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(Incorporating The Journal of Preventive Medicine and Sociology)

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The Hospital World

(Incorporating The Journal of Preventive Medicine and Sociology)

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Editorials

THE SYPHILITIC PROBLEM

THE discoveries within the last decade of the spirochete pallida, of the Wassermann reaction for the disease it causes, and of that wonderful remedy salvarsan, mark a remarkable epoch in the study of zoology, hematology and syphilology.

These discoveries are of inestimable importance to humanity—particularly to that large one-twentieth portion of the race who, by heredity or through exposure, have been the victims of this dread scourge.

The practical application of the Wassermann and the administration of 606 have proven that syphilis is much more prevalent than was supposed. It is now known that all paretics and tabetics are sufferers from syphilis. One eminent pathologist states that all cases of angina pectoris which he has autopsied have shown luetic post-mortem lesions; and the majority of heart affections in patients over forty, he avers, are due to syphilis.

It is now certainly believed by the advanced syphilographers not only that many people are unconscious sufferers from this disease, but also that many children who are below par in health are so because of the invasion of the spirochete.

It used to be thought that the spirochete could not make a host of the *genus homo* without producing a hard chancre. This is now known to be erroneous.

The organism has been found in a genital abrasion within three days after exposure. It is believed that in many people who are the unsuspected victims of the disease, the symptoms, if any, are more or less marked.

The spirochetes have been found, in so-called cured cases, in situ in the heart muscle without having produced any marked tissue changes.

The unmistakable prevalence of the disease in European countries has long been known to medical men. The first question asked of any patient entering most

European hospitals or applying for relief at the out-clinics has been, Have you ever had syphilis? Unfortunately, such patients have hitherto been too casually treated, not only by hospitals and dispensaries, but also by physicians in private practice. A course of mercury and the iodide of potash has been prescribed, but the necessity for long-continued treatment has not been emphasized, while too little warning has been given regarding contagion. The result has been that the patient, growing tired of medication, or unable to pay for continued treatment, has given up his visits to his medical adviser, grown careless about sanitary precautions, and developed some of the deadly tertiary symptoms. In this condition he has passed on the disease to his family, or even to outsiders through the public drinking cup, the common roller towel, or other unsanitary public utilities.

Then, too, there must be considered the delinquencies of our American hospitals in denying admittance to victims of this disease, either through fear of contagion or abhorrence of the prejudged moral condition of the patient. This attitude of our hospitals has done much to shorten the lives of such patients and to spread the disease through the community.

The viewpoint of the profession to-day concerning the disease, its cause, course and cure, compels an altogether different attitude. The health boards and the practising physician are beginning to recognize that they must work together in eliminating this disease, as in others of better known but less deadly contagions.

All suspected cases of syphilis should be reported to the boards of health, and where the physician is uncertain and wishes to establish the diagnosis, the health board should supply the Wassermann and the 606.

Where the patient is too poor to pay for these the state or municipality must, for the protection of the public, supply both. These cases demand constant supervision until cured. The family and fellow workers must be protected absolutely.

Congenital cases must also be discovered and treated at the earliest possible moment in order to prevent blindness and deformity.

Hospitals must open their doors to all necessitous cases. Such can be segregated and treated on the same aseptic and antiseptic principles as are cases of any other contagious disease, by boiling all dishes, instruments, the use of gloves, etc.

By a combined effort on the part of the boards of health, the hospitals, the medical profession, this disease, like consumption, may be practically stamped out within the next few decades.

But many apostles are needed, and needed now.

BLANK STATIONERY FORMS

WITHIN the past two decades a marked advance has taken place in the matter of providing hospital records, requisitions, receipt forms, and blanks of all sorts. From a state of poverty in this respect some institutions now appear to possess a plethora.

The American Hospital Association has done much to bring the matter to the attention of hospital workers by the exhibition of forms used by several leading hospitals. But in looking over the exhibition it becomes a matter of wonder to the uninitiated why some institutions require so many more forms than do others; why some of the sheets used for similar purposes present so great a disparity in size; why the sizes are so varied in the forms of the one institution; why some hospitals use vari-colored paper while others hold to white; and so on.

A little thought shows how much improvement might be made in regard to these blanks.

A first suggestion is that the name of the institution should appear at the head of every form. This is often omitted. Then there should be shown as a subhead the name of the form so that anyone may know to what use it is applied. This was brought home to the writer upon one occasion when he found it necessary to return a blank chart to one of our leading hospitals to inquire its purpose.

A third suggestion is that all forms should be numbered consecutively. This is convenient to the printer for reference and also for making requisitions. Of course, the printer usually has a number of his own, which, with his imprint, often appears inconspicuously on the front of the form. The printer should be satisfied with his initials only placed next his number.

Another point worth while is that these forms be standardized in size. They might comprise a series of three sizes. The convenience of uniformity in shape and size is evident.

As to color, there appears no sufficient reason why uniformity in this respect also should not be observed.

A suggestion might be made to the Committee on Programme of the American Hospital Association, that some member who has made a special study of this question present his findings. Or, the Association might appoint a committee to secure sets of the most recent forms used by representative American and Canadian hospitals, select the best from each, and make a recommendation to the Association regarding the matter.

In addition to the details of size, color and form of these blanks, there is also the matter of the text. This committee would see to it that the text be arranged in the best order, sufficiently concise without sacrifice of clearness.

If standardization could be secured in this important feature of hospital service it would tend not only to economy of time, of space, and nerve energy, but would result in a marked saving of hospital funds throughout America.

A LABOR OF LOVE

VOLUME XVI of the Transactions of the American Hospital Association has been issued from the office of the Secretary, and is doubtless by this time in the hands of the majority of the members. It comprises the verbatim report of the papers and proceedings of the Association in conference at St. Paul, Minnesota, held in August of last year. These sixteen volumes constitute

a valuable index of the growth and progress of the Association. They also reflect markedly the advance of hospital science during that period.

