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AN INTERNATIONAL JOURNAL
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Vol. 2.

TORONTO, OCTOBER, 1912.

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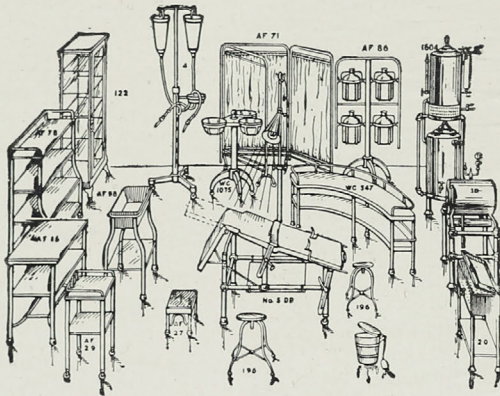
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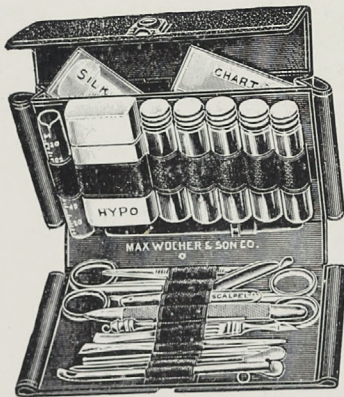
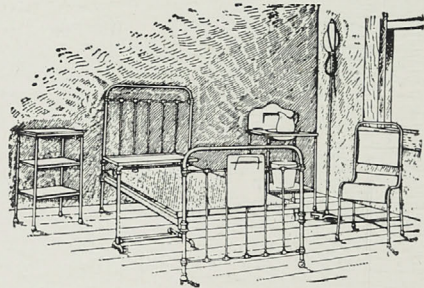
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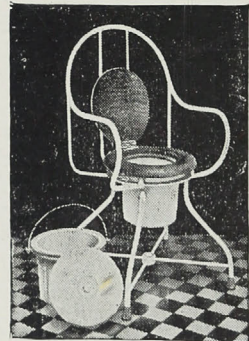
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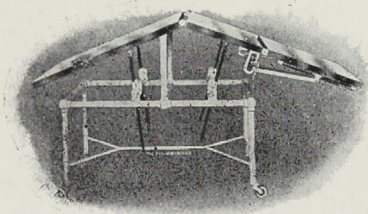
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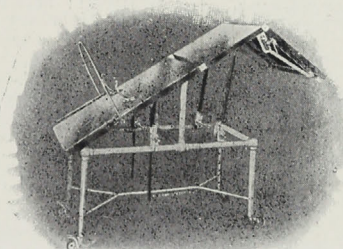
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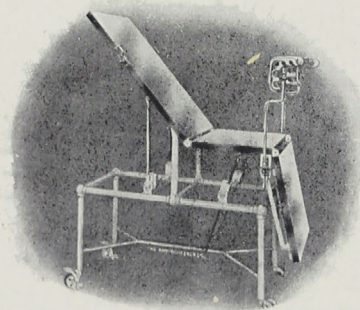
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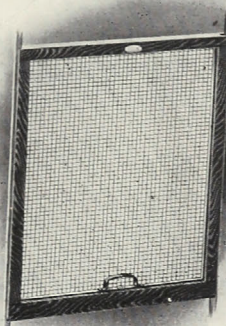
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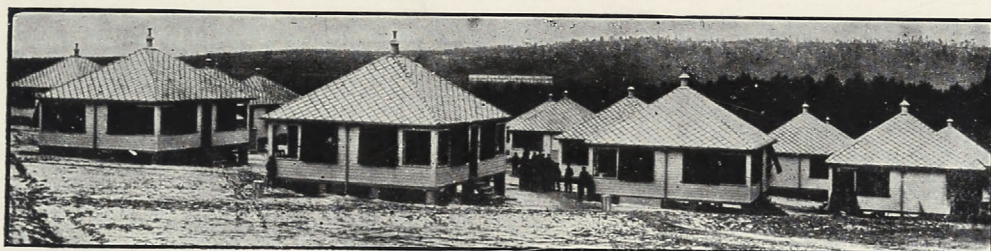


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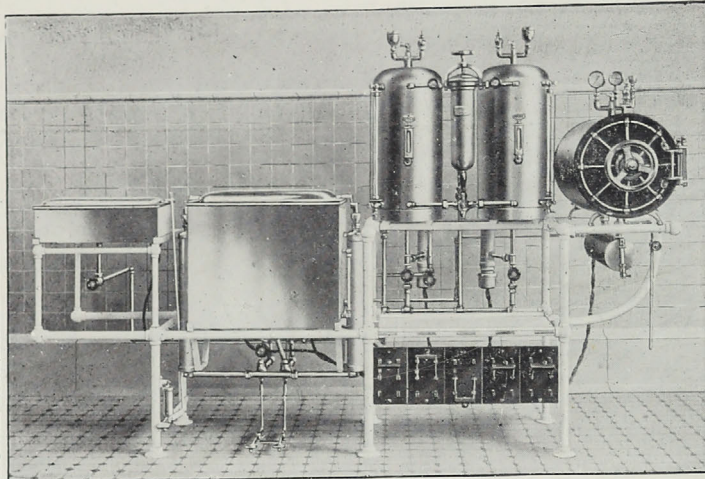
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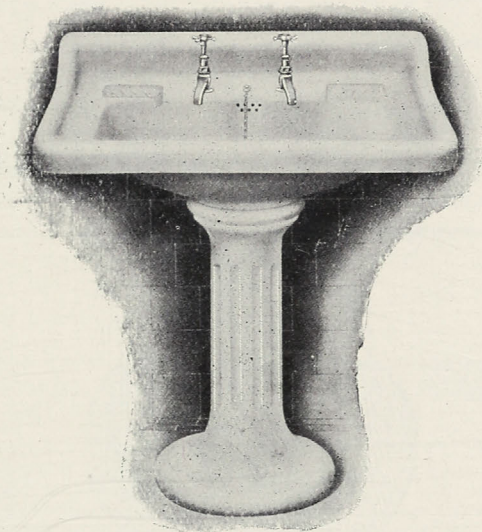
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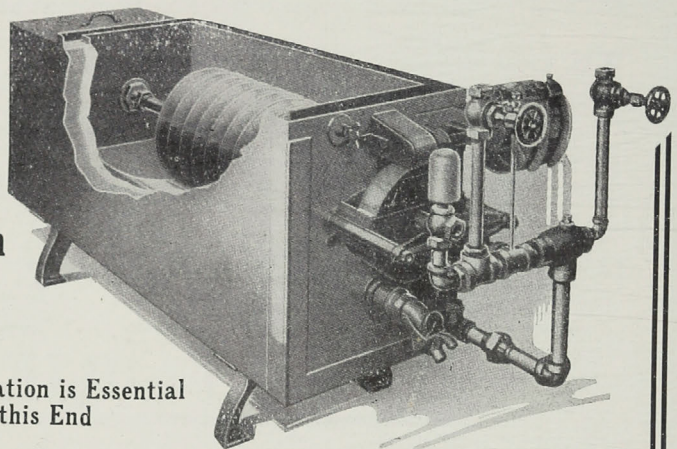
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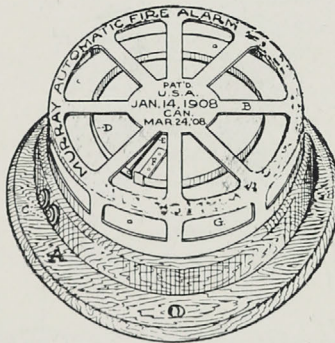
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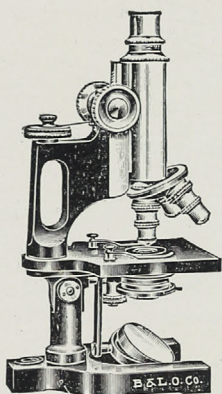
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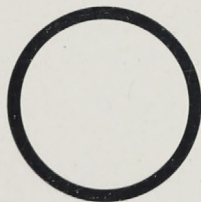
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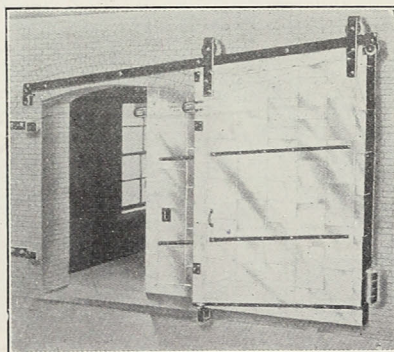


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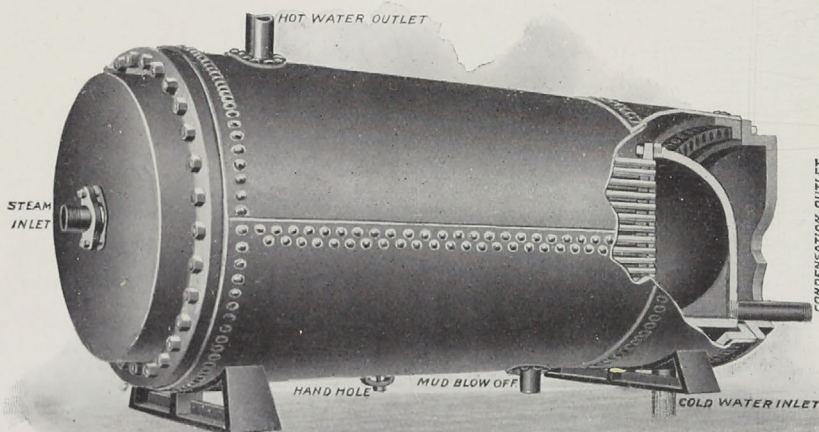
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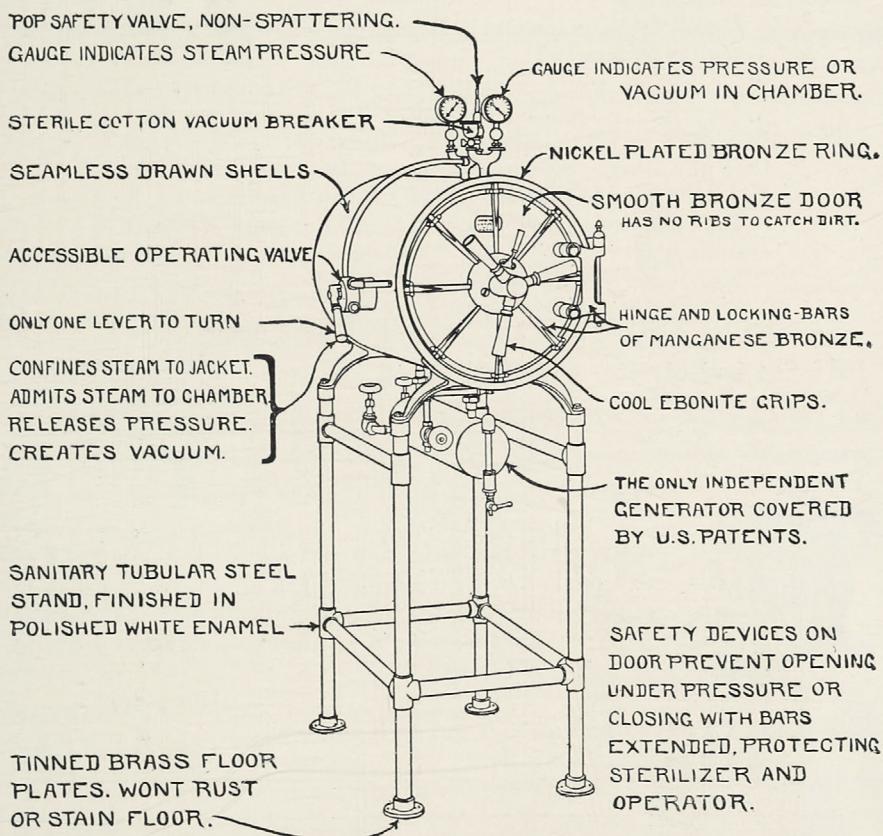
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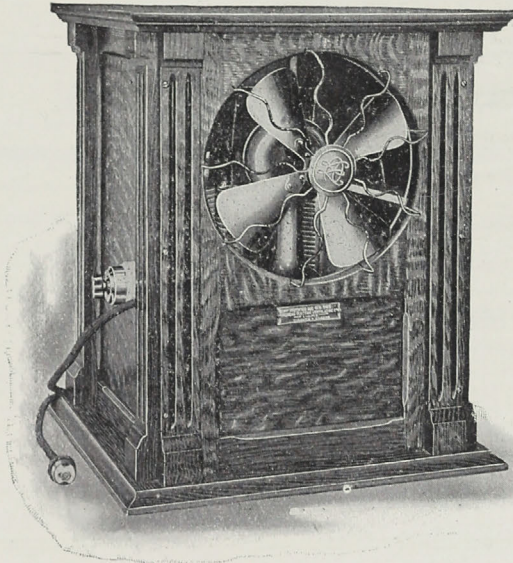
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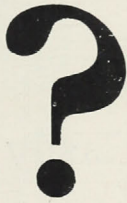
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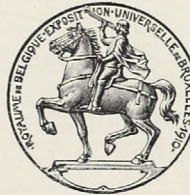
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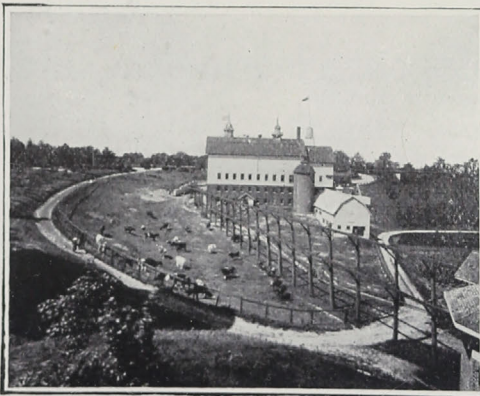
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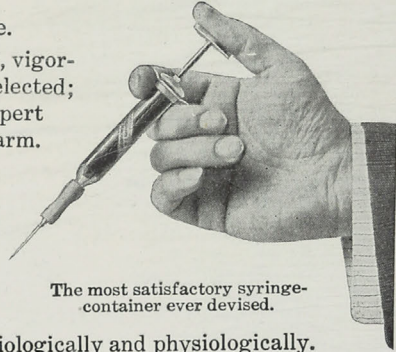
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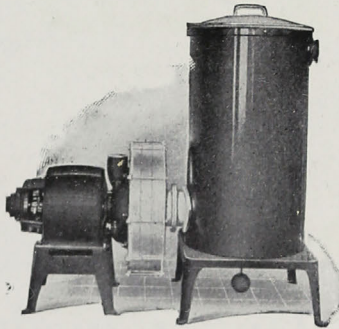
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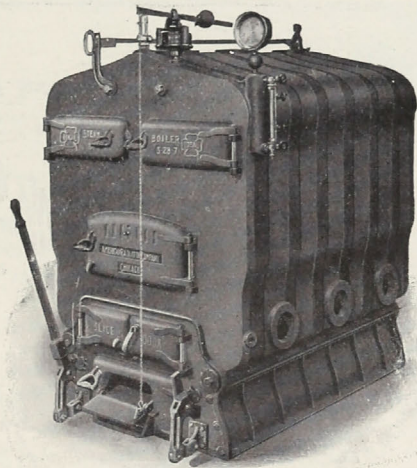
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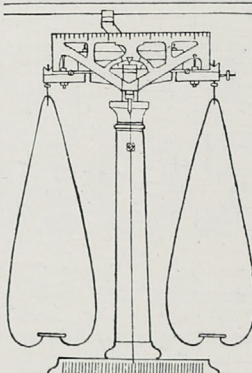
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Vol. II

TORONTO, OCTOBER, 1912

No. 4

Editorials

THE DETROIT MEETING

This number of THE HOSPITAL WORLD will reach all its readers during the meeting of the American Hospital Association. Remember the dates—September 24, 25, 26, 27. The Place: Detroit, Michigan.

Exhibits: There will be two exhibitions—a non-commercial exhibit, arranged by the industrious and enthusiastic Miss Aikens. A careful inspection and

study of this exhibit will repay any superintendent for the sacrifice made in visiting Detroit.

There will also be a commercial exhibit, under the management of Mr. Del Sutton, editor of our esteemed contemporary, *The International Hospital Record*. This exhibition will be held in the Richmond and Backus building—we are informed—which is just across the street from the Pontchartrain Hotel, in which the meeting will be held. It will be worth the price of membership.

Entertainment: There will be a visit to the Parke-Davis plant and automobile drives to Belle Isle, to Log Cabin, to the parks and along the beautiful residential streets of that lovely city of Detroit. That will be worth the cost of coming.

Programme: Ann Arbor and her university sends two of her professors to give papers, Prof. Reuben Peterson, M.D., in charge of Obstetrics and Gynecology, who will discuss the Interne Question, and Prof. Glover, who will give a paper on the cost of infectious diseases, with views.

Social service will be spoken of by Rabbi Franklin, of Detroit, and Miss Ida Cannon, of Boston.

A session will be devoted to the nursing problem—three papers being promised.

The Round Table Conference for workers in the smaller hospitals and the question box will allow an informal, free for all discussion on numerous live topics.

The laundry, the kitchen, the operating room and the food question will all be handled by able expon-

ents. So with the out-patient and the medical staff. In addition there are the special reports on construction, accounting, efficiency, medical teaching and the trustees' session—a programme so full that no hospital worker in America should think of missing the meeting.

THE AMERICAN HOSPITAL ASSOCIATION

Presidents: Jas. S. Knowles, Chas. S. Howell, J. T. Duryea, John Fehrenbatch, Daniel Test, Geo. H. M. Rowe, Geo. P. Ludlam, Renwick R. Ross, S. S. Goldwater, John M. Peters, H. B. Howard, W. L. Babcock, H. M. Hurd.

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Treasurers: A. W. Shaw, A. B. Ancker, Reuben O'Brien, Asa Bacon.

Places of Meeting: Cleveland, Pittsburg, New York City, Philadelphia, Cincinnati, Atlantic City, Boston, Buffalo, Chicago, Toronto, Washington, St. Louis, New York, Detroit.

Registered Attendance: 1899, 9; 1900, 31; 1901, 45; 1902, number not recorded; 1903, 54; 1904, 47; 1905, 77; 1906, 86; 1907, 129; 1908, 154; 1909, 204; 1910, 120; 1911, 389.

To illustrate the nature of topics dealt with on the programmes, we quote from a few of them as follows:

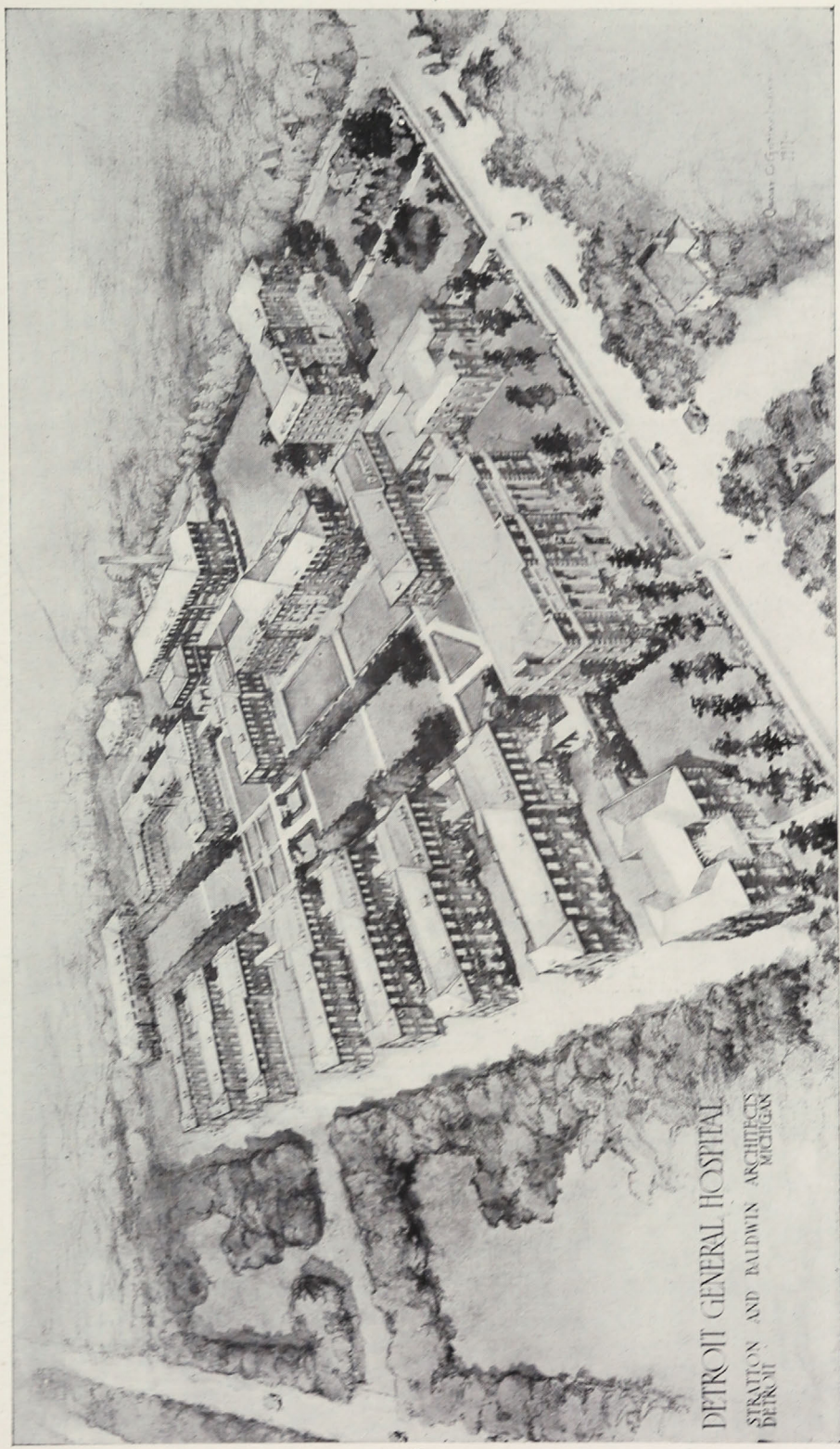
Philadelphia Meeting, 1902: The Relation of Politics to the Hospital; Observations on Hospital Organization; Hospital Reports and Records; Dispen-

sary Abuse; Hospital Construction; Hospital Equipment and Furniture; Dispensary and Hospital Relief Stations and Hospital Ventilation.

