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THE HOSPITAL WORLD

(Incorporating The Journal of Preventive Medicine and Sociology)

THE OFFICIAL ORGAN
OF
THE CANADIAN HOSPITAL ASSOCIATION

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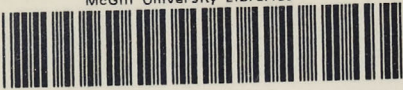
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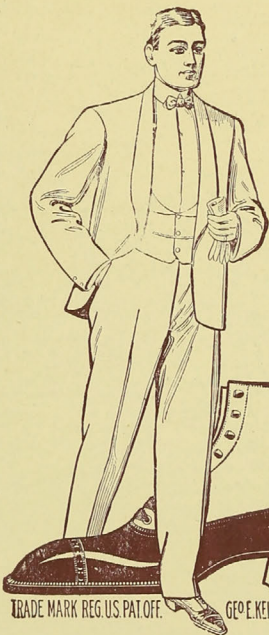
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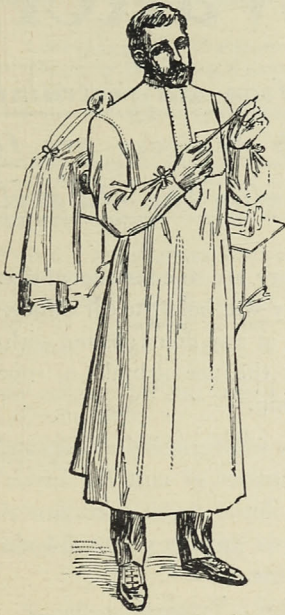
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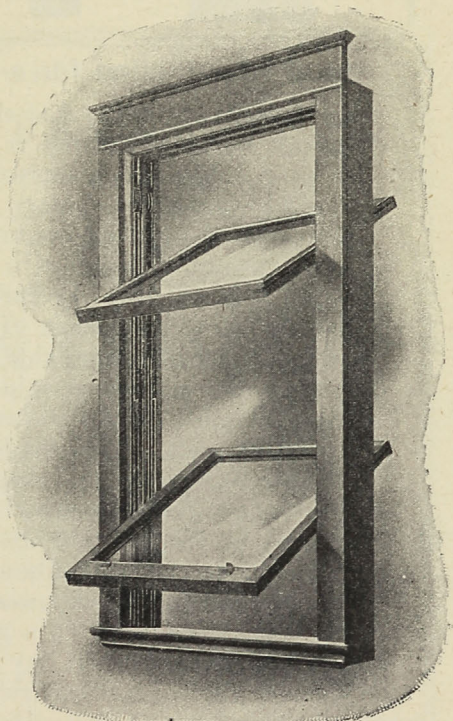
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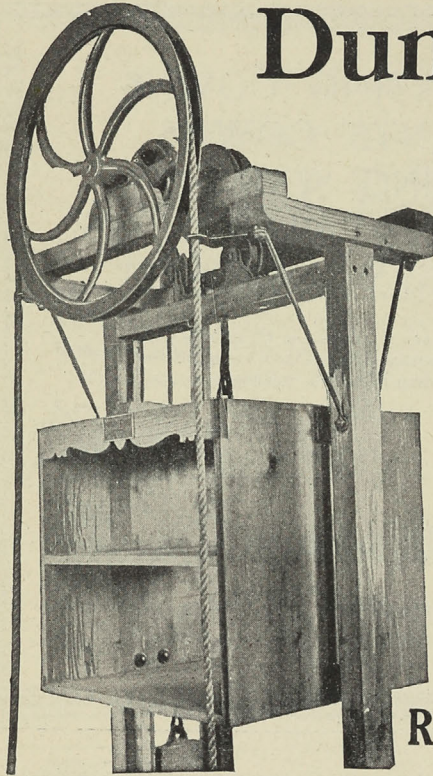
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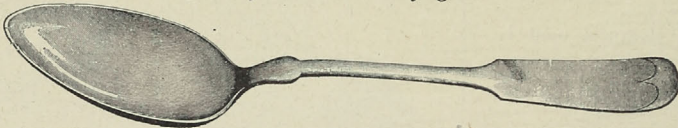