This journal has dealt so often upon the value of these transactions to all hospital workers, that it may not come amiss to indicate another aspect little considered by the members, namely, the labor involved in producing these annual volumes. The Secretary, upon whom devolves the labor of publication, secures as many of the papers as possible before the conference closes. Some, however, evade him and are only obtained after much correspondence. The stenographic report of discussions is usually on hand within two or three weeks after the close of the conference. This is sent to those who took leading parts in the discussions, for desired alterations or corrections. And herein lies the best proof of the spontaneity of the discussions which follow the papers, for the changes made from easy colloqialism to preciser form are many and emphatic.

To obtain the complete return of the discussions is often a slow process, some delinquents being moved to action only by the long-suffering Secretary's threat of letting their especial discussions pass unrevised.

Then comes the dealing with printers; the study of type, of paper, of cover, of cost, of technical set-up, of illustrations and inserts. And when these are settled and the printing is fairly under way, the Secretary begins his long and monotonous task of revising the membership list in its double classification and of compiling an index. Woven in and out of these undertakings is the constant proof reading.

When the thousand or more copies are ranged before the Secretary ready for mailing, he views them with a satisfaction that somewhat obliterates the weary labor. He feels that his work has been well done, and that the volume worthily represents the work of the Association.

After the copies are mailed, the Secretary waits rather eagerly for the first acknowledgment. It comes, and reads as follows:—

Retreat for Hospital Supts.,
Eloria, Mass.

Dear Sir,—

I have received my copy of Transactions after a long wait, and am surprised to find that my name is put down in the membership list as Miss *Edith* James, whereas it should be Miss *Edythe* James. Also I have moved, but forgot to inform you. Please correct.

Original Contributions

HOSPITAL AMBULANCE SERVICE

By Mason R. Pratt, M.D.
Superintendent, Hospital of the Good Shepherd, Syracuse, N.Y.

In this paper on ambulance service I have not attempted to go into details to any extent, as it is usually best for each hospital to arrange the details according to local conditions.

Owing to the rapidly increasing number of patients who are being admitted to hospitals, the question of ambulance service is becoming a very important one. The hospital must first consider whether there is some adequate outside service at its disposal, and if not, will such a service, controlled by the hospital, be of sufficient advantage to the hospital to warrant the expense of running such a service. In almost every case, I believe, the annual cost will exceed the direct receipts from patients, municipality or other sources. It is probable, however, that the ambulance service will bring to the hospital an increased number of patients and in this way become a source of income to the hospital.

In some cities of the second class the city runs its own ambulances, supplying a surgeon for each ambulance. The call is usually sent to police headquarters and the ambulance sent out by this department. The patient is taken to whatever place he desires within reasonable limits.

Sometimes a liveryman or an undertaking establishment runs an ambulance service at a moderate charge to each patient or to the hospital, which collects from the patient. In a city or town having more than one hospital, it is unfortunate that the ambulance service should be controlled by an undertaker, since, as a rule, he will cater to that hospital which in his opinion caters most to him. In other words, if he endeavors to bring patients to any particular hospital he expects that hospital in turn to recommend him as an undertaker to the relatives of

patients dying in the hospital. Such reciprocity, if attempted at all, is seldom satisfactory, since, as a rule, the relatives will select the undertaker whom they desire, and there is always the danger that charges of graft may be made against the superintendent of the hospital.

I have learned of one hospital which has bought an ambulance and loans it to a liveryman who supplies horses and driver, and takes all calls for the hospital. The charge for service varies according to the location of the call. Of this charge the hospital retains one dollar and the liveryman the remainder. This plan, I understand, has given satisfaction in the city where it is in use, but would not be successful in most communities where the need is for a free ambulance service.

When the hospital operates its own ambulance service, it must first meet the original cost of the ambulance; horses, if horse drawn, garage or stable, also necessary equipment, as stretchers, blankets, etc. Next, the annual cost of the service is quite large, including surgeon, driver, food for horses or gasoline and oil for automobiles, and the constant repairs which are needed.

In the larger cities the city government often pays the hospital a fixed annual amount either for the service or for each ambulance kept in operation by the hospital. In such cases the service becomes an emergency service as well as transfer service, and patients are taken to any hospital desired or to their homes within certain limits. With possibly a few exceptions I believe the cost of such a service is greater than the amount paid by the city.

When the hospital has definitely decided to install an ambulance, the first question which arises is—shall it be horse-drawn or motor driven. In practically every instance I would recommend an automobile ambulance. I can conceive, however, of places where a horse-drawn ambulance would be necessary, as a very sandy country as found in the South, or a locality in which the snow is usually very deep and of long duration.

In a city as far north as Syracuse, New York, a gasoline automobile can be run during the average winter without difficulty. During the past winter, the most severe in many years, the snow was at one time three feet deep on the level, and yet

our ambulance was prevented from taking calls during one day only. There were also one or two calls in the country which we could not reach, but the horse-drawn ambulance failed also. The greater number of calls which can be taken and the amount of time saved can easily be understood.

Electrically driven ambulances are to be given preference where the runs are short, the streets level and the snowfall is light. They are more simple in construction and do not require a very skilful or high-priced chauffeur to operate them. As they are usually equipped with hard rubber tires the expenditure for tires is small compared with that for gasoline cars. Another advantage of the electric car is that there is no danger of fire.

Dr. D. C. Potter, formerly Director of the Board of Ambulance Service of New York City, in a recent letter to a member of this Association, strongly favors the motor ambulance and considers the gasoline car far superior to the electric car. It is his opinion that an up-to-date motor ambulance will cost from $2,000 to $2,250, and that it should be run at a cost not exceeding $1,500 a year.

He writes, "The Board voted in 1913 to make no new contracts for horse-drawn ambulances, that is, not to add any to the existing number." "The automobile ambulance will easily take the place of two or three horse-drawn ambulances and shows up equally well on long or short distances." He gives as his personal opinion "that an automobile ambulance costs so little more to maintain than any other kind of an ambulance that when its advantages are considered it is the only vehicle that an up-to-date hospital with a reasonable territory to cover can afford to consider."

In any case, the ambulance should be light, well ventilated, and comfortable to ride in. There should be plenty of room for the surgeon to perform any treatment called for on the journey.