Papers read at the 6th conference, at Atlantic City: The Physician As a Hospital Superintendent; The Layman As a Hospital Superintendent; The Purchase of Hospital Supplies; Mental Wards in a General Hospital; Private Patients in General Hospitals; Heating and Ventilation; Hospital Accounting.

Papers read at the Toronto meeting (10th), 1908: The Inspection of Nurse Training Schools; Relation of the Training School to Hospital Efficiency; A Layman's View of Hospital Work; The Visiting Committee As An Aid to the Safe Conduct of Hospitals; The Development of the Association; Some Scientific Aspects of Hospital Management; Trained Housekeepers; Uniform Accounting; Field Work in Connection With Children's Dispensaries; Co-operation in Dispensary Work; The Out-Patient Department; The Private Hospital As a Municipal Agent; Hospital Construction; The Planning of Hospitals For Smaller Cities; Medical Organization; Infectious Diseases in General Hospitals; The Hygiene of Infectious Diseases in Medical Wards.

New York Meeting, 1911, papers read: European Hospital Notes; Details and Equipment of the Hospital; The Sanitarium Hospital; Hospital Treatment of Communicable Diseases; The Development of Typhoid Fever Among Hospital Workers; The Foundation of Hospital Efficiency; Methods of Giving



DETROIT GENERAL HOSPITAL
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Detroit General Hospital
1914

Anesthetics; Hospital Facilities in New York City; Purchasing By a Central Body vs. By Separate Institutions; Standardization and Purchase Agreements Through a Central Bureau; The Future of the Trained Nurse; Hospital Social Service; How to Increase Public Support of Hospitals; Hospitals, Medical Education and Research; General Hospitals in Preventive Medicine; Some Problems in Dietary Department of Hospitals; Round Table Conference; Question Box; Hospital Efficiency; Finance and Economics of Administration; Exhibits.

It will be seen from the above that the members of the American Medical Association are alive to all the departments of hospital work—construction, administration, medical organization, etc.—and are endeavoring to emphasize its motto: “For the Promotion of Economy and Efficiency in Hospital Management.”

The membership of the association was widened some four years ago to admit hospital trustees, and they have taken so active an interest in the work that a trustees' session has been included in the programmes of 1911 and 1912.

Assistant superintendents, anyone ranking next to the superintendent in any hospital, and members of hospital or charities associations are admitted as associate members, and enjoy all its privileges, except that of voting.

The association was pleased to include in its honorary membership two transatlantic visitors, Sir Henry Burdett, the great English authority, who

attended the Boston meeting and took an active part in its discussions, and Dr. Donald J. Mackintosh, M.V.O., Superintendent of the Western Infirmary, the best known hospital man in Scotland. Also Mr. Del Sutton, editor of the *International Hospital Record*, of Detroit, one of the fathers of the association; and Dr. R. W. Bruce Smith, Inspector of Hospitals in Ontario, one of our co-editors.

The association at the Washington meeting adopted the splendid report of its committee appointed to enquire into the Training School question. This report has been made the basis of training in many of the hospitals throughout the continent.

The association is now considering, through one of its committees, the question of a standard hospital nomenclature; it is to be hoped that some provisional standard, at least, will be adopted at this meeting. It will be of great service to hospital superintendents, registrars and the medical fraternity generally.

The association has taken up the question of uniform hospital accounting; one of its veteran and highly respected members, Dr. C. Irving Fisher, gave a great deal of thought to the matter, and has distributed widely, gratis, the book embodying the wrought-out scheme. This standard has been adopted by the big New York hospitals, as well as by a number of others throughout the continent.

The Buffalo meeting saw the commencement of the non-commercial exhibit which grew into such magnitude at the New York meeting. This exhibit has proven an attractive and valuable feature of the

annual gathering, and affords an opportunity for all hospital workers to bring to the attention of their fellow-workers such articles and methods as their skill and experience have enabled them to evolve. It has proven helpful to hundreds of hospitals and contributed to the comfort of thousands of our sick citizens. The praise for this is due, in the main, to Miss Charlotte Aikens, of Detroit, than whom no other woman has done more for the welfare of the association.

The local committee has been empowered to arrange for a commercial exhibit at the Detroit meeting. Many of the members from small towns and villages were anxious to see at the meeting a display of the latest samples of all sorts of apparatus and supplies. This would save them many steps and much time at the meeting. It is to be hoped that this will become a permanent feature of the conferences.

The association is growing by leaps and bounds. At the New York meeting 205 new members were received, and the Secretary informs us that there are already (Sept. 1st) 201 applications for membership this year, and that the number will likely reach 230 or 240 by the opening of the meeting. This will bring the membership up to the neighborhood of the 1,000 mark.

The programme, which we reproduced in full in our last number, shows that the coming meeting will be full of genuine interest to all hospital workers. We predict the meeting will be one of the largest and most important gatherings of hospital workers ever held.

THE WARD UNIT

The two essential parts of a public ward unit are: (1) the ward, (2) its annexes.

The ward may contain from four to forty beds. In the larger hospitals the average number of patients accommodated is about twenty. This average is lessening, as newer ideas prevail. This decrease is due to the fact that it is found desirable to classify patients. The fewer the number of patients in each of the wards of a hospital, the greater the number of wards.

By such construction patients suffering similarly or requiring similar sorts of treatment may be placed in one ward, and thus segregated from patients of a different class. In the ward of fewer beds there is more quiet—a very desirable condition to secure for the uninterrupted recovery of a patient. The fewer the patients in a ward, the more easily can it be emptied of patients, cleaned, fumigated or renovated.

Modern hospitals have included in their annexes three to four smaller rooms in which to accommodate the patient whose presence in a ward would militate against the good recovery of any of the other patients in the ward, or whose own welfare is best conserved by being put in a private room.

The favorite orientation of the large public ward is from north to south with windows on either side to admit plenty of light and to permit of cross ventilation. Artificial lighting is best effected by the use of

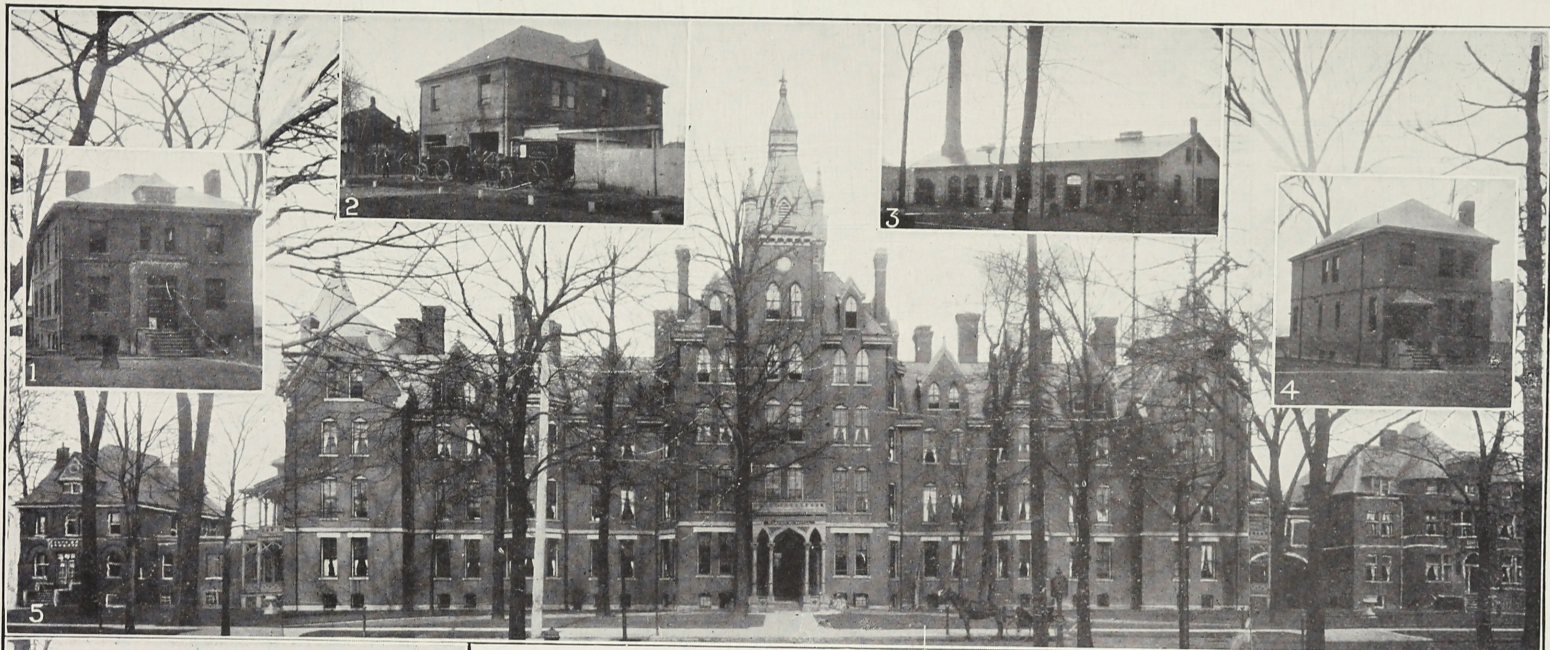
electricity. This by the indirect source of lighting method will soon come into use. A powerful light placed in the concavity of an upright six-foot column will illuminate the ward beautifully for general use; it is not hard on the patients' eyes and the lamp is easily accessible for cleaning. Outlets may be placed in the wall at the head of each bed (not near the base-board) for the attachment of an extension when, during the night, examinations requiring close inspections of the patients are necessary.

A light green, cream or light yellow makes a restful color for walls. Heating by means of hot water is the most healthful. The radiators should be hung from the wall, and their sections wide enough apart to admit of easy cleaning.

A heated exhaust flue is useful in drawing off foul air; it may be supplemented by a fan when it is connected with toilet rooms, utility rooms, and kitchens.

The chief reliance should be placed on natural ventilation; but care must be taken to avoid drafts. This can be secured by using the proper types of windows and transoms. The sashes may be pivoted so as to tilt inward at their upper portion, thus throwing the air current toward the ceiling. A good hardwood floor is homelike. Battleship linoleum, if well laid, makes for quiet, and is easy on the nurses' feet. Terrazzo and tile, properly put down, are the most durable and most sanitary.

The annexes should be floored with terrazzo or tile, and have wainscotting of the same materials if they can be afforded.



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- 1 Contagious Department
- 2 Ambulance Station
- 3 Power Plant and Laundry
- 4 Duffield Cottage
- 5 Polyclinic
- 6 Operating Building
- 7 Swain Home



These rooms should be ample in size and well lighted, and arranged so as to best meet the convenience of the patients, the nurses and the doctors.

We expect to have an opportunity of dealing with some of the important features of these subsidiary rooms in a later issue.

THE NURSING PROBLEM

A satisfactory disposition of the nursing question will require time.

It cannot be settled off-hand by a group of nursing leaders, who look at it from the personal and professional viewpoint only, nor yet by prominent men of the medical profession, who are disposed to remark that nurses are being over-trained.

Nor can it be decided by hospital superintendents and directors whose greatest burden is to keep their institutions from going headlong into debt, but who are required to see that the nursing staff give an efficient service and receive a good degree of tuition.

There are nurses and nurses and nurses, there always have been, and always will be. Why not recognize the facts and be governed accordingly? This naturally suggests classification.

Certain types of patients will insist on having the very best trained nurses, because they want the highest type of service and are easily able to pay for it. Certain patients require the very best nurses and their physicians should be able to secure such. For

instance, laparotomies, cases operated upon when the patient is almost *in extremis*, brain dressings, bladder irrigations, bad eye cases and the like, demand nurses with the best training in the art of aseptic methods, the finest intuition, and the best judgment. These nurses need not necessarily know the histological and chemical composition of pus, the life history of bacteria and the like. But the more they know of these things, the more interest and enjoyment they will take in their work, and the more intelligently they will perform their duties. But, first and foremost, is the *art*, the technique. This is class number one. It is this that the patient and the physician demand.

The average case can be nursed by the average nurse, but she must be on the alert for bad symptoms which may arise. These the average nurse may be taught to look out for. She must learn by doing, by being observant. The physician must be more watchful in working with nurses of this grade. The less capable the nurse the more watchful must the medical attendant be. The average country doctor treats the average patient with the assistance often of an "experienced" nurse, or more often with that of a plain, everyday, ordinary housewife, or neighbor-woman who "runs in" and "does up" the patient. How much the doctor would often give could he secure the services of even a graduate of two years' training of average ability, to lessen his duties and share his responsibilities! We are not with those who say "a three year trained nurse with one year high school or its equivalent before entering, or no

nurse." That day will never come. The common people cannot afford her. There are not enough of her to go around. We must have the average nurse. She and her sisters constitute class number two.

Then we must recognize the so-called "experienced nurse," who has picked up her knowledge, and the nurse who has been partly trained in a hospital and will follow the profession willy-nilly. Many a woman, over the age limit required by a training school, with a natural aptitude for the work, often takes it up under the guidance of a doctor who teaches her and gives her regular work. She will not be dubbed a "nurse attendant." Neither the doctor nor the patient nor the patient's friends will ever call her anything but "nurse," and so we have the third class.

The above is a natural classification, and no state regulation which does not recognize it will prove satisfactory either to its framers, the medical profession, the nursing profession or the community at large.

The attempt to frame any legislation should be done jointly by hospital boards, or their representatives the superintendents who have to finance the business, the medical profession to which the nursing profession is and always shall be ancillary, and by representatives of graduate nursing bodies.

So long as these three representative bodies are working disunitedly, so long will the problem remain unsettled.

THE HOSPITAL LAUNDRY

No department of hospital management has contributed more to the premature senility and early demise of hospital superintendents than the laundry. How often has that short, sharp, forceful epithet applied to Dickens' fat boy been applied to the laundry—vociferously by the pagan male superintendent, *sotto voce* by his church-going brother and under her breath or mentally by the superintendent of the softer sex!

Yellow sheets, torn shirts, shrivelled blankets, missing suits, drunken laundrymen and broken washers. Such aggravations fill rest cure homes and state hospitals.

To somewhat decrease the statistics relative to the commitments of hospital superintendents to lunatic asylums during the next ten years we advise:

1. Don't send your goods out to a commercial laundry to be "done," or they will be "done for." You can't control this outsider who does your work. If you cannot superintend this work, you are in a bad way. You will have shortages, your linen will be bleached to death, and you will have to pay as much as though you do it yourself. So do your own washing.

But, get someone who knows the business to run the laundry for you. Pay him (or her) well. Get good apparatus—small metallic washers, sufficient extractors, a drying tumbler, and ironers enough (in-

cluding the one for flat work which should not be called a "mangle," but very often it is)—arranged so that the goods can be passed handily from one to the other apparatus without undue steps—in a big, light, well ventilated building, amid pleasant surroundings.

Institute a good system of book-keeping and accounting. At any first-class hospital you can see how this is done.

Have plenty of linen in reserve, but deal it out judiciously. Have comparative sheets showing new head nurses what an average amount is used by economical nurses who preceded them or who are in charge of wards containing patients affected with diseases similar to those under their own care.

Have the soiled linen regularly collected and regularly distributed. See that all infected clothing is disinfected as soon as possible. Have immediate attention given to all damp, soiled goods; otherwise they will soon mould.

It will pay every superintendent to give special study to the laundry question in order to know that the work is being well done and that true economy is being practised.

**“THE WELLESLEY” IS DECLARED OPEN
BY HIS ROYAL HIGHNESS THE
DUKE OF CONNAUGHT**

The sun was shining brilliantly at high noon on August twenty-seventh when, before a representative gathering of invited guests, “The Wellesley Hospital” was opened by His Royal Highness the Duke of Connaught. Amid old trees, beautiful flowers and foliage, the old mansion which forms a part of the new hospital has stood sentinel during the years Toronto has been in the making. It is a treasure house of old oak in wainscotting and trimming, varied in library and lounging rooms by walnut and mahogany. In the wards, accommodation is at present, provided for about sixty patients. The rooms are so arranged that the sun comes “peeping in at ~~noon~~”; bath rooms adjoin each of the private wards. Of course the hospital is exclusively devoted to paying patients.

Luxury and refined taste go hand in hand throughout the building. The table appointments bear the crest of the Wellesley family, for the use of which permission was obtained from the Duke of Wellington. The motto serves well to voice the spirit and the dominant note of restful beauty and yet brightness everywhere accentuated in the institution and its furnishings, it is “Never without hope.”

The Founder of the hospital, Dr. Herbert Bruce, and its President, Sir William Mulock, have honored not only themselves, but Toronto by the presence of

such a building and by making its door the *open sesame* to all physicians and surgeons in good standing in the profession. Non-sectarian, it knows no narrow law or creed, and appeals to the most artistic taste on the one hand and to the most mature and critical scientific mind on the other, because of its ever ready and splendid surgical equipment.

Brief were the ceremony of dedication by His Lordship the Bishop of Toronto, the speech by the President, and the reply by His Royal Highness, beside whom stood Princess Patricia.

In the past, the old Homewood appealed to the rising generation as a home of grandeur, to-day it appeals to those who go through its many rooms and on up to its roof garden as a home of beauty and completeness, to-morrow it will appeal to all who enter its doorways in weariness and pain, as the trysting place of Hope.

August twenty-ninth, Sleepy Hollow, Toronto.



H.R.H. The Duke of Connaught opens The Wellesley Hospital, Toronto, on August 27, 1912. On the right are seen Sir William Mulock, Dr. Herbert Bruce, and Lieut.-Governor Gibson.

Original Contribution

PRESIDENT'S ADDRESS *

BY DR. HENRY M. HURD.

Secretary Board of Trustees, Johns Hopkins Hospital, Baltimore, M.D.

Members of the American Hospital Association, Ladies and Gentlemen:

Before entering upon the more formal subject matter of my address I wish to express my sincere thanks for the honor which you have conferred in selecting me to preside over the sessions of the American Hospital Association. I appreciate it the more because the beautiful city of Detroit is associated in my mind with many delightful personal associations and friendships, and the State of Michigan with my birth, youth, early training, university education and nearly twenty years of professional service in her institutions. I feel that I am at home and among friends still in almost every portion of this prosperous and progressive commonwealth and particularly here, even after an absence of 23 years. The position of President of the Association, being one of duty and service, cannot be considered by any right thinking person as a prize to be striven for by personal effort; when the honor, however, comes unsought, it should be highly prized as an evidence of confidence and good will. So regarding it I desire to return to you my heartfelt thanks.

Political economists for more than a century have differed as to what constitutes a productive or non-productive citizen. Adam Smith, the father of economics, asserted that "Churchmen, lawyers, physicians, men of letters of all kinds, players, buffoons, musicians, opera singers and opera dancers" must be ranked together as unproductive persons, that is, they produced nothing which could be eaten or worn or used or which added to the sum total of human wealth. In other words, they produced no material thing which could be sold for money by one man to another, or, in other words, which possessed utility. The point was long contested by experts and proved a vexed question. Of late, however, a more liberal and a juster view has obtained, and it is

* Delivered at the American Hospital Association Meeting, Detroit, Sept. 24, 1912.

now generally agreed that any labor which conserves other labor, which lightens the burden of human ills or makes the productive capacity of mankind as a whole greater, ministers equally to utilities and is essentially productive. Judged by this standard, we, as hospital workers, are surely worthy to be classed among the productive classes. Every health officer who improves the hygienic condition of a community or conserves its health by preventing disease increases the productive labor and the industrial output of that community. In like manner, any agency which restores the sick to health and the injured to soundness as speedily as possible adds to the wealth of the community and increases its "utilities," to use an economic phrase. It makes little difference whether the laborer himself is personally benefited by the ministrations of the hospital. It is equally to his benefit if a member of his family is thus cared for and restored to health so that he may be saved the loss which would otherwise ensue to him or his family if he were compelled to relinquish a wage-earning occupation to devote himself to the cure of a sick member of the family in his own house. The relation of the hospital to the health, welfare and prosperity of the community is so close I have thought it well to take the public into the confidence of the Association and present at this opening session a brief review of some of the problems which confront us as hospital officers and workers.