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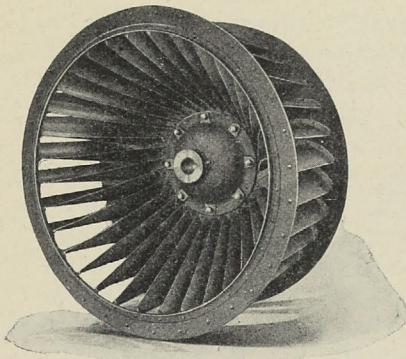
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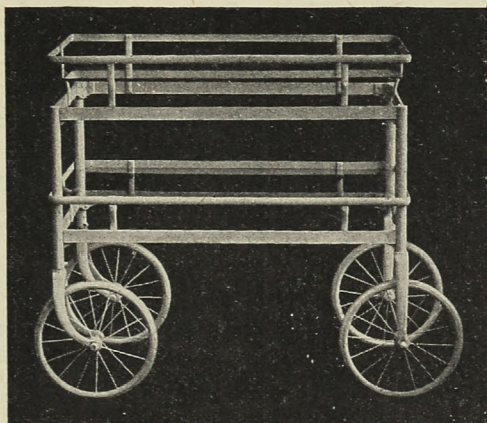
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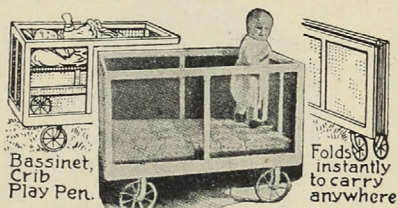
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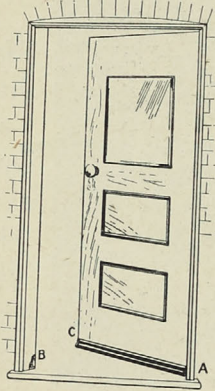
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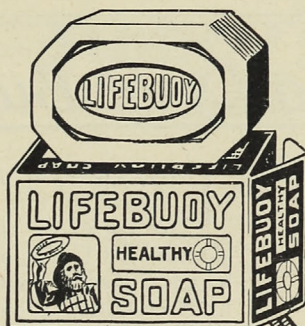
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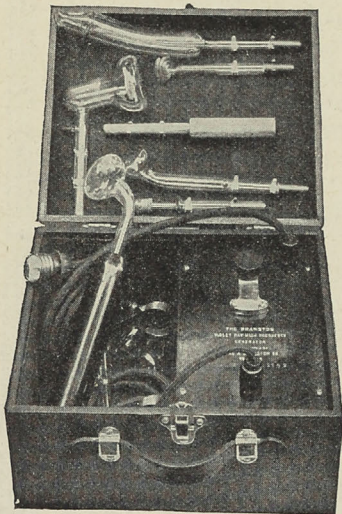
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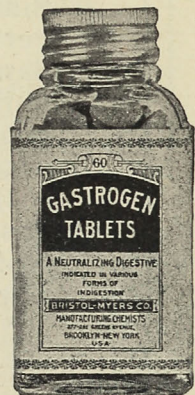
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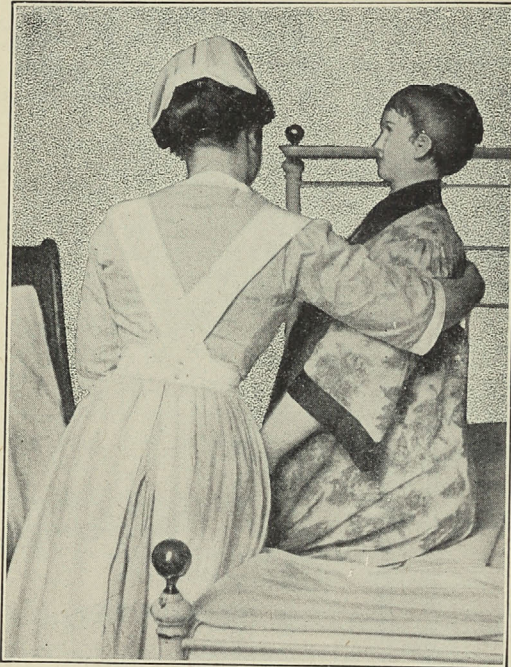
