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THE HOSPITAL WORLD

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The Canadian Hospital Association

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MEDICAL COUNCIL OF CANADA

The place and date of the Next Examinations will be fixed when the Council meets at Ottawa on the 16th of June next. In all probability they will be held in October. The Forms of Certificates necessary to qualify can be obtained by applying to the Registrar,

DR. R. W. Powell,
180 Cooper St., Ottawa.

The Registrar is also prepared at any time to furnish the necessary forms and details of requirements for registration under the Ten-Year Clause.

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The Hospital World

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Vol. V. TORONTO, MAY, 1914 No. 5

Editorials

NEWER IDEAS IN HOSPITAL CONSTRUCTION

LIKE everything else in this progressive age, hospital construction is certainly making some advance, both in theory and in practice. Two most important changes at present are being considered in regard to the number of beds in any one ward or room, and the number of beds considered necessary for any given population.

Five years ago in cities of over 100,000, five hospital beds to every 1,000 inhabitants was thought to be an adequate provision. But now this is thought too small. In industrial centres, and in places where social insurance is established, more hospital accommodation is required. In smaller cities four or five hospital beds are needed for every 1,000 inhabitants, and in towns about three or four beds for the same number of people.

As to the number of beds in a ward, the German authorities recommend not more than 12, and French experts say 6 or even 4. In new hospitals many single wards are provided in connection with the large hospital wards, both in Continental and in English-speaking countries.

There can be but little doubt that both these changes mark an advance in professional and public opinion as to the use of hospitals.

HOSPITALS AND MEDICAL SCHOOLS

That very vital problem, the relation of the medical school to the hospital, is solved at present in almost as many ways as there are varieties of school and hospital government.

There are hospitals controlled, if not owned, by universities or their medical schools, and if these are situated in large cities they are a most valuable asset. But where the school is in a small university town, the hospital so attached does not furnish the requisite clinical material either in number or variety. It is

generally agreed that the large city hospital, municipal or philanthropic, affords the best centre for clinical education; but in how far it would be to the greater advantage of such an institution to be placed altogether under the control of a medical college faculty is a debatable question.

The generally recognized need of a continuous final year of practical hospital work, as well as practical clinical work for the third and fourth year student, is to-day pressing the medical college into realization of its dependence upon a large and well-equipped hospital, and the advantage of owning, or at least controlling, the same. The measure of control is the crux of the present situation.

Flexner says that the medical school should bear exactly the same relation to the hospital that it bears to the various other school laboratories, such as those of physiology, bacteriology, anatomy, etc. But as Prof. Dodson recently pointed out there are very important differences between the hospital viewed as a laboratory and the above named departments. The latter serve exclusively for teaching and research, and there is no limit to the use of the material for this purpose. But the hospital is first a place for the cure and care of sick humanity. The material in this laboratory is sacred. It is there first to be "served," to be ministered to by the best medical knowledge. It may be "used" only in as far as the pathological condition and its treatment may yield instruction.

It is obvious, therefore, that the hospital, while constituting an important clinical laboratory, must bear a different and higher relation to the medical school than that of the other departments. Otherwise, if the status defined by Flexner was generally accepted and adopted, the "clinical laboratory" of the college would soon lack material. For while there is unanimity of opinion among those best qualified to know, that the teaching hospital, because of its unceasing stimulus, does best work for the patient, there is the instinctive prejudice of the lay public against being made a subject of demonstration, and always a fear that medical zeal may outstrip discretion. It is undeniable that the average adult individual objects to being viewed as "clinical material" for educational and scientific purposes; and the fact that a hospital is instituted and controlled chiefly for this end must militate against its success.

A few years ago some authorities advocated that the medical school and the hospital should be integral parts of a single corporation, with a joint treasury. Others favored a German practice in which the various clinics were organized as separate entities, each with its own budget, and having full control in its own department, even to the admitting of patients, the purchase and control of supplies, etc.

The tendency of to-day is to consider that the maintenance of a hospital, with all the economic service implied, is not the function of a medical school, and is often a financial and administrative burden to the college faculty. The hospital is primarily for the

care of the sick, and therefore its maintenance and control belong rightly to the department of civics or philanthropy.

The greatest medical schools of Europe do not as a rule own and maintain hospitals. They use the state or municipal hospital. And this system undoubtedly best applies to the hospitals of this continent. The medical school must find its clinical resources by affiliation with the larger hospitals and the utilization of the smaller ones as far as possible. The financial arrangement being made according to local or individual conditions. A measure of friction cannot always be avoided in this as in any other combination, but it may be reduced to a minimum, and it is more likely to occur between the school services than between the school and hospital authorities.

Where each hospital is founded and working under different conditions, municipal, charitable, private, and under various forms of government, no one basis of affiliation can be formulated as workable. Medical control should centre chiefly with the school faculty. Administrative and financial control should remain largely with the hospital board. Details in each case must be worked out to suit conditions. But the two bodies should and can work in harmony for the best interests of patients and pupils.

ANOTHER ADVANCE STEP

In his very valuable little book "The Mental Symptoms of Brain Disease" Dr. Hollander has gathered by detailed statistics a tremendous amount of evidence proving that the cure of criminal impulse, when due to brain irritation or disease, is fairly certain; moreover, that much of the said impulse is due to physical causes. "And if this be so," he says, "It is not going too far to assert that even the ordinary habitual criminal, who defies all moral treatment and the severest of punishments, may one day be successfully treated by a surgical operation."

The number of verified cases of such successful operation, reported in reputable medical journals, at intervals becoming more and more frequent, must be considered sufficient evidence "that crime is not always the outcome of wickedness, but often due to disease of the brain, and that therefore the medical and psychological expert should be called upon in all doubtful cases for a diagnosis."

Practically the new criminology admits that a law breaker may be a sick man physically or mentally, and in such instance is to be treated in a hospital rather than a prison.

The Municipal Court of Boston has been the first criminal court in the United States to recognize this fact, and has recently appointed a trained alienist and psychologist as a member of its official staff. Dr. V. B. Anderson, the appointee, has been less than six months in office, but his study of adult delinquents

that appear before the court confirms the new gospel that expert medical treatment is often more needed than a penal sentence. Certainly the laws do not allow the Court a wide range in treatment, but the medical study of each delinquent brings vastly more judicious sentence. Dr. Anderson applies normal capacity tests to the delinquents referred to him, in search of any particular mental defect that may account for the lawless conduct or deed. He has a conference with each offender and, as far as possible, secures his history—his genealogy, his environment and manner of life. When the case is remedial, he calls in the aid of the court's probation officers, and the relatives, to help the "second chance" sentence to a successful issue. And, where remedial work is impossible, he helps to turn the offender to the appropriate institution—home for the feeble-minded, the alcoholic, epileptic, or psychopathic hospital. In fact, beyond the first application of expert knowledge by diagnosis, Dr. Anderson's work is largely that of the medical-social worker,—one attached to the criminal court, instead of to the hospital.

The criminal judge in the court room, the physician in the hospital out-patient department—only these realize to the full the utter futility, often the unreasoning cruelty, of the jail sentence and the drug prescription. They know that the cure lies outside these.

Boston Municipal Court has made the first advance, but other courts will follow, and the time will soon come when every arrested law breaker will be

studied, medically, to discover the real sources of his conduct, and, as far as possible, to remove them, by education, direction, or restraint.

To what extent the courts have power to order a surgical operation is not yet defined. There is at least one instance of such authority being exercised by an Illinois court. But they may at least be able to make it an alternative in instances where the expert is fairly assured that the cause of the lawless conduct is physical and remedial.

Most of the work hitherto done in connection with delinquents has been altogether from the social side. The appointment of Dr. Anderson places emphasis upon the medical side first, and out of it a widely directed sociological work. It is in harmony with advanced knowledge concerning the criminal, and is a great step toward the prevention and cure of much criminal impulse.

SIDE WARDS

As a part of the ward unit, modern hospitals are providing small side wards to accommodate from twenty to twenty-five per cent. of the patients admitted to the ward unit.

The new Rigs Hospital, Copenhagen, divides its general ward into several compartments which afford a considerable degree of privacy to the patients and permits the segregation of cases, which is so highly desirable.

Given a unit in which there may be several convalescents, and where others are admitted—one, perhaps, a phthisical patient with typhoid, one with malodorous bronchiectasis, a case of pneumonia, a delirious typhoid, a case of anemia, a neurasthenic, a Bright's case, a diabetic—how shall these be best distributed in the ward unit?

The admitting officer would seek to keep the malodorous case in a separate room or on the verandah. The pneumonic, the tubercular patient, and the one with anemia would go on the balcony. The kidney case and the diabetic might go together in a two-bed room, the temperature of which is higher than that maintained in the general ward. The delirious typhoid should be placed in the one-bed ward with window bars, which when not needed may be pushed directly through the side casings of the window, thus being concealed when the ward is used for non-mental cases.

A single bed ward should be reserved for the case of sore throat, until it is determined whether it is infectious or not. A day room should be provided for the convalescents, together with a roof garden or balcony quite separate from the one in use by the bed cases referred to above.

These side wards should each be provided with lavatories, and with hot and cold water. They should be, of course, well lighted and ventilated, and made as convenient as possible for the nurses—the night nurses especially. These three or four side wards are preferably placed at the near end of the

ward unit, and are generally situated on one side of the ward corridor.

Another use that may be made of a side ward is to administer certain forms of treatment which cannot be very well carried out in a general ward—in the presence of other patients. Such a room also is desirable for certain clinics, which it is better not to hold in the open ward.

There is point in the arguments advanced by certain recent authors when they recommend the four bed and six bed ward for general use. In such case the necessity for side wards is not so urgent.

THE HOSPITAL VERSUS THE HOME

Two or three enthusiastic doctors in a community, urban or rural, feel the need of a hospital—particularly for their surgical cases. A well equipped modern hospital enables them to serve their patients very much more efficiently than they can serve them in the home. The hospital has its operating room, with its sterilizers and other equipment; its internes, nurses and orderlies; its dispensary and special equipment of antidotes, stimulants, etc., for emergency. So, the hard worked surgeon is able to unload much of his responsibility upon competent shoulders, and feel that his patient stands a better chance of recovery than if he were at home.

From the home standpoint also, how great the advantage.

The housing and the expense of a trained nurse, the improvisation and equipment of an operating room under absolutely aseptic conditions, the nervous strain of the household, with its unfavorable psychologic reaction,—these are some of the conditions that make the hospital in a small community a providence to the people.

So the hospital is welcomed by both the doctor and the people.

In the small town all the reputable doctors go on the staff and look after their own patients. Poverty is rare, and consequently there are few, if any, non-paying patients.

But in the larger hospitals with a free service or public ward service, where free patients and those paying a modicum of their maintenance are warded together, there arises the necessity of the appointment of the requisite number of medical men to properly care for these sick folk. For this service in a hospital with a medical school (university or otherwise) attached, the Trustee Board should secure the services of the respective heads of departments in the university medical faculty. In other cities with no medical schools, good, live, scientifically trained men should be secured, who are willing to give a good share of their time to the care of their patients, to the study of the diseases from which they are suffering, and to the reporting of the history of these cases for the hospital archives or for publication.