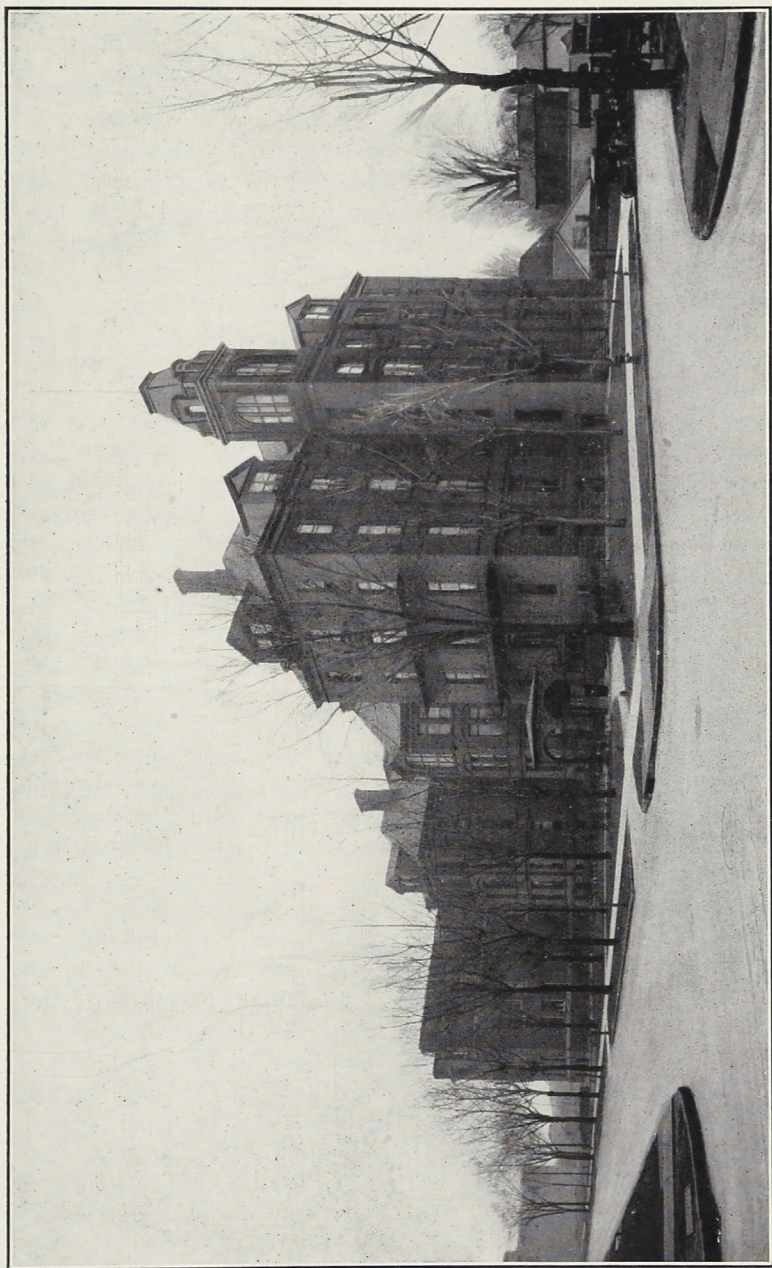
It is evident that hospital conditions are constantly changing and shifting, and fresh events bring with them the necessity of new adjustments or readjustments.

The hospital systems of the United States and Canada have been almost wholly inherited from England through the traditions of early hospitals which were organized on models found and studied by medical men when they received their medical education and training wholly or in part in England or Scotland. In their buildings, government and general arrangements, the older hospitals reproduced with more or less fidelity the London hospitals. Their scope, however, was of necessity much more restricted because of the poverty of the country and the need of making provision alone for the most needy class. There was no inherited wealth to draw upon, and no pauper class, such as existed in England, to be considered. Land was abundant; food

and shelter were easily obtained. It was essential, however, to provide for emergencies and epidemics; but in the most frugal manner.

The first hospitals in Philadelphia, New York, Montreal, Boston, and Baltimore were built primarily to accommodate the homeless and friendless immigrant who might be found upon landing to have typhus fever, smallpox or yellow fever, and thus constitute a direful menace to the health of the seaport where he landed, or he might have become insane from the hardships of the long voyage, and endanger the lives and prosperity of citizens by reason of his irresponsibility. The founders and promoters of these hospitals had no thought of antiseptic surgery or probably of any surgery beyond the treatment of wounds or accidents; the medical attendants knew none of the modern refinements of diagnosis; they required no microscopes or stethoscopes or ophthalmoscopes or X-ray apparatus or cardiographic outfits; they needed no chemical laboratory or chemical tests or bacteriological paraphernalia or pathological investigations. They had no conception of providing care for a person who possessed means enough to secure shelter in a boarding-house, however humble, or home, however meagre, and knew nothing of private or semi-private patients or endowed rooms. In all their arrangements the hospitals were planned to provide for those whose presence might become a menace to the health of the city by the risk of infection or prejudicial to good order and safety of property by inability to exercise self-control, as in the case of a disordered lunatic.

To-day how changed is the situation! Instead of a few crude and badly administered hospitals in large cities, generally important ports of entry, we find hospitals crowding upon each other, both in cities, villages, small towns and country districts. We find large hospitals under the control of wealthy corporations, under the control of religious orders and religious denominations, under the control of medical schools, and connected with them for teaching purposes; special hospitals also for diseases of women and children, for lying-in cases, for eye, ear, nose and throat cases, for tuberculosis; municipal hospitals for contagious and infectious diseases, state hospitals for the indigent insane to the number of several hundred throughout the land;



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mining hospitals, industrial hospitals, cottage hospitals and private hospitals in every community.

This amazing multiplication of hospitals, especially during the past twenty-five years, has brought about an increased complexity of hospital problems. These require to be met by new methods and careful thought and consideration. The scope of the hospital is no longer limited to the care of the homeless, friendless immigrant or the insane pauper. It has rather become commensurate with the needs of the sick of every class, the well-to-do as well as the destitute. The rapid filling up of the country by immigration and the natural increase of population has produced an undue pressure upon the city until we have an overcrowding where all persons once had ample room. The small house, once tenanted by a single family, has given place to the tenement house and the apartment house, where every inch of space is utilized and no room is to be found for the sick or injured. The person who has appendicitis and requires an operation, or who has typhoid fever or pneumonia, cannot receive proper care in a tenement or flat, nor as a rule can the members of his family spare room enough for his uncomfortable accommodation; he must become an inmate of the hospital. The same holds true of non-emergency cases of surgery, like the removal of tumors, the care of hernia, or the treatment of accidents. All of these are compelled to go to a hospital for surgical operations and for after-care. The prospective mother, even, no longer finds needed privacy and quiet in her own home in child-birth, and is too often compelled to resort to the lying-in department of a general hospital. Increased demands upon the hospital might be similarly recounted in every branch of medicine and surgery, but the foregoing will give some conception of the burden which has become increasingly heavy upon all general hospitals during the past quarter of a century. It has crowded each hospital and increased the expenses out of all proportion to the income. Today, in fact, notwithstanding a greatly increased interest in hospital work, as shown by larger benefactions from the benevolent, we find all hospitals in need of funds and their managers seriously alarmed over the growing discrepancy between income and outgo. The reasons are obvious. The work done by every hospital has greatly increased, it is true, but the aggregate cost has

moreover increased out of proportion to the amount of work which has been accomplished. In every hospital there is each year a higher standard of care, necessitating more and better nursing, more refined and more exacting methods of diagnosis, more costly apparatus, and an augmented medical and surgical service. The high cost of living—if it were the cost of high living we might remedy it—gives promise of increased expenditures year by year for food supplies, and the same cause leads us to expect a vastly increased cost of all labor and service. Hospitals must pay better salaries to their employees to retain their services and to enable them to live.

There are also increased expenses because of the complications introduced into hospitals by the need to give better and larger training to nurses. Additional departments in some hospitals have been required to be established to furnish adequate training in obstetrics, pediatrics and mental and nervous disorders. The specialties comprising eye and ear, throat and nose, skin and salvarsan cases, are clamoring for beds or wards in general hospitals, and many of them in fact have assumed so much importance in the study and relief of disease by surgery as to demand provision in the wards. Many of these patients formerly considered out-patients, must now become hospital patients for longer or shorter periods.

The acknowledged duty of the hospital to assist in the education of medical students has also involved increased expenses; and the wisdom of greater co-operation in the good work is apparent to all.

Formerly, as has been well expressed by a recent writer, the hospital considered solely its duty to the sick person who occupied a bed. Now, in this era of preventive medicine, we not only consider the sick man, but his disease, and seek to eradicate it from the community by greater care and more scrupulous and hence more expensive methods of isolation and quarantine. As evidence of this, I need only to cite the increased cost of treating a disease like diphtheria by antitoxin, special nursing and vigorous disinfection, or the great initial cost of salvarsan, and the cost involved in its efficient, conscientious and painstaking administration.

Another important item of expense is found in the establish-

ment of social service. Hospital officers can no longer be satisfied to have patients discharged, as formerly, from their wards without friends or homes to receive them, or any provision for their support or care during convalescence, but must recognize the "plain duty" to provide whatever may be lacking until they are once more able to earn a livelihood. This may involve food, clothing, apparatus, such as crutches, artificial limbs or spectacles, and a home surrounding which shall not, by its unhygienic conditions, defeat the previous effort of the hospital, and, above all, a friend! These desiderata for the proper conduct of social service entail a serious burden upon the struggling and the wealthy hospital alike.

The duty of a systematic effort on the part of general hospitals to train hospital administrators is beginning to be recognized as one of their functions. With one or two exceptions, no hospitals have, up to the present time, taken into consideration the question of how best to procure men and women who have been educated for this particular work, and the supply has been fortuitous and generally inadequate. Scarcely a day passes that an urgent appeal is not made to the larger hospitals for a trained man or woman to assume the responsible duties of hospital administration. Such appeals rarely bring any satisfactory reply, because comparatively few persons are receiving any training for it. To increase the administrative staff of a hospital sufficiently to permit such training brings an added expense, from which, however, the hospital ought not to shrink. Hospitals for the insane have for a long time trained such officers; general hospitals should no longer omit to do so.

The hospital also owes it to the community to do more for the spread of correct ideas as to the causes of disease and the methods of prevention. A recent writer has well said: "The patient is something more than an individual; he is a warning, a problem, a symptom of economical and hygienic ignorance or mal-adjustment; remedial measures must be supplemented by hygienic and investigative effort." How many hospitals to-day are attempting to make such hygienic and investigative effort? How many, in fact, have the means at hand or competent persons, to enable them to make them? And yet the strategic position of the hospital to deal with the problems of the causation and

cure of disease in its wards, in its out-patient department, and through its visiting nurses in the homes of patients, is manifest to all.

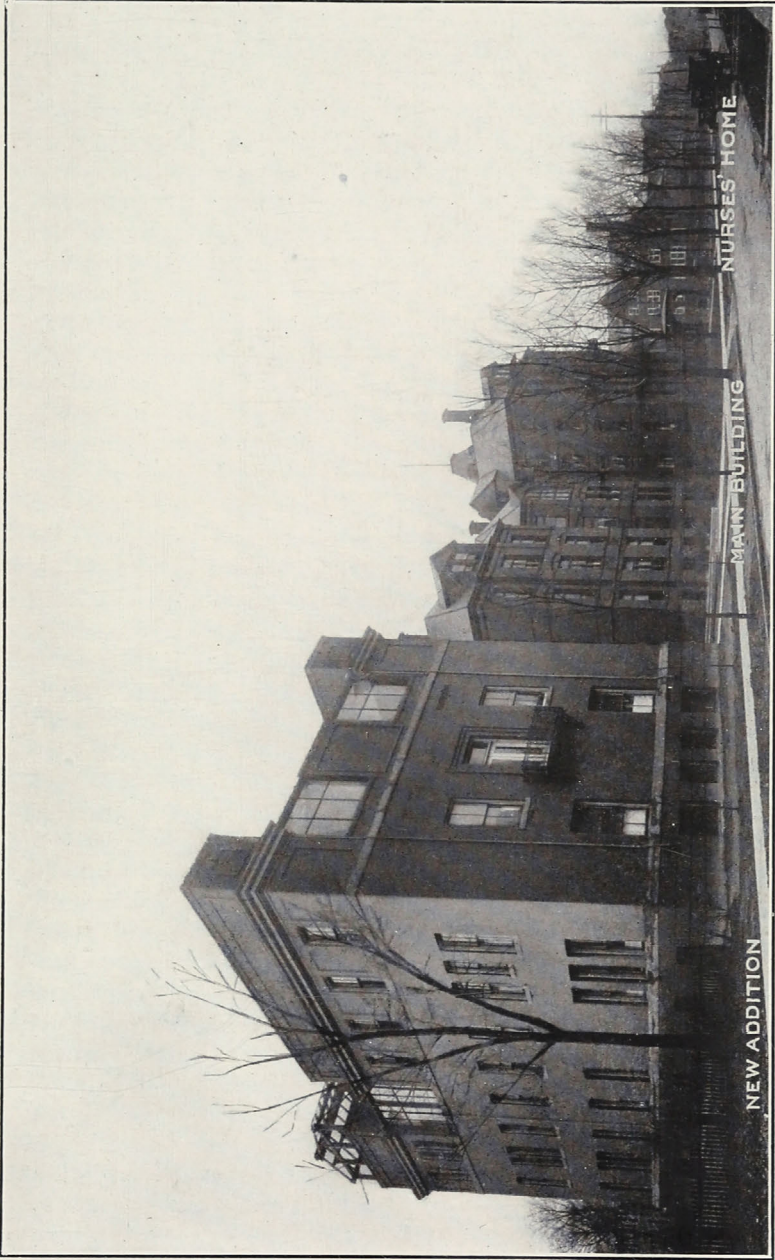
To sum up: The hospitals of the United States and Canada find themselves without adequate funds for the increased cost of operation because of the growing need of expensive apparatus for the diagnosis and treatment of disease; for the greater cost of all food supplies due to the high cost of living; for the increased cost of service in every department; for the increased scope of hospital service; for the need of doing more for the education of nurses and the training and education of physicians and hospital administrators; for more departments, better operating rooms and better equipped hospital wards; and lastly, for ample resources to carry on social service and preventive work. The growth of medical science and the public need demand these expenditures, and the desire of every person in hospital service to attempt to make the work of relief as perfect and efficient as possible justifies it. To be satisfied with a lower standard of service than the best would be unworthy of the traditions and aspirations of the founders and promoters of hospitals. How, then, are these difficulties to be met, and what remedies can be recommended for them? I would answer:

1. An effort should be made to interest the public in hospital work by presenting a full statement of the work and of the necessary cost of the same. It should be impressed upon the public that the relief of the sick is a public duty, and not the special burden of a few hospital managers, who, voluntarily, out of love for suffering humanity, have assumed the task of attempting to lessen it. No hospital, however carefully managed, if it performs its duty, can ever be anything but a financial burden to a community. It disburses all that it receives, and there is never any hope of a dividend. Many devoted men and women who labor earnestly on hospital boards without hope of reward and under serious discouragements to bring proper care to the sick and destitute, lack the funds which the public would gladly give if the conditions and needs of the hospitals were better known. The widest publicity should be given to the work. The people of every city and town should feel that the duty of cooperation and support belonged to all, and not to the few alone

who have heard the cry of the poor and needy. The public must never be allowed to forget the necessities of the hospital, or to lose the conviction that they must be relieved by personal action. The example of our associate, J. Ross Robertson, of Toronto, in his appeals for aid, is to be commended as an example for hospital managers. Similarly, the example of the men and women of England, from the King down, in their liberal yearly gifts to hospitals, should spread to America. Many corporations, like railways and manufactories, which possess large resources, often avail themselves of the facilities of local hospitals, but fail to recognize any corresponding duty to assist the hospital. This form of reciprocity should be impressed upon them.

2. There ought to be a closer scrutiny of the ability of patients to pay some portion of the cost of care in every voluntary hospital. Many persons have an impression that free treatment in a hospital is a natural right to be available to every citizen. This idea should not prevail. I would not advise any hard-and-fast rule for the determination of the ability of the patient to pay something which might exclude a single needy case or delay relief, but I am fully persuaded that an officer of the hospital should, in every case, satisfy himself beyond peradventure that the patient is a proper object for free care and treatment before his admission as a charge upon the hospital. Under a proper system the financial condition of patients may be thoroughly, carefully, conscientiously and kindly investigated by a trained charity worker, to the great improvement of the funds of the hospital and to the benefit of the morals of the patient. He will have more self-respect if he pays as far as he is able. That there are many persons in good circumstances in every city who go about from hospital to hospital and from clinic to clinic, to the great waste of the resources of the hospitals, I am fully persuaded. They can be sought out and compelled to pay for their maintenance. Hospitals in the same city should exchange information as to such persons to detect them, and to prevent such miscarriage of charitable effort.

3. A stricter line of demarcation should limit the sphere of activity of the municipal and voluntary hospital. The municipal hospital should be reorganized whenever it is necessary to afford proper care for all cases of chronic disease among dependent



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patients, and for cases which come under the police powers of the city, cases in which the right to restrain them in quarantine or to isolate them or to enforce hygienic requirements must be exercised. These regulations cannot be enforced by a voluntary hospital, and must devolve upon the constituted authority of the city if the spread of contagious disease is to be prevented. Municipal and county hospitals throughout the country should be reorganized as intimated above in the interests of humanity for the care of patients. Efficient staffs should be appointed to conduct them, and the care of chronic patients, whether medical or surgical, and of all patients requiring the exercise of police power, should devolve upon them. Voluntary hospitals cannot receive these patients without detriment to the interest of their own special patients.

4. Standardization of Hospital Buildings and Supplies.—To prevent extravagance in the first cost of hospital buildings—an extravagance often incurred by city officials as a matter of local pride—it is important that an effort be made to promote greater uniformity in their plans and construction. Up to this time there has been a tendency to erect monumental buildings, which may serve to beautify a city and enable its citizens to point with pride to them as evidences of their public spirit. Expensive sites for hospitals have also been purchased in many instances, and plans have been made to gather too many persons upon sites which later proved inadequate, and yet could not be enlarged without a vast outlay of money. As a question of healthfulness for patients it is important that the large hospital should be built in the country, where land is comparatively cheap and easily procured in case a site needs to be added to. The smaller hospitals, on the other hand, can be advantageously scattered about the city for convenience of relief in case of accidents and emergency cases. Smooth pavements and automobile ambulances render the transfer of convalescing or non-emergency patients to the larger and more permanent hospital in the country a simple and inexpensive matter.

Such a hospital in the country can have less expensive buildings, more light and better air and more convenient access to grounds than is practicable in the crowded city. If the plan proposed, to establish a bureau of hospital information in Wash-

ington in connection with the Public Health Service, can be realized, it will be possible to standardize hospital construction and offer satisfactory plans to those who are charged with the task of erecting hospitals. It is to be regretted that the prospects of securing this action at the hands of the present Congress, which at one period during the session seemed so promising, have vanished. It is to be hoped that the Special Committee charged with the duty of obtaining this legislation may be more successful at another session.

The standardization of supplies and their purchase through a single purchasing agent in New York City, has effected economies there, and there is reason to anticipate that a similar system may be extended with advantage throughout the entire country. Those supplies which are manufactured especially for hospital use, such as gauzes, cottons, bandages, sheetings, clothing, crockery, furniture, bedding, drugs, chemicals, surgical instruments and apparatus, might thus be procured, with manifest economy, through an agency and distributed to hospitals, both large and small.

5. Consolidation of Training Schools.—I have long been of the opinion that the hospitals of every city should combine to co-operate in the training of nurses. The whole work of the first six months being essentially preliminary, could be carried on in one school, and thus save the expense of half-a-dozen separate schools, with paid teachers in anatomy, hygiene, cooking and other fundamental branches. There could also be similar advantages and economies in combining classes in all lectures and text-book instruction later in the courses. Such co-operation between schools would give a needed emphasis also to the educational rather than technical character of nurse training.

6. Medical Schools and Hospital Expenses.—The need of furnishing training to physicians is so largely recognized as the duty of all hospitals situated in the vicinity of medical schools it seems hardly necessary to refer to the matter. I am of the opinion that it is not only essential to do this in the interest of physicians and of the community, but also of the patients in the hospitals. Whenever medical teachers are properly appointed and students are admitted to hospital wards under proper restrictions, it is evident that the diseases of patients are more carefully studied and

more skilfully treated than under other circumstances. The tone of the hospital is better, and the medical work is more active and of a higher type. Granting that these benefits flow from medical teaching, and I do so cheerfully and without reserve, I am still compelled to add that such co-operation in teaching adds materially to the expenses of the hospital. It should also not be forgotten that access to the wards of a good hospital has become in these modern days one of the best assets of a medical school. For these reasons medical schools ought not to become burdens upon hospitals, but should pay a proper proportion of the increased expense which they entail upon the hospitals.

7. Avoidance of Duplication of Hospitals.—There has been a tendency in some cities to multiply hospitals, and to needlessly burden the community with the support of several struggling hospitals where, perhaps, a single hospital could have been easily maintained with a certainty of better results. The recent course pursued in Tonawanda and North Tonawanda, in the vicinity of Buffalo, New York, is worthy of imitation. In these neighboring and somewhat rival towns, instead of proceeding to erect separate hospitals as a matter of local pride, an expert was selected to study the whole situation, and his report recommended a single hospital, to be located in the region which needed the most service and was best adapted to be a good site. All communities ought to act with equal wisdom.

There are many other topics of equal interest to us all, which could be referred to, and which I had planned to consider, but the length of my address is already far beyond my original intention. I can only express my thanks for your kind attention and my best wishes for the harmony and success of the 14th annual meeting of the American Hospital Association.

SOME REFLECTIONS RESPECTING HOSPITAL ADMINISTRATION

BY CONRAD W. THIES, ESQ., LONDON, ENG.

It is both interesting and profitable occasionally to look back upon the years that have passed and to note the various changes and the progress made in the particular sphere of work with which we have been associated. It occurs to me, therefore, that possibly some reflections upon the changes which have taken place in the methods of our voluntary hospitals in London, since I first took up hospital administration work as Secretary of the Royal Free Hospital, some twenty-five years since, may prove of interest to readers of *THE HOSPITAL WORLD*.

So gradual is the progress made that we are apt not to recognize at the time the changes that are constantly taking place in any particular department of work; it requires a contrast of the things that *are* with the things that *were* to give us a true perspective.

The past quarter of a century has witnessed an entire revolution in medical and surgical methods. There has been remarkable progress all along the line, but in surgery the development has been most notable. Operations are now daily performed which only a few years since would have been deemed impossible; modern pathology was practically unknown, and massage had not become a recognized method of treatment, while the curative and penetrative power of the X-ray and medical electricity was not even dreamt of. The treatment of disease and injuries was crude, as compared with the present methods, when the physician and surgeon have at their disposal all the elaborate appliances that the inventiveness of many able men has produced during recent years.