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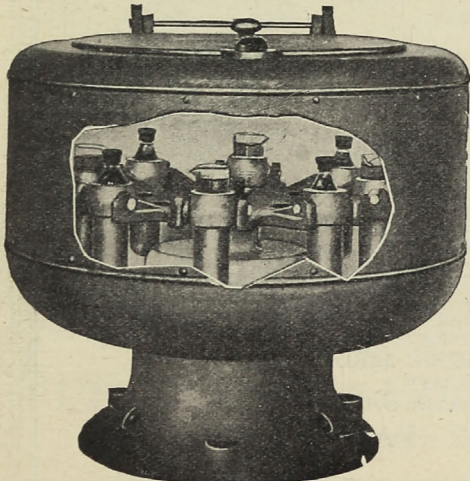
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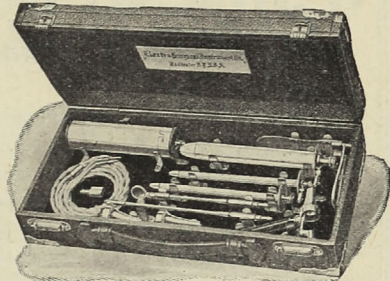
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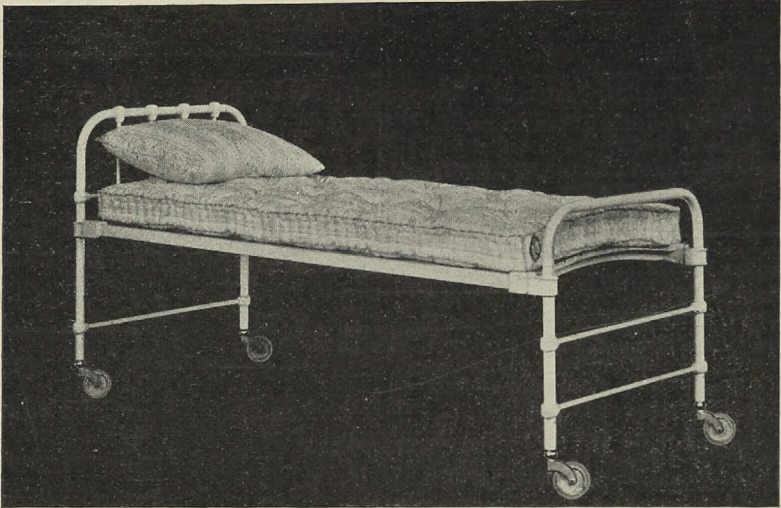
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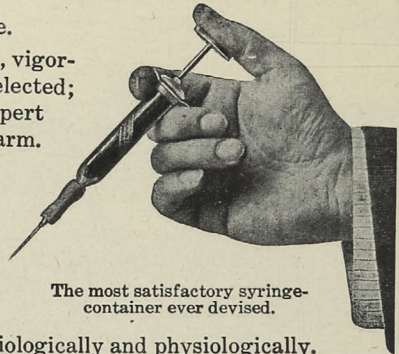
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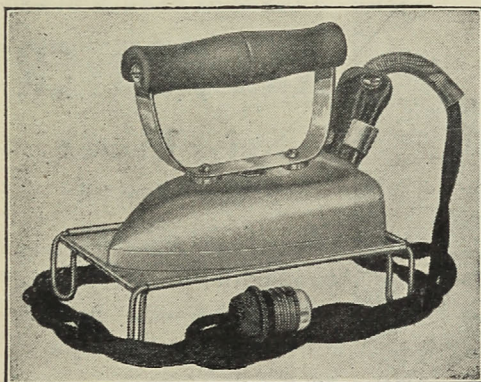
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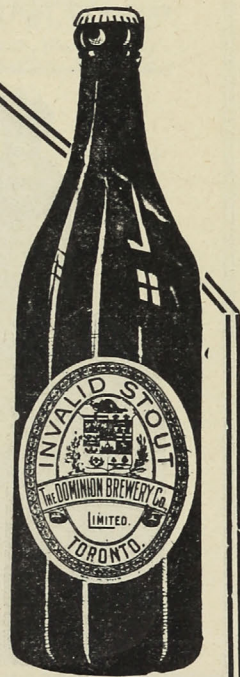
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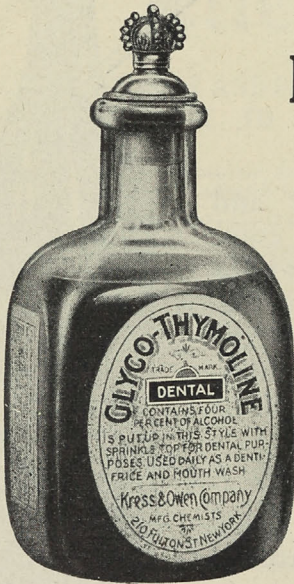