Where horses are used at least two horses are needed for a one-horse ambulance and three horses for a two-horse ambulance. When one horse is used at a time, the change can be made as often as necessary, but where two horses are required, it is a good plan to work each horse two days and rest on the third

day. Where the service is especially heavy, four horses should be maintained. One objection to the horse ambulance system is the necessity of having a stable on the hospital premises. Even with the greatest care flies and stable odors are difficult to eliminate.

While the repairs on an automobile ambulance are numerous and expensive, especially in the line of tires, and the car must frequently be out of commission for short periods, yet this is offset to a large extent by the shoeing and sharpening of shoes in the case of horses, and new solid rubber tires for the ambulance wheels.

In selecting a motor ambulance the first question is, of course, the kind of car. While it is always best to select a car made by a company which has already made several successful ambulances, yet it is much more important that the company selected shall have a branch or repair shop in your vicinity. It is very simple to run down to the garage and get a new part even if the dealer has to take it from an exhibition car, as he usually is willing to do, to accommodate the hospital and keep up the reputation of his car; but it is very distressing to wait three or four days while a new part is coming from the factory several hundred miles away.

Never alter a car built for some other purpose in order to have an ambulance. If the body is enlarged, the centre of gravity is changed with relation to the chassis and the unusual weight on a given part will call for constant repairs. If the chassis is lengthened, it is weakened, and again constant repairs are needed. Be sure your ambulance is built for an ambulance from the ground up and there should be little trouble.

One of the greatest essentials of a motor ambulance service is a good driver. A poor driver can ruin the best ambulance in a very short time. It is not merely sufficient that he can run the car through the streets without accident to himself or others, but he must be able to make all ordinary repairs as soon as needed or your ambulance will be out of service much of the time and your reputation will suffer accordingly.

Always carry at least one complete extra tire and also a lantern, for although most motor ambulances are equipped with

electric lights, one can never tell when some accident to them may occur and it usually does occur when they are most needed.

It is advisable that both the surgeon and driver be in uniform, and that smoking on the ambulance be strictly forbidden. The driver, and I regret to say frequently the interne, fail to appreciate the difference between an ambulance and an ash cart, but the citizens do not.

There is one more point I wish to emphasize which is likely to be forgotten. The ambulance entrance to the hospital and the patient's reception into the hospital are of very great importance. The entrance should be so arranged as to insure quick and comfortable entrance for stretcher patients. It should be neat and clean and cared for the same as the main entrance to the hospital.

Do not keep a patient waiting. If the patient cannot be taken at once to his room or ward, at least have a nurse and orderly present when the ambulance arrives. While waiting for the doctor or while taking the admission history, or whatever your individual custom may be, give the patient the privacy of a room kept for that purpose instead of leaving him or her in the corridor, an object of interest for every passerby.

Society Proceedings

AMERICAN HOSPITAL ASSOCIATION—SMALL HOSPITAL SECTION

Cost of Training Schools; Ambulances, Floors.

For some years there was a growing feeling in the American Hospital Association that insufficient attention was given to discussing topics in which small hospitals were interested. This voiced itself in the Detroit meeting. At the following meeting in Boston there was a profitable session devoted to questions relating almost solely to the smaller institutions. The man who took the most active part in this meeting was chosen chairman of the section, and presided at the Minneapolis meeting.

Following is a summary of the discussions:—

(1) Should the expenditures of the training school be kept separate and distinct from those of the hospital?

Dr. Moulder, Supt. M. E. Hospital, Indianapolis: It has never been the policy of the hospital management to keep the accounts entirely separate; although I have figured on the proposition quite frequently, and am able almost at any time to tell exactly what the operation of the training-school costs per day for each and every nurse. I don't think there is any advantage in keeping the accounts separate.

It costs the Methodist Hospital of Indianapolis in the neighborhood of a dollar a day to train their nurses. We have our nurses in five different homes in the vicinity of the hospital. Each one of those homes, or houses, accommodates about twenty nurses; in each one of those homes we have a supervisor who looks after the discipline of the girls or young ladies in that particular home, all of which makes it a little more expensive. I am satisfied it is more expensive than if we had them all in one house. We pay our nurses $5 a month, $3 in cash, and put to their credit $2 at the end of each month. That $2 pays for their uniform, their breakage, their books, ther-

mometers, and such articles as they use in their necessary work about the hospital. All of that now is charged up to the operation of the nurses' training school. We have a lady physician in the city who gives ten lessons in massage. She charges five dollars a lesson for a term. She usually has to have about two terms during the year, which would make in the neighborhood of $100. That, too, is charged up to the training school of nurses.

"Should the expenditures of a training-school be kept separate and distinct from those of a hospital?" I would say, yes, (although we do not do that in the broadest sense), for the reason that you ought to know just what your training-school is costing you, just as you ought to know what the butcher bill and every other bill is in the hospital.

Dr. Packard: The expenditures of the training-school should be kept as an absolute record in the management of any hospital. If the figures that the gentlemen quoted are correct, I should say that the maintenance is exceptionally low. In our hospital we have a training-school of fifty nurses, and our average for the past three months has been $1.54 per day for the maintenance of one nurse in the training-school.

Miss Thatcher, of Cincinnati: We keep a very accurate account of the training-school and nurses' home, as against the hospital. I am unable to tell you just how much it costs us per meal for the nurses. Our average, though, I think, runs from $1.50 to $1.60.

Dr. Potts, Memphis: I would like to ask if the estimates made here of the cost of the nurses includes the rent or the expense of housing the nurse, laundering for the nurse, board, teaching expense, servants' hire, and everything of that kind. I would like to know if all those things are figured in.

Dr. Packard: Everything is figured in, the rent, the light, the water, the proportion of office expense that has to go to the training-school, the proportion of printing that goes to the upkeep of the training-school, everything that is an expense in every part of the institution, a proportionate charge of that is charged to the training-school on every detail, nothing is left.

(2) Where a hospital has but one ambulance, which should it be, horse, electric or gasoline?

Dr. Morritt: In the town I am now in the undertakers run the ambulance, and have a very unique method of doing it, too. All three of the undertakers have ambulances. If they are going to one hospital, they have a very neat little brass sign that they hang out, with the name of that hospital on; if they are going to the other hospital they have a very neat sign with the name of that hospital, so that the people in the town really think that each hospital has its own ambulance. The ordinary run costs $3.