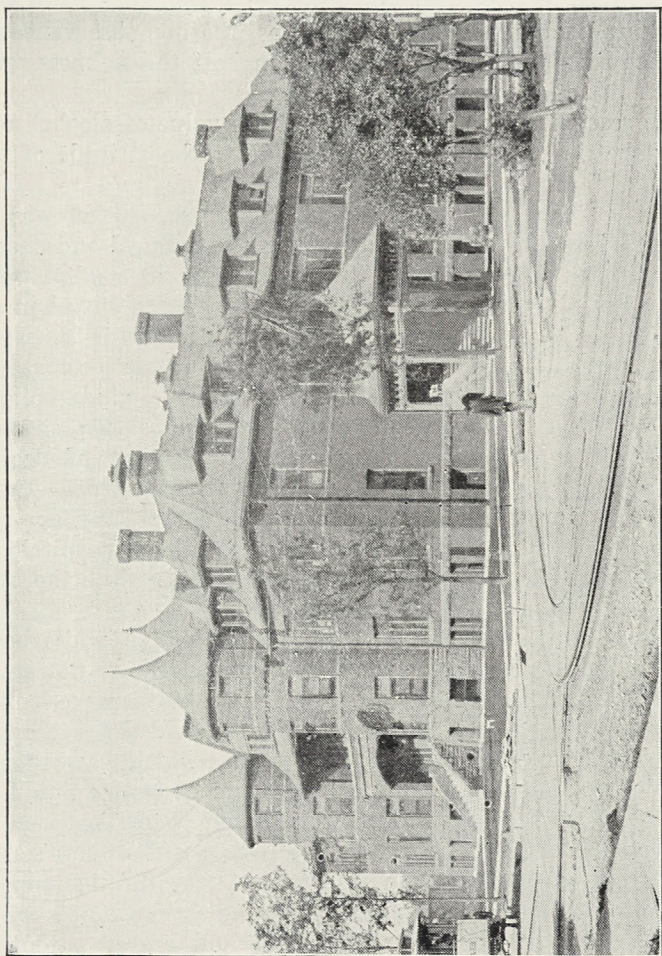
These improved methods of treatment have necessarily involved a great increase in the cost of the upkeep of hospitals, and at the present time the institutions which depend upon voluntary contributions are finding it increasingly difficult to keep pace with the demands made by modern medical and surgical science.

The increase in the medical and nursing staffs of the hospitals

has been very considerable in recent years. For instance, the number of nurses employed at the Royal Free Hospital has been more than doubled during the past twenty-five years without any corresponding increase in the number of patients treated. The premises have been so extended and remodelled to meet the modern requirements that the hospital has practically been rebuilt, and further schemes for extensive additions are at the present time under consideration. Thus the burden of expense steadily increases to meet the improved methods of treatment, while, on the other hand, the difficulty of obtaining the necessary funds for the upkeep of these voluntary hospitals is so great that the managers are often at their wits' end to find new sources of income. It is generally recognized that the difficulty of maintaining these medical charities will be greatly augmented in the near future, in consequence of the passing of the National Insurance Bill, which, in the opinion of many competent authorities, must hasten the day when these institutions must be assisted by state or municipal grants.

I have on more than one occasion been asked whether in my opinion the general health of the people has improved during the past quarter of a century; my answer is distinctly in the affirmative. The average health of the people in the present day undoubtedly compares very favorably with the average of years gone by. One reason for this improvement is that children's diseases are now more quickly detected and dealt with than they used to be, and the recently instituted medical inspection of school children, under the auspices of the London County Council, is an important step in the right direction. Treat a disease in its early stages, and you will save not only pain and suffering but much longer and more difficult treatment in the years to come.

Evidence also of the improved health of the people is demonstrated by the fact that the time occupied by patients in our hospitals has decreased, and modern methods of treatment are mainly responsible for this. Cases that in times past would have taken several weeks, or even months, to treat are now disposed of in a much shorter space of time. In the old days the average period that a patient remained in the wards was five weeks, while it is now barely three weeks.



WOMAN'S HOSPITAL AND INFANTS, HOME, DETROIT

Another important factor is the greater regard which in the present day is paid to temperance, and I do not refer only to temperance as applied to alcoholic liquors. It may seem a platitude, but I mean temperance in general: temperance in eating, in drinking, and in sexual relationships, the non-observance of which has been the source of more than half the sickness with which mankind is afflicted.

The great change in the estimate of the value of alcohol now held by the general public is largely due to the attitude of the medical profession on this subject.

When I was a scholar at Christ's Hospital, alcohol was so highly rated as a food that we boys were given bread and cheese and beer for supper. When I first entered upon hospital work beer was looked upon as a food, and was very largely used in all hospitals as a necessary article of diet. The following statistics will illustrate this point: When I first took up my post at the Royal Free Hospital, in 1887, the cost of alcohol (wines, spirits, beers, etc.) was £480, while the milk bill was only £354; comparing these figures with those of the year 1910, the cost of alcohol was then only £66, while the milk bill had risen to £938. These figures speak for themselves, and I may add that they are not peculiar to the Royal Free Hospital, for at all the hospitals of London the cost of alcohol has greatly declined, while the consumption of milk has very largely increased.

It is an interesting fact in this connection that while beer, wines and spirits in former days were regarded as necessary articles of diet in all hospitals, tea, sugar and butter were looked upon as luxuries, and were not therefore provided for the patients. They could have alcohol in any form which was ordered by the doctors, but if they wanted tea, sugar or butter they had to provide it themselves. If, however, they were too poor to afford these "luxuries," they were at some hospitals purchased for them out of the Samaritan Funds, but they did not appear on the ordinary diet sheets. Those were the circumstances when I first went to the Royal Free Hospital, and I drew attention to the anomaly, and eventually the Board agreed to add tea, sugar and butter to the diet sheet. This involved an increased cost of £200 a year, but the alcohol bill was soon correspondingly decreased.

It is curious, however, that at some of the largest hospitals in London this old arrangement still remains in force. The medical officers may order champagne, expensive meat extracts, or alcoholic liquors, and they are provided, but no patient is allowed to have tea, sugar, or butter, except at his own expense. Why this illogical practice is still adhered to is a mystery, for it appears to me to be absolutely indefensible.

During recent years there has been a very great increase in the number of beds which are available for the sick poor, and which are maintained out of the public funds. We have in London at the present time accommodation for some 25,000 beds in Poor Law infirmaries, and, in addition to these, about 30,000 beds are provided for fever cases and lunatics, all of which are paid for out of the rates, while all the voluntary hospitals together provide only about 10,000 beds, so that out of something like 65,000 beds which are maintained for the sick, 55,000 are being paid for out of public funds. In the face of this striking fact it is evident that the time has arrived when the whole problem of medical relief and education should be dealt with. We are, however, always met by the objection that such a step would destroy the voluntary principle which has done such good service in the past.

The great need at the present time is adequate provision for persons of the lower middle classes, who, in case of serious illness, are unable to pay the ordinary fees of the consulting physician or surgeon, and the large cost of the private nursing homes.

The only adequate solution of the problem seems to lie in some approximation to the system that is universal throughout Germany and Switzerland, where patients of all classes are eligible for admission to the public hospitals, each paying for their treatment according to their means and circumstances.

Society Proceedings

THE AMERICAN HOSPITAL ASSOCIATION

The Fourteenth Annual Conference of the American Hospital Association, "For the Promotion of Economy and Efficiency in Hospital Management," to be held at the Pontchartrain Hotel, Detroit, Michigan, September 24, 25, 26 and 27, 1912.

PROGRAMME.

TUESDAY, SEPTEMBER 24, 10 A.M.

Registration and Enrollment.

The Secretary will be in attendance for the enrollment of new members, and the Treasurer for the reception of dues.

Morning Session—11 a.m.

1. Invocation: Rev. Maurice Penfield Fikes, D.D., Detroit, Mich.
2. Greeting. The Hon. William B. Thompson, Mayor of Detroit.
3. President's Address. Dr. Henry M. Hurd, Sec'y Board of Trustees Johns Hopkins Hospital, Baltimore, Md.
4. The Cost of Infectious Diseases. Prof. Jas. W. Glover, Michigan University, Ann Arbor, Mich. Discussion led by Dr. W. H. Walsh, Supt. Children's Hospital, Philadelphia, Pa.
5. Non-Commercial Exhibit of Hospital Appliances, Invented, Improved or Arranged by Hospital Workers. Miss C. A. Aikens, Chairlady of Exhibit Committee, Detroit, Mich.

Announcements.

Evening Session—8 p.m.

1. Some Social Service Aspects of the Hospital. Rabbi Leo M. Franklin, Detroit, Mich.
2. Social Service in the Massachusetts General Hospital. Miss Ida M. Cannon, Head Worker, Social Service Department, Massachusetts General Hospital, Boston, Mass. Discussion led by Mr. Howard L. Udell, Associated Charities, Detroit, Mich.
3. Hospitals and Their Duty in Relation to the Prevention of Disease. Dr. Chas. P. Emerson, Dean of the Medical Department, University of Indiana, Indianapolis, Ind.

WEDNESDAY, SEPTEMBER 25.

Morning Session—10 a.m.

1. Hospital Management, Especially the Division of Responsibility and Labor. J. R. Coddington, Esq., Supt. Polyclinic Hospital, Philadelphia, Pa.
2. Report of Committee on Hospital Efficiency, Hospital Finance and Economics of Administration. Dr. Thos. Howell, Supt. New York Hospital, New York City.
3. Report of Committee on Medical Organization and Medical Education. Dr. L. B. Baldwin, University of Minnesota Hospital, Minneapolis, Minn.
4. The Use of Salvarsan (606) in Hospitals. Dr. Renwick R. Ross, Supt. General Hospital, Buffalo, N.Y.

Afternoon Session—2.30 p.m.

1. Report of Committee on the Training of Nurses. Miss Emma Anderson, Supt. New England Baptist Hospital, Boston, Mass.
2. Nursing Standards and the Supply of Pupil Nurses. Dr. Frederick A. Washburn, Administrator Massachusetts General Hospital, Boston, Mass.
3. The Grading of Nurses. Mrs. E. G. Fournier, Supt. Minnesota Sanitarium, Gravenhurst, Ont., Canada.
4. Report on Out-Patient Work. Dr. Wayne Smith, Supt. City Hospital, St. Louis, Mo.

Evening Session—8 p.m.

Round Table Conference for Superintendents of Small Hospitals. Chairman, Miss Louise Brent, Superintendent Hospital for Sick Children, Toronto, Ont; Associate Chairman, Miss Amy Armour, Superintendent New Rochelle Hospital, New Rochelle, N.Y.

THURSDAY, SEPTEMBER 26.

Morning Session—10 a.m.

Report of Membership Committee.
Report of Treasurer.
Report of Auditing Committee.

1. The Important Factors in the Feeding of Hospital Employes and Patients. Dr. H. T. Summersgill, Supt. Post-Graduate Hospital, New York City.
2. Economy in the Operating Room. Mr. Asa Bacon, Supt. Presbyterian Hospital, Chicago.
3. The Hospital Laundry. Dr. Winford H. Smith, Supt. Johns Hopkins Hospital, Baltimore, Md.
4. The Equipment of a Hospital Kitchen. A. A. Wilson, Esq., Toronto, Ont.

Afternoon Session—2.30 p.m.

- Trustees' Session. Chairman, M. E. Farr, Esq., Chairman Board of Trustees Detroit General Hospital, Detroit, Mich.
1. Report of Committee on Hospital Accounting. J. B. Draper, Esq., University Hospital, Ann Arbor, Mich.
 2. The Present Day Obligation of Hospital Trustees. Mr. Richard P. Borden, Trustee Union Hospital, Fall River, Mass.
 3. A Contribution to the Problem of Convalescence. Dr. Fred Brush, Supt. Burke Foundation, New York City.

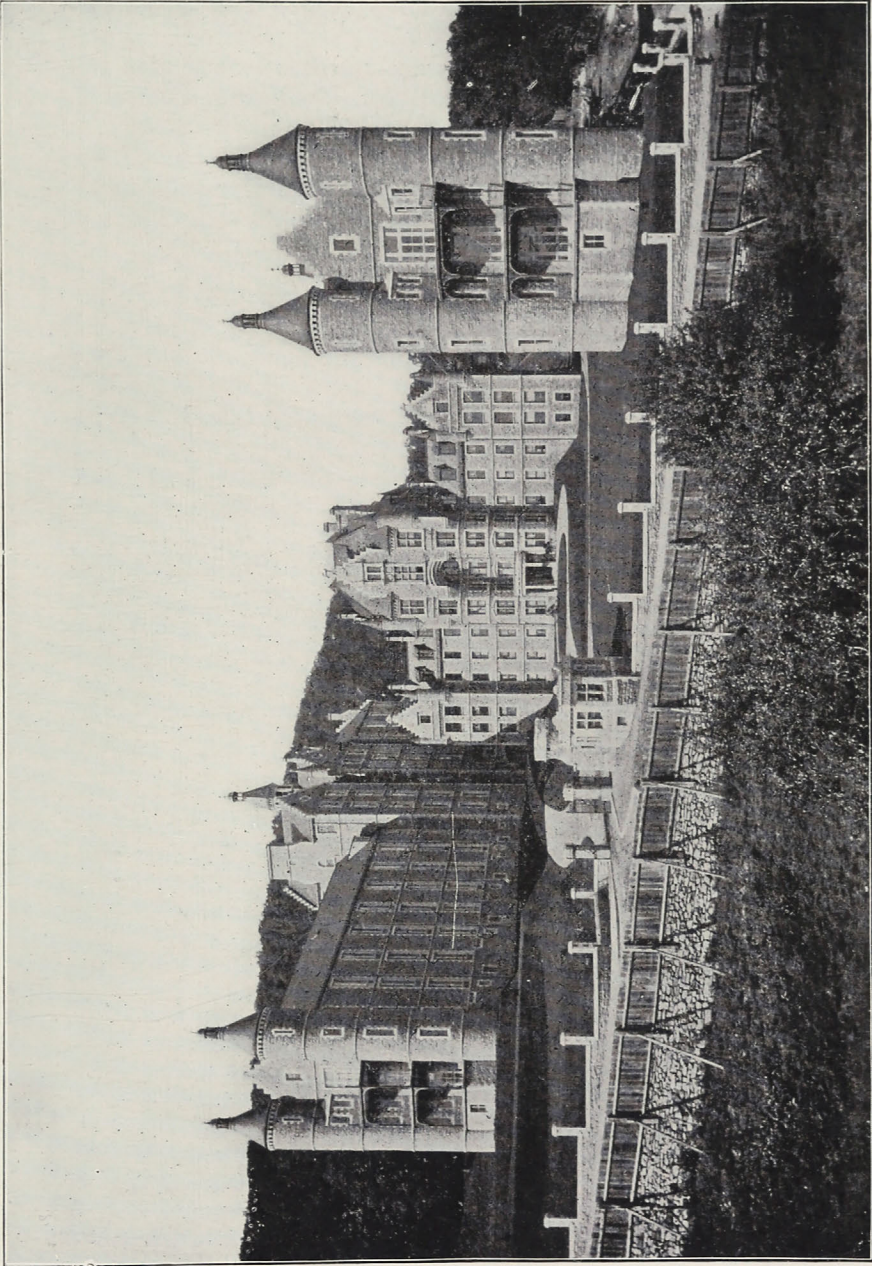
Evening Session—8 p.m.

1. Report of the Committee to Memorialize Congress to Place Hospital Instruments on the Free List. Rev. G. F. Clover, Supt. St. Luke's Hospital, New York City.
2. Hospital Organization, With Special Reference to That of the Detroit General Hospital. Dr. W. F. Metcalf, Detroit General Hospital, Detroit, Mich.
3. Report of Committee on Hospital Construction. Dr. C. R. Holmes, Cincinnati.

FRIDAY, SEPTEMBER 27.

Morning Session—10 a.m.

1. Report of Committee on Standard Nomenclature. Dr. Frederick A. Washburn, Massachusetts General Hospital, Boston.
2. Hospital Internes. Reuben Peterson, M.D., Medical Director University Hospital, Ann Arbor, Mich.
3. The Question Drawer. Dr. Alice M. Seabrook, Supt. Woman's Hospital, Philadelphia, Pa.



THE ROYAL VICTORIA HOSPITAL, MONTREAL

Afternoon Session—2.30 p.m.

1. Report of Committee on Bureau of Hospital Information and Permanent Secretaryship. Dr. S. S. Goldwater, Chairman, Supt. Mt. Sinai Hospital, New York City.

Other Committee Reports.

Report of Committee on Time and Place of Fifteenth Annual Conference.

Report of Nomination Committee.

Election of Officers.

Introduction of President-Elect.

Adjournment.

OFFICERS.

President, Henry M. Hurd, M.D., Secretary Board of Trustees, Johns Hopkins Hospital, Baltimore, Md.

Vice-Presidents, A. J. Ranney, M.D., Superintendent Lakeside Hospital, Cleveland, Ohio; Miss Nancy P. Ellicott, Superintendent Rockefeller Hospital, New York City.

Secretary, J. N. E. Brown, M.B., Superintendent Detroit General Hospital, Detroit, Mich.

Treasurer, Asa Bacon, Esq., Superintendent Presbyterian Hospital, Chicago, Ill.

EXECUTIVE COMMITTEE AND COMMITTEE ON LOCAL ARRANGEMENTS.

Dr. W. L. Babcock, Superintendent The Grace Hospital, Detroit, Mich.

F. E. Moulder, Esq., Superintendent Harper Hospital, Detroit, Mich.

Dr. E. B. Smith, Boulevard Sanitarium, Detroit, Mich.

Miss Sydenham Melville, Superintendent Woman's Hospital, Detroit, Mich.

Del T. Sutton, Esq., Editor *International Hospital Record*, Detroit, Mich.

MEMBERSHIP COMMITTEE.

Dr. H. O. Collins, Superintendent City Hospital, Minneapolis, Minn.

Dr. R. W. Corwin, Superintendent Minnequa Hospital, Pueblo, Colo.

- Walter Mucklow, Esq., Director St. Luke's Hospital, Jacksonville, Fla.
Miss R. A. Metcalfe, Superintendent Central Maine General Hospital, Lewiston, Me.
Dr. Frederick Brush, The Burke Foundation, New York City.
Dr. Theodore R. MacClure, Solvay General Hospital, Detroit, Mich.

COMMITTEE ON CONSTITUTION AND BY-LAWS.

- Dr. S. S. Goldwater, Chairman, Superintendent Mt. Sinai Hospital, New York City.
Dr. J. M. Peters, Superintendent Rhode Island Hospital, Providence, R.I.
Dr. H. A. Boyce, Superintendent General Hospital, Kingston, Ont.
Miss Lina Lightbourn, Superintendent Hospital of the Good Shepherd, Syracuse, N.Y.

AUDITING COMMITTEE.

- F. E. Moulder, Superintendent Harper Hospital, Detroit, Mich.
Dr. L. W. Luscher, Superintendent General Hospital, Kansas City, Mo.
Miss Lydia Keller, Superintendent Cobb Hospital, St. Paul, Minn.

NOMINATING COMMITTEE.

- Dr. Renwick R. Ross, Chairman, Superintendent Buffalo General Hospital, Buffalo, N.Y.
Reuben O'Brien, Superintendent Manhattan Eye and Ear Infirmary, New York City.
E. S. Gilmore, Superintendent Wesley Hospital, Chicago, Ill.

PUBLICATION.

- J. N. E. Brown, Chairman, Sec'y Am. Hosp. Assn., Detroit, Mich.
Miss Louise Brent, Supt. Hospital for Sick Children, Toronto, Canada.
Miss E. B. Greene, Superintendent Hospital for Incurables, Toronto, Canada.
Miss Kate Matheson, Superintendent Isolation Hospital, Toronto, Canada.

COMMITTEE ON HOSPITAL EFFICIENCY, HOSPITAL PROGRESS AND HOSPITAL CONSTRUCTION.

- Dr. C. R. Holmes, Chairman, Cincinnati, O., Hospital Construction.
- Dr. Thomas Howell, Supt. N. Y. Hospital, New York, Hospital Efficiency, Hospital Finances and Economics of Administration.
- Dr. Richard O. Beard, University of Minn. Hospital, Minneapolis, Medical Organization and Medical Education.
- Dr. Wayne Smith, City Hospital, St. Louis, Mo., Out-Patient Work.
- J. B. Draper, University Hospital, Ann Arbor, Mich., Hospital Accounting.

SPECIAL COMMITTEE ON BUREAU OF HOSPITAL INFORMATION AND PERMANENT SECRETARYSHIP.

- Dr. S. S. Goldwater, Superintendent Mt. Sinai Hospital, New York City.
- Dr. W. P. Morrill, Superintendent General Hospital, Winnipeg, Man.
- Miss Emma Anderson, Superintendent New England Baptist Hospital, Boston, Mass.

COMMITTEE ON NON-COMMERCIAL EXHIBITS.

- Miss C. A. Aikens, Chairlady, Detroit, Mich., and such members in Detroit as are on the Local Arrangements Committee.

COMMITTEE ON STANDARD NOMENCLATURE.

- Dr. F. A. Washburn, Chairman, Superintendent Massachusetts General Hospital, Boston, Mass.
- Dr. Winford H. Smith, Superintendent Johns Hopkins Hospital, Baltimore, Md.
- Dr. George O'Hanlon, Superintendent Bellevue Hospital, New York City.
- Dr. H. T. Summersgill, Post-Graduate Hospital, New York City.

COMMITTEE TO MEMORIALIZE CONGRESS TO PLACE HOSPITAL INSTRUMENTS, ETC., ON THE FREE LIST.

- Rev. C. F. Clover, Chairman, Superintendent St. Luke's Hospital, New York City.

