

Address.

MEDICAL PROSPECTS.¹

BY GEORGE E. FRANCIS, M.D., WORCESTER.

MR. PRESIDENT AND FELLOWS OF THE MASSACHUSETTS MEDICAL SOCIETY: AS our society gathers for its first meeting in the twentieth century, the thoughts of all of us are naturally turned into one channel. A year ago we were led to survey the wonderful achievements of the century just ending; today brings the far different task of attempting to foresee what the future has in store for the profession of medicine.

I have not been so presumptuous as to attempt to predict the *scientific* advances which medicine is about to make; my purpose today is simply to note some conditions and tendencies which are now to be observed in the *practical* side of medicine, and to forecast, if may be, some of the changes which they will bring about.

The most obvious, and perhaps the most important new factor in medical life, is, of course, Specialism. I speak of it as new, because many of us remember the time when practically it was not, and have almost witnessed its birth and its growth. It is doubtful if in the year 1861 there was a single member of our society who limited his practice to any specialty except that relating to the eye. In the Harvard Medical School of that date every professor was to some extent a general practitioner, the one exception to this statement being the illustrious professor of anatomy. If Oliver Wendell Holmes had ever actively engaged in medical life we may be sure he would have shunned and scorned any appearance of putting a fence about the range of his studies or his work. In one of his latest books,² he makes a good deal of fun over some of the abuses of specialism; but were Dr. Holmes with us today, he would be among the first to give hearty and grateful recognition to the magnificent additions to our science which the workers in special lines have lately given, and still give, and very certainly will continue to give.

We have been speaking of specialism as an innovation, forgetting that it is but a revival from very ancient times. Baas, in his "History of Medicine," tells us that in Egypt, "according to the account of Herodotus, there were physicians (who were all priests) for every part of the body. This specialism is *per se* an evidence of a civilization of high development, indeed of one tending toward its downfall, and in Egypt it attained a perfection which our own system, with all its completeness, has not yet reached. We know that the sick were visited and treated at their homes by the physicians. The latter must first, however, be sent for to the president of the temple, who selected and dispatched to the patient the specialist best suited to his case."

It seems to be true that specialism is absolutely essential to progress in every department of hu-

¹ The annual discourse read before the Massachusetts Medical Society, June 12, 1901.

² Over the Tea Cups.

man thought and activity. As knowledge has broadened, it has become more and more impossible for a single brain to keep up in all, or in many, of the lines of advance, especially in science. Today we are leaving scientific progress out of the discussion, and are considering how the practical side of medicine is likely to be affected by such a new condition.

When specialism is applied to manufacture, it is termed "division of labor." It seems to be demonstrated that the best results at lowest cost are only to be had when each artisan and operative has become trained in a narrow specialty, so that he can do his own little range of work with the utmost rapidity and accuracy. The making of shoes is one of our great industries, and many of our people earn their living thereby. Each shoe is the final result of successive bits of labor by scores of specialists. There seems to be no doubt that this is the cheapest way to make good shoes. But among all the skilled workmen who combine to make the finished product, there is not one who is taught to make a whole shoe by his own labor. There seems to be no place for the cordwainer of former days.

Is there perchance a useful parable here?

All specialism, whether mental or manual, seems to narrow the range of one's powers. It is simple prudence, therefore, to study this possible danger threatening our profession, and to do what we can to counteract the injurious effects which are likely to attend the spread and sway of specialism. We cannot expect, even if any have the desire, to check this spread and sway; the new way is necessary; it is inevitable. By it alone can scientific progress be made. And yet it bears with it some dark and threatening shadows.

Imagine, if you please, a visit made about this time to his Alma Mater Medica, by R. Van Winkle, M.D., Harvard, 1861. Picture to yourself his amazement at the growth and development of the school he once knew so well. What, do you think, would be his predominant feeling? Not wonder at the growth; not admiration of the development; not envy of the superior advantages of every kind, though no doubt all these thoughts arise in turn; his final sentiment, if I mistake not, would be of pity for the unfortunate student of today, whose tasks have become so much more extensive and difficult.

The purpose of a good medical school is to fit each graduate thoroughly and completely for the successful practice of medicine; and to accomplish this result two distinct processes have to be carried on at the same time. Each pupil must be *educated*, in the strict sense of the word; that is to say, all his faculties of body and mind must be developed and trained, so that when he enters upon his life's work he can observe accurately, can compare things rightly, can reason and decide logically, and can dexterously carry out the details of treatment.