The Chairman: In Minneapolis we have now what we call an Emergency Ambulance Association. It is a private corporation owning and operating a number of gasoline power ambulances for all the hospitals excepting the municipal hospital. The City hospital still operates its own, and the police department operates ambulance for accident cases. The other hospitals all have contracted with this Ambulance Association for ambulance service. They now operate three cars and will soon have a fourth car in service. They are giving us very good service. Our minimum rate over there is $3.50, but they will cover a considerable territory at that rate. It includes all the stations in the city and a large portion of the resident section. The maximum charge within the city limits is $5 for a trip, and that requires them sometimes to drive as much as seven and one-half miles going and seven and one-half miles coming. I think that is going to prove very satisfactory.

We had what we thought at one time was the acme of perfection in a horse-drawn vehicle. It was an expensive wagon to start with and nicely finished, but when these gasoline ambulances came out, fitted with electric fans in hot weather, and hot water radiators in cold weather, and all such conveniences, we felt we couldn't compete. And sometimes people took offence when we sent our horse-drawn ambulance. The doctor would simply call for an ambulance, we sent our ambulance, these people were people of some pretensions, and they refused to ride in our ambulance and would send it back. We couldn't make them any charge. They would call up the Automobile Ambulance Association and get their car. So we aban-

doned that. Besides, there was a great economic factor in this for the hospital. You don't have to provide any linen, any blankets, any machines. You don't have to send out any orderly or interne; the case is brought to your doors by the servants of this Association who are trained in Red Cross work, more or less. They are the high type of orderlies who go into this work and are paid $75 a month, getting their room, their uniforms and one thing or another. It is a pretty good thing. It is better than being a hospital orderly, anyway. So that has solved the ambulance problem very satisfactorily over in our town; and I believe it is doing the same in several other cities.

Dr. Pratt, Syracuse: I think this question is a very interesting appearing one, but there is a great deal more to it than perhaps would seem at first, more than we can perhaps go into at one time. The question to start with will be between a horse ambulance and a motor ambulance without regard to which kind. If a small hospital having only a few calls was to keep an ambulance, they would find the horse ambulance much more expensive than a motor ambulance, which is no cost at all when not in use; unless the hospital has some other work they could use the horses for, as in trucking or farm work, or something of that sort. The horse ambulance, if it is a busy service, cannot take care of nearly as many calls as the motor ambulance can. It is a nuisance on the hospital grounds on account of the odors and flies that are attracted around the hospital. The motor ambulance does away with all those difficulties.

When you have decided to use a motor ambulance, the question of a gasoline car or an electric car would then come up. An electric car is entirely satisfactory under certain conditions, but they are very few. If your streets are level and your runs comparatively short, your snow fall, as a rule, comparatively light, your electric car will be entirely satisfactory and much cheaper to run. But such conditions are found in very few places. In New York City it is found to be very suitable. In Boston I understand—just why, I don't know, I have never heard the reason—they have found the electric ambulance very unsatisfactory. The gasoline car for busy service will take care of much more work than any other car,

and is no more expensive practically, I think, than a horse-drawn ambulance, certainly. It might be more so than an electric ambulance. In the electric ambulance you must have a charging station either at your own plant or near by. If you do not have it at your plant, you are very frequently called out suddenly and get about half way on your call and find your car has run down. It is difficult to have it at your own plant unless you make your own electricity. So that all these conditions would have to be considered with the individual hospital in deciding what kind of an ambulance would be most satisfactory to that particular hospital.

Dr. Waterson: After careful investigation I have found that in cities of 10,000 to 30,000 where there was no ambulance connected with the city, the gasoline patrol wagon and ambulance combined, which is being gotten out now by some of the automobile firms, has been quite economical for those cities.

(3). Which is the best flooring material for wards, for corridors, for administration buildings and for operating rooms?

Mr. Stevens: I have tried nearly everything that has been made. Sometimes I recommend one thing, sometimes another. It depends in which year I am asked. Just now, what I am using in some of my hospitals is this: For the corridors, a cork tile. This cork tile will hardly ever wear out. It is most resilient and I think for a corridor floor it is perhaps the best thing that we have to-day. It is surely non-slipping and has every advantage of a corridor floor. For wards and private rooms I think linoleum seems to be the nearest approach to a perfect floor if it is properly laid. Get experts who will lay that floor and lay it smoothly and have it thoroughly cemented to the foundation.

In southern Germany the best architects there were cementing linoleum directly to the concrete base.

I don't believe in using linoleum on rooms where there is a great deal of moisture, like sink rooms, toilet rooms, diet kitchens and kitchens themselves. There, I should use some simple material, depending on the amount of the appropriation. If you have plenty of money, I should use tile; if you haven't I should use terazzo.

Miss McCalmont, New York: Cork tiling is very expensive, and smaller hospitals, it seems to me, would have to content themselves either with a dreadnought linoleum or similar material, or possibly a granolithic floor with a linoleum strip well sunk into the granite.

I have always found building committees are very averse to linoleum in private rooms. They do not like the appearance and patients do not like the appearance of linoleum, and are almost insistent upon hardwood floors, which we know are a great nuisance to maintain. But in private rooms that seems to be almost a concession that we have to make. In wards it seems to me that there is nothing much more satisfactory than linoleum unless, of course, the hospital has the money to put in cork. Cork is particularly nice in children's wards because of the warmth of it, general softness, and the beauty of the coloring, etc.

In operating rooms, I was particularly impressed with a hospital in San Francisco that had two operating rooms, one done in white tile and one in a soft green. The green was put in as an experiment and it has become so popular that they find great difficulty in getting their servants to operate in the room with the white tile. There is a vast difference on the eyes. This room is tiled, and wainscoted about six feet up the walls. It has been a tremendous improvement on the light.