Rev. A. S. Kavannah, D.D., Superintendent M. E. Hospital,
Brooklyn, N.Y.

Dr. J. N. E. Brown, Secretary Association, Detroit, Mich.

Dr. W. L. Babcock, Superintendent The Grace Hospital, Detroit,
Mich.

Dr. Winford H. Smith, Superintendent, the Johns Hopkins Hos-
pital, Baltimore, Md.

Active members shall be those who, at the time of their elec-
tion, are trustees or executive heads of hospitals.

Associate members shall be executive officers of hospitals, next
in authority below the Superintendent, or contributors to, or
officers or members of any association, the object of which is the
foundation of hospitals, or the promotion of the interest of
organized medical charities.

All applications for membership shall be in writing and shall
be endorsed by one or more members.

The annual dues for active members shall be \$5.00; the dues
for associate members shall be \$2.00.

Application blanks can be obtained from the Secretary on
request.

Members and guests are requested to register at the Secre-
tary's office immediately on arrival.

Headquarters.—The headquarters of the Association will be at
the Pontchartrain Hotel, Cadillac Square, Detroit, Mich., where
the Secretary will have his office adjoining the convention hall, on
the eleventh floor.

This hotel is located convenient to the Railway Station, and
in its vicinity are the following hotels: The Tuller, the Griswold
and the Cadillac.

Railroad Rates.—Owing to the restrictions placed on passen-
ger traffic by the Trunk Line Association, it is not feasible to
obtain reduced rates for members attending the meeting. At this
season of the year, however, members can obtain special excursion
rates from many parts of the country by inquiring of their local
agent.

It is hoped that members will unite with the officers in mak-
ing this a banner meeting. Each of our annual conventions has
been better than the preceding. Do your share by arranging to
attend. Assist us in obtaining new members. Look over your

copy of the Transactions, and if the Superintendent of any hospital in your city is not a member of the Association, write to the Secretary at once for application blanks. DO IT NOW.

It is intended to feature the "Non-Commercial Exhibit of Hospital Appliances," and a large room has been engaged for that purpose. Nearly half more space than occupied at New York will be available; members of the Association who desire to exhibit any hospital articles that are new or handy, should communicate with Miss Aikens, 722 Sheridan Ave., Detroit, and arrange for their exhibition. Full credit will be given for anything exhibited that is non-commercial in its adaptation for hospital use.

Workers exhibiting hospital appliances should use no label smaller than $3\frac{1}{2}$ by $6\frac{1}{2}$ inches; larger when explanations are required. Use cardboard and make letters large and plain. Add name of hospital and exhibitor. Make label effective as possible.

DR. HENRY M. HURD, PRESIDENT OF THE AMERICAN HOSPITAL ASSOCIATION

Henry Mills Hurd, President of the American Hospital Association, was born in Union City, Michigan, May 3, 1843. His family removed to Illinois when he was eleven years old. He was educated at Knox College, Galesburg, Illinois, and at the University of Michigan at Ann Arbor, and graduated at the latter institution in Arts in 1863. He received the degree of M.D. from the same institution in 1866; the degree of A.M. in 1870 and that of LL.D. in 1895. He served as Assistant Physician and later as Assistant Medical Superintendent at the Michigan Asylum for the Insane at Kalamazoo, Mich., from 1870 to 1878. In the latter year he was made Medical Superintendent of Pontiac State Hospital, Mich., and remained there until 1889 when he accepted the Superintendency of the Johns Hopkins Hospital at Baltimore. In the same year he was made Professor of Psychiatry at the Johns Hopkins University. He retired from the latter position in 1906 and is now Professor Emeritus. He became editor of the Johns Hopkins Hospital Bulletin and of the Johns Hopkins Hospital Reports in 1890 and continued in charge until 1911, when



OPERATING THEATRE OF THE ROYAL VICTORIA HOSPITAL, MONTREAL.

he resigned the Superintendency of the Johns Hopkins Hospital. He became one of the associate editors of the *American Journal of Insanity* in 1897, and still holds the position. In 1911 he retired from the active work of the Johns Hopkins Hospital and was made Secretary to the Board of Trustees.

SYNOPSIS OF PAPERS PRESENTED AT THE AMERICAN HOSPITAL ASSOCIA- TION CONVENTION

“Present-Day Obligations of Hospital Trustees”—By R. P. Borden, Esq., Union Hospital, Fall River, Mass.

A hospital trustee should:

Realize his position of trust as well as of honor; secure a competent superintendent as representative of the trustees, and, having done so, stand behind the superintendent in carrying out the policies of the hospital; not interfere as an individual in the management of the hospital, but act as a board, through the superintendent, with relation to internal policies, and through the secretary and duly authorized committees as to other matters; before acting, secure expert advice on all professional matters; have sufficient knowledge of the institution to act wisely, and to that end become somewhat familiar with all its departments and the work which is being done; realize that it is the function of the hospital to preserve the physical efficiency of the community which it serves; that it is impossible for the hospital alone to do this, and, therefore, have an interest in public hygiene, sanitation, social service, and housing problems and the agencies available in his community for carrying on this work; and, in so far as possible, endeavor to bring about co-operation between the hospital and all such agencies.

“Report on Medical Organization and Medical Education”—By Dr. L. B. Baldwin, Supt. University Hospital, Minneapolis, Minn.

The principal points in the report will be as follows:

1. Importance of the teaching hospital.
2. Organization of its staff and its relation to the school.

3. Addition of the fifth or hospital year to the course in medicine.

4. Standardization of hospitals.

5. Importance of dispensary service for pupil nurses.

"Contribution to Problem of Convalescence"—By Dr. Fred. Brush, Supt. Burke Foundation, New York City.

Reasons for presenting thus early plans and programme of work of the Burke Relief Foundation Convalescent Institution. Great need of institutions for convalescents and chronics. Full capacity of new institutions, on 60 acres of land, 20 miles from the city: 300 beds. Provision being made for classification of patients, motor transportation, adequate medical and surgical treatment, possible shortening of hospital stay, physical therapy, physical "setting-up" of the guests through dental and eye, ear and throat service, valuable patients' records, year-round diversions and occupational instruction, outdoor sleeping, various social helps, close relations with existing organizations and with patients' physicians, how not to increase the convalescent "rounder," city admitting station to do important clearing-house work, etc. Questions of probable effectiveness along these and other lines.

The report of the Committee on Hospital Efficiency, Hospital Finances and Economics of Administration will be prepared by Dr. Thomas Howell, of the New York Hospital.

Dr. Howell will endeavor to obtain and compile information from all sections of the country regarding advances made along these lines during the year.

Among other subjects which he will touch upon are the following: Pensions for superannuated employees; the care of incipient insanity in general hospitals; the training of hospital superintendents; improvement in bookkeeping methods; quantity standards for various commodities; salaried admitting physicians; the giving of prizes for ideas; the inaugurating of new clinics, etc., etc.

Synopsis of paper on the Hospital Kitchen—By Mr. A. A. Wilson, Toronto, Ontario.

This paper will deal with the question of the location of the kitchen with reference to the other portions of the hospital; the size and shape of kitchens; their relation to the storeroom; their

equipment, which should be practical, substantial, and easily repaired. Plans will be exhibited, showing position of the various apparatus. Consideration will be given to the size and capacity of the various articles in comparison with the number of patients and employees, and to the subsidiary rooms of the kitchen, diet kitchens, and ward serving rooms. Consideration will be given, also, to the relation of the kitchen to the ward serving room and various dining-rooms.

Dr. R. R. Ross, of Buffalo General Hospital, will read a paper on 606, considering the following points:

1. How extensively is it used?
2. Is it used in dispensary practice?
3. To what extent do hospitals charge for the drug?
4. Most suitable cases and results.
5. Has public opinion in regard to syphilis been influenced by the knowledge that there is a remedy which will apparently cure the disease?

"The Grading of Nurses"—By Mrs. E. G. Fournier, R.N., Gravenhurst Sanitarium, Gravenhurst, Ont.

1. Some of the failures and difficulties of the registration of nurses as said registration is operative to-day.
2. The necessity of nursing and caring for all classes of sick as efficiently as possible.
3. Providing openings for girls who have left school and who wish to become registered nurses some day, thus supplying more workers for our hospitals, sanatoria, and in many and varied places which, to-day, need just such help and find it so difficult to obtain.
4. Plan for the grading of registered nurses, trained nurses, and licensing undergraduates.

Summary—To accept our responsibility in the care of the sick, suffering and helpless humanity, and to deal with the nursing problems in a sane, practical, and efficient manner.

"Organization and Policy of the Detroit General Hospital"—By Dr. W. F. Metcalf, of Detroit.

Hospitals should be organized as are manufacturing plants. The policy of the board of trustees should be carried out by a superintendent who has a medical education and is familiar with the needs and expectations of every department.

There should be one chief in each department who is held responsible for the development of his department, and upon whose advice all other workers in the department are chosen.

"Rotation in Service" is prejudicial to the development of any hospital and to the development of staff members.

There should be an age limit, as in any service.

Where a medical school is permitted to use a hospital it should control the policies of the hospital. Its teachers should compose the entire staff. A hospital will be as great or small as the school using its facilities. The admission of proprietary school or medical trades union will prevent the normal development of any hospital.

Hospital dividends cannot be estimated in dollars, but in the restoration of people to useful citizenship and in making additions to the sum total of knowledge; therefore the trustees should employ disinterested experts from other cities to report annually upon the condition and achievements of each department.

Miss Emma Anderson, of the New England Baptist Hospital, Boston, will present the report on the Training of Nurses, based on the following queries:

1. Since the adoption of the Training School Committee's report in 1909 what do you consider to be the most significant features of the training school progress?

2. Is sufficient attention being paid to the following line of training: Tuberculosis work; dietetics; general hygiene; social service; institution ethics?

3. To what extent should hospitals be expected to prepare pupils for public health work? Considering the fact that the majority of nurses graduated are to enter the field of private nursing, how many hospitals better prepare their pupils for this work?

4. Is the supply of candidates for training greatly influenced by any one factor?

5. Are paid instructors being more generally employed in hospitals than three years ago?

6. What is the maximum number of hours weekly which a hospital is justified in requiring of pupil nurses to be spent in actual nursing service, exclusive of class work; and what pro-

gress is being made in reducing the hours of weekly service for routine work in hospitals of all grades?

7. In view of the chaotic conditions which prevail in the nursing field, the numerous small and special hospitals which are training nurses, and the fact that hospital graduates with full training have to compete with all of these varied classes of nurses, would you approve that all nurses be brought under supervision, and required to be licensed in various grades, as in the case of school teachers?

8. Is it possible in the majority of states and provinces of the United States and Canada for hospitals to maintain a sufficient corps of nurses to meet the demand in hospital and community and restrict admitted candidates to those who have had a full or partial high school course? What proportion of your present corps of nurses have had (a) a full high school course? (b) one year in high school? Does such restriction bar out good candidates who otherwise would be admitted? Does it result in unpromising candidates being admitted to training schools? Please elaborate on this question.

9. Should facilities for training in administrative work be multiplied, and what suggestions have you to offer regarding this question? Would you recommend that the association take steps to induce hospitals to offer a course on executive or administrative work, with a view to better preparing superintendents and heads of departments for active institutional work?

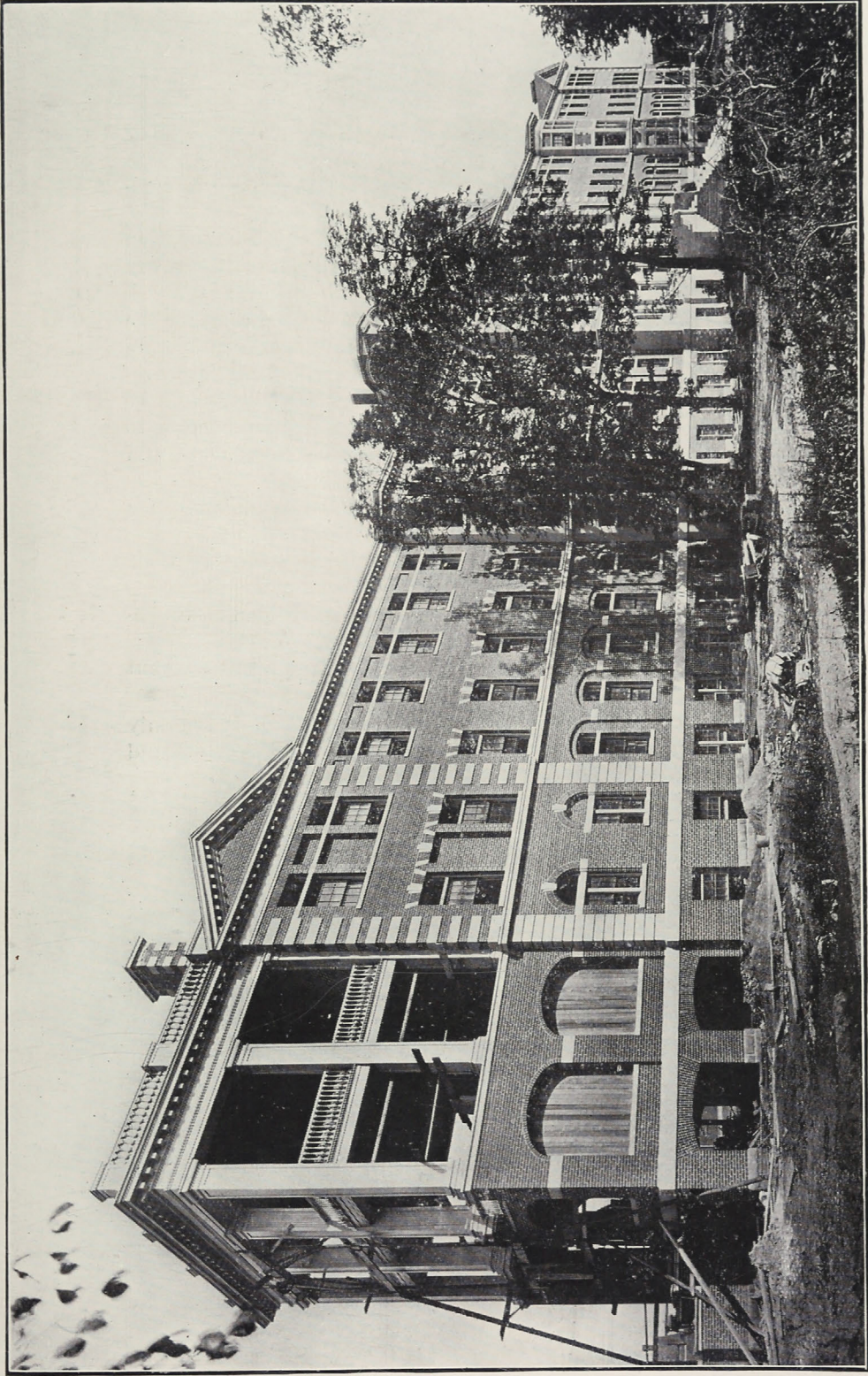
“Hospital Management, Especially the Division of Responsibility and Labor”—By Jas. R. Coddington, Supt. Polyclinic Hospital, Philadelphia.

The paper will touch upon the rights of the public, the gradual concentration of responsibility until the superintendent is reached, and then again the distributing of the responsibility and labor to the various departments.

Also the decision of what these departments shall be and control.

The superintendent; the choice of the heads of departments; their duties and limitations.

The importance of each head understanding his or her own duties and fulfilling them to the utmost, with the recognition of the need of loyalty and harmony.



THE NEW WESTERN HOSPITAL, TORONTO

“Hospital Accounting”—By Dr. J. S. Draper, Supt. University Hospital, Ann Arbor, Mich.

Hospital efficiency, finances, and economics of administration are among the greatest problems we are called upon to meet every day.

Every hospital, whether large or small, must first consider the source of income necessary to meet the current expenses. We are soon called upon to meet the much-needed extensions, improvements, and repairs. Uniform classification of accounts would be of inestimable value, which would enable all the hospitals to accurately compare the per capita cost in each department and thus create a strong, healthy rivalry.

What is the greatest objection which stands in the way of a uniform classification of accounts?

1. One upon which all can agree as being suited to their special work.

2. The cost of voucher register and necessary blanks, vouchers, checks, etc.

3. Is the voucher system advised, and does the result warrant the extra cost of labor?

4. I am convinced by personal experience that it is the only system whereby an accurate audit can be made of receipts and disbursements.

5. A fair trial will convince the most skeptical person that the amount saved will soon make up for the additional expense.

6. How can a uniform classification of accounting be brought about?

7. By the association appointing a committee in whom you have confidence, then accept their recommendations and adopt them.

8. Careful and accurate accounting of hospital supplies will soon call your attention to the leakage and waste here and there, which is essential in order to make your hospital self-sustaining.

9. Every hospital should have an experienced storekeeper who knows how to handle supplies.

10. No supplies should be issued from the storeroom except upon a requisition signed by the superintendent or his duly authorized agent.

11. Too many hospitals fail to provide a suitable storeroom in which to keep their supplies.

Dr. H. F. Summersgill Superintendent of the New Haven Hospital, New Haven, Conn., will present a paper entitled "Important Features in Feeding of Hospital Employees and Patients." The minor part will deal with the "Feeding of Hospital Employees," the major part with the "Feeding of the Sick."

"Social Service at Massachusetts General Hospital"—By Ida M. Cannon.

1. Sketch of Social Work in Wards.
 - (a) Executive's assistant.
 - (b) Lady visitors.
2. Social Service Department in the Out-Patient Department.
 - (a) Organization.
 - Good points and defects.
 - (b) Divisions of work.
 - a. Work with tuberculosis patients.
 - b. Work with children.
 - c. Sex problems.
 - d. Work with nerve clinic.
 - e. Work with physically handicapped.
 - (c) Co-operation with social agencies in community.
 - (d) Co-operation with School for Social Workers in training of workers for Hospital Social Service.

SOME SOCIAL SERVICE ASPECTS OF THE HOSPITAL—OUTLINE OF TREATMENT.

The physical basis of many phases of degeneracy, while always more or less clearly recognized by students of social problems, is receiving to-day constantly new emphasis. In schools, for instance, the backward child or the habitual truant is no longer flogged—at least not until he has been examined as to a possible physical basis for his defect, in weak eyes, defective hearing, adenoid growth, etc. Telling experiments along these lines in various reformatories and penal institutions. The Federal Government is spending a vast sum of money in experimentation along these lines.

But if the physical basis of mental and moral defect is gaining recognition, so also is the truth that the physical body does

not tell the whole story to the physician who would diagnose physical disease. Failure to count with the psychic factor, with the power of suggestion, etc., has limited the possibilities of the physician to achieve results. To this cause may be traced the origin of many of the so-called mind-cure cults. Christian Science, is a monument to the failure of medical science. This short-sighted attitude is being rapidly overcome.

Of equal importance in the successful treatment of disease is the recognition of disease as a social symptom. Impossible to deal with certain phases of disease without tracing them back to their root causes, e.g., child labor, bad housing, overcrowding, sweatshop, long hours of work, etc. Failure to count with these conditions explains why patient, apparently well on leaving hospital, returns again and again.

Hence, the hospital fails unless it co-ordinates its work with other social, philanthropic and educational forces both before and after the actual treatment of the patient. The hospital must realize itself as a social force, and not be merely the laboratory of some medical school.

What has been accomplished along these lines:

Arguments for and against the view that Social Service Department should be an integral part of the hospital. The Visiting Nurse. The Charity Clinic and Its Opportunity. The Paid vs. the Volunteer Worker.

Necessity of gaining the social viewpoint which emphasizes the family rather than the individual as the social unit.

Indirect Social Service rendered by hospital. Awakening of confidence instead of fear. Friendly visitor at hospital finds patient receptive to suggestion. Mere contact with clean, well-ordered housekeeping, as seen in a well-conducted hospital, an object-lesson to the patient.

The educational value of Hospital Social Service work. Its Influence on nurse and physician—On patient.

Its influence in overcoming sources of preventable disease.

Its necessity.

Means to be employed for its more general establishment.

"Hospital Construction"—By Dr. C. R. Holmes, Chairman of Hospital Committee of City Hospital, Cincinnati.

Dr. Holmes will present the report of the Committee on Hos-

pital Construction. His subject will be "Improvements in Construction and Equipment of Medical Hospitals," illustrated with photographs.

"Hospitals and Their Duty in Relation to the Prevention of Disease"—By C. P. Emerson.

There is a growing feeling that hospitals owe as much to the community at large as to the patients in particular, and that each patient received involves wider responsibility on the part of the hospital. This particular work cannot be done by the doctors and nurses actively engaged in the care of the patients, but should be directed by them. The hospital should be the centre of Social Service in the community where it is.

A review of the success along this line in the past years. Work now in progress. The outlook for the future. Medical students as social workers.

"Operating-Room Economy"—By Asa Bacon, Superintendent Presbyterian Hospital, Chicago, Ill.

I shall treat the subject from a purely business standpoint and not a professional one, for it is not my purpose in any way to dictate what the surgeon shall or shall not do in the operating-room, for the life of the patient is in his hands; therefore, the responsibility lies with the surgeon. I believe it is the duty of the superintendent to co-operate with the surgical and nursing staff, so as to bring about proper team work, as well as to provide suitable supplies, instruments, etc., to produce the very best results for the patient. It is a fact, however, that very few superintendents know how rubber gloves are made, and as this is such an important item of expense, and as there are so many poor gloves on the market, I shall, as a matter of information, tell you in as few words as possible how one of our leading manufacturers makes gloves.

When the surgeon throws aside a pair of gloves, mend them for the interne, and from the interne send them to the floors for dressing purposes. So far as possible, buy heavy gloves. They last much longer, and are cheaper in the end.

As a matter of information and comparison, my bill last year for all rubber gloves used in the hospital was \$522. We cared for 2,609 surgical patients, including 244 obstetrical, and had

2,702 operations. This makes 20 cents per surgical patient for gloves.