At the same time it is equally necessary that he be *informed*; that his memory be stored, crammed full, with facts of many kinds which

it is essential that he should retain, ready for instant use, through his whole professional life. These medical facts are not self-evident things; they must be learned laboriously, and laid away in the storehouse of the memory with care and system. Every school of applied or practical science is forced to keep in view this double object, of educating the faculties and of storing the memory with selected facts for future use.

Now, all the changes and improvements which have been made in the medical schools — the laboratory work, teaching in small sections, individual clinical training, and the rest — all these conspire to bring about this result among others: That from the hour of his matriculation until he receives the coveted parchment, the student is scarcely ever free from the close personal influence of *specialists*. All the instruction he receives which is fresh to him, not to be found in the textbooks, is from specialists. Every case which is in any way striking or unusual, is sure to be referred to some specialist for diagnosis and treatment. In passing we may observe how strongly all this is likely to bias the youthful mind and to foster the early choice of a specialty as a career.

Medical training on these lines is admirable from many points of view. It provides a teaching staff not only thoroughly well informed, but full of fresh enthusiasm and vitality. The pupil is inspired by the consciousness that he is in the very current of progress.

An oft-quoted maxim is to the effect that the ideal professional man should know all about one thing and something about a great many things. This is really a paraphrase of what has just been said, that the student in practical science must be educated and also informed. There is probably no better way of getting the education than by good advanced work in one, but only one, special line. We can appreciate how difficult are the problems which the heads of medical schools have to solve, in this matter of limiting judiciously the amount and variety of advanced special work done by undergraduates, and especially in properly guiding the choice of facts which are to be memorized.

There comes to mind a plaything of childish days, which we used to call the "dissected puzzle." A map or picture was pasted upon a thin piece of wood, which was then artfully cut up into a number of pieces of very irregular outline. We used to think it amusing to fit these parts together. In the medical schools we find the domain of medical knowledge divided up, more or less artificially, into many separate departments, which vary greatly in size and importance. The practical problem or task is to combine these parts into a complete, harmonious and useful whole.

The comparison is far from perfect, as we appreciate in a moment, and yet it may serve the present purpose. The various branches of medical instruction are not bounded by clean-cut lines of division; they overlap in many places; but this need not disturb the simile. The important dis-

tinctions are, that in the toy of our childhood the number of detached pieces was moderate, and each one by itself was not made attractive or interesting, except as it fitted its neighbors and helped make up a whole. In the medical school the divisions have already become a multitude, and each year witnesses further addition and subdivision. And all the while every endeavor is being made, by every instructor, to render each fragment so interesting in itself, that in the plentitude of attractive objects of study, few of the students are likely to keep in mind that the main object of the four years of hard work is not the microscopic study of some or all of the component parts, but that study of the separate departments is preliminary and subsidiary to the study of medicine as a whole, and man as a whole. Medicine, viewed as a science or as an art, is something far higher than a patchwork of its separate departments, precisely as man is far more than the joining together of a certain number of organs. To know the structure and the working of each detached organ and tissue of the body in health and disease is essential, but it is not the sum or the summit of medical knowledge. Nor is this a sufficient equipment for entering into practice. Nothing less is demanded than the further knowledge of the many obscure, complicated, and most important inter-relations between the component parts. With infinite regret we must recognize that to properly impart this sort of knowledge seems to become every year more nearly impossible, mainly, as I think, on account of the increasing numerical preponderance, in the teaching staff, of specialists over the men trained to view things broadly.

How is specialism likely to affect the established lines of medical life in the years which are before us? Many possibilities suggest themselves, of which the most startling is that the family doctor is doomed to practical extinction, soon to be sought for as a rarity in some remote or poverty-stricken region.

In large cities it is very obvious that the children in many wealthy families grow up with almost no experience of medical treatment save at the hands of specialists. It might be amusing to make a list of the various kinds of experts who have in turn looked after the health of a modern heir, combining to do the work which was not so badly done forty years ago by the one general practitioner, who sufficed a family in those days. This habit, or vice, of employing the services of specialists for even trifling and commonplace ailments, already somewhat established among the rich, is as usual filtering down the scale of income and getting some hold upon that large and fortunate portion of our people who possess neither poverty nor riches. Among them it seems likely to extend, until, as seems inevitable, it is found to be altogether too costly a luxury. Just what will happen then, is wrapped in impenetrable mystery.

It is needless to discuss the relations of the really poor, this class is now so largely treated at the free clinics and dispensaries, where specialism has its freest scope.