Too often have the hospitals of this country been obliged, for the sake of maintenance, to take on the

popular men of the community who are able to fill the private wards, rather than the scientific workers who love study and investigation more than they do general practice—who are content with a living and the opportunity for work.

One of the leading German medical authorities has an income of less than $400 per year! Many of the best German investigators are satisfied to plod for years on a problem, without asking remuneration.

One of our prominent authorities hopes the time will soon come when each community hospital will have a consultant physician who will give his whole time to the hospital and to consultation work, and thus make the institution a centre for special medical study and research.

Original Contributions

WHAT COLOR SCHEMES SHOULD BE USED IN HOSPITAL WARDS AND ROOMS AND THE REASON WHY*

By Wayne Smith, M.D.,
Late Superintendent City Hospital, St. Louis, Mo.

In a report made December 2, 1907, by a committee of oculists and electricians on artificial lighting and color schemes of school buildings in the city of Boston, it is interesting to note that after careful study of this problem for a period of six months, in which all the schools were visited, thoroughly studied the literature, which is very meagre, and consulted engineers, they made three suggestions:

1. That shades of green and buff be adopted as standard colors for school rooms.

2. In considering the color of walls, the daylight illumination must be taken into account; for bright sunny rooms a light green is the best color.

3. For dark rooms, a light buff and all ceilings slightly tinted.

It seems strange that very little attention has been paid to this important subject by hospital architects and superintendents, I find no mention of color schemes for hospital wards and rooms in any writings in hospital literature.

If it is desirable for physiological reasons to have school rooms tinted green, why should it not also be desirable for hospital wards and rooms which are occupied twenty-four hours out of the twenty-four, when schools are occupied usually from 9 a.m. to 3.30 p.m.

We all understand school children are studying approximately four hours a day, and that prominent oculists and engineers have advised green tints and green shades as the most restful and least harmful for children's eyes in the study room.

Should we not select the same scheme of colors for hospitals?

* Read at the meeting of the Canadian Hospital Association, Toronto.

Should we not preserve our nurses' eyes and our patients' eyes and give the same restful colors?

We should warm up and use color, flat ornament, scraffeto, anything sanitary, any physiological color, as long as it distracts a patient.

Every one knows that very bright light causes a destruction of the visual substance in the retina, that if the eye is exposed any length of time to white light, strong electric light, blindness is the result.

In our operating rooms, which are usually painted brilliantly white with zinc and enamel, can our surgeons do the best work? Is not the reflected white light injurious and fatiguing?

Does bright light cause irritability of the doctor, nurse and patient? We know positively it is injurious to the retina and optic nerves. We also know the eyes become fatigued because the breaking down of the visual purple in the retina is far more rapid than the building up process.

Schafer tells us that in a living frog ten minutes' exposure to strong sunlight is only necessary for complete bleaching of the visual purple, while it takes two hours to regenerate; in a warm-blooded animal bleaching is far more rapid, according to Kuhne sixty times more rapid than in the frog.

This is evidence enough to show bright light, sunlight and bright sunlight reflected from snow are injurious to the eye.

In Dr. Harrington's hygiene, he states that direct sunlight is one of the most important disinfectants known. It retards the growth of organisms and after a varying period of time will cause the death of a number of important organisms; it destroys the vitality of a number of important bacteria, including some of the most highly resistant.

Geisler found that this action of sunlight is chemical, the ultra violet rays being endowed with the great power to destroy. Hence it must be the blue-violet and ultra-violet rays of white light that damage our eyesight and cause irritability to the whole nervous sympathetic system.

Shall our wards be extremely light, or shall the light and color scheme be subdued?

It will be interesting to note the fusion of color sensations by using cards with small discs of various colors and a stereop-

ticon. It is especially interesting to note the color which abounds throughout all Nature is the selective color of the retina, which causes the eye to be at complete rest, and that color is a light olive green which will be noticed especially on the card with the two large squares of yellow and green.

The original experiments, "The Cortical Fusion of Color Sensations," were done by Dr. Charles H. Williams, of Boston. Dr. Williams used the red and green. He found that when a red and green of about the same saturation were thus shown, as soon as the two colored areas entirely overlapped, the red disappeared and the disc appeared as a green slightly modified in shade, but the green always predominated, changing sometimes back to red but finally to green.

Dr. Williams said, "The practical application of this matter, so far as it relates to green and red signal lights in railroading or transit problems, where signal lights are used," is that such lights should not be placed too near together, for there is always a chance even at a considerable distance that a green signal may drown a red danger signal and cause an accident.

Dr. A. E. Ewing, of St. Louis, has performed these experiments with many colors, using different combinations of colors one with each other, then finally with green. The green always predominated and the color seems to be the natural selection of the retina and brings the eyes to absolute rest and ease.

I have prepared thirty-seven cards and ask that this interesting experiment be tried by all.

To my mind, a green tint has a further practical field than in railroading, and that is in hospital color schemes, especially in our psychopathic wards and operating rooms.

WHAT A LADY SUPERINTENDENT SHOULD KNOW ABOUT HOSPITAL PLANNING AND CONSTRUCTION*

By Miss Minnie Goodnow, R.N.

Assuming that the hospital in question is not only to be planned, but also to be built and used, the lay superintendent should know many things about the subject. It is not too much to say that she should know in a general way the fundamentals of most parts of the building. Planning buildings is not necessarily more difficult than planning clothes, nor is a knowledge of plumbing and painting harder to acquire than a knowledge of surgical technique. It takes the same kind of brains to detect quality in brick as in silk, even though brick be masculine and silk feminine.

Those of us who, though women, are hospital superintendents, find knowledge of buildings a great convenience, not to say a necessity. Without some knowledge of construction and methods of work we cannot take proper care of our buildings, nor know whether a bill for repairs is correct. There is no reason why we should not all acquire some of this sort of knowledge, make our work easier and more efficient, and be ready for the time when we shall help with a new building.

A woman may become familiar with buildings by exactly the same method that a man does, chiefly by keeping her eyes open and by asking questions, also to some extent by reading books and articles.

The lady superintendent, because she has been a nurse, and come close to the patient, has therefore learned in a measure to share his view and to know what is essential for his comfort and well-being. She is much more likely than is the robust business man or the healthy club woman who may happen to be on the Hospital Board to know just what will make sick persons happy and aid them in their recovery. Because she knows these details, she should try to carry that knowledge a little

*Read at the meeting of the Canadian Hospital Association, Toronto.

further, learning how comfort may be had and discomforts avoided. Since noise, dirt and discomfort are bad for sick people, the superintendent of a hospital should know what causes noise, dirt or discomfort, how to stop it and how to keep it stopped. Nearly all such matters originate in the setting, arrangement or construction of the building itself.

When one begins to think of a new hospital building, the first question to be settled is "where"? If an entirely new site is to be chosen, one should consider its present and possible surroundings, one should look for sunshine and air, and for freedom from smoke and dust. Trolley cars, trains, stone pavements, factories and schools should be beyond speaking distance. Consider the convenience of the patients' relatives, and forget not to make provision for the convalescent, but remember that the sick patient is the one primarily for whom this hospital is to be built, and that his requirements take precedence of all others. Quiet, fresh air and sunshine are the greatest of these requirements; therefore see that they are secured by the proper selection of the site and by correct orientation of the building.

The lady superintendent may well leave all discussion of styles of architecture to the Building Committee, but it is perfectly allowable for her to confer with the architect and to discover whether a few thousands of dollars can be saved from the exterior decoration and expended where it will be of more value to the patient. The citizens and the architect can be trusted to see that the outside does them credit, but neither the average citizen nor the average architect know much of what ought to go inside a hospital. The nurse-superintendent does know this part, and should help with it. Sir Henry Burdett is quoted as saying "When constructing or altering a hospital, the great need is to have a consultation between the architect and those who are called upon to work in the hospital." Comment upon this straightforward statement is unnecessary.

Very early in the discussion of any building comes up the matter of economy. We women feel this to be a distinctly feminine subject, yet we can learn much if we get the masculine viewpoint in regard to it. Women, and hospital committees,

tend to be penny wise and pound foolish, but when the matter in hand is so important and permanent as a building, we should hesitate to yield to this tendency.

There are three prime considerations in economical building: *initial cost, length of service and upkeep.* To the Building Committee, first cost is apt to be all-important; to the superintendent, the upkeep; while to the average American, length of service is a negligible quantity. There is also the secondary consideration of beauty, or acceptability, and in a few instances this becomes primary.

It is something of a task to get the correct balance among these considerations and to determine in any given instance which one is chief. Take as an illustration the matter of floors for patients' rooms and wards. Granolithic floors cost considerable, last for a long time, cost little for upkeep; they are fireproof but noisy, are easy to clean but crack badly, are ugly and hard on the nurses' feet. Cork carpet is rather expensive, wears fairly well, costs but little to maintain; is noiseless and soft, but ugly and somewhat absorbent. Wood floors wear fairly well, cost a great deal to maintain in good condition; are unsanitary, none too easy to clean, but are pleasing to walk on (if not too slippery), beautiful and homelike in appearance. Lineoleum cemented down is moderately expensive, wears excellently, costs little for upkeep, has no cracks, is easy to clean, is quiet, comfortable to the feet, may be had in all colors or in patterns. Each case must be argued upon its own merits, and the lady superintendent is the one of all others to decide which argument is the more weighty.

The woman superintendent may well interest herself in what the builders call "inside finish," *i.e.,* door and window casings, baseboards, doors, etc. She should know about them in order that she may as far as possible eliminate them. With modern methods of construction there is no need for door or window casings, the baseboard may be flush with the plaster (which to a woman's mind means practically non-existent), transoms and transom bars with their dust-collecting ledges may be left out, and doors can be made with no panels at all. Think of the hours of cleaning saved by these modifications and then

insist that your Board spend the small additional amount which will be required for them. If, besides, you can induce your architect to give you windows which swing or turn so as to be easily washed, you may save the wages of one or two maids as long as the hospital stands.

One must be careful in deciding upon economy to avoid devices which are apparently good, but which are merely fads. Try to judge new things from the standpoint of the nurse or the servant. Are their merits obvious? Can they be readily understood? Can they be misused? What will they be like after five years of use? The answers to these questions will be illuminating.

We do not always understand that the size of a building can be influenced, and therefore the expense. In figuring costs, architects estimate buildings by the cubic foot. The laity sometimes forget that every bit of brick, stone, mortar, or any other building material must be paid for, so that space which is wasted costs just as much as space which is utilized. Have an eye then for any wasted room in your building, and see that every bit of floor space is used for something. This does not mean crowding, since light and air are requisites, but it does mean using everything to its best advantage. Abnormally high ceilings waste space, since air which is more than eleven or twelve feet above the floor is of no use to anyone. In a hospital costing from 23 to 30 cents per cubic foot a ceiling even a foot higher than is necessary wastes quite a little money. Cut out the waste floor space and the abnormally high ceilings, and you have many dollars which can be spent for really needed things.