From my experience, I find 16-20 gauze, 20 to 21 yards to the lb., shipped in packing boxes, the most economical. By carefully buying and selling the boxes, your gauze bill should not be out of proportion to your other items of expense, providing proper economy is used in distributing.

Suture Material—Silkworm gut, catgut and surgeon's silk can be purchased to better advantage in the raw state and prepare it yourself.

Rough German catgut, No. 0-1-2-3, is a very economical catgut to use. However, many surgeons prefer the smooth. Braided silk, whether white or black, is stronger and more economical than the twisted.

Iodine Method of Preparing Catgut.—Roll catgut tightly on glass reels. Tie ends firmly. Drop catgut as wound into clean glass jars. (Mason jars will do.) Cover catgut with solution of iodine 300 parts, ether 1,700 parts, and leave immersed for seven days in air-tight jars. Then pour off iodine solution into original bottle or on to freshly wound catgut. Pour ether (commercial) on sutures. Keep pouring off and on until the ether solution comes away clear.

Preparation of Silk-Worm Gut.—Wind around fingers to curl so as to occupy less space. Boil for half an hour in covered basin; remove with sterile forceps; place in covered sterile jar, and cover with 95 per cent. alcohol.

The anesthetic bill can be greatly reduced and at least a part of the anesthetist's salary can be met by extra fees from patients who wish the services of an expert.

Small hospitals having one operating-room can easily instal their own nitrous oxide plant, provided they have a small room, say 8x10 feet, adjoining the operating-room.

In using ether it is economy to buy the best and purest.

Gowns.—Gowns can be made cheaply in the sewing-room, at the same time using a pattern to suit the surgeon. The cost is from 75c. to 90c. each, according to material used.

Some Small Leaks, and How to Prevent Them—

A large pad of gauze is often used to wash a patient when a sponge or two is sufficient.

The worn-out towels can be made into pads to wash patients. Large, thick pads put on clean surface absorb more alcohol, but some operators consider a large pad necessary.

Save the gauze. You can greatly reduce your bill by washing, sterilizing and using it again.

Use cheap cotton or gauze for pads instead of the high-priced absorbent.

Use cheap cotton for clinching windows and doors when fumigating. Save the cotton and use it again.

Laundry bags and cans of waste should be carefully watched. You will find an occasional instrument and pieces of linen in them.

Replace glass-top tables as fast as they break with porcelain, enameled iron or nickel.

Use bottle dispensers for alcohol and liquid soap instead of pouring on the hands in the old way.

Bags used for sterilizing utensils, when worn out, make good dust cloths, iron-holders in the laundry, and they can also be used for wiping machinery in the engine-room.

Urethral catheters are ruined by boiling. Save them by sterilizing in alcohol.

Mend the gloves. They can be used by the internes and nurses in the operating-room, and for dressing patients.

It is economy to have uniformity of solutions, uniformity of sutures, uniformity of needles, uniformity of instruments, uniformity of everything so far as possible.

ROUND TABLE CONFERENCE

GENERAL ADMINISTRATION.

Is it wise to have a committee on internes from the medical staff to assist in their supervision and general control when a young nurse is superintendent?

Should a general hospital admit venereal patients?

Is it wise to have a separate kitchen in the Nurses' Home, and what are its advantages and disadvantages?

Can the materials used in teaching cooking to nurses be pro-

perly utilized when the training kitchen is separate from the hospital?

Is it desirable, when possible, to provide accommodation for married employees on the hospital grounds?

Is the hospital to any extent responsible for the nursing, when a patient brings his own special nurse with him?

Should the hospital charge full price for the room as if it were responsible for all nursing, and also charge in addition for the board of special nurses?

How can the board of a small hospital be induced to make provision for out-door treatment in summer?

To what extent is it desirable to provide accommodation for friends of private patients?

Can a hospital advertise?

What kind of advertising is ethical for hospitals?

Is it unethical to write to physicians over the State and enclose them a button with the name of the hospital on the same, to place upon their patients that they send to our city in order to identify them at the trains?

Is it not a fact that hospitals may even use the daily press and remain within the pale of ethics?

What constitutes a hospital day? Does the day of entrance and the day of exit count one day?

TRAINING SCHOOL.

How can pupil nurses be better prepared for private nursing?

How can a Superintendent be sure that pupil nurses have been systematically taught practical duties beyond those which come to them as routine work?

WANTED.

An outline for a course of training for head nurses for departments.

Methods of teaching nurses the cost of supplies, and of preventing waste and breakage by pupil nurses.

How to prevent nurses from losing their professional attitude and severity of uniform after graduation.

Give a scheme for eight-hour duty.

Who should teach probationers?

Give an estimate of the average time spent by superintendents

at conventions or gatherings, away from actual duty, for the purpose of improving themselves.

DOMESTIC.

Where and how should housekeepers for small hospitals be trained?

The advantages and disadvantages of having a graduate nurse in charge of the dietary and housekeeping departments in small hospitals.

How to get the hospital sewing done?

GENERAL ADMINISTRATION.

(1) What to do, when ward rate is \$1.50 per day, and one can only pay \$1.00; another is paid for by the city, and another will not pay more than \$1.00 because the other does not?

(2) Is it below the dignity of Boards to get up Fairs and Kermeses to raise money, or should they confine themselves to solicitations in writing?

(3) Should the Superintendent of Nurses be independent of the Hospital Superintendent, as far as compatible with courtesy and common sense?

(4) Should the housekeeper be responsible to the Superintendent of Nurses?

(5) Should any hospital of 50 beds be run without an engineer?

TRAINING SCHOOL.

(1) Should massage be taught?

(2) How can we secure older and more experienced women as nurses?

(3) In what way has a well educated woman any superiority when a Superintendent of a small hospital, over one who is not well educated, when she is so busy that she cannot stop to think of "Browning" and "Alma-Tadema" and "Paderewski"?

(4) To how much must we shut our eyes among these very young nurses?

DOMESTIC.

(1) Why not have non-resident Chinese servants?

(2) Should not every hospital have a Central Linen Room?

(3) How far tax nurses for rubber goods, glass goods, dishes and linen that are destroyed?

THE COMING CONVENTION EXHIBIT

The coming exhibit of the American Hospital Association promises to surpass all previous records and no hospital worker can afford to miss the inspiration and practical value which are combined in the convention to be held in Detroit in September.

Among the features of special interest we expect to show a model of a hospital now being erected on a site of twenty acres—which is expected to embody the best features of hospital construction approved both in Europe and America. There will be new things in surgical lighting designed by practical hospital people and tested out within the last year. We shall have models of economical, sanitary cottages for hospital employees which can be erected at very moderate cost. We shall have models of tuberculosis shacks—illustrating the latest methods of dealing with surgical tuberculosis. An operation table designed and used but which has not been placed on the market, infant incubators (home made), children's cribs designed by hospital workers for their own use—home-made devices of all kinds, articles arranged so as to illustrate ward methods, orthopedic devices, a model of an outdoor ward, a model of an emergency hospital in a departmental store and a great variety of interesting devices which must be seen to be appreciated.

The social service exhibit is receiving much attention and promises much that will be of interest to all hospital workers. We expect to meet the infant population of Detroit or their representatives (in miniature) and to show some of the conditions under which they have to live, move and hold on to life. These and many other features will be included in that section of the exhibit. For weeks, enthusiastic hospital social service workers have been working on this part of it. The visiting nurse adjunct to hospital work also will be represented. We hope also to give some emphasis to the idea of preventative work in hospitals of all classes.

The non-commercial exhibit will have about three times as much space as ever before and represents a vast amount of time and labor which has been expended on it for the benefit of hospital workers.



ACUTE HOSPITAL BUILDING—ESSEX COUNTY HOSPITAL FOR INSANE, OVERBROOK, N.J.

HOSPITAL FOR INSANE, OVERBROOK, N.J.

THE Essex County Hospital for the Insane, at Overbrook, New Jersey, is recognized by hospital authorities as being one of the most up-to-date and, architecturally, about the most beautiful in America. The group of buildings are the work of Messrs. Hurd & Sutton, Architects, New York City, and the following illustrated description of the buildings will interest the readers of THE HOSPITAL WORLD.

The building operations, about completed and under way, with their necessary sewage and drainage system, heating, ventilating and electrical apparatus, comprise a total of twenty-three buildings, ranging in size from the Fire House, a building about 40 feet square, to the Acute Hospital, over 300 feet long, with their connecting and service corridors, sun parlors, tunnels, etc., designated as follows:

The Hospital Group, consisting of five hospital ward buildings, connected with each other by one-storey corridors, and including the necessary operating rooms, sun parlors, infirmaries, etc., arranged for the reception and treatment of acute and chronic patients.

Two main Dining-Room Buildings, with adjacent serving and private rooms, to accommodate about 500 patients each.

Administration and Kitchen Buildings.

Auxiliary Buildings.

The Power House, in which are located the boilers, hot-water heating tanks, turbine pumps and other apparatus, and the electric lighting plant.

The Laundry, with the necessary washing, ironing and drying apparatus.

Bakery, with modern ovens, dough-mixing and baking machinery.

Store-House, subdivided into the Butcher, Grocery and Dry Goods departments, Ice-Making Plant and Cold Storage rooms.

The Industrial Building, comprising the machine, carpenter and plumbing shops, mattress and upholstering departments and sewing and tailoring rooms.

Paint Shop and vault, for the storage of paints and combustibles.

Fire House.

Amusement Building.

Female Nurses' Home.

Male Nurses' Home.

Female Employees' Home.

Male Employees' Home.

Superintendent's House.

Cow Barn.

The Hospital Group is the principal construction upon the Overbrook grounds, and comprises the acute and chronic hospital ward buildings, with their adjacent dining halls, administration building and kitchen, with their various communicating and service corridors, forming a complete hospital, used only for the reception and treatment of patients, with ample means of intercommunication with every part and the administrative and supply departments.

The Administration Building contains the administrative offices, such as the Superintendent's main and private offices, physicians' offices, staff consultation room, reception rooms, medical library, medical record room, with vaults, telephone central, where every ward and department is within call by telephone or signal, steward's offices, committee rooms and staff dining room.

The second and third floors contain living quarters for the staff and physicians and the necessary domestic help required in this building.

A separate kitchen is provided in the basement. Also additional separate dining-rooms for domestic help and clerks, with the necessary store-rooms, pantries, etc.

In addition to the domestic quarters in the basement are located the dispensary, drug room, X-ray room, laboratory, etc.

The ward buildings are located directly east from the administration building, extending north and south, and are composed of buildings designated for the sake of convenience as Buildings Nos. 1, 2, 3, 4, 5.

The centre building of the group, noted as Building No. 3, is the Acute or Receiving Hospital, where it is intended that

patients suffering from acute mental disorder are received and undergo treatment, and is equipped practically as a separate and distinct hospital with separate dining-rooms, diet kitchens, sterilizing-rooms, hydro-therapy department, surgical and operating-rooms.

The centre portion is the only portion of the ward buildings over two storeys in height, this third floor being occupied with a fully-equipped surgical operating theatre, with sterilizing, bandage, preparation, resting and lecture-rooms, fully equipped with all sterilizers and operating apparatus.

An electric elevator communicating with every floor is installed in this portion, giving ample and quick service.

Upon the second floor is located the hydro-therapy department, with its complement of shower, douche, needle, spray and vapor baths, etc.

The centre of this building marks practically the common centre of the ward group, communication being obtained north and south to the various wards, and west through the enclosed corridor to the Administration Building.

Upon each of the first and second floors are the required hospital and convalescent wards, day rooms, private patients' rooms, lavatories, toilets, clothes and dressing-rooms, adjacent to the several wards, diet kitchens, with steam-cooking apparatus, refrigerators, etc.

Two main dining-rooms, capable of accommodating about 200 convalescent patients, are located upon the main floor of this building, and are served from a serving room directly connecting with the service corridor, communicating with the main kitchen.

This serving room is fitted up with all the necessary apparatus for service, such as steam tables, sinks, plate warmers, refrigerators, cases and racks for crockery, dishes, etc.

To the south of the Acute Hospital, connecting therewith by means of an enclosed corridor, is the female chronic ward building. This building is separated into three separate units, composed each of a day room, dormitory, a number of private rooms, with the bath, toilet and dressing-rooms on each floor.

A sun parlor is provided upon the communicating corridor, with overhead light.

Farther to the south, connecting therewith, is located Build-



CHRONIC HOSPITAL BUILDING, ESSEX COUNTY HOSPITAL FOR THE INSANE, OVERBROOK, N.J.

ing No. 1, which is practically a duplication of the foregoing, with the exception of additional quarters provided for disturbed patients and the female infirmary.

Midway between these two buildings, one of the main dining-rooms is placed, capable of accommodating about 500 female patients, with dining-room for attendants and serving-room adjacent thereto, and connected with the kitchen service corridor.

To the north of Building No. 3 are situated Buildings 4 and 5, which are practically duplicates of the buildings just mentioned, as far as accommodations are concerned, and are intended for the housing of the chronic male patients, provided with day or exercise rooms, dormitories, sun parlors, dining-rooms, single rooms and all necessary toilet and bathing facilities.

Connected with each ward and dormitory are the necessary toilets, which in general are located in practically separate buildings, thus giving adequate light and ventilation.

Closely related to those facilities are the clothes rooms, with ample means for the storage of clothes and linens, with the necessary dumb waiters to the basement, where all the soiled linen is collected for transportation to the laundry, and by the same means the clean linen is returned.

Each ward building is equipped with hand passenger lifts, so designed that infirm or incapacitated patients may be moved from floor to floor.

To the north and south of this main group are located the Infirmarys, which are designed for the treatment of the physically sick, and have adjacent thereto the necessary single rooms for patients and nurses, toilets, diet kitchen and small convalescent dining-rooms, with all their necessary equipment.

To the south of the Administration Building and on the level of the ward buildings, is the Kitchen Building, equipped with the necessary cooking apparatus and utensils, with additional rooms for food stores, refrigerators, storage, help dining-rooms and living quarters for the kitchen employees.

This kitchen is in direct communication by means of enclosed corridors with all the dining-rooms, Administration Building, etc.

The two dining-rooms, designed to seat approximately five

hundred patients each, and the kitchen proper, are one-storey buildings, with high roofs supported on steel trusses. They are lighted with large windows upon their longitudinal sides, with the addition of lanterns in the roofs, running the entire length of the rooms, thus providing ample means of lighting and ventilating.

This hospital group has been designed in the most modern manner, to assure the safety of the patients in case of fire, being practically fire-proof construction throughout, composed of brick walls, terra-cotta arch floor construction and fire-proof partitions, and the detail work has been arranged to provide as little opportunity as possible for unsanitary conditions to arise after occupancy.

There are as few angles, corners, etc., as possible, all plaster angles being rounded or coved.

All rooms where toilet fixtures are located have vitrified tile floors with tile sanitary bases.

The only rooms having wood floors in the ward buildings are those intended for sleeping purposes, such as the dormitories and single rooms. All other floors, except tile, being composed of a cement composition of a dark terra-cotta color, smoothed and waxed, with a coved base of the same material around all rooms, thus affording a smooth, sanitary surface.

All door trims are plain boards with rounded corners.

The ward buildings are divided into sections whereby the patients may be subdivided, depending upon the desire of the physicians in charge, each section being closed from the other by means of fireproof doors.

Every division is furnished with a fire standpipe, with hose and nozzles, in such locations as to be accessible and in readiness at all times.

Telephone and fire signaling apparatus is installed so that should occasion require the attendants upon any portion of the buildings can be in instant communication with the telephone central office in the Administration Building or Fire House.

All windows in the private patients' rooms and all above the first floor of the ward buildings are equipped with heavy wire guards, secured upon the inside by means of two locks, assuring an absolute safeguard, and thus preventing the patients from having access to the windows.

The Administration Building, in general, follows along the lines of construction of the ward buildings, being of fire-proof construction, but the official quarters of the Board and Staff are treated in a manner appropriate to their uses.

The medical record room and the fire-proof vault adjacent to this room, in addition to the vault in the Steward's department, is equipped with steel filing cases, where the patients' records, valuables, etc., will be kept in safety and easily obtainable at any time.

There are two morgues located at the north and south ends of the group, and scattered at various locations are the rooms for the reception of the soiled and clean linen.

The hospital group is heated by the forced hot water by means of direct and indirect system, having warmed air forced into rooms by means of blowers in the basement, and exhausted through the ventilators in the roof, in addition to the hot-water radiators and coils distributed throughout the wards, corridors, etc.

It is equipped for lighting by electricity, the wires being run in iron conduits and fitted with simple fixtures, having wire cage arrangements for protection from the destructive efforts of some classes of patients.

To the west of the Hospital Group is located the Amusement Building, directly opposite the Administration Building.

This is a one-storey building, designed for the purpose of furnishing a recreation and religious centre for the institution, and not only will be of considerable value in the treatment and benefit of the patients, but is expected to prove, owing to the use to which this building may be put in the way of entertainment, a strong incentive to produce a more contented feeling among the employees.

Flanking the Amusement Building to the north and south are located the Nurses' or Attendants' Homes. The South Building is the Female and the North the Male Homes, and are both designed upon similar lines.

To the south of the Female Nurses' Home is located the Female Employees' Home, which is designed to accommodate employees of the institution employed in other capacities than as nurses, such as seamstresses, laundresses, etc.

The Male Employees' Home, situated to the south of the



AMUSEMENT BUILDING, ESSEX COUNTY HOSPITAL FOR THE INSANE, OVERBROOK, N.J.

storehouse, is identical with this building, modified as necessary to suit the site.

To the south of the Female Employees' Home, and almost upon the southern edge of the county's property, is located the Superintendent's Home, set well back from the road, thus insuring privacy, and is designed to conform with the other constructions.

The Fire House is to the south of the main group and intended to house the apparatus and have accommodations for employees upon duty at all times. The fire signaling and recording apparatus is located here.

To the southeast of the main group is located the power house, laundry, bakery and storehouse and Industrial Building.

The power house is arranged into three separate departments, such as the boiler room, in which are installed seven two-hundred horsepower boilers, which generate steam for heating and power purposes. The coal storage bins are built along the boiler room, and are filled directly from the cars which run overhead.

The water-heating and pump room, in which are installed the water-heating tanks, heated by the exhaust steam from the engines and the centrifugal pumps for forcing the heated water to the various buildings.

The engine and generator rooms, which are equipped with electric generators used for furnishing electric light and power for the entire institution.

The laundry is a separate building, located to the north of the power house, and is equipped with an up-to-date equipment of washing and ironing machinery, with sterilizing and drying apparatus.

The bakery and storehouse is located along the railroad switch, where cars with supplies are unloaded directly into these buildings, ample storage capacity being provided for the necessary flour, meats, dry goods and groceries.

The bakery is equipped with modern ovens and the latest improved baking machines.

The storehouse is fitted up with cold-storage rooms for meats, poultry, vegetables, butter, etc., the refrigeration being obtained from the ice-making refrigeration plant, located in this building.

The cow barn has accommodation for eighty cows.

NEW HOSPITAL APPLIANCES, PHARMACEUTICAL PREPARATIONS, ETC.*

A Preparation Particularly Suitable for Invalids

The attention of the readers of *THE HOSPITAL WORLD* is called to page lxxxii of this issue, where they will see the announcement of Messrs. F. Edwards & Co., 18 Front St. West, Toronto. This firm are Canadian agents for Beck's German Lager, a preparation that is ideal for use in the private wards of hospitals and sanatoria. This lager is made from pure malt and hops, and is bottled only in Germany. Messrs. Beck & Co. are one of the largest exporters of lager in the world. They have branches in all of the British possessions and have built up their reputation upon the purity of their product. Beck's Lager has been introduced in past years into hundreds of hospitals, and the manufacturers would be pleased to have hospital superintendents try it in the different institutions throughout the Dominion. This preparation is obtainable from all wine merchants or direct from the Canadian agents.

Thorough Courses in Physiotherapy for Nurses

The Pennsylvania Orthopedic Institute and School of Mechano-Therapy, Philadelphia, Pa., will open the Fall session of its courses in Mechano-Therapy in two sections, owing to the large number of applications already received. The first section opens on September 17 and the second section on November 12, 1912.

Every up-to-date nurse knows the increased demand for special training in these lines. If you are anxious to further your profession and your own interests, the above-named school can offer you facilities that could not be surpassed anywhere.

As previously announced, the institution has acquired the adjoining building and lot. Extensive building operations are now going on which, after completion, will provide larger quarters for the school and institution. The new building contains an up-to-date operating room, wards as well as private rooms for

*Publishers' Department.

patients, laboratory, diet kitchen, etc. This still further increases the facilities for our students, the courses are broadened and the students receive the best obtainable practical and theoretical training. After completion of the new building, special courses in dietetics, as well as in anesthetics, will be given to nurses. Our graduates are recognized as the best trained operators in this line of work.

If you wish further information write for illustrated booklet and particulars to the Superintendent, Max J. Walter, M.D., 1711 Green Street.

Just Published—A New Equipment Catalogue

The Max Wocher & Son Co., of Cincinnati, O., are celebrating their diamond anniversary this year. They are the oldest manufacturers of hospital supplies in the United States, having been established over seventy-five years.

In commemoration of this event they have published one of the most elaborately illustrated and most interesting two hundred and fifty page books, containing the most up-to-date line of sanitary furniture and supplies.

This firm are known for their original ideas and have devised some of the most practical pieces of furniture. They will gladly send one of these books to anyone interested in hospital work.

Hospital Sterilizing Apparatus

The constant improvement in sterilizer design indicates the demand made by hospitals on the manufacturers. No longer is apparatus considered practical, unless it combines at least the three elements of efficiency, durability and convenience. First, the sterilizing process must be absolutely positive so that 30 minutes of sterilization means the destruction of all infecting bacteria. Second, the operation of the apparatus must be so simple and convenient that a nurse may have entire charge of the sterilizing room. And third, the material used in construction must be of such quality that a hospital will not have a heavy repair charge every few years. The "Features of the Castle Pressure Dressing Sterilizer" clearly show the progress made by the manufacturer in their desire to meet the demands.