This serious question of the future of the general practitioner has been receiving a good deal of attention during the past year, and has been particularly well discussed in a recent paper by Professor Caillé.³ Himself an eminent specialist, though still somewhat engaged in general practice, he expresses without reserve his appreciation of the usefulness of the family doctor, and adds: "I firmly believe that the family practitioner is not doomed to become extinct, and that in due time the people will again elevate him to the position of trusted family counselor." This paper is very interesting, but the remedies which he suggests do not seem to me to reach the root of the disturbance. His article ends with these sentences: "In conclusion, I would venture to express the opinion that all medical men should start as general practitioners. If, for any reason whatsoever they find it advisable to practise a specialty, they will be more generously informed and better equipped in every way, by reason of years of general practice and experience. I predict that the successful general practitioner of the future will be a *diagnostician, sanitarian* and *minor surgeon*, and will develop into a valuable and conservative general consultant." As an ideal, this is sound and admirable; but I must declare my protest that under the conditions now visible, and those which we foresee to be probable, such a mode of evolution is quite impossible. For, in the first place, it appears to be clear that to the young people now in the medical schools general practice seems to offer no prizes, and that those who are possessed of the capacity, energy, ambition and persistence which will finally make them eminently useful, all these make early choice of a specialty as a career. And, secondly, if it be not true today, it will soon become a hard and obvious fact, that it is not possible to gradually shift from general practice into a specialty. A high wall already stands between the two fields, and a man must be on one side of it or the other; he can clear the boundary only by a leap. The family doctors who still survive are sufficiently aware of their own interests not to take the risk of allowing a paying patient to seek special treatment at the hands of any one who still takes general practice; the temptation to absorb that patient and his family is so strong that to resist it requires a keen sense of honor.

Is it at all remarkable that a specialty should now seem far more attractive to the young graduate than general practice? The inducements seem to be in every way superior; from the scientific as from the financial side the prospect is far more alluring, and it is an easy and safe prediction that for many years to come the cream of each graduating class will join the ranks of the specialists.

The general question must be followed a little farther. Assuming that the number of well-qualified general practitioners is to gradually diminish because the natural vacancies are not adequately filled by new recruits, what will follow? Is it

likely that the public, or the general medical profession, will be satisfied with the resulting situation? On the contrary, it seems clear to me that a well-defined and imperative demand would soon arise for what is to us almost a new kind of medical man.

According to our present ideas, all scientific medical men practically belong to one of the two great groups; they are in general practice, or they are specialists. Assuming that the number of general practitioners is gradually becoming smaller, and of less merit and distinction, and that before many years have passed the specialists will decidedly predominate, then it will become the custom for the public to go directly to some specialist for advice and treatment. This means that the specialist will be selected by the patient or by some non-medical friend. It needs very little experience of disease to appreciate that in multitudes of cases the laity will be unable to rightly decide which particular brand of specialism is required. Few of us have not felt perplexed on this point, in the presence of an obscure case, for we cannot satisfy ourselves as to the organ which is primarily or most at fault. In such a dilemma specialism does not meet the need, and we have been accustomed to ask counsel of men of the broadest possible knowledge and experience; first, we call upon some one of our neighbors, whose skill we know; in important cases, and as a final resort, we apply to men who have become noted as general consultants, who are often teachers of general or clinical medicine and visiting physicians in the wards of large hospitals. On reflection it will be found that these invaluable counselors have all had their training in the school of general practice; they have all been family doctors. If this training school falls into desuetude, then we must provide some other source of general consultants and clinicians. Patients must have them, if only to select specialists for them, as did the president of the temple in Egypt so long ago. Specialists will require them to guard against the errors inevitable to their own more narrow knowledge. Hospitals cannot do without them, if only to assign patients to the proper wards. Medical schools will need many of such men as professors and instructors, if the purpose holds of turning out really educated graduates. Medical science calls loudly for men of the broadest training, for it is only from such that we may hope to obtain the one most important improvement which our art now requires; namely, a great generalization. Let some further order be established in the vast mass of recorded facts, and both the study and the practice of our art would become far easier, more reasonable and more successful.

I hope to live long enough to see the establishment here of a higher medical degree, somewhat corresponding to that of M.D. in England, which shall be a guaranty of very high attainment in a broad range of study, and shall mark the general consultants and clinicians of the future. If it should follow, as in England, that the services

³ American Review of Reviews, April, 1901.

of such accomplished men and women shall be sought for ordinary attendance upon the families of those who wish the best attainable skill, and are willing to pay high fees therefor, what an upheaval shall we witness of some notions which prevail today! The family doctor will become a luxury which only the wealthy can afford!