It may be noted that many-storied buildings, up to a certain limit, cost less in proportion than low ones. A building must have a roof and a foundation no matter how high it is, nor how low, and while there must be thickening of foundations and walls for several stories, the cost is not in proportion. This matter becomes a consideration in deciding whether the hospital shall be a block or a pavilion type, though amount of land, climate, class of cases, ease of administration, etc., must be thought of.

Looking at the matter somewhat in detail, remember (*a*) Do not crowd the wards. Allow about 100 square feet of floor

space to each patient, never less than 85. (*b*) Do not make private rooms too spacious. There is a growing demand for moderate-priced private rooms, and it is the expensive ones which stand vacant and bring you no income. (*c*) Allow for wide corridors, with ample room to turn a bed or stretcher, to provide currents of air in warm weather and light at all times. Eight feet in width is usually correct, rarely seven, almost never less. (*d*) Allow plenty of space for the utilities, serving kitchens, sink rooms, toilets, bath, linen, storage, duty or medicine room, surgical dressing room off wards, etc. These should occupy 25 per cent. of the entire space.

When you have settled upon the site, orientation, kind and style of building, and material, it is time to begin upon the actual plan. Present your architect with a list of the things which you *must* have, something as follows:

Twelve private rooms.
One six-bed ward for men.
One eight-bed ward for women (or two four-bed wards).
One six-bed ward for children.
Isolation room off each ward.
Porch for each ward.
Porch for private patients.
Ample utilities (naming them in detail).
Store closet on each floor.
Broom closet on each floor.
Clothing room for ward patients.
Separate toilet for nurses, and so on.

You can at the same time save his time and yours if you specify the things which are most important, such as:

Sink rooms and serving kitchens must be near patients.

Rooms containing plumbing fixtures must not be next those containing patients.

Nurses' stations must not be opposite to or near doors of rooms of wards.

Elevators and stairways must be enclosed or in a separate hall.

Rooms must be wide enough to place a bed crosswise.

There must be porches enough to accommodate at least half the patients at one time, part of them in bed.

When you get the first plans from the architect, go over them first for general arrangement, then room by room for details. Look out for wasted space. Question any room which seems too long for its width, as such rooms are pretty sure to be inconvenient. See that sink rooms and serving kitchens are large enough and approach a square shape; never accept a very narrow sink room or serving kitchen, no matter what its length or amount of floor space. See that porches have not been placed so as to darken rooms. See that there are doors enough to shut off noises. See that pan racks, slop sinks, hoppers, and such things are kept out of corners or closets and that the rooms containing them are well lighted. See that all odd-shaped or crooked corners are eliminated, and that there are no passages leading to rooms or wards which will not take a stretcher with ease. While you are looking for these things you will probably find a number of others.

Then, tape line in hand, picture a pupil nurse as she goes about her morning work, and measure upon the plan her trail. See if it cannot be shortened. Imagine the night nurse at a busy season and measure her trail during her last two hours on duty. Try to shorten that. These two pastimes may suggest some pretty radical changes in the plans. Do not be afraid of changes while the thing is on paper. It is after the bricklayers and carpenters get to work that changes cost money.

Pay some attention to the plumbing at this stage. Remember that every plumbing fixture has supply and waste pipes, that these pipes must lead somewhere, and that every foot of pipe costs something. Therefore have the fixtures one above another in the various stories where it is possible, not scattered. Find out what type of fixture is to be used in each place. The ordinary house fixtures, be they ever so good, are usually unsuited to a hospital. Pay particular attention to the fixtures which are in most constant use, such as slop sinks, surgeons' and nurses' scrub-up sinks, etc., and see that these are of proper design as well as being correctly placed. If the wrong things get into these places (and few architects or plumbers know what the right things are) endless inconvenience and exasperation result.

Before your architect completes his plans, spend some time in imagining the equipment of the building. It is just as well to be sure that each private room has two places for a bed, that a dresser, a rocker and a straight chair will go into each, and that the doors to hall and closet may be opened wide without moving the furniture. If the windows and the beds in the wards do not fit each other, or there is no place to put the wheel chairs, now is the time to mention it.

But the so-called furniture is the least of the problems of equipment. The fixed pieces, the things which we accept as matters of course, are the troublesome ones. Fixed equipment nearly always has water, gas or steam pipes or electric wires connected with it, uninteresting but necessary arrangements. In any building these pipes and wires should be put in before the floors and partitions, and in a modern fireproof structure it is imperative, as placing them afterwards means unsightly work and much expense. There is no reason for delaying to plan equipment which we know will be needed. There are urgent reasons for getting at it early.

If there be a steam laundry, large or small, steam supply and return pipes, water and waste pipes, and electric wires for motors must be provided and brought through walls and floors at the proper places. If the kitchen range is to burn gas, if the nurses are to be able to boil instruments or heat a cup of broth, gas pipes must be got to the right place, and someone must designate the place. If there are to be steam cookers in the kitchen, or a dish-washing machine, or a coffee urn, or a warming closet, more pipes must be laid to an exact measurement. All sterilizing apparatus must be decided and located, so that its mass of pipes may be provided. The interior telephone system must be located, the annunciators for the patients' calls, the connections for side light or electric cautery in the operating rooms.

As you go over these things one by one you can readily see that no ordinary architect can comprehend them nor Hospital Committee know them, that even doctors will assume or omit about half of them. If the superintendent does not see that they get in at the proper time they are more than likely to be

left out, and architect, committee and doctors ask in chorus "Why didn't somebody say they were needed?"

Does the whole subject seem difficult, complicated, technical? It is no more so than surgery, or nursing, or training nurses. It is not half as hard as dealing with patients' relatives or making the ends meet. We women have learned surgical technique, teaching methods, tact, and high finance. Let us take a bit of post-graduate work in blueprints, plumbing and imagination. So shall we be a blessing to our own institution and a joy to our successors.

NATIONAL INSURANCE IN GERMANY AND ENGLAND

By Donald J. Mackintosh, M.V.O., M.B., LL.D., F.R.S.E.
Glasgow, Scotland.

(Continued from the January Issue.)

The ordinary rate of benefits of the Insurance Act are as follows:

MEN.

Sickness Benefit of 10/- a week for 26 weeks during total incapacity from work, payable after 26 weeks in insurance and 26 weekly contributions have been paid.

Disablement Benefit of 5/- a week should the illness continue longer than 26 weeks, payable after 104 contributions have been paid and the insured person has been in insurance 104 weeks.

Medical and Sanatorium Benefits are now in operation, and there is no waiting period.

Maternity Benefit of 30/- payable to the husband; if the wife is also an insured person she can claim sickness benefit.

For women the rate of sickness benefit is 7/6 a week for 26 weeks, and disablement benefit of 5/- per week.

Aliens receive a reduced rate of benefits varying according to their age.

The method of collecting the contributions is very simple and inexpensive. A liability is placed upon the employer of affixing a 7d. stamp to a special card which an insured man hands to him and he is entitled to deduct 4d. of that sum from the man's wages. The cards have spaces for 13 contributions and at the end of each quarter they are returned to the approved society or to the Post Office. Insured persons fall into two classes, either members of approved societies or deposit contributors. The latter scheme can hardly be called insurance, although it has certain good features, *e.g.*, it provides medical benefit for a very needy class. It was designed to meet the cases otherwise "uninsurable," viz., those cases which would not be accepted by approved

* A paper read at the conference held in Boston, Mass., on August 28th, 1913.

societies on account of the burden they would be to the funds. Their contributions are paid to a special fund known as the Post Office Fund. The provisions of the Act in relation to this class have received a good deal of criticism. The employer pays 3d., the insured man 4d., and the State contributes two-ninths of the benefits and cost of administration. A deposit contributor in the Post Office can only draw benefits so long as his personal account is in funds, and in addition he receives medical and sanatorium benefits. On the other hand an insured person in an approved society is entitled to continuous benefit as soon as he has completed the statutory waiting period. As the fund is mutual he can continue to receive benefits long after the amount standing to his personal credit has been exhausted. The State does not guarantee the solvency of an approved society and in the event of a deficit members are liable to make good the loss. Contributions need not be paid while an insured person is in receipt of sickness benefit and all arrears accruing in the first twelve months are disregarded in the case of employed contributors.

The principal features affecting women are:

(1) If they marry and cease to be employed they are suspended from the ordinary benefits of the Act, but they may become special voluntary contributors, paying a reduced contribution and receiving a reduced rate of sickness and disablement benefit and also medical benefit.

(2) The terms of re-entry into insurance in the event of the death of their husband are very generous, as all arrears which have accrued during her husband's lifetime are disregarded and in order that there should not be any danger of a married woman not understanding her rights the Act imposes the duty upon the secretary of an approved society to give her certain information on receipt of notice of her marriage or of widowhood.

It has been stated several times that the financial provisions of the Act relating to women are not satisfactory, but apparently if they fall short the Insurance Commissioners will make good the deficit out of the sums retained for discharging their liabilities in respect of the reserve values created by the Act. The effect of this would be that the date on which benefits could be extended,

if the financial provisions of the Act result favorably, would be postponed.

I do not propose to touch the unemployment part of the Insurance Act, as that only applies to certain sections of manual laborers and is quite separate and distinct from the section of the Insurance Act relating to Health Insurance. Naval and Military Forces and the Mercantile Marine are specially dealt with under the Insurance Act.

SANATORIUM BENEFIT.

In Germany sanatorium treatment is administered by the Pension Offices to relieve the funds of cases of permanent invalidity, but German organization does not deal with the subject in as comprehensive a manner as is contemplated by the English Insurance Act. In England the sanatorium benefit is administered by Insurance Committees. To a degree the medical benefit and the sanatorium benefit are closely related to the doctor because of the capitation allowance he receives—6d. per head per annum in respect of each person on his list for the domiciliary treatment of tuberculous cases. The importance of this point will at once be seen now that patients do not hesitate to consult a doctor who would be in a position at an early stage to recommend him to apply for sanatorium benefit if necessary, and so the Insurance Committee would have knowledge of the disease before it had gained a serious hold.

The section of the Act defining sanatorium benefit describes it as "treatment in sanatoria or other institutions or otherwise when suffering from tuberculosis and such other diseases as the Local Government Board, with the approval of the Treasury, may appoint." The words "or otherwise" were added in Parliament during the passage of the Bill, and are extremely important because they cover domiciliary treatment, treatment in dispensaries, and other ancillary treatment. Extensive measures have already been taken by the various local authorities in England, prior to the introduction of the Insurance Act, to combat the spread of tuberculosis, and the provisions of the Act recognize the work that has already been done, and are of a supplementary nature. The Act places the duty upon the Insurance Committee of making arrangements with local authorities or

various persons who have the management of sanatoria or other institutions approved by the Local Government Board. The terms of the Act left the responsibility to the local authority to provide the necessary buildings. A uniform scheme to deal with the whole question in a national manner cannot leave to each authority the initiative of its own local schemes. The provision of the necessary buildings was given a national character by a Government grant of a sum of £1,500,000, which was to be apportioned to England, Wales, Scotland and Ireland, according to their respective populations. The distribution of the money was to be made by the Local Government Board with the approval and consent of the Treasury. In certain counties the population was not sufficient to justify the erection of a sanatorium, and power is given for two or three counties to combine together and erect a joint building.

