the bare necessities of life practically consume their entire earnings. These societies gave their members medical aid. They became known under the generic name of the Friendly Societies. They were popular, and it was finally discovered that the organization and management of such societies gave a proper, but material addition to the income of the men who had charge of their activities. As a conse-

quence, many such societies were organized, and there arose quite a competition for members, and the managers eventually canvassed for and accepted members whose incomes were much larger than those for whom the societies were originally intended. Door-to-door canvasses were made for members, and I have seen hand-bills asking for members in the windows of small shops in English provincial cities.

These societies contracted with a medical adviser for treatment of the entire group. Competition among the medical men brought the salaries down to a very low level. Those of you who are accustomed to read the *British Medical Journal* will remember the periodical appearance, for years before the National Insurance Act, of lists of Friendly Societies, with the statement that the salaries which they paid were unfair for the amount of work exacted, and asking all members of the profession to refuse employment under the societies named in the list. It was a burning question with the physicians of England for a quarter of a century.

The first compulsory action of the English Government in the direction of medical care of wage-earners was when the Employers' Liability Act was passed in 1880. The last Workmen's Compensation Act was passed in 1906.

The similar laws in Massachusetts and other American States were modelled on these laws, and are so well known to all physicians that their provisions need not detain us at this time.

The English Parliament in 1911 enacted the National Insurance Act. This law is compulsory. The funds are derived seven-ninths from the employers and the beneficiaries, if they are men, and three-fourths if the beneficiaries are women. The balance is derived from moneys raised by taxation. The individuals who are thus compulsorily insured comprise all "employed" persons, British or alien, from 16 to 70 years of age. All other persons engaged in some regular occupation, and who are wholly or mainly dependent for their livelihood on the earnings derived from that occupation, can voluntarily insure under the Act, provided their total income from all sources does not exceed 160 pounds a year. It is also provided that persons who have previously been "employed" and insured for five years or more, may, subsequent to said employment, volun-

tarily be insured without limitation as to income.

The medical benefits were medical attendance and treatment, medicine, medical and surgical appliances, treatment in sanatoria for tuberculosis, and maternity benefits.

When the law was first proposed it was planned that the Government should organize associations to administer the act by localities, trades, industries and industrial organizations. This, of course, raised a great protest from the Friendly Societies, which ended in the Government practically accepting the existing societies as the agents for the administration of the law, the Government reserving only the right to organize such associations as might be necessary where Friendly Societies did not exist, or where the insured preferred not to join them.

The medical profession was very much agitated by the proposition, and the British Medical Association came almost to the point of threatening a general strike unless the remuneration was made satisfactory to them.

The terms first proposed by the introducers of the law were 4s. per year per capita. The Cabinet officer having the matter in charge said that the Friendly Societies paid from 2s. 6d. up. The highest, by the way, was the Postal Employees Association, which paid 8s.—two dollars a year for all medical care and medicines.

Finally, the British Medical Association was pacified by a per capita payment of 6s. 6d. The sixpence was supposed to cover the cost of medicines.

Another complaint of the medical men against the proposed act was that the law contemplated the continuance of the old and vicious contract system, which enabled the societies to contract with one or a few medical men, whom they could discharge if they did not conduct their medical practice in such a manner as to be advantageous to the funds of the society. This point was fought bitterly both by the profession and the Friendly Societies, and the final result was the so-called "panel" system, whereby any respectable physician could signify his willingness to serve on the panel, the insured person to be free to select from the panel the physician he preferred. The physician was to receive from the societies

the 4s. and 6d. of all those who selected him for that year.

In 1914 there were insured under the National Insurance Act in England 13,643,000 persons, and in May of that year there were 16,000 physicians on the "panel." About half of these gentlemen had not more than 500 persons on their list; 30% had from 500 to 1000 persons; 16% had from 1000 to 2000 persons, and 4% had more than 2000 persons. It must have been one of these latter gentlemen to whom a medical man in Oxford alluded when I asked him in 1912 how the law was working. "Oh well!" he said, "some of the men do pretty well. A friend of mine over in Wales sometimes sees 80 patients in his surgery of an evening." The total cost of all the medical benefits paid for under the act was 5,616,000 pounds in 1914.

Compulsory health insurance was, however, first instituted in that land of compulsion—Germany. The first law was passed in 1884, and included miners and others engaged in dangerous occupations, but the scope has been broadened from time to time, until a bill that was passed just before the opening of the present war covered all manual workers, foremen, commercial employees, domestic servants, agricultural laborers and government employees. Other than employed individuals, with the same income, can join the societies. The upper limit of wages was raised by this bill to \$625. In 1885, 10% of the population were in these societies, which number was increased gradually, until, in 1910, they contained 22% of the population, to which it was estimated the last amendment to the bill would add another million people.