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No. 5

Editorials

HOSPITAL ESTHETICS

To what extent the esthetic element should enter into hospital architecture and equipment is a question admitting of more than one viewpoint.

The demand for complete asepsis has grown yearly more imperative as the medical laboratories have sent out their results of bacteriological research. The modern hospital in response has done wonderful things in germless construction. Flooring, doors, windows, walls, smooth surfaces, glass, white enamel—everything is made to show the slightest trace of soil or dust. Shining, bare, hard spotlessness has come to be the modern hospital ward idea.

Now arises certain questioners concerning the desirability of this ideal. They wonder whether possibly the aseptic pendulum has not swung too far, and whether the esthetic element should be altogether ignored.

Grosvenor Atterbury, of New York, writes ably on this subject in the *Journal* of the American Medical Association of recent date. He takes as his text the motto of the great Virchow Hospital, "In treating the patient do not forget the man," and with light but graphic touch depicts the patient's viewpoint of this shining spotlessness.

"The poorer he is the more startling the contrast between the impersonal institution—high ceilinged, vast, mechanical, unresponsive—and the tiny room he has left, dirty and ugly if you please, but thoroughly vitalized through personal use."

The writer contends that, as efficiency and asepsis are the first factors demanded in a hospital ward, the architect has little opportunity to introduce much beauty; and he wonders whether there is

not a larger efficiency to be considered, and whether the price of perfect asepticism is not too high. "For in spite of all its modern improvements, when you send even the intelligent patient to the hospital you have put him in the incipient stages of mental goose flesh, whereas the prime requisite of the hospital is, after all is said and done, that it should inspire confidence and hope."

We may take issue with the latter statement, since first and always the prime requisite of a hospital is that it should cure its patients. But that a cheerful mental attitude is a strong contributing factor, and that a more or less esthetic environment tends to produce this is well allowed.

Mr. Atterbury justifies his plea from an economic standpoint by amusing mathematical logic, taking Johns Hopkins Hospital expense report as a basis. He finds that the shortening of the average time of bed occupancy by a single day per patient would mean the saving of a comfortable sum of \$500,000 a year. That the introduction of a measure of esthetic grace in the wards to the banishing of the bareness, the glistening hardness, and the consequent tendency to "goose flesh" would conduce to this happy result, he feels assured. Consequently he wants some small part of that \$500,000 to provide "open fire-places, window curtains and pink bed jackets."

That hospital serves best which cures its patients most quickly and completely; and whatever contributes to this end is undoubtedly a factor, larger or

smaller, in the total efficiency of such a service. That perfect aseptic conditions should rank first is obvious. But that a sense of cheer and comfort, which is, perhaps, a human reflex of artistic, colorful and sensuous surroundings, should be used as a contributory health restoring factor is equally evident. The architect's protest is against the tendency to exalt the first to the exclusion of the second.

Institutions have each a character that, consciously or unconsciously, impresses itself upon those who come within its influence. The appeal of the hospital to the sick should be one of combined skill, purity, comfort, and as far as possible beauty; and the latter elements have been too much ignored.