The Insurance Committee may also extend sanatorium treatment to dependents; this has been done in many cases. If in any year the amount available for defraying the expenses of sanatorium benefit is insufficient to meet the estimated expenditure for insured persons and their dependents the Insurance Committee may transmit to the Treasury and to the local County Council a statement of the probable deficit. The Treasury and the Council, if they sanction the expenditure, will then be liable for half of the deficit.

The English Insurance Act is very generous as to arrears, and it is difficult for a person to lose his right to sanatorium benefit. Insurance Committees have grappled effectively with the subject of sanatorium benefit since it came into operation on July the 15th, 1912. The principal difficulties they have had to face were an uncertainty as to the application of these funds and the lack of experience. The subject being entirely new the committees had no reliable data as to the number of beds they would require, and what contracts it would be advisable for them to enter into, while facing them was the fact that the amount of their income was very clearly defined. The County Councils had not decided (some are still considering the matter) what steps they should take in the matter, and the sooner they decide the better. The administration of this benefit is improving every month, and committees are now gaining some

idea of the claims which will be made upon them, and are able to make arrangements accordingly.

The Chancellor of the Exchequer, who was responsible for this Act, said, on the 25th of May, that they had already 6,000 workmen in excellent institutions and receiving the best treatment. The method of procedure of the Insurance Committee is that, as soon as notification is received of a tuberculous case, the Medical Officer of the Committee who is usually connected with the Local Health Authority, should see the person and arrange that he is put on proper treatment; also, if necessary, that his home is made in a sanitary condition, and that the other members of the family receive advice to prevent the spread of the disease. If the case can be properly met by domiciliary treatment this is given, and the patient kept under proper observation. When treatment in a sanatorium is necessary the Medical Officer is able to report to the Insurance Committee and make the necessary recommendations.

INSTITUTIONAL BENEFIT.

In Germany institutional benefit plays a more organised part in the treatment of disease and illnesses than in England. The hospital system in Germany is very different from the system here. The public authorities there *own and administer hospitals* for general purposes and not simply for infectious diseases. Patients of all classes are received in their hospitals and payments are made for all. Each authority makes its own arrangements for hospital management and also its charges. For instance:

Hamburg has four main classes and the charges for patients are respectively, 12s., 7s., 4s., and 2s. 6d. per patient per day.

Cologne has three main classes with charges of 8s., 5s., and 3s. per day, and members of sickness societies are admitted for a charge of 2s.

Kiel has two main classes at 4s. 6d. and 3s. per day.

Provision is made for the patient according to the class he is in. For instance, a patient in No. 1 class would have a separate room.

In place of medical and money benefit the society may give a member treatment in a hospital, and if the member has no de-

pendents the society must also pay money benefit of not less than one half of the ordinary money benefit which would be payable to him were he not in hospital. If there are no dependents the society is not bound to pay the money benefit, but may pay one fourth of the ordinary benefit. Hospitals are used for *checking malingering;* as the patient is under observation it can be quickly discovered whether he is ill or not. Societies can make an agreement with one or more particular hospitals for the treatment of patients. Every other public or philanthropic hospital maintained by a public association or corporation, however, must be allowed to take patients on the same terms, with certain exceptions. Most of patients treated in hospitals are in the lowest class. For instance, at the Hamburg Eppendorf Hospital in 1910, of the total of 700,000 days' maintenance, less than 6 per cent. were in other than the lowest class. Thirty-eight per cent. of all the patients were paid for by sickness societies. The prices charged to the societies by the hospitals work out at below cost; the average cost of treatment and maintenance per person per day, excluding capital costs, works out as follows:

Hamburg (Eppendorf Hospital)	4s. 2d.
Cologne (Lindenberg Hospital)	3s. 9d.
Kiel.....	4s. 1d.

If these figures be compared with those just given it will be seen that sickness societies have opportunities to obtain treatment for their members at a rate under cost, thus receiving a considerable contribution towards the relief of their fund from the local authorities. It is estimated that in 1882 there was one hospital for about 22,000 persons in Germany; in 1906 one to about every 16,000 persons. There has also been a large increase in the provision of convalescent homes. The demand for hospitals still continues and there is no doubt that it has been largely due to the sickness insurance. There are also in addition private hospitals owned by philanthropic and Roman Catholic bodies and also in the large towns there are numerous private doctors' clinics.

The following figures are interesting:

LEIPZIG DISTRICT SICKNESS SOCIETY.

Number of days for which the following benefits were given in 1910 to members.

(Number of members, 182,898.)

	Days.	Days.
Money benefit (without institutional treatment)		1,464,728
Institutional benefit with money benefit	308,634	
Institutional benefit alone	87,184	
		395,818
Total		1,860,546

Hospital benefit was given to—

5,451 male members for 175,525 days.
2,685 female members for 78,428 days.

Total.. 8,316 members for ..... 253,953 days.

MUNICH DISTRICT SICKNESS SOCIETY.

Expenditure in 1910 on Institutional Benefit.

Amounts paid for treatment in—	
Four municipal hospitals	£ 30,831
The Hospital of the Women's Association of the Red Cross	3,009
The Hospital of the Order of the Knights of St. George, Nymphenburg	846
Hospitals outside the district	1,239
The Royal University Women's Clinic	212
The Royal Surgical Polyclinic	22
The Royal Gynecological Polyclinic	11
The Royal University Eye Clinic	431
Three Eye Clinics of private doctors	751
Five nursing establishments of private doctors	808
Various establishments	29
	£ 38,189

A homœopathic establishment		£94
Asylums	£1,138	
Royal Psychiatric Clinic	741	
		1,879
Bath establishments		2,809
Sanatoria and convalescent homes and resorts—		
Society's Sanatoria	£4,332	
Other establishments	2,960	
		7,292
Inebriate Homes		13
Total		£ 50,276

The expenditure averaged 8s. per member.

KIEL DISTRICT SICKNESS SOCIETY.

Expenditure on Institutional Benefit in 1910.

(*a*) Hospitals and other institutions at which cases were treated.

(*b*) Number of cases treated.

(*c*) Number of days of maintenance.

(*d*) Average payment for maintenance and treatment per person per day.

(*a*)	(*b*)	(*c*)	(*d*) S. D.
University Hospital	746	14,796	2 9
Anschar Hospital	78	2,272	2 8
Clinic for mental and nervous diseases	99	2,081	2 9
Ear clinic	13	418	2 7
Municipal Hospital	115	327	3 3
Various Private Hospitals	85	2,700	2 9
Various Hospitals outside Kiel	53	1,292	2 10
Through the Poor Authorities	39	1,612	2 2
Total	1,228	25,498	2 7

The municipal hospital was used only for some special cases because the charges had been increased. One result was that some cases which needed hospital treatment did not receive it. In 1909 the number of days of maintenance in hospitals, etc., was nearly 32,000; in 1910, under 26,000.

The treatment in convalescent homes is extensively used by the societies. Some societies have their own convalescent homes or affiliate into a group. Other societies are helped by existing or specially formed philanthropic societies, and a good deal has been done of recent years in providing various forest camps in different places in the country or in forests within easy reach of the town where persons can have the benefit of the open air at night and follow their profession by day.

HOSPITAL TREATMENT.

The outstanding feature of the English hospital system is its voluntary character. The hospitals throw open their doors to the necessitous and give them the best treatment without charge.

The National Insurance Act in England apparently was drafted on the understanding that these conditions would continue, and this has proved to be the case so far. There are no compulsory provisions in the Insurance Act which make it incumbent upon approved societies or insured persons to contribute to the hospital.

In two cases only does the Insurance Act take cognisance of hospitals. In the first case it provides that if an insured person who has no dependents is an inmate of a hospital, it is open to the approved society to enter into an agreement with the hospital and pay the whole or any part of the insured person's benefit to the hospital. The same provision holds good for asylums, convalescent homes or infirmaries supported by any public authority or out of any public funds, or by charity or voluntary subscriptions. Some hospitals have been able to obtain contributions from the approved societies, but the difficulties are of a "competitive" character, as the sub-section which gives power to the approved societies to enter into an agreement with the hospital has a proviso that if an agreement is not entered into, the benefit may be applied otherwise for the insured person's benefit. It will be seen, therefore, that the society which enters into an agreement with the hospital is placed at a disadvantage in its endeavors to secure members as compared with a society which applies the sickness benefit otherwise for the insured person's benefit, and the hospital suffers.

Another clause in the Act makes it lawful for an approved society to grant such subscriptions or donations as it may think fit to hospitals, dispensaries, or other charitable institutions. It is too early to say whether advantage will be taken of this section, but as the effect of the hospital treatment would be that the insured person would recover more quickly than if he did not have the opportunity of being attended in this manner, the funds of the approved society would receive relief corresponding to the general average reduction of the number of weeks or days effected in each illness so treated. It is not an unreasonable demand that some, at any rate, of the benefit which so accrues to the approved society should be handed to the hospital, but in order that a hospital may take advantage of the clause an agreement for the purpose must be come to between the society or committee and the hospital, so that the society may give a donation or subscription to hospitals. Very few hospitals have made application up till now, as conditions will no doubt be laid down by the Local Government Board which will to a very large extent interfere with the present management of these voluntary institutions; for example, they will demand that the hospital will be open to inspection at any time by any of the Board's officers or inspectors; that such records will be kept in connection with the hospital as the Board, after consultation with the Insurance Commissioners, may from time to time require; and, further, they may demand that the Board be informed of any proposed change in the management of the institution, and of any proposed alteration in, or addition to, the medical staff of the institution. This strikes at the root of the whole voluntary principle, and is likely to interfere so materially with the progress and efficiency of these institutions that the managers will hesitate to hand over their institutions to be so governed. In July, 1911, the Chancellor of the Exchequer was good enough to receive a deputation from the British Hospitals Association, and at that interview he stated that he was glad to meet those competent to speak on behalf of the hospitals of the country, and he thought that the representatives of the voluntary hospitals were laboring under a misapprehension when they put forward their views that they would be adversely affected by the passing of the National Insurance Act, so far as finances were concerned.

He said he considered that "the hospitals of the country were essentially a part of the machinery of civilization, and he could not imagine any country allowing a single hospital to be closed." But even with the amendments made to the Bill, up till now no provision has been made for institutional treatment, beyond providing sanatoriums for the treatment of tuberculous cases. When an insured person requires a serious surgical operation performed, or requires treatment by a specialist and skilled nursing, he must seek admission to a voluntary hospital. On the 29th July, 1913, the question was raised in the House of Commons with regard to Section 12 of the principal Act, which provides that the sickness or maternity benefit should not be paid to a person who was an inmate of a hospital, or any institution maintained by voluntary subscriptions. The Financial Secretary to the Treasury is reported to have said: "The actuarial calculations assumed that every sick man or woman would receive full sick pay in some way or another, and the time had come when it should be declared that every man or woman should receive sick pay. A sick man or woman ought to have either in kind or in cash the full amount of the benefit, and he had in mind an amendment which would ensure the payment of the benefit to the insured person. The argument might be put forward that some of the money should go to the hospital. If the insured person were willing some of the benefit could go to the hospital, but he would be very chary in making over to the hospital the whole of the benefit." He further added: "There ought not to be any pressure put on the patient to sign away his sick pay to a hospital, and he moved an amendment which would insure that the benefit should be paid to the patient upon leaving an institution in a lump sum, or in instalments, or applied as the particular society or committee thought fit." The question arises, Will the voluntary principle stand this strain? For my part, I see no reason in the meantime to suppose that the voluntary hospitals in large cities will not be maintained in the future as they have been in the past, but only time and experience will confirm this belief.