Hospital Partitions

In an attic well known to the writer there is an old steel engraving covered with glass and framed in mahogany. Doubtless the parchment on which it was printed was fair and smooth in its day, but now it is old and wrinkled, and there are streaks of dust behind the glass where the parchment has drawn away from it.

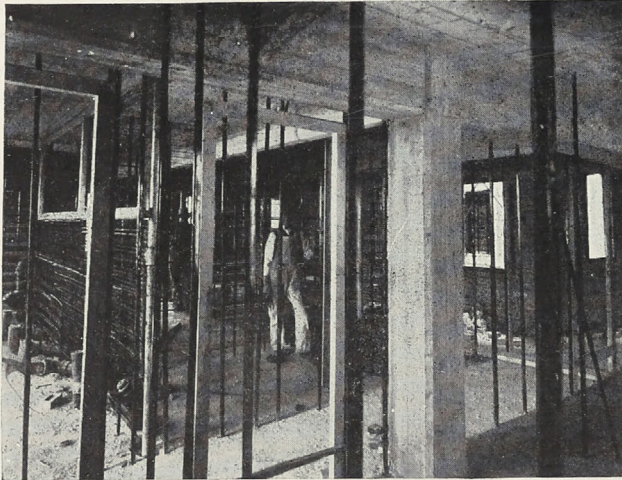
That dust is the text for a sermon. Why it forced its way between the glass and the moulding and around the edge of the glass, only to rest finally in such a small space, was once the subject of considerable boyish speculation, but it is clear enough now. A grain at a time it was deposited. Every night the air in the small space contracted and a very little more air went through the crack and dragged a grain of dust with it; every morning this little wisp of air came out again, but it came so slowly that it failed to carry back the dust. And so after a period of years this wrinkle became well provided with dust, and millions of germs too, no doubt made a permanent home there.

Every crack leading to an enclosed air space attracts germs in this way, but not every closed air space has a glass front and thus advertises its disgrace. The larger the space the stronger the air current and consequently the more surely the germs are harbored.

In a hospital the spaces between studs in a partition, once a crack has occurred in the plaster, form ideal breeding places for germs. Moisture and air are present and sunlight is absent. Fresh germs are occasionally drawn in, and it is very hard to reach the space with an antiseptic. Even the spaces in a little partition are germ harbors. It would be impossible with changing temperature to prevent the movement of air into any space not provided with air tight walls, and nobody pretends that plaster is air tight; even when no visible crack has occurred the air spaces in a partition are not above suspicion.

For this reason the best partitions for hospitals are those which have no air space. An admirable form of partition is that constructed with Herringbone metal lath on small steel channels or $\frac{3}{4}$ " Perfection sheet metal studs. The metal studs are first placed in position by springing them into small holes driven into

the concrete floor and ceiling. Herringbone lath is then attached to one side of these studs and the construction is ready for the plasterers. The first coat is applied on the side away from the studs and is followed by a second coat applied to the clinch of the first coat between the studs. These are followed by successive coats on alternating sides until the wall is built up to a total thickness of two inches.



CONSTRUCTION OF SOLID PARTITIONS FOR "MEN'S OWN," WINNIPEG.

Door frames are attached to rough wood bricks, which in turn are attached to the steel studding. Base board and picture moulds are attached to grounds which are wired to the studding and which after the wall is finished are flush with the outer face of the plaster.

Mr. Clarence W. Noble, 117 Home Life Bldg., Toronto, is General Sales Agent for Herringbone Metal Lath and Perfection Studs. He can give any interested person full information as to how these partitions are constructed, can furnish the necessary material and, if desired, can quote on the labor of erection.

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Manufacturer of Deformity Apparatus, Trusses, Supporters, etc.

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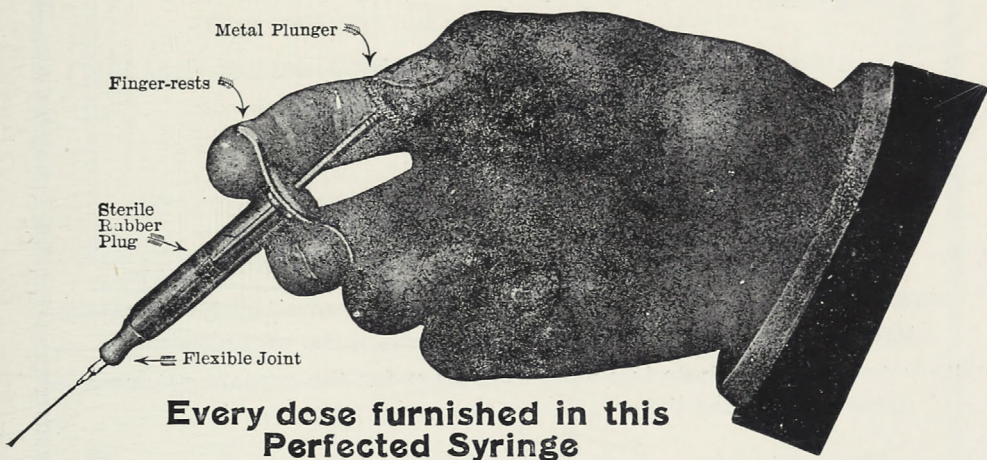
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"IMPERVO" Sheetting—"Waterproof,
Acid Proof. Everything proof."

Mulford's Antitoxin and the New Syringe



Every dose furnished in this
Perfected Syringe

- ADVANTAGES OF NEW SYRINGE: ASEPSIS, contamination impossible.**
POSITIVE WORKING: The metal plunger screws into the rubber plug, adjusting pressure and making action positive.
Metal finger-rest with rubber guard at top of syringe prevents any possibility of syringe breaking or injuring operator's hand.
Needle attached with flexible rubber joint permits motion of patient without danger of tearing the skin—a great advantage in administering to children.
Our new adjustable rubber packing possesses great advantages; it is readily sterilized, does not harden, shred, absorb serum or become pulpy.
Simplicity and accuracy—no parts to get out of order.

Mulford's Antitoxin is Accepted Everywhere as THE STANDARD

The higher potency enables us to use much smaller syringes.
Minimum bulk—maximum therapeutic results

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—Re Claim Policy 7485 R. A. Smith deceased—

We beg to acknowledge with thanks the receipt of your letter with cheque for \$10,000, in settlement of the above claim.

Mrs. Smith desires us to thank you for the prompt payment immediately upon the completion of the claim papers.

Yours truly,

AYLESWORTH, WRIGHT, MOSS & THOMPSON

The above letter refers to claim of Robt. A. Smith, of the firm of Osler & Hammond, Financial Brokers, Toronto, who was killed in an Automobile accident on July 17, 1912.

The claim papers (consisting of certificate of Dr. M. M. Crawford and declaration of the beneficiary) were received on the morning of August 21st and cheque mailed before noon of the same day.

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OF CANADA Head Office: CONTINENTAL LIFE BUILDING, TORONTO

PELEG HOWLAND, President JOHN J. DURANCE, Manager

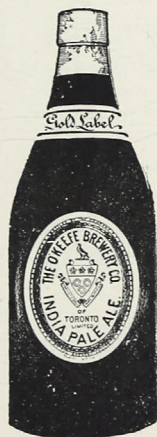
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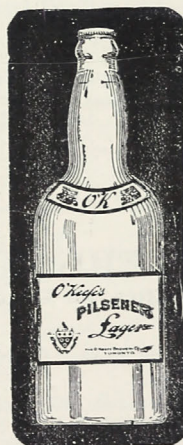
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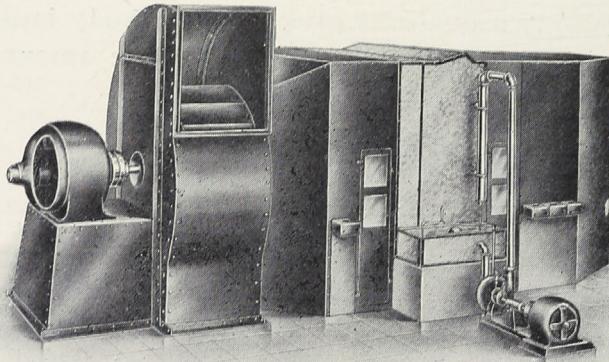


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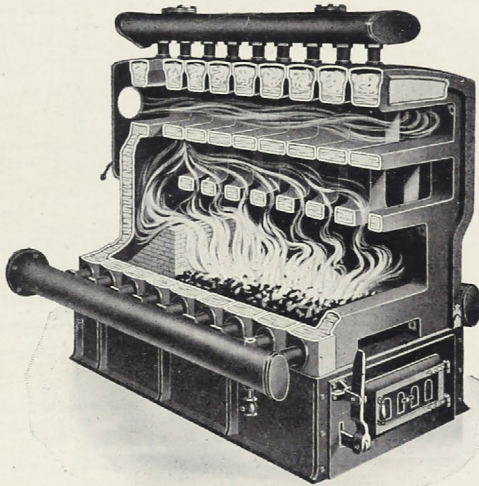


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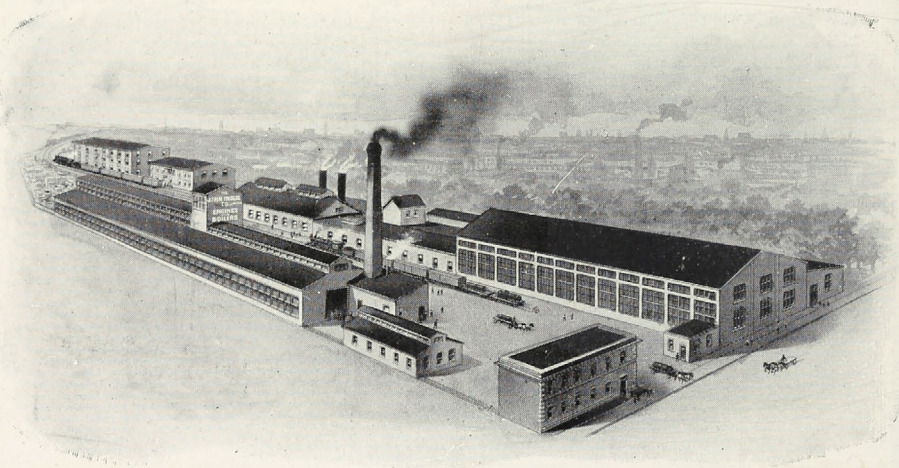
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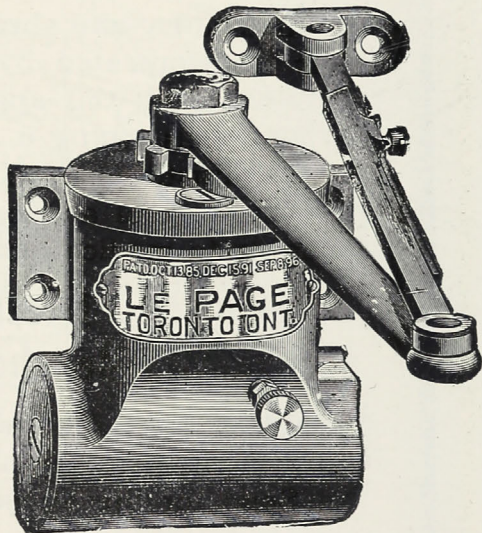
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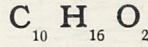
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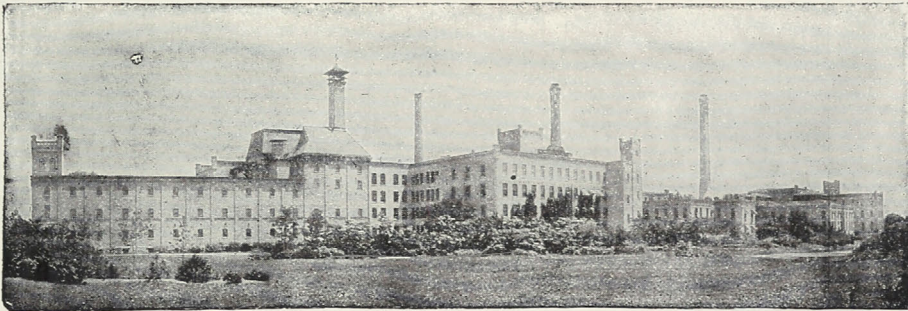
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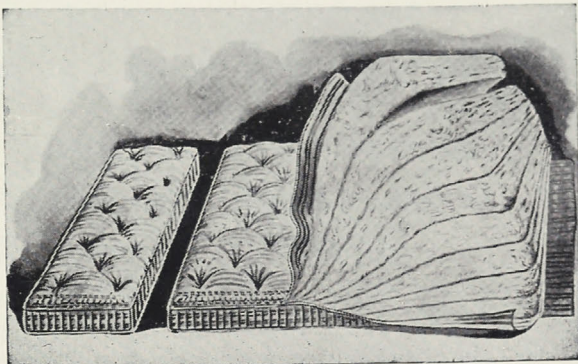
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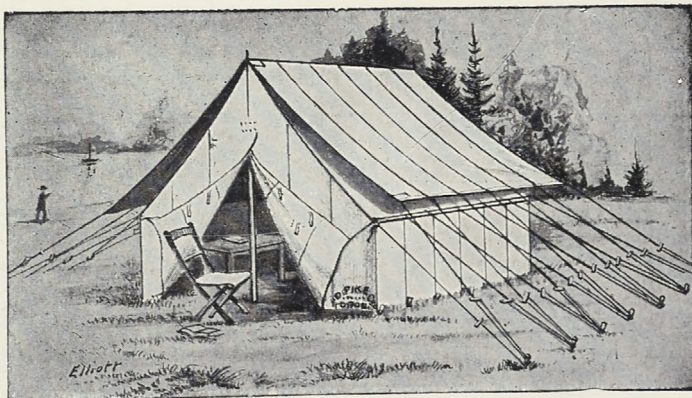
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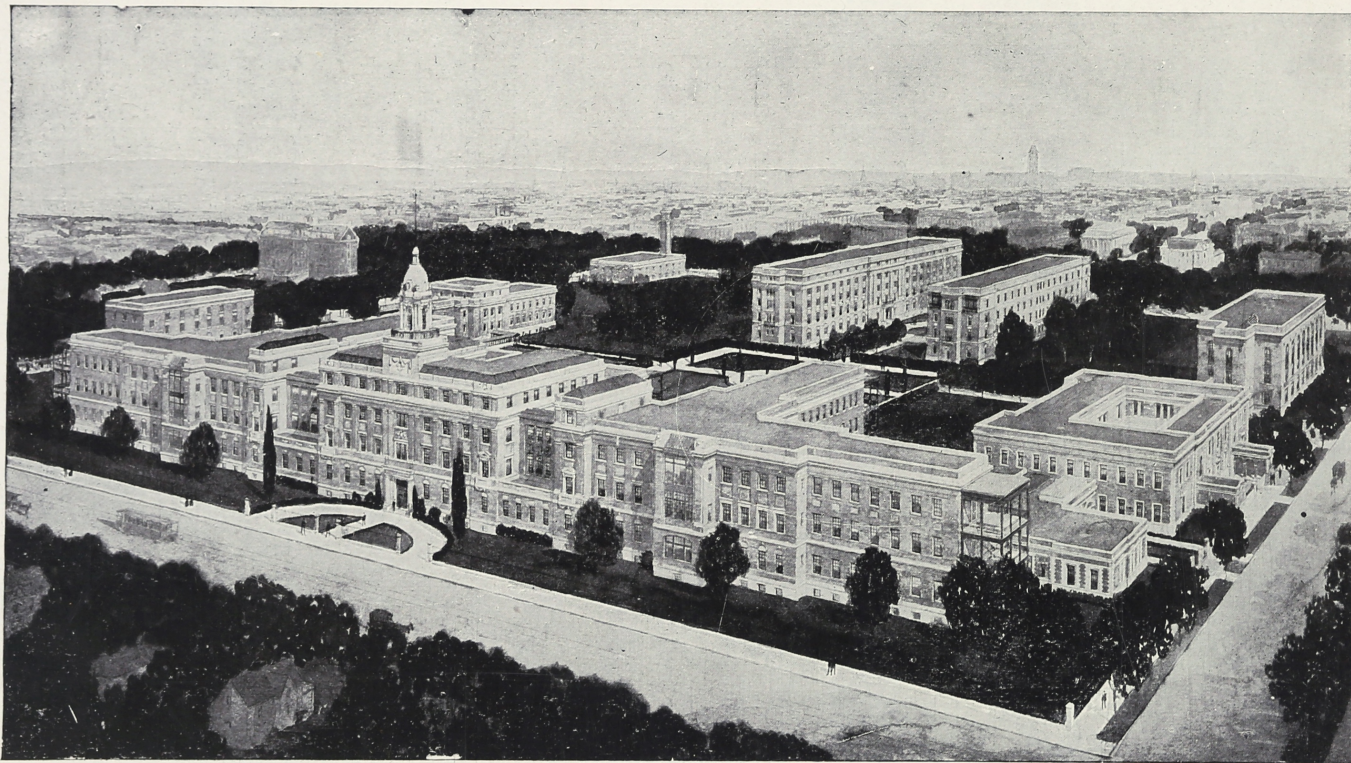
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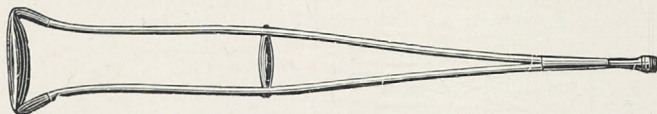
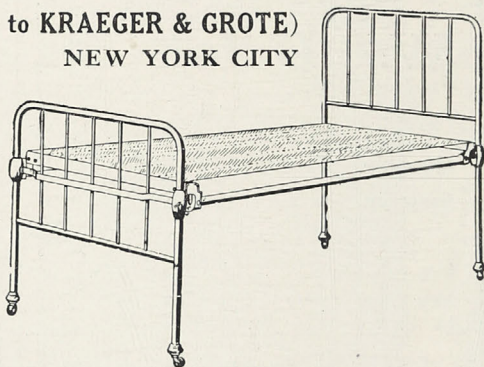
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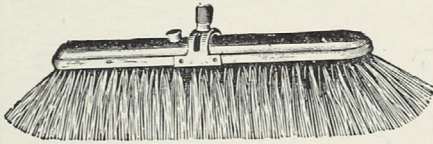
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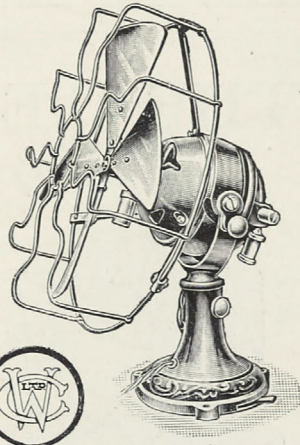
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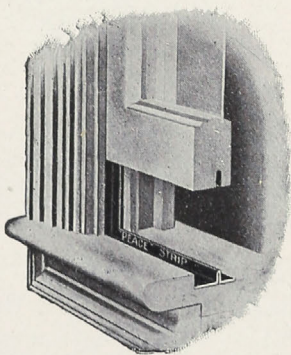
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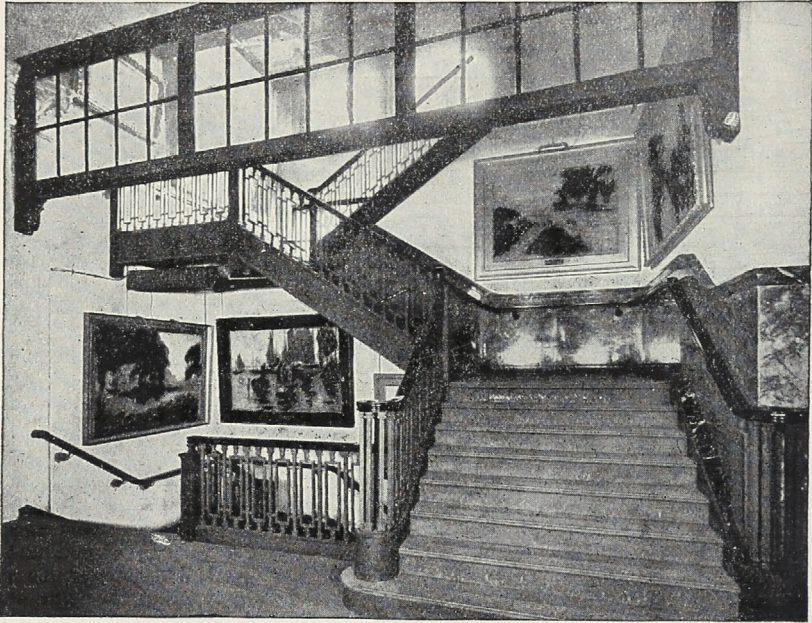
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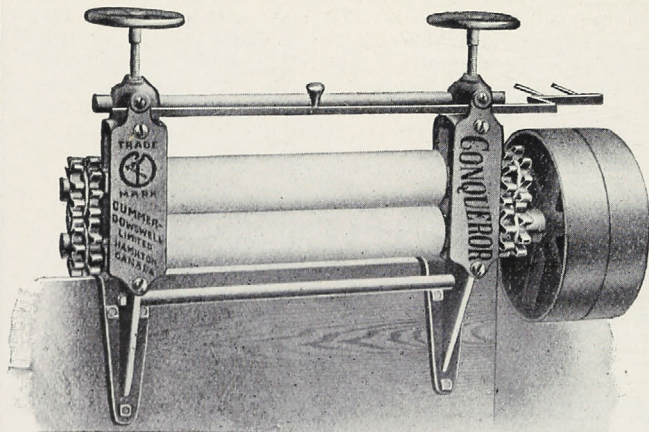