Dr. Potts: Our hospital has been in operation two years and we have tiled floors in corridors, rooms, everywhere except in the kitchen and dining-room, where we have the granolithic floors, and we have found it very satisfactory. It is a Spanish tile with different patterns and looks very much like a rug. First, we had little rugs laid in the rooms, but we found that those were not satisfactory and we took them out. We use only the bare tile. The only difficulty we have found is, it is a little noisy. But we have rubber strips down the corridors. We have no rugs now at all in the rooms except a very few. In our specially nice rooms we try to keep some rugs. I think it is more sanitary than anything else we can get, and we are becoming more and more pleased with it. We were just like all the rest in building our hospital. I visited New York, Philadelphia and Chicago, and consulted hospital superinten-

dents, and they were all up in the air about floors. We finally decided on tile and are very well pleased with it. We were fortunate in making a deal with a company that was laying the Spanish tile and trying to get in with the city, and we got it at a very reasonable price.

Miss Ritchie: Mr. Chairman, we have a hospital a little less than five years old. All the floors with the exception of the operating room proper and the stairs are in a dull red concrete. I don't know the character of the concrete, but I know that it contains a portion of asbestos. It is put in without angles and is very satisfactory. If it becomes discolored, it cleans easily with steel shavings and is finished again with oil. It is easy to clean and quite sanitary. We use rugs, and having a very good vacuum cleaner, we have no trouble in keeping our rugs and the floors clean.

Miss Burns, Kansas City: Mr. Chairman, at the German Hospital in Kansas City, which has been in use for two years, we have what we call petropulp. I don't know what it is. I suppose Mr. Stevens may have told you before I came in.

Mr. Stevens: I have never heard of it.

Miss Burns: We like it very much. It is not as noisy, of course, as a hardwood floor or as the terazzo. We have it in the private rooms and in the corridors. We use rugs in the private rooms. It turns up at the base board. I don't know what it is, because it was there when I went there.

Dr. Howard: Mr. Chairman, I would like to ask Miss Burns about the stain on that. We have some ourselves.

Miss Burns: It was somewhat stained from being used before it was sufficiently dry, so I am told. We find that clear water is the best. We discovered this from an overflow from a bathtub that clear water was better for cleaning it than anything else. There is just one place that we have had any trouble with it, that was in the nurses' dining-room, where some steam pipes leaked and caused a little upheaval in the floor.

Dr. McRae: I would like to ask Mr. Stevens if he has had any experience with plastic linoleum. I understand some of the large hospitals have used that.

Mr. Stevens: I would say, Mr. Chairman, that this plastic linoleum is just another name for magnusite floors, as I understand; the basis being magnusite. They use various ingredients for the mixture, sand, sawdust, asbestos, cork and various things. I think cork is used in what is called plastic linoleum, as I understand it. I saw some used in the Bellevue Hospital in New York. I was told that it was some of the same material, that is, a magnusite floor. My objection to a magnusite floor is this, that the least bit of even diluted acid will eat that surface right off; that warm water dripping on that floor constantly will eat a hole in it. For instance, I used it in several kitchens and the various dripping in the kitchen would gradually wear that floor away. For that reason I don't like it as well for that sort of a place. It is good, as I say. I like it best for a place where it isn't subject to very much wear, but I shouldn't prefer it for toilets, sink rooms and that sort of thing.

Dr. Pratt: I was just wondering if a number of the members here might not have been at the Detroit convention two years ago and seen the new hospital which was opened there at that time in which they had the terazzo floors in the corridors extending in the private rooms. I was speaking to Dr. Babcock a day or two ago to find out how that turned out, and if I understood him right he said they had found them very satisfactory indeed, and wouldn't think of going back to wooden floors.

The Chairman: That strengthens me somewhat in my convictions. We are building a new building in Minneapolis now, and the contract has been let for terazzo floors in all the rooms.

(4) Should nurses receive their preliminary training in technical schools?

Miss Aikens: Much depends upon the proximity of the technical school to the hospital and the hospital conditions in general. If by preliminary training we mean that a nurse spends her entire probation period in a school apart from the hospital, I shouldn't think it was a very wise proceeding. The preliminary training is not alone to cram the nurse with a certain amount of theories, but it is to gradually accustom her

to the hospital atmosphere, the hospital surroundings and the hospital people, and to give her a little insight into the life that she is expecting to lead for the next two or three years. I can see some advantages in having some class work in a technical school. I remember a few years ago having quite an argument with one of the prominent members of this Association who was very enthusiastic about central technical schools where a nurse should spend the first year and where she could be surrounded by laboratories and all the other facilities for giving the most expert training during this first year. And I asked him what his plans were for the second year. Why, he said, he would send them then to the smaller hospitals throughout the State. He would have the central training school in a large city. The technical school would be where all the students would take their first year work. I asked him if he thought that a nurse who had spent her first year work possibly in a central school connected with a very large, elaborate hospital and surrounded by all these modern improvements would be perfectly satisfied to go out into a little railroad town, perhaps, and settle down for the rest of her training. He wasn't quite sure that she would.

I believe very fully that we ought to begin to instil the principles of hospital loyalty into our pupils from the day they enter. I should be very careful about the teacher that taught my probationers. I should want to know just what she was teaching them in the technical school and whether the things that she was teaching them were contrary to the things that the nurse might expect to meet when she came to the hospital.

As I said before, I think that if this hospital is so located that certain classes can be held in technical schools, that it is a very excellent idea to let your pupil nurses go to the technical school for those special classes, like classes in chemistry, or special classes in dietetics where they have expert teachers and all the facilities for giving a thorough training in dietetics or some of those other subjects. I should think it was a very excellent plan to let them avail themselves of those certain classes; but I do think there is a great deal to be gained in having the pupil really under the administration of the hospital, and control of the hospital and gradually accustoming

herself to the hospital from the time she begins her career as a probationer.