I would like to refer to the valuable information I have obtained from the work of Mr. I. G. Gibbon, entitled "Medical Benefit in Germany and Denmark," and I am also indebted to Mr. W. R. Fuller, of the "Nurses' Insurance Society," for his kind assistance.

MEDICAL EDUCATION IN OHIO

By Dr. Christian R. Holmes, Cincinnati, Ohio.

Dr. C. R. Holmes, at his installation as Dean of the Medical Faculty of the University of Cincinnati, spoke as follows:—

"The Deanship of the College of Medicine of the University of Cincinnati, which the President and my colleagues have seen fit to confer upon me, I humbly accept with a full appreciation of the honor and good will it implies; but also with the realization that it carries responsibilities that cannot be discharged successfully by one man, and I ask for the earnest and unselfish support of our medical men and citizens who have the interest of Cincinnati at heart, and desire to help in restoring her past medical prestige, for Cincinnati has a medical history of which we may well be proud, when we consider that little more than a quarter of a century ago there gathered within her medical schools more than 1,000 students annually! Many of her medical teachers ranked with the best in this country; likewise her schools as measured by the standards of that day.

"Nearly one hundred years ago the scholarly and justly famous Dr. Daniel Drake made personal application to the Ohio Legislature for the passage of a law authorizing the establishment of a Medical College in Cincinnati. Such a law was passed on January 19, 1819, and Dr. Drake became the first Dean of the Ohio Medical College, which opened its doors November 1, 1820, with a class of twenty-four students, thus making it the third oldest medical school in the country.

"In looking over the roster of professors that were identified with the schools from the time of Dr. Drake up to the present day we can point with pride to the long list of men who have been prominent in American medicine.

Miami Medical College.

"In 1852 there was founded another vigorous institution called the Miami Medical College. Other colleges have come and gone, but these two held high the beacon-lights of medicine in the Ohio Valley; they were destined ultimately to unite—for in 1896 the Medical College of Ohio became the medical

department of the University of Cincinnati, and in 1900 the Miami Medical College followed her example. The two turning over to the university their property, moneys, good will and self-government, became, *de facto*, an integral part of the university.

"I cannot close this very brief reference to the medical past of Cincinnati without paying tribute to a few of the departed great leaders in medicine in the Ohio Valley, many having stamped indelibly their imprint upon our city by their personal achievements. The names of Drake, Gross, Mussey, McDowell, Blackman, Bartholow, Longworth, Murphy, Reamy, Commegys, Williams, Dawson, Whitaker, Connor, and last, but not least, our beloved and scholarly late confreres, Drs. Dandridge and Forchheimer. These are a few of the stars in the diadem of medical Cincinnati. We honor their names and are stimulated by their illustrious examples.

"Turning from the past to the present we are confronted by the fact that medical education in this country has made wonderful progress along scientific lines during the past few years. In searching for the reason, we must pay homage to the institution in this country that laid the foundation for higher standards, and to some of the splendid men who made her famous—you all know it—'Johns Hopkins.'

Two Towering Figures.

"Out of her staff we see two figures who tower above the medical teachers of this country, and we feel highly honored that one of them, Professor Welch, has taken time out of his busy life and from high responsibilities to come and speak to us this evening, and I trust that he, as well as his illustrious colleague, Sir William Osler, will be with us in October at the formal opening of the new hospital, and that then, through the munificence of some of our wealthy and philanthropic citizens, we shall lay the corner-stone for the new Medical College building. I have a letter from Dr. Osler wherein he expresses the hope that the Medical Department of the university may soon have a modern medical building and that the naming of such a building in honor of Dr. Daniel Drake, the founder of medical teaching in the Ohio Valley, would be a fitting tribute to a great genius, and that he (Osler) would cross the ocean to

be present at the dedication. However, as Dr. Osler will be at Johns Hopkins in October of this year, I am in hopes we can take him at his word without requiring him to make an extra passage of the Atlantic Ocean.

"The elevating influence of Johns Hopkins School of Medicine, since its opening in 1893, has steadily permeated and elevated medical teaching in this country, thus paving the way for the tremendous impetus given during the last five years through the Council of Medical Education of the American Medical Association, and the exhaustive investigations by the Carnegie Foundation for the Advancement of Teaching. Mainly through these combined influences we find a large number of proprietary unendowed medical schools have been forced to close their doors, and more will be compelled to follow in the near future. We need not look very far to find the cause for this.

Required Standard Raised.

"First. The required standard of education of the prospective medical student has been raised to at least two years of college work by the institutions that are in the A1 class (of these there are twenty-four in this country, and I am proud to state that the College of Medicine of the Cincinnati University is one of that list).

"Second. Anatomy, histology, physiology, chemistry, materia medica, pharmacology, pathology, bacteriology should be taught by full time professors who are specialists and not engaged in the practice of medicine. These chairs were formerly, and are to-day, still filled in a majority of the second and third class colleges, by practising physicians who (with few exceptions) have neither the training nor the time to give proper and efficient service.

"Third. Formerly the laboratories of the medical colleges (even the best) were woefully deficient.

"The great difference between the modern method of teaching medicine and the older method consists in laboratory and clinical instruction, both of which must be individual. Laboratories are very costly, and the number of laboratories required in a fully equipped medical school is astonishing. Such a school must have a dissecting room—the anatomical laboratory

—and along with this a laboratory of histology, and another which may be combined with a laboratory of embryology; a physiological laboratory, in which each student will become familiar with physiological methods and be trained in exact and careful observation; a laboratory of chemistry, and, especially a laboratory of physiological chemistry; in the department of materia medica, a laboratory of pharmacy, in which the student will learn the essentials of pharmacy; a laboratory of pharmacology, in which he will learn the action of drugs and be prepared rightly to use them; in pathology, a laboratory of morbid anatomy, a laboratory of bacteriology and a laboratory of hygiene. The mere statement of this catalogue of eleven laboratories will enforce the fact that great expense must be incurred, not only for their installation, but also for their running.

Fees Alone Insufficient.

"From this you will understand why it is impossible for a medical school to live up to the requirements enumerated above and still exist from students' fees alone, to say nothing of paying a dividend to the doctors who run the institution.

"I think we of Cincinnati are fortunate in the possession—or will be before this year has passed—of unequalled municipal hospital facilities and a city university—a splendid public asset, which will richly remunerate the city for the money expended.

"The modern medical school should be developed as the medical department of a university; its functions are, first, to train well-qualified practitioners of medicine; second, to develop trained teachers and research men, and, third, to continue to advance medical knowledge.

"A medical school must also have well-equipped clinical facilities. The first and most important being a modern hospital, having for such clinical department a continuous service under the immediate charge of the head of that clinical department and his assistants. Also out-patients' service, or dispensary, besides clinical laboratories, amphitheatres, classrooms, operating rooms, and X-ray department.

"As to the hospital, it is primarily for the care of the sick, and, in the case of our municipal hospital, for the sick poor;

but it is proved beyond dispute, and should be made clear to every layman, that the best interests of the sick are attained when the hospital is a high-class teaching hospital. The education of the medical student is an important function of the hospital, and its best interests demand that it be conducted as a scientific institution, in charge of medical men who are specially qualified to teach.

"Having shown that a first-class medical school, no matter how prosperous, cannot defray its expenses from student fees, and must close its doors unless it receives endowments, or is supported by the state or municipality, the question may well be asked, what claim has the medical profession, and, through it, the medical school, upon the generosity of the individuals of the municipality.

Medical Profession's Claim.

"To this I shall answer—it has great claims, because of the charity and labor of love, it, as a profession, gives freely and cheerfully to the poor—directly, and to the rest of the community as well, through study and research work, thereby constantly improving sanitation and preventing diseases at their origin—diseases that formerly brought suffering, death and sorrow, besides enormous financial losses to whole communities, such as smallpox, yellow fever, diphtheria, cholera, typhoid fever, cerebro-spinal meningitis and malaria. These have been brought almost entirely under control, if proper supervision and attention is given. In other words, through his philanthropic work, the physician has helped by so much to reduce his own income. When we consider that the average age of students who graduated in 1912 from six of the leading medical schools in this country was twenty-seven years, add to this one year as an interne in a hospital (which will soon be compulsory in many states—it is now in Minnesota), and the young doctor has passed the age of twenty-eight before he can begin to earn anything. Up to that time it has been a steady expenditure of money and hard study to acquire a profession, an age when many young men in the business world have reached lucrative and prominent positions, besides having been at liberty to devote their spare time to the pursuit of pleasure, while the

student, if of the right sort, has but little time for pleasure, would he reach the goal of his ambition.

"From the time he begins the practice of medicine and continuing through life he gives liberally, even if he is poor, to charity of his capital (said capital consisting of his medical knowledge and physical strength). There is no time he can call his own in season or out, no storm too great, no night too cold to keep him from promptly, yes, eagerly, responding to the call of a suffering fellow being.

Charity Work of Doctors.

"To bring it more thoroughly home, I have, with the help of some of my confreres, compiled statistics as to the amount of charity work that your 800 physicians in Cincinnati perform annually, absolutely free of charge. Estimating the visits, operations and treatments at the minimum rate, it would go well above the million dollar mark. I ask, in what other walks of life can you find such liberality under similar conditions? Hence I feel that the profession has a right to ask the citizens to contribute freely to such unselfish work.

"From our President you have heard what we have received and also an intimation of what is still needed. Would that a medical philanthropist would arise in our city and do for us what Mr. Robert S. Brooking has done for the Washington University, in St. Louis, but especially for the medical department. When, last September, it was my privilege to spend two days with Mr. Brooking as his guest, and see his work, I was amazed. He has built and is now equipping a set of medical school buildings that cost him one and a half million dollars, not to mention other large gifts he has contributed to the university. But that is not all. He is giving nearly all of his time to the carrying out of his splendid work. I congratulate St. Louis upon possessing such an institution, and Mr. Brooking upon being able to realize to the fullest extent his high ideals of what a medical school should be.

"We of Cincinnati are less ambitious, but need $500,000 to build and equip a medical school as planned, which will, in conjunction with the facilities provided in the new hospital, amply care for all of our needs. As to what these are, Professor Welch will tell us."

Society Proceedings

SEVENTH ANNUAL CONFERENCE OF THE CANADIAN HOSPITAL ASSOCIATION

(Continued.)

Question No. 5.—Has anyone found a paint suitable for cement floors?

Miss Green (Toronto): Ask Mr. Kent.

Mr. Kent: I am just trying to find one now. I think there is one being made now. They have a cement paint now which will paint cement floors. We will be able to see samples.

Dr. Clarke: We are trying out several just now.