The art of healing is becoming recognized as a marvellously complex thing—the patient, as a marvellously complex organism. Mechanism and mechanical equipment, however perfect, cannot reach the hidden springs.

Medical research has not yet laid emphasis on the esthetic as a curative agent. Perhaps in our haste to meet the many demands science has made we have stripped our hospitals overbare. There is a tendency to reaction, as evidenced in the architect's plea.

SOIL SICKNESS

THAT bodies become diseased is an old and sadly familiar fact, accepted by all. But that soil may become diseased, and in this condition react upon those who dwell upon it—this is surely largely a new conception to the majority.

Beyond a general recognition that gravel soil and slope ensuring good drainage make desirable building sites, the soil as a factor in human health has not been largely considered except from an agricultural standpoint. Recent investigations, however, by agricultural chemists, aimed to discover the causes of soil deterioration, indicate that soil may become "diseased" in a very real and human sense, and that these diseases may be treated, once they are correctly diagnosed.

A close and most interesting analogy appears to exist between sick soil and sick people. Soil needs cultivation as human beings need exercise and air. But this is not always sufficient. Certain chemical substances develop in soils which render them infertile, and these must be extracted or rendered innocuous—in other words, healthy conditions must be established before fertility is ensured. That there are laws of hygiene and sanitation quite as essential to the control of the soil's health as to that of mankind is asserted by these skilled investigators, who have come to the interesting conclusion that the soil is not dead and inert, but a living organism, with

vital functions and with likenesses to the human body.

To what extent the recognition of this similarity will revolutionize soil treatment is yet to be seen. But the close analogy of health conditions between soil and the humans who dwell upon it leads by instant association to the larger question, To what degree does a sick soil affect human health?

That drainage of subsoil has markedly lowered mortality in certain diseases, such as consumption, is a matter of repeated record. That the stench of the battlefields is giving anxious thought and effort to those entrusted with the health of our armies is also well known. But it almost appears that beyond these there may be even a finer interplay of health conditions, a closer and more vital association between the two organisms, to a degree that deterioration of the soil in any particular must imply a corresponding deterioration in the humans who dwell upon it. Does dust call to dust in some hitherto unrecognized subtle way?

Sluggish water, undrained low-lying ground, fungi, mold, rankness—all of these are known health menaces. To these may be added many other evils of soil impurity. The direct influence of soil conditions upon human health must henceforth be given a deeper and larger interpretation because of the wonderful possibilities revealed by these recent researches.

Original Contributions

LITTLE JOURNEYS

BY DR. JOHN N. E. BROWN,
Superintendent, Henry Ford Hospital, Detroit.

THE MASSACHUSETTS GENERAL HOSPITAL.

THERE are two services in medicine and two services in surgery in this hospital. The superintendent and the two chiefs in medicine form an executive committee on the medical side. A similar committee acts for the surgical side. There is a general medical advisory committee consisting of the superintendent and the two medical chiefs, two surgical chiefs and one representative from each of the smaller surgical divisions. Each chief has his associates and assistants. None of the members of the visiting medical staff is paid, and therefore does not give his full time to the hospital.

The services are practically continuous, barring the holiday time, when the work of the chief is taken on by an associate. There is a resident attached to each of the services in medicine and surgery. These officers receive a salary of \$500 per year. They have general supervision of the work of the internes. An interne serves in one department only, as a rule. There is no bar placed, however, upon his going over to another service after he has completed the service he is on. The residents are generally chosen from the interne staff, but not necessarily.

Many of the members of the medical and surgical staff are teachers in the Harvard Medical School. A great deal of post-graduate work is done in this hospital, and the courses given are attended by practitioners within striking distance of Boston.

Dr. Howland says that they send about three thousand circular letters of invitation to medical men in Massachusetts and surrounding states advertising these courses.

THE NEW NURSES' HOME ADDITION.

An additional nurses' home to accommodate about one hundred nurses was finished a year ago. Entering the basement we were shown a room about thirty feet square with a linoleum floor. This room is provided with a cupboard, tables, and chairs, and is used as an off-hour dining-room. Adjoining this is a small kitchen which is supplied with utensils. Here the nurses may prepare meals for themselves at off times—supplying their own food.