Miss Powell, Minneapolis: I should like to say I have for the last four years had the superintendence of nurses having four months in a technical school, but I have my nurses during that four months. I have a class with them every day myself, five hours a week. In the University they would get from expert teachers their anatomy, physiology, materia medica, bacteriology, chemistry, and in the academy a course in lettering. We have let them have some English, but we find it is not altogether necessary as they are high school graduates. I take up with them the history of nursing, nursing technique, nursing ethics, hospital economy, and try to gradually prepare them for what they are going to work in, tie them up to the work of the hospital. My hospital dietetian also has them for an hour a week in preparatory dietetic work which is carried on during the two months of probation which they get when they come into the hospital. When they get into the hospital there are six hours of ward duty and two hours of class work every day except Sunday. I have those classes made up for practical demonstrations and practical dietetics. They do nothing for patients until they have it demonstrated in the class room. I do feel that the technical work which can be taken up relieves the hospital of a tremendous burden of teaching. The amount of money that is accorded to the training-school for nurses in the University of Minnesota, accounted as they count six hours and cost of work in the University for other departments is rated at $3,055 a year, the actual time that is taken up during the year. That includes, of course, the undergraduate work which is carried on by the University faculty after they come into the medical hospital; the class work being carried on by nurses. So that we do not give up our nurses entirely to the teachers in the technical school, but I have very close watch on them by having them myself. I feel they come in gradually prepared. They have a foundation to work on. They are getting that work when they are entirely free from any other work. They are rested, they are fresh, they are putting their work into study.

That work costs our students $25 at the University, and better than $125 which they pay for boarding themselves during that four months. We count the course is costing them $150 for the time. After they come in we pay them nothing. We furnish their uniforms, giving them a 56-hour week, and their class work following that. Of coure some of you know how much trouble I have had in getting nurses. Up to this time they are five years old. We have spent over $11,000 in graduate nurses for the wards, but this fall my class is larger than I have need for, and I am going to need twenty-one nurses within the next year. Together with nurses who come to us for a year, I shall be able to pick and choose among my class this fall. That has not been the case heretofore. This is the first class since February of this year that we have been able to run the hospital with our pupil nurses. I feel the technical schools of our Universities give good training and it is not a disadvantage. I feel that the hospital by employing trained teachers can arrange that preliminary work in their own hospitals to take care of the nurses if they wish to do it that way. We find it more satisfactory at the University school to have it the way we have.

THE CHAIRMAN: Miss Powell has told us something about the training school at the University Hospital at Minneapolis which is unique in this respect, that it is a department of the University, so that when a pupil nurse graduates from the University Hospital Training School, she gets a University diploma.

MISS POWELL: A University degree. There are University requirements before entrance.

THE CHAIRMAN: The requirements are the same as in the academy department of the University?

MISS POWELL: Yes.

THE CHAIRMAN: I don't know just the exact interpretation of this question, "Should nurses receive their preliminary training in technical schools?" I presume it refers to their training after they have been accepted, of course, as probationers or pupils of a training school. Do I understand it to mean they should be sent to some technical school or a separate curriculum should be devised for them in the hospital of a technical nature different from the usual curriculum? Or, does

it mean it is advisable to select such applicants for our training school, or advise those who wish to apply to our training schools, to receive some sort of technical education? I think we need a little further enlightenment on the exact interpretation of this question. I want to say for my part, when I look at this question, the kind of applicant I want in our training school is the girl with a general well rounded education. I don't want one who knows more about electricity than another girl, or more about steam, or more about cooking or sewing, and less about literature, history or grammar. I want the general, well rounded, educated person.

Question 5. Should the tray for private patients be made up in a central serving room, or in serving rooms on the floors? Should nurses or pantry maids prepare the trays?

Miss Anderson: In answer to the first part of that question, I can give you my experience rather than my opinion. Ours is a small hospital, only fifty beds, and the building is not constructed for it, so it is impossible for us to do otherwise than to serve from one place. There are advantages, I think, in each system. The food all comes up from the kitchen, and the steam table is presided over by the housekeeper. We help the nurses as much as possible by having the menu posted, the different kinds of diet are stated and the patients get different diets; house diet, and extra house diet, which means something a little extra added for the private room patients. The nurses go to the steam table, tell the housekeeper what their patient likes, how much she wants, etc. That works out pretty well.

The latter part of the question I have a very decided opinion about. I think the nurses should always serve their patients' food. It isn't possible for each nurse to go to this diet kitchen. If it were, I should like that better. But we designate certain nurses to serve the trays, and we always send our senior nurses, nurses of best judgment and best experience to the diet kitchen to serve the trays. After a surgical operation there is no other one subject that demands so much attention as the diet. The patients if they are getting along pretty well and are fed pretty well, are happy and their troubles are less. So if we send nurses to the diet kitchen to get out those trays, who will get out good trays and attractive trays. We lay great stress on

that. I don't think we would be liable to get the trays as well served if they were gotten out by a maid. But I may be old-fashioned about that. I like to have the nurses get out their own medicines and do their own charting and do everything possible for their patients. I think if I were building a new hospital I should have separate diet kitchens. But, of course, that depends a good deal on the size of the hospital, too.

Miss Burns: Mr. Chairman, we have the diet kitchens on each floor and we put the probationers in—not during their first month—it is in about the third month, to set up the trays. We have in our main diet kitchen two nurses who help do the cooking for the private patients' special diets. These two nurses and the dietitian preside over getting out the trays at meal time. Each patient's tray is tagged, the name of the patient, the number of the room and the diet. We think that works out very satisfactorily. It is the older nurses who are getting the training in the diet kitchen in the cooking, and it is the younger nurses who set up the trays. The older nurses preside over getting the food on to the trays.

Miss Duncan: I am very much interested in this question because we are building a new wing in which we are having the central diet kitchen, from which all the food is to be served. It is claimed, and I have found it so in the hospital as it is at present, where we employ several special nurses, that there is a good deal of trouble in serving the meals from the separate diet kitchens, as each special nurse wants to have special cuts for her patient; whereas if they are served from a central diet kitchen, served on a tray with a hot water plate directly to the patient's room, the dietitian being in charge of those trays can be made responsible both for the food and the appearance of the trays. And the nurse under her gets the experience of seeing the trays perfectly set and the food properly handled, and there is not the same discussion about the food that is served, the cuts and so on, from the separate diet kitchens.

(*To be continued.*)

News Items

"The Modern Hospital" Purchases "The International Hospital Record"

The International Hospital Record which has been published for eighteen years by the Sutton Publishing Company, Detroit, has been purchased by The Modern Hospital Publishing Company of St. Louis and Chicago, and was merged with *The Modern Hospital*, beginning with the March issue.