Dr. Robertson: I asked this question in the Alexandra Hospital in Montreal. They informed me that they were waiting for the paint. Their opinion was that the cement acted on the paint and destroyed it.

The Chairman: We use a paint called the Cement Seal. I cannot tell you who the manufacturers are. It lasts only fairly well, although I think it is the best I have seen yet. I think it comes from Windsor.

Mr. Kent: This is an American firm, with an office in the Canada Life Building. We tried one made in Toronto, and it was a failure.

Mr. Parke: There is a paint made by the Macdonald Varnish Company which is very successful, but if things go wrong don't always blame the paint; it is getting the first skin on the cement.

Question No. 6.—In view of the Hospital Act of April, 1912, is it advisable to collect by court proceedings amounts due by municipalities?

Discuss best form of notice to Clerk, as provided for in Section 23, Clause 3; also how Act could be improved.

The Chairman: As perhaps some of you know, it has been very difficult in days gone by in some of the rural districts to get pay for indigent patients; that is, to get the municipality to be responsible for them. During the last year we have had several patients, and the municipality paid for one or two, and

then suddenly stopped. We wrote two or three letters, and received no reply. I went to find out what the difficulty was, and was told very plainly and politely that they did not intend to pay any more bills. That was their decision. However, I found out afterwards that there were some who said it was impossible to get around the payment. They decided to make a test case of this bill. The Committee of Management decided to take proceedings, and put it in the hands of a solicitor, who wrote a letter. However, the bills were paid immediately. That has been our experience. I think that while this same municipality set and wrote out certain rules and regulations, that such patients must have the consent of the mayor and I don't know how many others before they would recognize him at all, I don't think it is necessary.

Dr. Clarke: I suppose, perhaps, our experience is broader than any other. We had trouble with the city of Toronto, but we have been getting money every time they found they had to pay. This Hospital Bill is a workable one, and I think the trouble is all over. In Toronto they fought as long as they could. Several municipalities have objected strongly, but they have always paid; I don't think they have any option.

The Chairman: I think there are several points which may be brought up which might be taken exception to, but I think our judges are frank in this matter, and when the patient has been treated they decide in favor of the hospital.

Miss Miller: We have had no difficulty whatever in Lindsay. They have kicked, but they have always come to time. The onus is put upon the municipality. The only question that came up was the case of residence; outside of that we have not had the slightest trouble.

Miss Winter: In only one case did I receive a letter from the municipality.

Miss Miller: Even apart from that the onus is on the municipality. The municipality have to pay it, and if the man can afford it, all right. We have had no difficulty whatever.

Dr. Clarke: A great many hospital people feel that the residence question should have been settled. I discussed that

with Mr. Hanna, and he thought that the method adopted was the best one in the interest of the hospitals. He deliberately left that clause as it reads at present.

Miss MacAdams: In only one case have we been refused; that is in recent days.

Dr. Caven: We have never had any experience, as far as I know. The municipality is notified. Except in two cases just east of the city, we have received no notification from that time to this, and the reasons that they gave were that the patients were able to pay for themselves, and that they were property holders in this town. Then, I had to send an incurable case back about forty miles, and the municipality refused to pay the bill.

Dr. Robertson: I might say that every municipality we wrote to absolutely refused. We have not yet gone to the extent of threatening court proceedings.

There is another point, the Act reads this way: "Every employer of ten persons —" (reading portion of Act). There was a question of this kind (reading letter). They put their case in the hands of a lawyer, and he put up this question. The man was paid off; the day he left their employ, therefore, he is an ex-employee. The lawyer informed me that if the Department intended that to mean employees and ex-employees, the Act should be amended.

Judge Fisher: There have been no cases before me under this Act. It seems to me that the notice provides that the onus should stand unless the municipality deny that he is a resident. I think that establishes the fact.

My friend here says that if he is able to pay it is an easy matter to make the municipality pay. Of course the hospital in that case would proceed against the man direct. The word indigent is not defined in the Act, but coming before any of the courts of Ontario, I don't think it would require much proof. A mason earning $2 or $3 a day when he is laid up is indigent. I fancy in that case the municipality would be liable. The great thing in this Act is that you can go to the municipality and make an agreement. That is the benefit of

it. All they want is something to justify themselves with the ratepayers. They say, "If we had not entered into this agreement we would be liable for perhaps a very large bill," and in this way they justify themselves.

Then there is the next question as to whether it is expedient to enter action. I know one hospital that sends the notices regularly, but never have followed them up. It is a very difficult question, but as far as the Act is concerned now, if the municipalities say that this man is not a resident of the township, you will have to prove that, and that he is an indigent person.

Miss Miller: There is proof for that, is there not? If a man comes and represents himself to me, all I do is to notify the Clerk, and if he is not an indigent person then the municipality can collect from him.

Judge Fisher: The law provides for collection, but if he has the means to pay, he is not an indigent.

Miss Miller: But is it necessary for the superintendent of the hospital to investigate the case?

Judge Fisher: I remember one case of a man getting splendid treatment in a charity ward, and he was worth two or three thousand dollars.

Miss Miller: That was before the new Hospital Act.

Judge Fisher: I don't think you could collect from the municipality, because he is not an indigent person. I don't think because a man represents himself as an indigent that the municipality is responsible. This man was not really an indigent person, and I think there would be some complications there.

Dr. Robertson: For eleven years I was one of the deputation to see the Government, and when this Act was put into force I was one of the committee appointed to make suggestions, and at that time the suggestion was to put the onus on the municipality, but the difficulty was the people who could but would not pay. The intention was to put the complete onus upon the municipality, and allow them to collect from the men. That was the suggestion; what the law is I don't know.

It is Dr. Bruce Smith's intention that if the Act can be amended in any way, he will be glad to have suggestions.

JUDGE FISHER: I think it would be wise for this Association to pass a resolution requesting this Government to make it clear that when a township is notified, that unless the hospital receives a notice within fourteen days, they have admitted the fact that the patient is both a resident and an indigent person, unless they deny that he is not able to pay, he shall be deemed to be an indigent within the meaning of the Act.

DR. ROBERTSON: The Government should be asked to send a copy of this Act to the Clerk of each municipality.

JUDGE FISHER: They have it already, it is in the Statutes.

DR. ROBERTSON: This is the form issued by the Ross Memorial Hospital. (Reading.) If there is any criticism I would like to have it.

JUDGE FISHER: I think that is an excellent notice, but just in one respect, "The said John Smith has been residing at—" I don't know whether that is sufficient to locate him. Some of the townships are twenty miles square, it might be.

MISS MILLER: This is filled in with the number of the lot.

THE CHAIRMAN: I suppose the question of the legality of the notice comes up, too? Then there is another point; sometimes we may forget to register the notice, we have no means of telling whether it has reached the Clerk. I suppose it is necessary that this should be registered.

Question No. 7.—Would it not be advisable to place public hospitals on the same plane as parks and public libraries, so that hospitals could command a share of the public taxes, say to the amount of one-half mill on the dollar, and thus help to get rid of the ever present deficit, which causes much worry, and often prevents hospital boards from being as generous as they should be in the interests of the institution which they represent?

Mr. Harrison: I have had quite a few years' experience as a member of hospital boards. I realize that nearly everyone here is an inside worker, so that perhaps they will not be so much in sympathy with what I will advocate. I might say that in our case we have managed as closely as we possibly could, and still last year we were $1,300 in arrears. This was more than made up by donations and by going to the County Council and the Town Council, but I do not think that a hospital board should be obliged to go round with a subscription list every year or so in order to keep the institution up to the standard. A great deal of charitable work is done, and I don't think that $1.00 per day covers the cost; this year I think it cost $1.45 per patient; consequently we have had a deficit. We don't refuse people because they don't pay in advance; we have never done so, although we feel disposed right now to do so.

We know that public libraries and parks commissions have the right to spend up to half a million dollars out of the public funds. I would like to see hospital boards in the same position; we are just as important—no, more important than either of these other institutions—and therefore we should be provided for, and that would settle to a very large extent some of our difficulties that we have under this dollar a day business, because if the municipality is paying for the hospital, then the deficit would be charged up. Adjoining municipalities could go in on a pro rata basis in the same way as schools, according to the cost of maintenance. I think this is the plan on which hospitals should be managed. If we are building a new wing we ask the town for $5,000, but the balance is nearly all paid by public subscription. We think this work should be maintained by the municipality, there should be some manner in which that could be effected. We should not be compelled to exist on charity. I don't know how many hospitals are self-sustaining, but I think a law of this kind would be a great encouragement to some of the smaller towns to take up the work and go along with it; they would have some guarantee that the maintenance would be kept up; but as it is, they have none.

I would like, if it is the feeling of this meeting here, that a resolution should go to the Provincial Secretary, asking that the Act be amended in this way.

JUDGE FISHER: I think the idea is an excellent one, but I must confess that I have never given it much consideration. We are in the same trouble, we have to go to the charitable public every year. Of course if you put it on the basis of taxation, then will it not dry up the Christian charity, which is, after all, a strong factor; if you have to get it by taxes they will say, "We have nothing to do with it," and we may drift into the same condition as the poorhouses in England. It seems to me a good idea to have it not to exceed one-half a mill on the dollar; however, not having given it consideration, I hardly know what to think. At all events it is well worthy of consideration.

THE CHAIRMAN: In my paper last night I referred to a paper written by Mr. Olsen, of the Swedish Hospital of Minneapolis. I know of no paper which will give so much information along this line as this paper by Mr. Olsen. I think I referred to him going in when it was a very small affair, and during the last fifteen years they have been able to erect buildings worth $150,000; and he impresses this one point, "Collecting from the people who are able to pay." Make them pay sufficient to cover those who cannot. Here is an instance of an individual in our hospital; this man sent his son to the hospital, where he had to stay for some time. He said I will pay, and he kept on saying he would pay, perhaps next week, until eventually I said, "Now, you see in our hospital the expenditure and the receipts come very close together, and we have to get every cent of this; you agreed to pay when your son was brought in for treatment. We have done our part, and your bill is so much." I then told him that I wanted to make a definite arrangement as to the payment of this bill, and the result was that he promised to pay the bill by a certain date, and we got the payment of the bill. If we had not, we would have gone after the man again. I don't think it is charity to give people free treatment who can afford to pay. Take in every poor patient and treat him, but any man who comes in and goes out who is able to pay, it may not be for three or four months, but he can pay, keep right after him. I would commend this paper of Mr. Olsen's to your consideration. It is in the report of the American Hospital Association. Mr. Olsen

is a business man, and his methods are business-like from start to finish.

There are entries of patients who have been let go who could have paid. Now, they have gone and still we are crying to the community for help. We should not expect the people to pay for those who are able to pay for themselves.

Mr. Harrison: The difficulty is in collecting, especially in a lake port. In a lake port you get a great many strangers, and they go away and you lose track of them. You have to do that work, and we are right in doing it. We believe they should pay, but they don't do it very often in our case; we receive very little from them once they are out of the hospital for any length of time. I thoroughly agree with the idea of the Chairman, that those who are able to ought to pay.