Previous to the institution of compulsory health insurance in Germany there had existed, as in England, Mutual Aid Societies which had, as one of their principal benefits, medical aid. Indeed, they had existed in Germany for a much longer period of time than in England, and they were utilized to some extent under the Health Insurance Act, but the bulk of the beneficiaries were organized into new society groups arranged according to occupation, and all workers were compelled to join a particular society, in accordance with their employment.

The doctors complain that most of the members of these societies take very little part in their government, and that the management falls too often into the hands of the political

group called "social democrats." The direct expenses are borne by the employers and wage-earners, although the Government spends considerable money in general oversight and management.

The services of a physician are provided in accordance with the regulations established by each fund; the usual plan is for the society to make contracts with a number of physicians, who give their services in return for an annual sum, fixed in advance, or for a specified sum per case, also fixed in advance. In no case is the charge fixed on the number of visits or number of prescriptions. Some of the societies, in order to secure low rates of fees from the physicians, provide only the services of a limited number of physicians. The competition among the physicians to secure the position of medical officer in such cases has resulted in reducing the cost of the service to the funds to a very low level, and the fees have often been so small as to produce vigorous protests from the medical profession. This protest has resulted in numerous "doctor strikes," in which the physicians have refused to work for these societies, and the strikes in some places have been so strenuous that the physicians not only refused to act for the societies, but also even to treat as a private patient any individual insured in them.

I have found allusions to 1022 of these strikes, of which 921 were decided in favor of the physicians, 11 in favor of the societies, and the other 90 were pending at the time of the compilation.

Some of the societies make contracts with a large number of physicians, and the insured person is allowed to select the physician he wishes to attend him.

This comparatively free choice of a physician has generally been the result of a desperate struggle between the societies and physicians of that particular locality. The most notable example of this arrangement is in Leipsic, where the society has contracts with some 400 physicians,—the list includes many specialists in all branches of medicine, including dentistry. The strike to obtain this condition was very bitterly fought. It took place in 1904. The demands of the physicians were an increase of fees to \$1.00 per member without dependents, and \$3.00 per member with dependents,—little enough surely,—a free choice of physician, and that agreements with the individual physician

should not be terminable at the will of the society.

The list of the demands of a labor union strike in this country often covers practically the same demands.

The physicians terminated their service on April 1, 1904. They were loyally supported by practically all the other physicians in Leipsic and the neighborhood. The University medical professors and teachers refused to treat society patients in the University clinics.

The society fought back by importing physicians, to whom they guaranteed an income of \$1500 a year. They established three consultation centers under the charge of whole-time medical officers.

The physicians took steps to discourage doctors from entering the service, and of 75 who agreed to come but 62 came.

The supervisory authorities were petitioned to intervene and compel the society to provide adequate medical service. The authority decided that at least 112 physicians were necessary for the proper treatment of the members. The society was unable to fulfil the requirement, and the much-quoted present arrangement was agreed upon.

At Cologne there was a similar contest, in which the society was victorious, and at the time of my latest information it had in its employ 70 or 80 physicians, including specialists—all except about 15 of whom had been imported by the society. Some of them were doctors that had previously been employed by the Leipsic society in its struggle with the local physicians, of which I have spoken. Three hundred physicians of Cologne refused to serve the societies. These gentlemen belong to the "Leipziger Verband," which is an association of 23,800 physicians, 95% of the profession in Germany, who have organized themselves under that name into what is frankly a trade union. The details of the methods of paying the physicians by the societies varies widely, but it is an interesting fact that in some instances the local organization of the physicians receives the total amount paid by the societies for medical service, and divides it among the practitioners in accordance with the amount of service they have given.

The average amount paid by the societies in Germany for medical service in 1910 was \$1.37 per person per annum.

These insurance societies in Germany also

furnish orthopedic appliances, false teeth, false eyes, spectacles, etc. They pay for the care of their members in hospitals and institutions, often less than the cost to those much-imposed-upon organizations.

The law allows and some of these societies have already established hospitals, convalescent homes, sanatoria, etc., of their own.

The enactment of laws for compulsory health insurance has spread rapidly over Europe. Between 1884 and 1913 the following countries had established such systems: Germany, Austria, Hungary, Luxemburg, Norway, Servia, Great Britain, Russia, Roumania, and the Netherlands, and from 30 to 33% of their population have been withdrawn from the domain of private practice.