The distinction drawn so strongly in England between the functions of a physician and a surgeon seems to us rather strange and perplexing; but in origin and theory the matter is simple and rather suggestive. The *surgeon* is nothing else than the *chirurgion*; and he, as the derivation of the word implies, was one whose occupation was a handicraft, or of that nature. Everything involving manual dexterity, from drawing a tooth or opening a vein, to a major amputation, was looked upon as handwork, and therefore on a much lower plane than the purely mental labor performed by a physician. Since most treatment involving manipulation is for lesions which can be seen or felt, everything on or near the surface of the body or its open cavities came to be considered as in the province of the surgeon. Judged by the ancient standard, it appears that most of the present specialties belong in the lower grade.

Few of us can recall the gradual change in the relation of dentistry to medicine. No doubt some of our oldest members remember when the only dentists were regular physicians; but for at least fifty years there has been so distinct a line of demarcation that we rarely think of dentistry as being included in the domain of medicine.

A very notable tendency of the times is toward increased stress of competition in our ranks, as in most other walks of life. No doubt this is going to increase; and indeed there is temptation to predict that it is likely to become a serious calamity before another generation has passed away. All the professions were becoming overcrowded, from causes which are obvious enough, even before the recent great disturbance in social conditions brought about by the growth of trusts and consolidations. The effect of competition in lowering fees and lessening incomes has long been felt and lamented in older communities in Europe, and sooner or later we shall have to face the same unfortunate state of affairs. A little careful study of some of the advertising pages at the back of the *London Lancet* or *British Medical Journal*, will show how pitifully small have become the fees which middle-class English people expect to pay to thoroughly educated medical men. And in almost every number of the same journals may be found letters describing some new club scheme for obtaining skilled advice at even lower rates.

No doubt there will still be room at the top, in the twentieth as in the earlier centuries. The recognized leaders and experts will continue to receive large fees, and many of them; but the rank and file of the profession seem destined to receive on the average a much smaller annual income. I fail to see how any action of ours can prevent or hinder the working of the inexorable

laws of nature; demand and supply are sure to settle this question in the end.

One other change of condition must not be overlooked, for it is likely to have very important effects upon the health of coming generations. I refer to the great modifications in the habits and in the physical and nervous constitutions of our patients, which the fast-increasing predominance of city life is bringing about. There is no time for discussion of this topic, and I can only say that adaptation seems to be a far more leisurely process than the recent and present rapid changes in environment; and that it is reasonable to expect that variation from the types we have considered normal is likely to increase both in frequency and in extent.

In a book once owned by every physician is to be found the history of a very ancient medical case; older probably than any other to which we have access. It tells us that a certain Syrian captain, who was a leper, made the journey to Samaria because he had heard that a great healer was to be found there; that he was directed by Elisha to wash seven times in the river Jordan; that with some reluctance he followed the advice and was healed. After more than twenty-five hundred years this narrative still offers much food for our thought.

It was not a mere coincidence that the healer was also a prophet; priests and prophets were the only healers at that time and place. All disease was then deemed to be owing to the anger of Deity, and to be cured only by supernatural means, through the mediation of the special servants of Deity or of the Temple. We read that "Naaman was wroth and went away and said, Behold, I thought, he will surely come out to me, and stand, and call upon the name of the Lord his God, and strike his hand over the place, and recover the leper." "And his servants came near, and spake unto him, and said, My father, if the prophet had bid thee do some great thing, wouldest thou not have done it? how much rather, when he saith to thee, Wash and be clean."

The evolution of the race has not yet lifted mankind out of the thought that recovery from disease is brought about by something more mysterious than the forces of nature. We find relics of this old belief everywhere; culture and education seem to affect it little; certainly they never quite wipe it out. The popular acceptance and approval of every wild new scheme for healing is usually in inverse proportion to the amount of common sense and truth on which the novelty is based.

These "little systems have their day,
They have their day, and cease to be,"

but the procession of them never pauses and never ceases. If ever medicine is accepted by the public as an exact science, with methods and results dependent only on natural laws, of course this relic of ancient superstition will cease to exist; but with it will vanish a trait of humanity which has been, and today is, far more powerful for good

than some of us are accustomed to think. I refer to the patient's personal faith in his doctor.