By obtaining half a mill on the dollar, those who are best able to pay do so, but in getting up subscription lists it is not those who can best pay that always give the most money. Some people who are charitably disposed give largely to these things, while others who have lots of money, which is taxable, should be compelled to pay. I think that payment through taxes, the same as anything else, is the proper way to pay.

The Chairman: I think the question raised by Judge Fisher is very well taken. The very minute you do that, you stop the voluntary contributions of the people that should be interested in your hospital; if you do that you immediately lessen the interest they take in it; if it is put on a tax basis the people would no more give to a hospital than to a street car corporation.

Dr. Robertson: In Ottawa eight years ago, we created a public sentiment so strong that the City Council consented to submit a plebiscite to raise one mill on the dollar for hospital purposes. A plebiscite was taken, and it was carried by a tremendous majority. The result was that the city had money to vote to the hospitals, and we are getting double the subscriptions to-day that we were eight years ago, and our collector says that it is very seldom that anything is said to him on the subject. I think they are getting almost three-quarters of a mill;

it is on the tax bill at the rate of so much on the dollar, and it has had no effect whatever upon our public subscriptions.

THE CHAIRMAN: How much does it amount to?

DR. ROBERTSON: $15,000 in our hospital.

THE CHAIRMAN: I think if you will look up the reports of Hamilton and London that you will find their subscriptions are practically nil.

MR. HARRISON: Perhaps they don't require it. If the municipality is paying for it, of course there is no more need for subscriptions. That does not say, however, that the people have lost all interest in the hospital. A man contributes because he thinks it is right for him to do so. I think the people are becoming educated to the fact that the hospitals are a necessity, and that the public have a right to support them. It is not right that hospital boards should be compelled to go round with subscription lists to maintain the hospitals. In our case we have a deficit of $3,700; this year it is about $1,400. We have reduced it, but it was over $4,000 a year ago. We also have a debt on the building which we will make up by subscriptions. It is the maintenance account that worries us, and we are compelled to ask for money for that. I don't think it is right; I don't think it should be necessary.

EVENING SESSION, October 21st, 1913.

THE PRESIDENT: The Convention will come to order now. I just want to announce again that the different committees will report to-morrow, so you had better get together as soon as possible and arrange for the Nominating Committee. Now the first paper on the programme this evening, the speaker is unavoidably absent, due to illness, taken rather suddenly and will not be with us this evening. The second paper by Mr. William Stratton, Architect of the Detroit General Hospital, "Doors, Windows and Floors," will now be read.

Mr. Stratton: Ladies and gentlemen, I am keenly alive to the contrast between my dry and specification-like talk and the warm and human element of the discussions which lent such charm and value to the morning session.

Where so much attention is being given to the arrangement of hospitals, it seems a mistake to use any but the most efficient appliances and the best of materials. In selecting materials a statement of the conditions to be met at each point should be made and the materials available for obtaining the desired result should be used. I have found that local tradition in building matters, and even hospital tradition in many cases, has kept the best solution from being reached.

I will give a statement of what I consider the requirements as to desirable features in regard to doors, windows and floors. These are major details in the rooms used for the treatment of the sick. I will deal with the requirements of these details in wards and corridors and rooms directly adjacent.

Doors—Doors should be of sufficient width for all possible traffic, should be easy to operate, perfectly plain, easily cleaned and hung in permanent frames that form the best joint with the adjoining materials. The frames should be of metal. A form of German manufacture is being much used in this country at present, consisting of a full rolled steel section with welted angles. There are also very good forms made of heavy sheet steel, rolled to the proper shapes. Both types are well anchored into the mason work of the wall and form a perfect joint with tile or plaster. Doors leading to work rooms through which there is much traffic, and in passing which the hands of the nurse are apt to be loaded with trays or utensils, should be double swing, with self-closing spring hinges. Many concerns are making very good plain, well-veneered stock doors. These are preferable to those made by local contractors. They may be painted, enamelled or left in the natural wood veneer. Metal doors should be used in places where the temperature of the rooms on either side varies to any considerable degree. I prefer lever handles on the latches, as it is possible to open the door without actually grasping the handle. In rooms where infection

is cared for, these handles can be lengthened so that they can be operated by the elbow.

Where screens are used on the hall side, I would recommend a short, light door, similar in all respects to the main door but cut off at top and bottom to leave an air space.

Windows—It is in the case of the window that tradition has held us most firmly to the old types.

The growing realization that fresh air bears such an important relation to successful treatment leads us to prefer a type of window that gives the fullest opening possible, i.e., one hundred per cent. of the window opening in place of the double hung sliding window now in such general use.

The problem of screening has much to do in deciding the type of window. The window should be easily reached for cleaning and easily operated, and the glass should be in as large lights as possible. In our climate a large area of glass of single thickness produces an immense amount of cold radiation without in any way helping the ventilation of the room. This radiation may be overcome largely by having the lower sash made double, the inner sash hinged to the outer with an air space between. The transom, which is much smaller in area, may be made of single glass. There are many points of advantage in a double system with a large air space between the sash, and there are many ingenious arrangements to allow ventilation without producing a direct draft.

Floors—The floor should be selected with regard to, first, its imperviousness to moisture and germ life; second, its wearing qualities; third, ease of cleaning; fourth, its tendency to show dirt; fifth, color; sixth, warmth to touch and elasticity to tread.

Terrazzo is the most universally used and the oldest material. It is made up of about equal areas of marble and cement, both of which are not impervious to moisture. Its color has pleasant possibilities and it is a pleasant floor to walk upon.

Tile combines most of the desirable features in a hospital floor. Its color, wearing and cleaning qualities are good. Criticisms are found in regard to its hardness and its inflexibility,

but this can be overcome to a great extent by the wearing of rubber heels.

Battleship linoleum is quite extensively used and is pleasant in many regards but retains the impression made by standing furniture and requires great care in the laying. It also shows dust marks.

Wooden floors of teak, Georgia pine or oak may be used in many places to good advantage.

Cork tile has the advantage of being very pleasant to walk upon, and experiment has shown it to be impervious to germ life. Its color is against it and it shows tracking quite prominently.

A composition floor, composed of sixty per cent. cork, called Plastic Linoleum, is being used to good advantage. It is warm to the touch, may be laid in various colors and is somewhat resilient. The possibility of covering the entire floor surface without a joint is generally considered as very desirable, and many materials now upon the market are being tried out.

The prospects are bright that some of these floors will stand the test of time and that the floor will be secure, which will meet most of the requirements for hospital use.

I am aware that all will not reach the same conclusions and that no material will be found which will be suitable under all conditions.

The constantly growing and changing conditions in hospital work quickly push into the background the decisions that we make to-day.

(Applause.)

The President: This paper is open for discussion.

Dr. Parke: Mr. Chairman, I think it is over four years ago since I asked a question of the American Hospital Association if anybody knew of a window that did not necessitate the removing of a double window in the spring and putting it up again in the fall, and which could be cleaned from the inside. There were no replies. I am glad to see somebody has been working since. Unfortunately in our institution these inventions had not been made, or we had not seen them, so we had

to start to work and work out a little plan of our own. We have a window that we hope is going to work satisfactorily. It has the advantage of sliding up and down in the ordinary English style. It does not need taking out in the spring or putting back in the fall. It can be cleaned by the cleaner standing on the floor of the room inside, all except a little transom at the top, that can be cleaned from the inside by getting on a ladder. He has not to get out on the sill or be held by a rope to clean the windows. We had a little trouble in arranging fly screens, but after about fourteen different screen men had worked on it we got screens that worked. I do not want to say too much about these windows. I know that in all these things it is the second or third year that is going to tell whether they are practical or not. In a large hospital like this the matter of putting up double windows and the matter of cleaning the windows on the outside is a very big expense. We have a rather large corridor which we call "The Bridge of Sighs," and our man figured out that every time we cleaned the windows on that bridge it cost us ten dollars. You will find it is a pretty big bill. I see you have here a type of door that we have in one part of our hospital and which we found with very little dampness on the floor, such as the spilling of a pail of water, by accident of course, and not being quickly wiped up, in a very short time that commenced to split at the bottom. Second, who is handling that plastic flooring; where could it be got at?

Mr. Stratton: The name of the maker is The American Flooring Co., 1170 Broadway, New York.

Dr. Parke: I should have said of course that our windows are double glass and slide up and down like an English window and can be swung in and out. If you get an arrangement that is all complicated, by the time that the nurse has served her second or third year she knows how to work it. These windows are worked like the rest, so she knows what to do with them.

Dr. Donald Robertson: No reference was made to operating room windows, whether skylights are necessary or whether double windows are needed.

Mr. Stratton: I have seen a great many operating rooms and some are single and some are double, and some have very elaborate heating arrangements next the glass, and some have none, and they are all very satisfactory so far as I can find to those who are using them. That is one of my troubles, to find out what they want.

The President: I remember seeing a window—I think it is in Longue Pointe Asylum—that swings on a hinge that opens in that way. I do not know whether it has any special advantages or not. Someone was speaking of a window that swung out. Now in a case of that kind what would you do in the matter of screening?

Dr. Parke: I said that was our only difficulty. The difficulty arose about the screen, but we overcame that difficulty. If anybody is interested in windows I will talk to them by the hour. At the Longue Pointe Asylum—I think I was with you—the trouble is if it is not weather-proof. It is all right as to being easily opened, easy to operate, but not as to being easily weather-proofed.

The President: Any further discussion? If not, Dr. Clarke wishes us to go to the Pathological Room.

Dr. Clarke: We will go over to one of the lecture rooms in the Pathological Building.

(The balance of the evening was spent in the Pathological Building, where Dr. John N. E. Brown, Superintendent of the Detroit General Hospital, exhibited some lantern slides on Hospital Construction.)

The President: I forgot to name a committee on the time and place of our next Convention. I received an urgent message that the next meeting be held in London, Ontario. I should like to name as the Committee, Dr. Young, Miss Rodgers and Miss Hopps, on the time and place of the next meeting, to report to-morrow.

(*To be continued in our next issue.*)

THE AMERICAN HOSPITAL ASSOCIATION

The next meeting of the American Hospital Association will be held at St. Paul, August 25th, 26th, 27th and 28th next.

About ten miles distant is the beautiful city of Minneapolis. The scenery in and around these cities is very attractive. Their hospitals are very large and modern in every particular.

On the way a profitable day may be spent in seeing the large Chicago institutions.

The president states that a most interesting and instructive programme is being prepared. Some of the best hospital workers in the world will be present to address the Conference. Doubtless, the St. Paul meeting will be the largest in the history of the Association.

This is an opportunity that no one in institution work can afford to miss.

A visit to the Non-Commercial Exhibit alone would be worth many times the cost of attending the Convention.

Will you not carry this message to your hospital friends and induce them to join the Association.

The application form gives full particulars as to who are eligible as associate members and who as active members. The fee for the former is $2, that for the latter is $5.

A copy of the transactions of the Boston Convention will be forwarded, as also applications for membership, on application to the secretary, Dr. H. A. Boyce, Kingston, Ont.

REGINA GENERAL HOSPITAL

We regret that through a typographical error some misstatements were made in a recent issue of The Hospital World regarding the amount now being expended on Regina General Hospital, and we gladly make the necessary correction.