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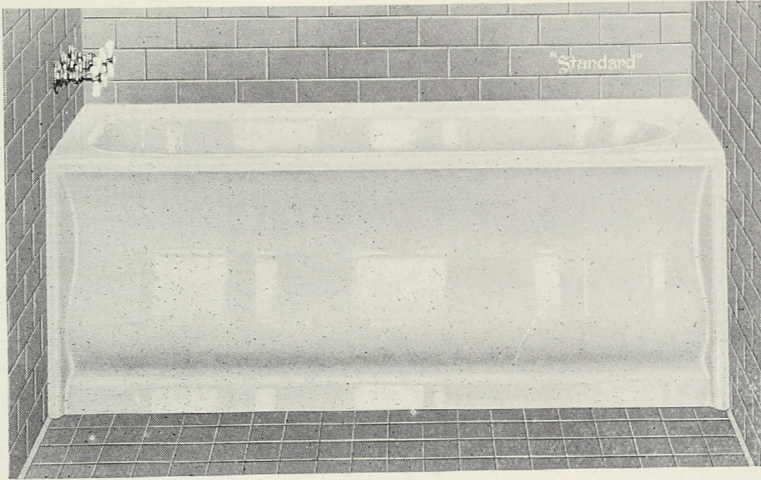
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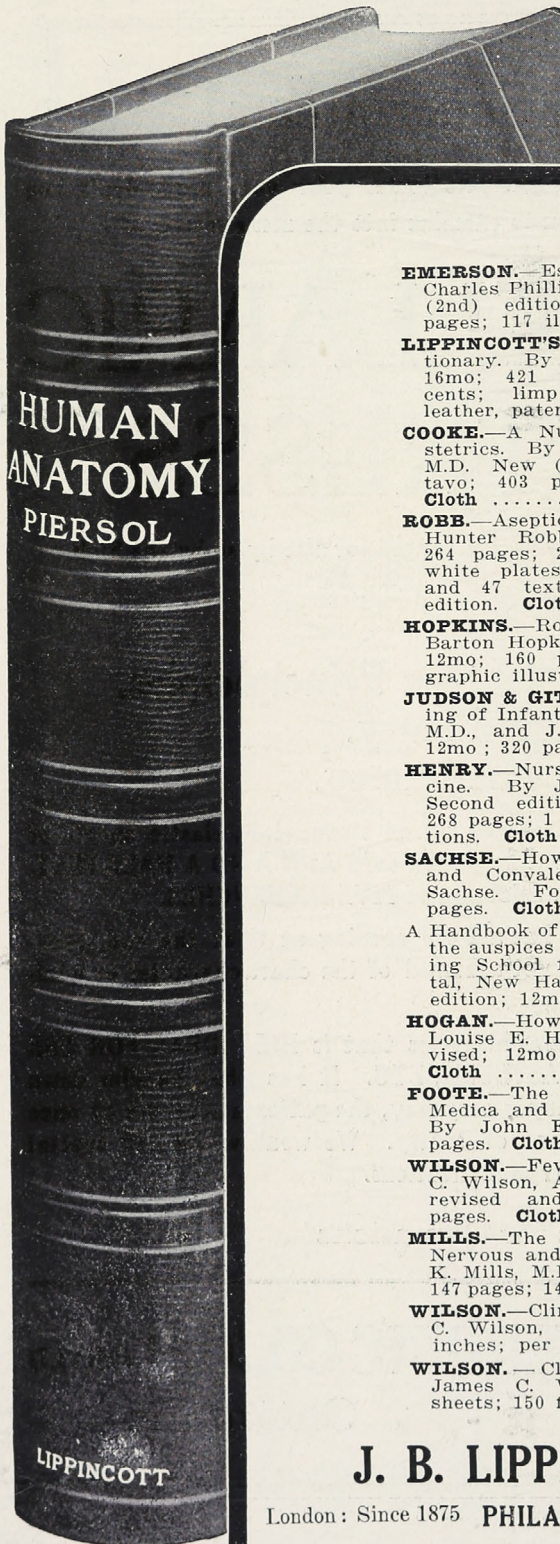
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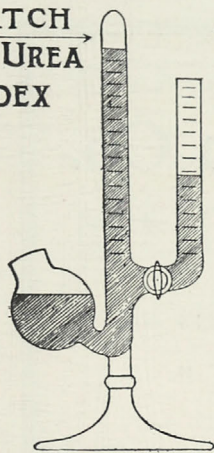
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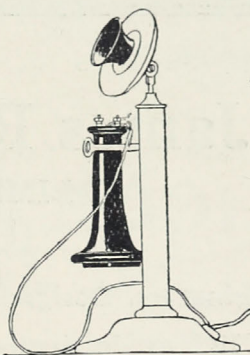
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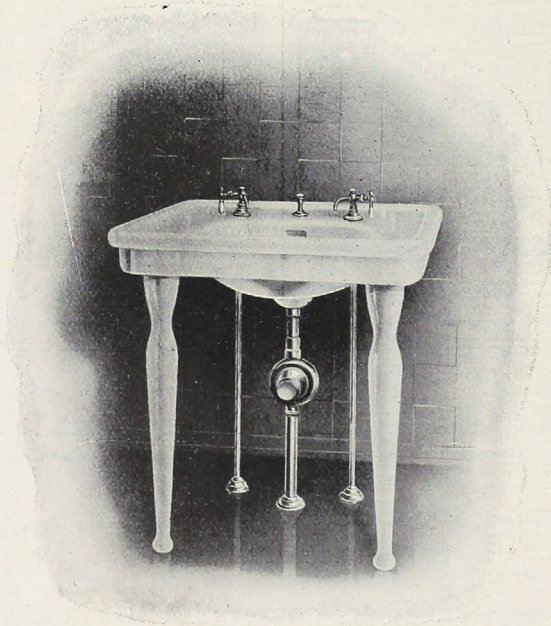
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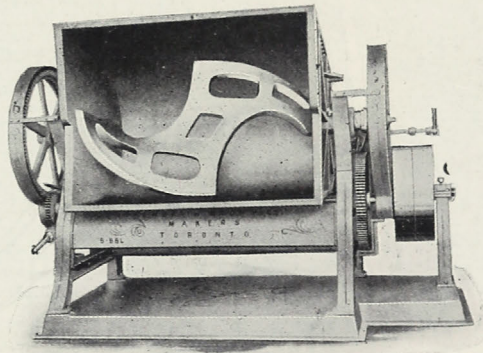
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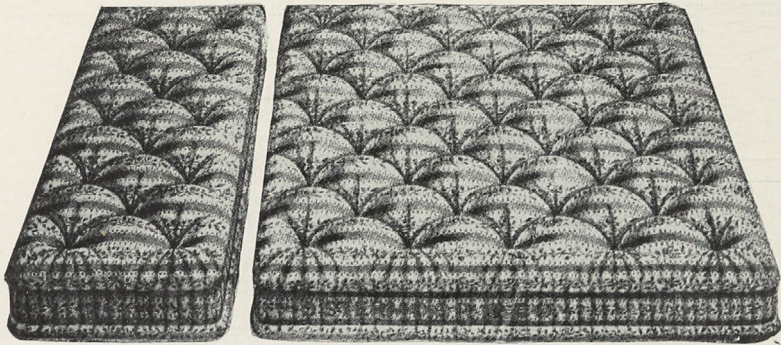
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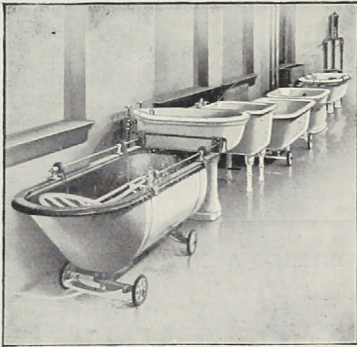
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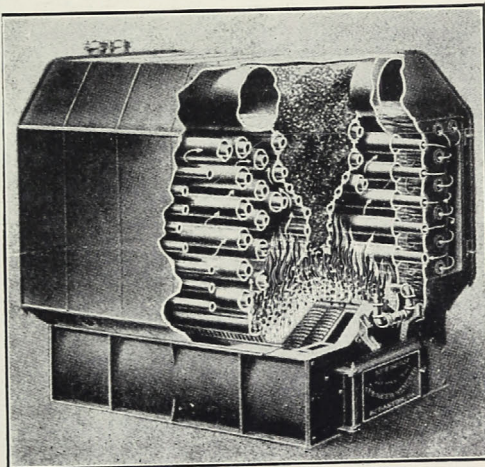
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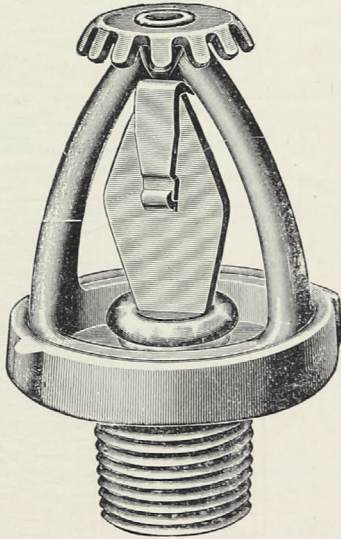
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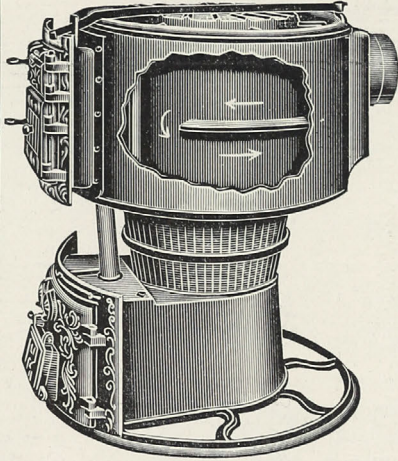
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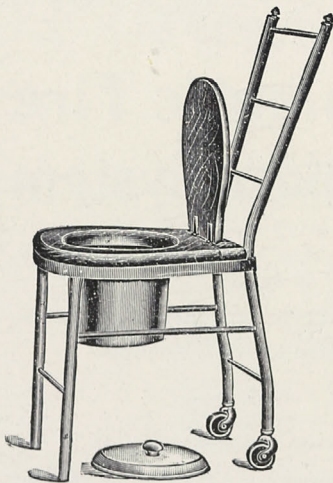
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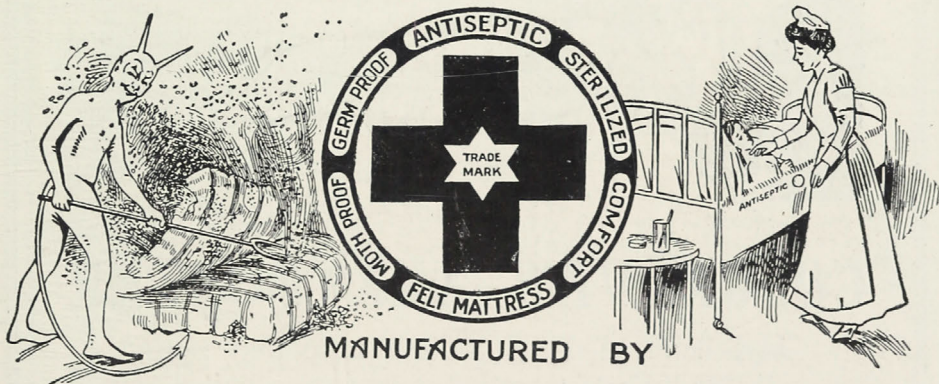
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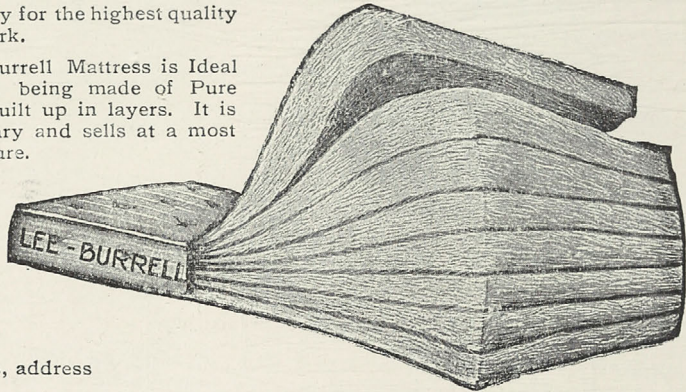
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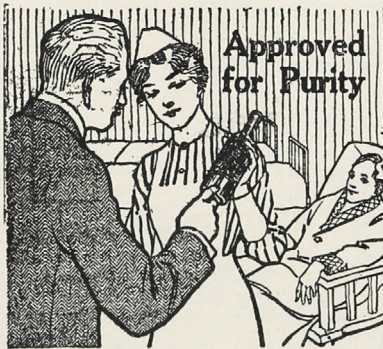
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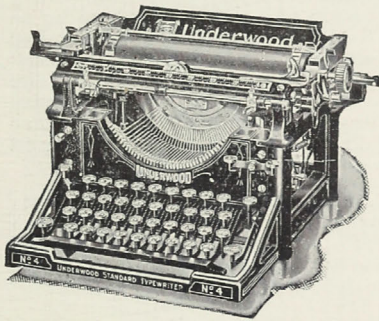
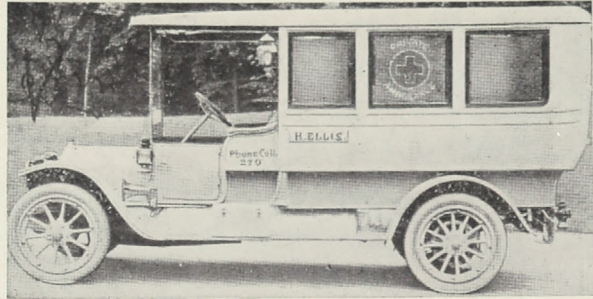
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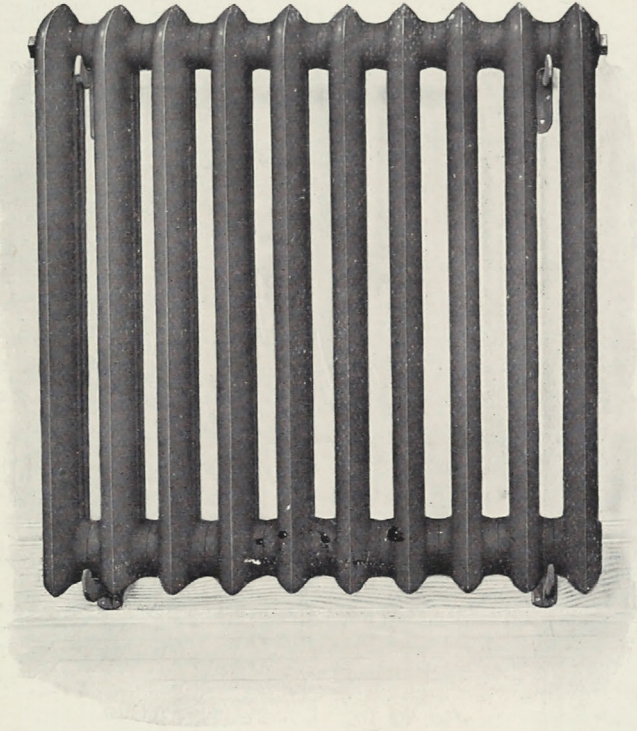
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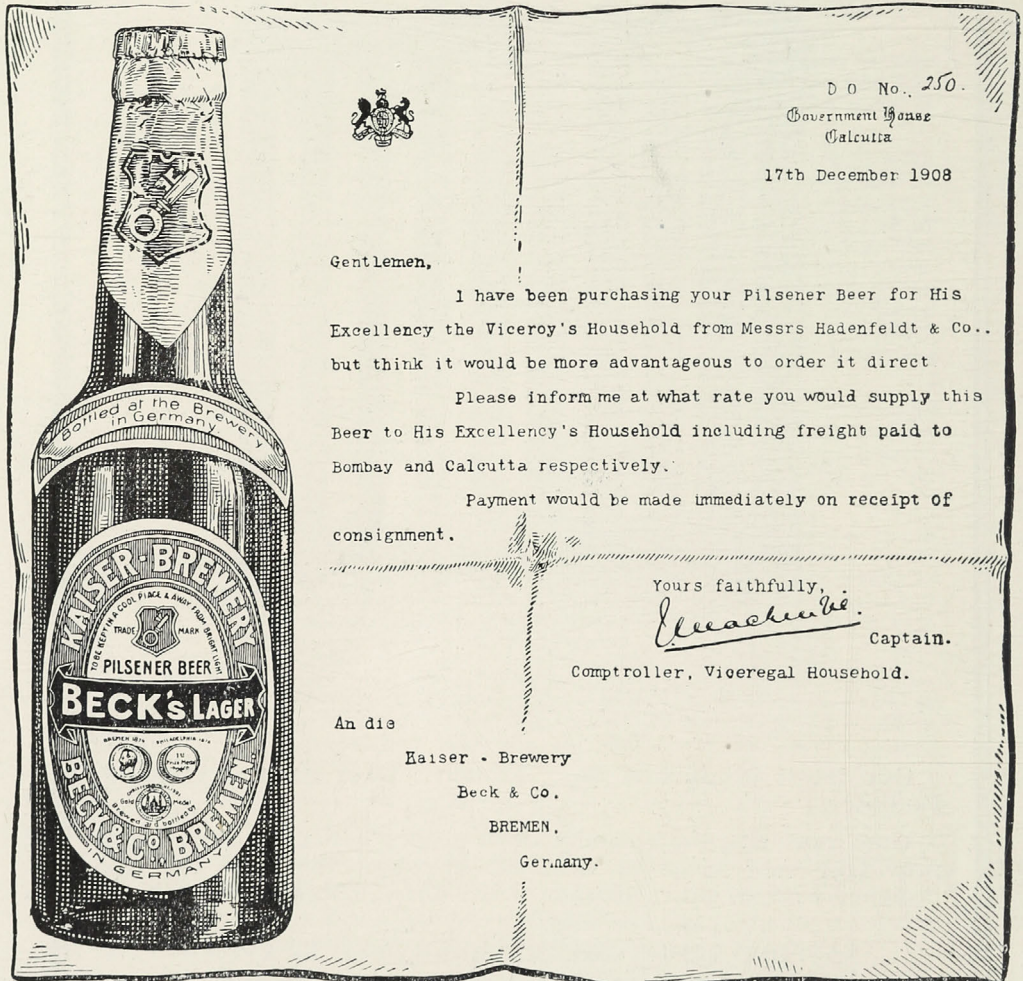
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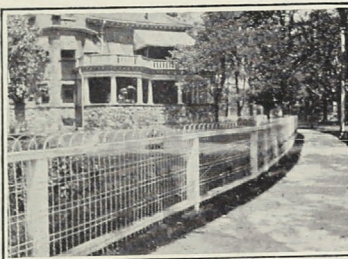
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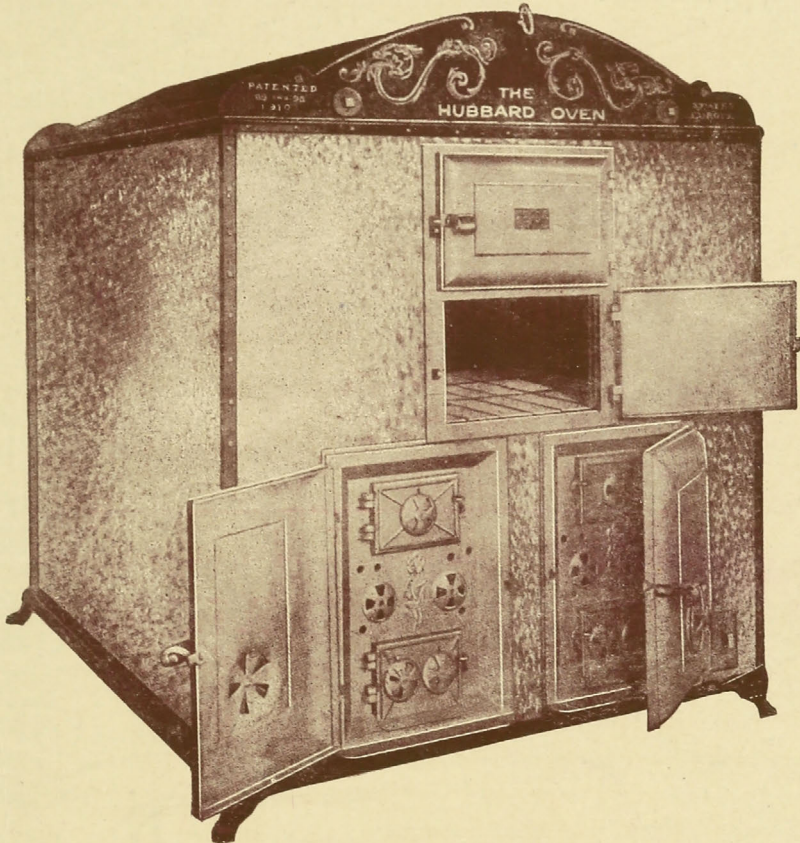
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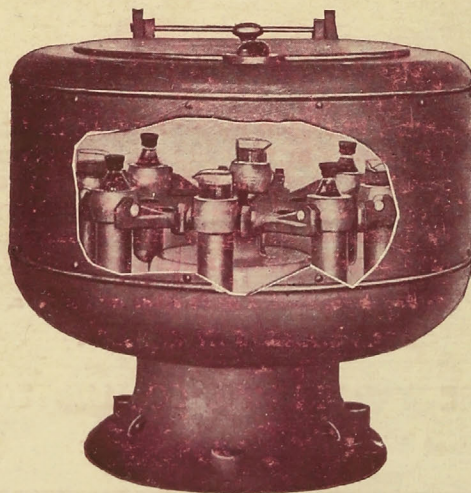
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