Of course, when any one of us considers his own relation to his patients, it is obvious enough that their confidence is solidly founded on merit; but if we take a broader view, embracing all the practitioners about us, I think we should agree that, in the case of many of them, there is no such basis of merit. And yet almost every one of these medical men and women, of every school and of no school,—of every degree of education and experience,—is possessed of clients who firmly believe that he is specially able to cure or relieve their ailments. Viewed in this general way, we must call this faith unreasoning, if not unreasonable; and yet upon it is founded one of our most effectual agents for good.

Every physician, without exception, helps his patients by the expectation of relief which his very presence brings; and most of us go further, and consciously or unconsciously use the very helpful power of direct suggestion, of a partially hypnotic character. It is curious to note that this faculty and habit of suggestion is the only feature which is common to all who attempt to heal the sick. When the last veil of mystery shall have been torn from our art by the advance of science, I fear that little will be left of our special power of suggestion, and that humanity will be much the poorer thereby.

We observe that the Syrian's leprosy was cured without the use of any drug. We may not all agree as to whether there is any visible tendency toward the disuse of medication; and certainly it would appear that the number of drugs in use or recommended for use, was never so great as now. On the other hand, we have learned that the virtues of much of the old *materia medica* were purely imaginary; while as to the value of the new synthetic compounds so pertinaciously thrust upon us, there appears to be widespread doubt. They are formidable weapons, indeed, but many of them have more than one cutting edge.

The growth of another doubt, of a more radical sort, is also to be noted—as to whether chronic organic disease is ever cured by drugs, if by cure we mean restoration to the normal state. Some form of compensation seems to be the extent of the benefit which is to be hoped in such conditions. This, at least, can be confidently affirmed: That in the chronic diseases which figure most largely in the bills of mortality, the use of drugs is decidedly on the wane.

If we are asked to name the specific whose power is most generally granted and least questioned, we should probably at once point to the control which quinine exercises against malaria; yet it seems exceedingly likely that the next century will see less and less use of this great remedy, simply because there will be less need of it—malaria is going to be prevented. Prevention is a watchword of great promise in the years which are before us; but the promise is to the community in general, and not to those whose incomes depend on the abundance of disease. Our pro-

fession prides itself on its constant and eager search for methods of preventing and diminishing disease, and we gain some public credit for our aims and achievements in that direction; but few seem to appreciate the full extent of our unselfishness, and that complete success means professional suicide. This sad result is not yet in sight, even of the prophetic eye we are using today.

Returning to the text from which we have wandered so far, we are struck by the statement that it was the little maid waiting on Naaman's wife who called attention to the skill or power of the healer. This little detail has a very modern and familiar sound.

We further read that the grateful Syrian attempted to reward his benefactor with gifts of value, but that the offer was refused. There is nothing modern about this statement. Even that new sect which boasts of its reversion to ancient modes of healing does not carry its reverence for antiquity to such an extreme; it demands the regular fees. Yet to find a modern analogue to the refusal of Elisha, we need only view some of our public and semipublic establishments for medical and surgical treatment. This very day, in almost any city in this State, any person, rich or poor, who is coming down with a fever, or needs a surgical operation, will be received into a city hospital, where he will get first-rate care and treatment. At his departure he will be asked to pay a proper price for his room, board and nursing, but for the professional services not a cent will be charged. What lesson is this likely to teach him and his friends, if not that the municipal supply of medical skill is an excellent and most economical idea, which might be carried further to great advantage.

This practice seems to me altogether wrong, not simply because it diverts much money from the pockets of doctors who deserve and need it, but because it so forcibly teaches a lesson in applied socialism which is very dangerous to the financial future of our guild.

Our text might easily guide us into many other lines of thought, but I mercifully refrain from further turning of the hour-glass, and will simply ask you to observe that this old story of the healing of the leper has long been known to the whole civilized world. Once, and not so long ago, this was a distinction almost unique; today every important medical case or discovery is promptly carried to the remotest regions of our globe. On this opening year of the twentieth century let us not withhold the tribute of gratitude and admiration due to the medical press, and particularly to medical journalism. Not all of these journals are admirable, and not all are truly scientific; perhaps in some might be suspected a slight bias from commercialism; but as a whole they are doing wonderfully good and useful work, and are to be ranked among the great improvements of modern times. Not all of us are called upon to write papers for them, but every one of us should look upon it as a duty, as well as a privilege, to subscribe to at least one good medical journal.