We were shown another room in which the nurses who wish may make their own clothing and do other sewing.

In another part of the basement nearby is a petty laundry. It contained several stationary wash tubs, ironing boards and a drying closet. From the wall at a convenient point projects a rod upon which a last is placed, upon which the nurses place their shoes for polishing.

One end of the basement is taken up by a nurses' class and demonstration room. The chief furniture of this room comprises a desk, and numerous large chairs upon the side of which is an arm upon which the nurses place their books while they take notes. On a frame ranged along the wall hang artificial limbs with rough sanded surfaces. On these the nurses are taught practical bandaging. A bandage roller, transformed from an old sewing machine, is installed in another part of the room, upon which the nurses roll new bandages and rewind those which have been used for demonstration purposes.

Wax models and anatomical specimens were also noted standing on the table under glass covers. Near the front of the room we noted a good-sized sink at which the students and instructors may wash their hands after handling the anatomical specimens.

A public pay telephone station is available for the use of the nurses.

The nurses' bedrooms are about eleven feet by eight feet and eleven feet in height. The bed is three feet wide. A small dresser with several drawers is provided, one of which has a cylinder lock, in which valuables are kept. The chairs—a straight back and a rocker are made of Austrian bent wood. A

cupboard along the wall about thirty-two inches wide and nineteen inches deep contain the nurse's text-books. A door at the bottom of the cupboard opens out horizontally, forming a desk. In the closet of the room were noticed a towel rack and a shoe bag. On the outside of the door of the room in which nurses were sleeping was a printed sign, "Night Nurse." A pay telephone is located at the end of the corridor.

A tastily furnished bedroom with a bathroom attached is reserved for guests.

The hall floors are of terrazzo with a terrazzo wainscoting. The thresholds are of Tennessee marble and the runways are of battleship linoleum. The room floors are of cement covered with linoleum. The doors are of birch-stain finish.

A large mirror is placed opposite the elevator landings in order that the nurses may observe whether their hair or dresses are awry.

Toilets and baths are supplied to the nurses in a ratio of one to five. The w.c.'s are separate from the baths.

One article of equipment noted was a dust bag, similar to a soiled linen bag. The bag is of dark stuff, is mounted on a wheeled holder and is trundled about by the maid from place to place as she does the sweeping.

The superintendent of nurses has an attractive suite of rooms, and on each floor supervisory nurses have a sitting-room which may be used by two or more of them. At each end of the building on the ground floor is a gong which is used to wake the nurses in the morning.

The home is provided with a roof garden. The intention is to have it covered with canvas eventually.

A practical desk lamp was shown us in the Home. It was shaded and provided with a screw joint for adjustment of the light and the shade. The lamp was covered with aluminum paint.

The Massachusetts General Hospital is one of the pioneers in occupations for the handicapped. We visited the workroom, where some two or three ex-patients were at work making cement flower bowls and garden seats. This department is directly under the supervision of the chief administrative offices.

A worker is in charge who was trained under Dr. Herbert Hall at Marblehead.

THE OUT-PATIENT DEPARTMENT.

In the Out-Patient Department the differentiating medical officer has a refusal book in which he writes the reason why he refuses admittance to any particular case.

They will not dispense medicines on prescriptions over one month old. All patients who are late in arriving at the dispensary have the time of their arrival put down on their slip by the janitor, which information can be noted by the admitting doctor when the patient comes to his desk.

All patients over sixteen years of age pay twenty-five cents for their cards; patients under the age of sixteen years pay ten cents for their cards. The cards are made of pasteboard four inches by two inches.

Patients losing their cards may secure new ones from the admitting doctor for the sum of ten cents.

The room in which the out-patient histories are kept is about twenty-eight feet in length and about eighteen feet in width.

Patients and students may purchase a glass of milk and two biscuits for five cents.

Women pathologists do the routine examination of urine in the out-patient department. A recovery room is provided in the surgical division of this department.

Patients do not carry their own history cards from the office to the examining doctor. They are sent upstairs by the means of a lift.