Compulsory health insurance for certain groups of wage-earners has been adopted by Belgium, Italy, France and Spain, while laws for subsidized voluntary health insurance, covering a large proportion of the population, exist in Sweden, Denmark, Belgium and Switzerland.

No American State has to my knowledge enacted such a law, although in Massachusetts such action was strongly advocated by Governor McCall.

Massachusetts, in 1917, appointed a special Commission to consider the subject, which made its report to the Legislature this year. It did not advise the adoption of compulsory health insurance at the present time, but it did advise the enactment of three laws which are interesting from the point of view of this discussion.

The first recommendation was that a sum of money be appropriated by the General Court to be expended by the trustees of the General Insurance Garantie Fund for the purpose of further encouraging and promoting the organization of mutual benefit associations among the employees in industrial plants in Massachusetts, in order to afford them an opportunity to insure themselves against sickness and disability, at their option. This law is on its passage through the Legislature at this writing.

The formation and successful operation of such associations would be the first step towards compulsory health insurance, for the history of governments will show that whenever an association of philanthropic people, or an association for financial gain, has broken the

ground in a new direction in supplying a need of the community, the government will first regulate, and eventually step in and take over the work, to the practical exclusion of private effort. This has been the result in education, water supply, postal service, hospitals, and transportation, in many countries, and that the tendency is still active is shown in the agitation in this country that the Government take over the telegraph and telephone lines and public utilities.

The Commission on Social Insurance thus not only looks forward to compulsory health insurance, but advocates a still more direct assumption of the medical care of the community in another law which it proposes: An act entitled to provide free medical treatment for school children, which provides that such medical and surgical care shall consist of medical diagnosis and the medical and surgical treatment of the eyes, ears, noses, teeth, throats, lungs, posture and nervous systems of the pupils, the cost to be apportioned between the cities and towns and the Commonwealth, in such proportions as the General Court shall determine.

If the General Court should pass such a law, it is evident that in school children, with the single exception of the heart, private practice would be limited to the disorders of such organs as nature has placed below the diaphragm.

The third recommendation of this Commission was that the State Department of Health might provide laboratory and x-ray equipment for the out-patient departments of hospitals and dispensaries, under certain limitations, but specifies that the control of and the regulations in regard to the use of these appliances should remain in the hands of the authorities.

Those of my auditors who have patiently followed thus far, have seen a steady and purposeful extension of public service in medicine going on in this country and in Europe for a century. A social movement in a service so vital to the community, continued for so long, is, without doubt, destined to continue. When 30% of the community receive medical treatment free, or for a very small sum, there will undoubtedly arise a demand for the extension of the same system, or some modification of it, to the entire population. An extension of such service, with a demand by the people for medical care and treatment at a minimum cost, would result in medicine becoming more and

more a function of the State. In fact, the State already demands of every physician much service, in the way of notification of births, deaths, contagious diseases, venereal diseases, and cocaine and morphine addicts, and most of this service is now required in America without pay, although in England the physician is allowed 2s. 6d. for each notification filed.

The logical result of such a situation must be that all medical men will eventually become government officials.

That medical men are destined to become government employees may seem a prophecy, the fulfilment of which is far away in the future, but there are already portents in the sky. In England, under the stress of war, there has been a relocation of medical men in civil practice so that all districts may be served. In New Zealand, that laboratory for the working out of all sorts of socialistic experiments, the medical men themselves have asked the Government that the country be divided into districts, that a physician be assigned to each district, and that the Government guarantee the medical practitioners a certain minimum, but a living income; and I have, this spring, read in a newspaper despatch that the Prime Minister of England, Mr. Lloyd George, replied to a visiting delegation that after the war he would be willing to consider the "nationalization of medicine."

Government official salaries to employees are now, and always have been, regulated to an amount that is barely sufficient suitably to maintain the recipients in their station in life without the ability to accumulate savings for old age, which is, no doubt, the reason that there has arisen in Massachusetts, as elsewhere, a persistent demand for pensions upon retirement for teachers, firemen, policemen, clerks, and all classes of public employees.

When the great bulk of medical practitioners become comparatively poorly paid government officials, the great cost of a medical education, as compared with other professions, will bring a new factor into this problem.

The broadening of the field in medicine in the last quarter of a century has added to the expenditure, both of time and money, which is required of the student in medicine, as compared with other professions.

Many States now require that the physician to be licensed to practise medicine shall have

devoted six years to study, after leaving the high school, before he receives his medical degree, viz., two years of college and four in the medical school. That this requirement will soon be universal is assured, and to this there is no doubt that another year in a hospital internship, or its equivalent, will soon be added.