After all our searching and discussing, the summing up shows but a brief list of plausible predictions. That specialism will increase, and competition become more fierce, we may feel as confident as of any future event. That medical treatment will become more scientific in its basis and methods; that disease will be more effectively prevented; that hygiene agents will largely supplant drugs—all these seem to be among the strong probabilities. Very probably the family doctor is about to be eclipsed for a time; perhaps to reappear later in a more glorified aspect.

The darkest cloud which rests upon our future seems to arise from the combined forces of greatly increased competition and the growth of socialistic and co-operative ideas.

We must not forget that the past is the only test by which we judge the future. In his great vision, Dante observed that all the prophets had their heads turned backward. The most accurate inferences we can draw from experience are liable, indeed are almost certain, to be deranged by the entrance of new and unexpected factors. Let us therefore face the future with the hope and confidence which befit men who believe that creation is not without a plan, and that the grand trend of evolution is toward better things.

"New times demand new measures and new men;
The world advances, and in time outgrows
The laws that in our fathers' days were best."

Original Article.

A CITY ISOLATION HOSPITAL.¹

BY MAY SALONA HOLMES, M.D., WORCESTER,
Superintendent and Resident Physician.

It is unfortunate that certain infectious diseases are the unwelcome but ever-present guests of all organized communities today. Therefore it has become the duty of the boards of health of these communities to provide for their isolation. If there could be thorough co-operation of the citizens with the boards of health to this end, no doubt these diseases could be wiped out of existence in a comparatively short time. It is needless to say, however, that we cannot hope for this happy result until the millenium comes; for it is inevitable that many mild and atypical cases will not be recognized, that many will be wilfully concealed, and that, owing to the popular prejudice to hospitals of this kind, commonly called pesthouses, many more will refuse the isolation provided.

There has been in recent years considerable progress made by the municipal control of infectious diseases, which must inevitably have had its effect upon their spread. Owing to this recognition of the constant menace to life from disease in its cities, the Massachusetts Legislature in June, 1894, passed the following act:

SECTION 1. In any city in which no suitable hospital accommodations have been provided for the care and

¹ Read before the Massachusetts Association of Boards of Health.

treatment of persons suffering from contagious diseases dangerous to the public health, the Board of Health of such city may address a communication to the Mayor thereof, stating that, in the opinion of said Board, the safety of the inhabitants of the city demands that suitable hospital accommodations should be provided for the reception and treatment of persons suffering from such diseases, other than smallpox and those of a venereal nature. The Mayor shall, forthwith, transmit such communication to the City Council, and the City Council shall forthwith order such hospital accommodations to be provided, and shall make the necessary appropriations therefor.

SEC. 2. Every city in which hospital accommodations have been provided, in accordance with the provisions of this act, shall make an annual appropriation for the maintenance of such hospital accommodations, and said appropriation shall be expended under the direction of the Board of Health, unless otherwise ordered by the City Government.

In accordance with this act the Board of Health of Worcester sent to the mayor of this city, in January, 1895, a request that early provision be made for such a hospital. An appropriation of \$30,000 was accordingly set aside, the plans submitted and the erection of the hospital begun that same year. The site obtained for the hospital was a most fortunate one. Few cities are able to furnish a location so admirable in such a variety of ways. The distance from the center of the city is not great, and yet it is practically in the country, with an apple orchard in front and woods in the rear. There is plenty of land to cultivate for garden supplies. The patients have play-ground space a sufficiently safe distance from neighbors. The buildings are on the slope of a hill, of good elevation, with a southern exposure. Sunlight and the circulation of fresh air are unobstructed.

The plans of the buildings were made by Fuller, Delano and Frost of this city. There are four separate buildings arranged in a hollow square. The appropriation did not permit of making preparation for but two diseases. Scarlet fever and diphtheria were, therefore, selected as the two most common and most malignant of the infectious diseases, and, hence, the greatest menace to the welfare of the city. There has been really great demand made upon us to isolate measles also, but the City Government has not been able as yet to add to our appropriation a sufficient amount for that purpose.

The hospital, as at first erected, consists of an administration building; forty feet to each side of this, and somewhat to the rear, are the ward buildings, the one on the east for diphtheria and the one on the west for scarlet fever. These three buildings are connected by both over and under-ground corridors. In the rear is a separate building in which are the ward laundry, the sterilizing plant, a morgue and chapel. The wards are exactly alike in plan. Each provides two rooms which can accommodate from 12 to 16 patients, three private rooms and a nurses' serving kitchen. There are closets and bath rooms at the extreme ends of each ward building, separated from them by cross corridors for ventilation. With six beds in each ward, 80 cubic