Dr. W. A. Dakin, the Superintendent, writes us as follows: "Our expenditure for hospital extension in 1913 and 1914 will total $375,000, distributed as follows:—A central heating plant and laundry, completed September 1st, 1913; the new

south wing of our present building, under construction and to be completed about October, 1914; a new Isolation Hospital under construction and to be completed about December, 1914, and a new Nurses' Home, for which tenders will be called in about three weeks. Our last money by-law for $175,000 was passed on March 11th."

Correspondence

March 28, 1914.

To the Members of The American Hospital Association:—

I am informed that there is a man working in the State of Pennsylvania, visiting hospitals, taking photographs, and claiming authorization from The American Hospital Association.

The President has instructed me to inform you that the Association has no travelling representative and has not authorized anyone to take pictures for the next convention.

Yours respectfully,

H. A. Boyce,
Secretary.

Book Reviews

What Men Live By. By Richard Cabot, M.D., Assistant Professor in Medicine, Harvard University. Houghton, Mifflin Co., Boston and New York. Price $1.50.

A book clearly printed and restful to tired eyes; a book filled with thoughts expressed in tersely-phrased Anglo-Saxon

words; a book to read through carefully, but also to pick up at any time and open at any page, since almost any one of the bright, breezy paragraphs is quotable, stimulating and clinging.

Dr. Cabot, the foremost physician in the newly-developed psycho-sociological movement writes out of a large practical experience which has compelled him to delve below the surface to seek causes and cures for mental attitudes that result in physical disease; and in the above series of readable essays he selects four factors—work, play, love, worship—as the interwoven strand that makes for sane and happy living.

In this volume the writer elaborates this theme, showing what each of these forces does, why it is beneficial, and what we can do to attain it, individually and socially. While nothing said is absolutely new, yet many things are emphasized into newness and made effectively forceful. Perhaps nothing in the writer's philosophy is better than this, that work of any kind done for work's sake only is of little value to the doer. "To get any satisfaction out of work it must seem to the worker to be of some use." The writer expresses his belief in "the spiritual value of hard cash"—of adequate pay for work done—as "a convincing way to wrap up and deliver at each citizen's door a parcel of courage for the future, and a morsel of self-respect, which is food for the soul."

"What Men Live By," should be on the family book-shelf as a wholesome stimulant for the average thinking, working citizen.

Notes on Politics and History: A University address by Viscount Morley, O.M. New York: Macmillan Company, 1914. Price $1.00.

Whoever may have read "On Compromise," "Studies in Literature," the essays on Rousseau, Burke, Cobden, Walpole, Critical Miscellanies, will also want to read this little book by the same author.

He holds that there should be a constant attempt to systematize political thoughts, and to bring ideals into closer touch with fact. The French Revolution has not realized its ideals;

no more has the Reformation; and "Christianity has been tried and failed"—so said someone in the eighteenth century. Quoting Thucydides, the author writes, italicising the quotation, "So little pains will most men take in search of truth: so much more readily they turn to what comes first."

Popular government, he holds, is a rough, heavy bulk of machinery, that we must get to work as best we can. It goes by rude force and weight of needs, greedy interests and stubborn prejudice. There exists in every community a grand reserve of wise, thoughtful, unselfish, long-sighted men and women, who, if one could only devise electoral machinery ingenious enough, if they had only parliamentary chance and power enough, would save the State.

Geriatrics, the diseases of old age and their treatment, including physiological old age, home and institutional care, and medico-legal relations. By I. L. Nascher, M.D. New York. With an introduction by A. Jacobi, M.D. With 50 plates containing 81 illustrations. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street.

It must be many years now since the last work on diseases of old age appeared from the American medical press. Why such should be the case we hardly know, as there are many conditions incident to old age, apart from the well-known arterio-sclerosis. The name "Geriatrics" is original with the author, being derived from the Greek *geron,* old man, and *iatrikos,* medical treatment. The volume covers 500 pages and is divided into physiological old age, pathological old age, primary senile diseases, secondary senile diseases, modified diseases of old age, preferential diseases of old age, diseases uninfluenced by age, and hygiene and medico-legal relations. We feel, after looking over the volume, that it should undoubtedly stimulate interest in diseases among the aged and save original research into both their causes and pathology. We congratulate the author upon the result of his labors.

NEW HOSPITAL APPLIANCES, PHARMACEUTICAL PREPARATIONS, ETC.*

Why the "All Steel" Refrigerator is an ideal one for Hospitals

When a Hospital purchases an article that should last a lifetime the Medical Superintendent knows that, eventually, the *best is the cheapest.* To decide which is best, he must depend partly upon the statements of the makers and the salesman,—but mostly upon his own judgment. In order to judge correctly, it is essential that he should *see* and *try* the article in his institution.

So sure are we that the All Steel Refrigerator will prove entirely satisfactory that we will let any prospective purchaser try it for thirty days before paying for it.

We claim that the "All Steel" Refrigerator is the *best* refrigerator on the market, and by far the *cheapest* in the end for the following reasons:—

1. Because the "All Steel" *will last longer than any other refrigerator.* There is no wood to swell or shrink. The locked and soldered joints prevent water from getting into cracks or between walls and causing damage. Every part is made twice as strong as is necessary for practical use and no expense has been spared to make a perfect refrigerator.

2. Because it is the *most sanitary refrigerator made.* A careful examination will convince any one of this.

In fact, we could justly claim it to be the *only sanitary refrigerator,* as any exposed wood is bound in time to become impregnated with odors which any amount of cleaning cannot fully eradicate.

3. Because it will *use less ice than any other refrigerator of equal capacity.*

4. Because it is sold *direct* from *factory* to *consumer,* saving travellers' expenses and middleman's profits.

Please remember that the saving of ice in one year, by using an "All Steel" Refrigerator, will more than pay the difference in price between it and a lower-priced refrigerator. Thus the "All Steel" Refrigerator *actually pays for itself* in a very short time by the saving it effects in ice bills.

Special prices to Hospitals. Full information and booklet can be obtained from the All-Steel Refrigerator Co., Galt, Ont.

* Publishers' Department.

CORRESPONDENCE

Hackley Hospital, Muskegon, Michigan.
March 10th, 1910.

The Hospital World, Toronto, Canada:

Will you kindly tell me the usage in Canada in regard to vacations of hospital employees:

1. Are Superintendents, head nurses, etc., usually allowed one month's vacation per year with full pay?
2. If an employee leaves at the end of his year without having taken his time off is he allowed an extra month's salary?
3. Is there uniformity among hospitals in these matters?

Yours truly,
Archibald Haddon.

In reply to the above questions, we beg to say in answer to question 1, "Yes." In answer to questions 2 and 3, "There is no uniformity."—Ed.

An Individual Towel

The Individual Towel is a necessity which has come to stay. Certainly in this the twentieth century, no reasonable person will share a towel with all and sundry, or compel an employee to run the risk of germ infection, when at the same cost, or perhaps for less, a clean towel can be provided for each individual. In hospitals or sick rooms, where cleanliness is imperative and where doctors and nurses have so frequently to wash their hands, these towels are handy and essential.

The E. B. Eddy Company's Tissue Paper Towels are to be particularly recommended, being made under perfect sanitary conditions, and guaranteed chemically pure. They are put up in rolls of 150, 250 or 500 towels, well perforated, so that each towel may be readily detached. Each towel is about the size of a large serviette, absorbent, and quite soft to the touch.

Safety First, Last and all the Time demands that you guard your health by using these towels. Eddy's towels are sold with neat, attractive fixture complete, all ready to affix to the walls.

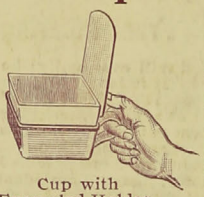
"The Town of Asbestoslate"

This title in red, on a sketchy cover of Scotch Grey, introduces one of the most attractive booklets we have seen in a long time. By way of describing a thriving little Canadian town, whose real name we will leave you to find out, it illustrates some charming homes and attractive public buildings. These and dozens of others in this embryo city, are roofed with Asbestoslate—hence the name.

The exceptionally artistic tone of the booklet does not prevent it from giving many valuable suggestions and much useful information to intending builders, to whom the publishers will be glad to send it on request. Write the Asbestos Mfg. Co., 263 St. James St., Montreal, for a copy of "The Town of Asbestoslate."

Meinecke

"Simplex Sanitary" Paper Sputum Cup and Holders

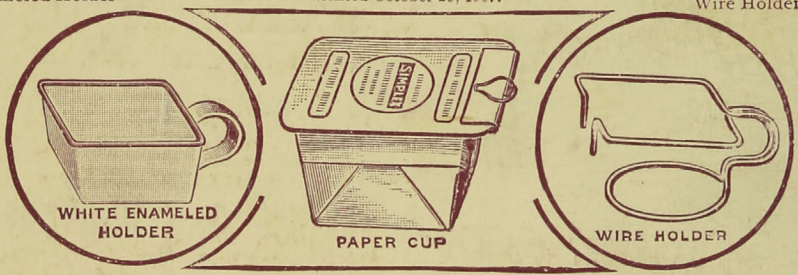


Cup with Enameled Holder

Automatically Closing Cover
Wide Opening
No Unsanitary Flanges

Patented October 29, 1907.

Cup with Wire Holder



The Most Practical Cup, either for Tuberculosis Sanatoriums or General Hospital Use

Seven Reasons Why

1.—It is already folded into shape for immediate use.
2.—Each Cup has a cardboard Cover, attached with a paper hinge, and both Cup and Cover are burned after being in use a day.
3.—The Cover is easily and quickly raised, and closes automatically. This automatically closing cover prevents flies and other insects from coming in contact with the germ-infected sputum.
4.—The wide opening and absence of flanges allow free entrance of sputum.
5—It is made of heavy manila, waterproof paper, which, being light in color, facilitates ready examination of the sputum.
6.—It can be used either with the Wire Holder or the White Enameled Holder. Both these Holders are neat, easily cleansed, and very practical. The White Enameled Holder, being much heavier, is particularly useful on the porches and verandas of Sanatoriums and Hospitals, as it cannot be blown over by the wind.
7.—It is the only Cup that can be used without a holder.

Flat or Knocked-Down "Simplex Sanitary"

For the convenience of Tuberculosis Sanatoriums and Hospitals using large quantities of Sputum Cups, we are prepared to furnish the

"Simplex Sanitary" Paper Cup Flat with Folding Creases

so that they can readily be put together by Assistants or Patients.

When furnished Flat, these Cups are put up 100 in a Box, and 2,000 in a Case, and in this way they take up very little space in the Store-Room.

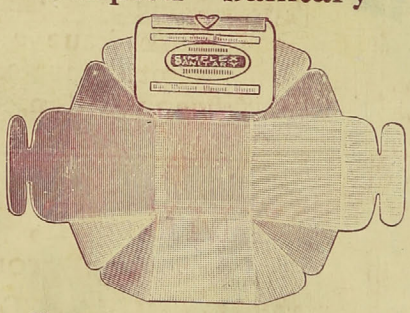


Illustration of Knocked-Down "Simplex Sanitary" Cup with Cover Attached

Free Samples Sent on Request to Sanatoriums and Hospitals