This is nearly twice the time required in other professions.

In law, in this State the student may get his degree in three years from the high school. This is true in most divinity schools. University schools of business administration often admit from the high school to a two or three years' course.

Architects, engineers and chemists receive their degrees from the Massachusetts Institute of Technology in four years from the high school.

In the actual expenditure of money for tuition, of all professions, medicine demands the highest fee.

At Harvard, in the Law School, Graduate School, School of Business Administration, etc., the fee is \$150, but in the Dental School it is \$200, and in the Medical School proper it is \$225, with a matriculation fee and numerous laboratory fees in addition.

These higher fees for medical tuition are fully justified. The cost of present-day medical education is appalling to the smaller universities of the country.

To cite the Harvard Medical School: The cost to the University of maintaining its Medical School last year was \$494,115.95. The School had 357 students, which was, roughly, \$1385 per student.

It is true that the School gave instruction in certain courses to 94 dental students, and to six students studying for the degree of Doctor of Public Health, but as the Dental School paid the Medical School only \$14,000 for their instruction, that fact did not very materially affect the cost per student to the Medical School.

The amount of time required, the cost of living during the student period, as well as the necessary tuition fees, are likely to increase in the future as they have already increased in the last generation, or longer; and if the rewards for the student in his lifelong practice are, by converting the practice of medicine into a governmental occupation, to be very moderate, will not the attractiveness of medicine as a

means of livelihood diminish, and will not the parents be apt to decide that a medical education is a poor investment of so much capital?

It would seem that such must be the natural result, and that the number of young men entering the profession would fall far short of the number necessary to care for the community.

If this should prove to be a correct estimate of the situation which would arise, I see but one solution of the problem, and that is, the Government will have to undertake the entire expense of the education of medical men, as it now does that of army and navy officers at West Point and Annapolis; pay them during their working days, and give them sufficient pensions after retirement to support them in old age. Nor is this solution as radical as it might seem at first thought. The Commonwealth of Massachusetts at the present time furnishes a free education to the members of one great profession, and does so for the same reasons that, in my opinion, will force the State to assume the cost of educating its medical men. I refer to the public school teachers, who are educated by the State without cost for tuition, books, etc., and with a nominal payment for board and rooms in our normal schools.

There will, of course, always be private practitioners of medicine, for men will arise in the ranks of the profession of such preëminent reputation and skill that people will always be willing to pay them abundantly for their advice and treatment.

These men, even though educated at government expense and assured of a livelihood, will resign from the public service, as great engineers, educated at West Point, leave the Army for higher remuneration, as directors of great works of civil construction, and as naval constructors leave the Navy to accept much higher salaries from rich ship-building corporations.

There will always exist in the community a group of well-to-do people, who will prefer to have free choice of their medical adviser, just as at the present time there is a considerable group of people who prefer to send their children to private schools, and, in my judgment, the group of people exclusively employing private medical practitioners in the future will prove to be about as large a proportion of the

entire community as the group which at the present time send their children to private schools.

This picture that I have drawn of the conditions of medical practice in the future is, in my opinion, a logical projection into the future of the lines of change in the methods of medical practice which have actually been adopted by the community and the profession in the last hundred years. These changes have been the result of an awakening of the public conscience as to the right of all citizens to have proper medical advice and attendance; to a constant tendency of the Government to regulate, control, and, in the end, supply all public service; to the fact that medical knowledge has become so broadened that it is impossible for any one man to be expert in all its branches, and thus has led the people to regard medical service as a service that no one man can fulfil, with the consequent loss of the sense of friendly protection and personal care which made the patient look upon his physician as a wise family friend.

The changes also have been largely due to the great aggregation of people in large commercial or manufacturing cities, where individual personal effort for the aid of one's neighbors seemed so inefficient that organized corporate effort appeared to be the only effective way in which to meet the problem, with the result that socialistic and impersonal ideals have usurped the places of the more personal and friendly ones of our forefathers.

None of these causes of change are likely to diminish as time goes on, therefore organized, systematized, efficient medical service is likely to be developed—with, alas! a little less of the personal human element in it.

The community, in its governmental, commercial, social and individual units, will, in the future, as it has in the past, need medical advice, and the learned men who give this advice, must be educated and supported by those who benefit by their skill, but the methods, both of education and payment, will not be those of the present day.

Physicians in the future will be just as eager, and perhaps even more so, to prevent disease and alleviate suffering, but that the conditions under which they do their work will change, radically change, seems inevitable.