The Modern Hospital is a monthly magazine devoted to the building, equipment, and management of hospitals, sanatoriums, and kindred institutions. Recently it has opened several new departments relating to public health problems, such as "Philanthropy and the Public Health," "Prevention of Tuberculosis," "Prevention of Blindness," "Dispensary and Out-patient Work," and "Life Extension." The editorial offices of *The Modern Hospital* are located in Chicago and the publication offices in St. Louis.

The Ambulance Construction Commission

This is the first great war in which field motor-ambulances have been extensively used. It was inevitable that many defects should be found in existing types, and in various quarters experts began to ask whether something could not be done to standardize the patterns and to improve the type. At the instance of Mr. Henry S. Wellcome, the founder of the Wellcome Bureau of Scientific Research, a Commission has been formed, and the names of members show at once that the matter is regarded as of first importance by those most intimately connected with the welfare of the wounded soldier.

Sir Frederick Treves, whose long experience and distinguished service specially fit him for the task, has consented to be the chairman. The Admiralty is represented by the Director-General of the Medical Department, R.N., while the Quar-

termaster-General to the forces and the Acting Director-General, Army Medical Service, represent the War Office. The British Red Cross Society is, of course, represented by Sir Frederick Treves, and the St. John Ambulance Association by Sir Claude Macdonald and Sir John Furley. The remaining members are all experts. This Commission will first and foremost act as a judging committee for the award of prizes of the value of £2,000, provided by the Wellcome Bureau of Scientific Research. These prizes are offered for the best designs of an ambulance—body which shall fit a standard pattern motor-chassis for field motor-ambulances. The last day for the receipt of competing designs is June 30, 1915. It is hoped that the competition will bring in a number of ingenious designs, from which the ideal field ambulance-body will be evolved.

It may be asked why the competition is restricted to designs for a body and not for the complete ambulance, including a chassis. The reason is that a chassis takes much longer to build than a body, and that, when war breaks out, it is impossible to get at short notice anything like a sufficient number of any one type of chassis. On the other hand, a standardized body to fit any chassis of approved dimensions can be constructed in numbers at comparatively short notice. And a perfected body is badly wanted to ensure complete comfort for the wounded.

It is hoped that the information obtained by the competition, and in other ways, will be published in some permanent form, available for future reference. Probably in addition to one design of special excellence, there will be submitted various ingenious suggestions which may be incorporated in the pattern design approved by the Commission. For these, a portion of the prize money has been set apart. The first prize is of one thousand pounds, the second of five hundred, and the third of three hundred pounds. All details of conditions may be obtained from the Secretary, the Ambulance Construction Commission, 10 Henrietta Street, Cavendish Square, London W. The competition is open to citizens of all nations.

Book Reviews

Report of the Committee on Inquiry into the Departments of Health, Charities, and Bellevue and Allied Hospitals in the City of New York, appointed by the Board of Estimate and Apportionment. George McAneny, Chairman, President of the Borough of Manhattan; and George Cromwell, President of the Borough of Richmond. Investigation and report under the direction of Henry C. Wright. City of New York: 1913.

From time to time during the past few years a number of the various reports comprising this large volume have been issued, and eagerly read by hospital workers. This work is a fine contribution to hospital literature and will be perused with interest and profit by trustees, superintendents and other hospital officials.

In the collating of this voluminous report the services of eminent sanitarian, engineer, architect, accountant, housing expert instructor and investigators were secured and a fine study made of Bellevue and the allied hospitals. The thorough inspection of conditions revealed the remedies which are being applied.

Among the various recommendations made, one of the most important is that of establishing Health Centres.

Such a centre would bring the hospitals and health departments into co-operation, and leave no uncovered territory between the functions performed by each; would enable the hospitals to secure a knowledge of home conditions; would retain at home many patients that otherwise would go to the hospitals. It would give a more intelligent care to convalescing patients. would advise patients when to go to an outpatient department; would minimize the spread of contagious diseases. The instruction of mothers would be a material aid in maintaining health conditions in the family. Centralizing information and records at one place would make them accessible to all agents in the district, thus rendering it possible to treat a large proportion of

sickness at its inception. Thus duplication of effort would be reduced, the hospitals would be relieved, and the amount and duration of sickness diminished.

The book is being sold at a nominal sum.

The Psychology of Management. The function of the mind in determining, teaching and installing methods of least waste, by L. M. Gilbreth, M.L. New York: Sturgis and Walton. 1914. Price $2.00.

Hospital superintendents who have in charge the larger hospitals of America will do well to read this volume. They may find the first chapter rather dry; but the remaining chapters are fascinating in interest. The various topics in their relation to what Mr. Gilbreth styles the three types of management: traditional, management, transitory management and scientific management. The last named type is the ultimate form of management because it is psychologically right. Scientific management is a science. It is built on the basic principle of recognition of the individual. It fosters individuality by functionalizing work. It includes measurement of the workers' capacity, standardization, accurate records, unification and self-perpetuation of management, is a contribution to education. Its incentives stimulate and benefit the worker—ultimately as well as immediately; it is applicable to all fields of activity—mental and physical; it can be applied to self-management; teaches men to co-operate with the management, as well as to manage.

It increases output and wages and lowers cost; eliminates waste; turns unskilled labor into skilled; provides a system of self-perpetuating welfare; reduces the cost of living; bridges the gap between the college trained and the apprenticeship trained worker, and forces capital and labor to co-operate and to promote industrial peace.

The presentation, elucidation and proof of the above premises make very profitable reading. No book can be of greater value to the hospital manager.

Notes on Dental Anatomy and Dental Histology. By T. W. Widowson, Licentiate of Dental Surgery of the Royal College of Dental Surgeons of England; late House Surgeon of the Liverpool Dental Hospital. Third edition enlarged and revised. More than 100 illustrations. 7/6 net. Published by John Ball, Sons and Danielsson, Ltd., Medical Publishers, Oxford House, London W.

To the dental student who is in search of condensed information on this subject, or the busy practitioner who wishes to re-burnish his information on Dental Anatomy, this work is invaluable. The author has succeeded in crowding a great deal of necessary information into small space. In fact the book is one that every practitioner ought to keep very near him for reference. It will help him do more intelligent work on the living organs of mastication. The illustrations are numerous and easily interpreted and throughout the book are blank pages where the reader can jot down the impressions he wishes to retain. The author and publishers are to be congratulated on the production of such a work and we gladly recommend its perusal to the whole Dental Profession.

Obstetrical Nursing. A manual for Nurses and Students and practitioners of medicine. By Charles Sumner Bacon, Ph.B., M.D., Chicago. Lea and Febiger, Publishers, Philadelphia and New York.

This is a new work, taking up all the relationships that exist in an obstetrical case, especially in a private house, in a very thorough and emphatic manner. Much stress is laid upon the qualities essential to a good nurse, since this work differs vastly from the care of a pneumonia case or an appendectomy.

The business side of the engagement between patient and nurse is handled in a frank, fair way, and all nurses can profit by it.

The anatomy of the parts is clearly described, also the physiological changes that occur, so that any pupil can obtain

a clear idea of this wonderful process of growth, and nothing is said, or omitted, to make the lessons obscure.

Every possible abnormal condition which can occur with the mother or child, is carefully dealt with, for example the care of the breasts. In one or two instances the illustrations might be improved; for instance, in breast massage, the nurse stands to better advantage, and must be on the side of the affected breast, permitting the patient to lie also on that side, with the breast in a pendulous position over the edge of the bed.

One might also wish that the difficult question of incubators were dealt with more fully.

As a whole, the work is well arranged and complete.

DOCTORS READY TO SERVE

The following is a list of thirty-seven medical men, who have recently qualified for military field medical men who are willing to serve with any contingent, and who are arranged according to seniority in qualification for military service: J. W. Humphrey, F. M. Walker, C. C. Birchard, F. S. Park, J. B. McMurrich, R. H. Thomas, G. G. Clegg (at Hurst Concentration Camp), L. C. Palmer, W. T. Little, J. D. Hayes, J. G. Fitzgerald, H. L. Reagin, O. J. Day, E. A. P. Hardy, A. Pain, A. C. Rowswell, R. Y. Kenny, H. G. Willson, F. E. Watts, G. N. Urie, V. H. McWilliams, J. V. Brown, N. C. Sharpe, H. E. Ferguson, A. A. Fletcher, M. G. Thomson, G. F. Boyer, R. W. MacIntyre. F. J. Livingstone, E. Boyd, W. E. Struthers, A. H. Caulfield, J. W. S. McCullough, W. L. Whittemore, R. H. Paterson, G. D. Porter, F. A. Dallyn, H. C. Parsons.

NEW HOSPITAL APPLIANCES, PHARMACEUTICAL PREPARATIONS, ETC.*

Ideal Illumination for a Hospital

If there is a building that should have as nearly as possible a perfect system of lighting, it is a hospital or sanatorium. How often it occurs that a surgeon, in operating after dark, is confused by the unsatisfactory lighting in the operating theatre, and medical practitioners know well of most distressing cases of eyestrain due to defective illumination. The James Devonshire, Limited, 166 Bay Street, Toronto, are Canadian agents for the Alexalite System of Lighting, which is ideal for use where the human eyesight is to be preserved from not only fatigue, but permanent injury as well, and also where everything should be distinguished in its true relationship as in an operating room. This can be only done by removing all spots of light from the normal range of vision, thus effectually screening the eye from the actual source of light. This is accomplished by the Alexalite system, which illuminates the object seen with an even intensity of light at all points, causing a feeling of restfulness and preventing any struggle on the part of the human eye to avoid a glare. As is well known, the best daylight is on a bright day with the sun obscured by a cloud, showing the value of indirect light. This is afforded only by the Alexalite system. It is for these reasons that hospital authorities and physicians should investigate this system first.

5,000 Miles Guaranteed

Doctors are naturally anxious to secure the biggest mileage possible out of their tires. It will, therefore, interest them to know that *one firm* anyway absolutely *guarantees* 5,000 *miles* out of their tires, and many users have got double that mileage. The tire referred to is *manufactured by one of Canada's Allies* in the great war, Russia, and the name of the tire is *The Columb.* With such a guarantee as that, *every physician should purchase* for this season *nothing but Columb Tires,* and they are procurable at 15 Wilton Avenue, Toronto.

Saves Time and Salaries

A hospital, being a charitable institution, must of necessity conserve its finances. One way to accomplish this is to introduce such labor-saving devices as will save the paying of unnecessary salaries in, say, the accounting department. One such device that will be found to save money is the Multipost Stamp Affixer and Accountant, a unique and most effective

* Publisher's Department.

machine for immediately fixing stamps on the envelope or wrapper. It dampens the stamp and affixes it by simply pressing the plunger. Institutions should not be without several of these machines. They cost but $25.00.

One of the Best Known Spas in America

The European war has made it impossible for Americans to go abroad for hydro-therapeutic treatment. In consequence the spas of this country will be patronized hereafter more than they have been before, and Americans will be happily disappointed to learn that they can receive the same kind of treatment in this country as they have been used to getting in France, Germany and Austria.

One of the best known spas in America is the French Lick Springs, where the water possesses virtues equal to those of the great Continental spas. In addition to the excellence of the medical attendance, the sojourner at French Lick is certain of delightful hotel surroundings and most pleasant environments. French Lick, in addition to its other attractions, is the home of Pluto Water.

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A local remedy must fill two requirements. It must be a detergent antiseptic and produce a degree of permanency of effect.

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The New Match Law—An Explanation

Last Session a Bill was passed (The "White-Phosphorus" Match Act) prohibiting the use of White or Yellow Phosphorus in the manufacture of Matches after Jany. 1st, 1915, and prohibiting the sale of Matches containing "White Phosphorus" after Jany. 1st, 1916.

The Act is actually for the protection of men and women employed in the Match Factory, it being held that White Phosphorus constitutes a menace to the health of those handling it. The general public is hardly affected thereby at all, the more so as the Eddy Company have for a long time been experimenting with non-poisonous compounds, and are now in a position to replace nearly all the old familiar brands with matches tipped with a non-poisonous compound and conforming in every respect with the present match laws.

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