The writer is indebted to Dr. Howland, the earnest assistant administrator, for most of the above information, imparted in a pleasant two-hour ramble through a portion of this historic institution.

THE BUILDING OF THE HOSPITAL: ORGANIZATION AND METHODS

BY OLIVER H. BARTINE,

Superintendent, The New York Society for the Relief of the
Ruptured and Crippled.

(Continued from October issue.)

Plans of the proposed hospital, from the earliest stage of sketches to final construction plans, should at all times be kept on file at the office of the Superintendent, where all members of the hospital staff may consult them. It should be made known that they were there for this purpose and that suggestions relating thereto on the part of the staff should be made to the Surgeon-in-Chief, President of the Medical Board, or Superintendent, i. e., to the head of the department in which originated the suggestion.

No more important duties fall within the province of the Building Committee than the selection of the architect, consulting engineer and builder. The committee should make the most careful studies and investigations and select those best qualified by experience to carry out the work. This selection should be made without the influence of friendship, mere acquaintance, or prejudice, such as all too often prove to be the determining factors.

Frequently the selection of the architect and consulting engineer is determined upon the basis of the fee charged, selecting those who ask a fee less than the usual rate or that charged by the best architects and engineers. Could anything be more absurd? As reasonably might we select our doctor or lawyer upon the same basis. It is recognized that there is ample justification for the demand of a higher fee by one doctor than another or by one lawyer than another. Ability is just as variable and just as desirable, nay essential, in the architect and engineer as in the doctor and lawyer.

The architect should be selected because of his ability, character, experience and organization, his willingness to co-operate with the Building and Advisory Committees, his demonstrated capacity for planning the building conveniently, efficiently and

economically. The architect who is extravagant in his ideas and in his selection of materials should be avoided as should the architect who is lacking in experience or organization, because he will probably involve the hospital in unexpected expense before the building is built and equipped.

The committee should investigate the previous work of the architect considered and study its character, completeness and relative cost.

The selection of an architect for a hospital by means of an architectural competition is the least desirable method that can be suggested. In such a case, however, the competition should be conducted according to the rules of the American Institute of Architects and should be confined to architects of sufficient experience in hospital construction.

In general, the remarks made concerning the selection and employment of the architect apply with equal force to the matter of the selection of the consulting engineer. To many, however, the necessity of the employment of a consulting engineer is less appreciated, but it is none the less real. The architect deals with the plan and scope of the building and with all of its esthetic requirements, while the engineer deals with the mechanical or engineering equipment. The first provides the building and the second that which makes it habitable, workable, convenient and useful. The one is an architectural problem and the other is an engineering problem. And the two lines of work involve essentially different temperaments, education, training and experience. No one man can accomplish both successfully. Very few architects, probably not more than a dozen in the country, employ mechanical or sanitary engineers in their offices.

The consulting engineer should be well informed and thoroughly experienced in hospital work and have an organization capable of successfully carrying on the work.

Just a word regarding the relations and fees of the architect and engineer. The schedule of charges of the American Institute of Architects provides for a payment to the architect of six per cent. on the cost of the entire work and an additional payment to cover the cost of the consulting engineer's fees, where required, but it does not state the amount of extra pay-

ment or where required. The usual engineer's fee is the same as the architect's, but it is based upon the cost of the mechanical equipment only.

The question will arise whether the Architect is to be paid his fee on the entire cost of the building, including the equipment upon which the engineer is paid his fee. The architect must so arrange his plans as to provide spaces as required by the engineer for coal, boilers, auxiliary apparatus, ventilating and heating apparatus, ducts, plumbing fixtures and piping, electric plant and equipment, refrigeration apparatus, elevators, vacuum cleaning plant, laundry and kitchen equipment, etc. It is also principally the duty of the architect to see that the building and its equipment properly come together during construction and upon the completion of the building. To a large extent also the architect acts as executive in administering the work in such matters as rendering certificates of payments to all contractors, keeping the records of all contracts, and in similar details. All of this involves much time and expense to the architect. At the same time the architect is not called upon for this professional knowledge and experience and he is relieved of the expense of making the plans and specifications for the mechanical equipment and the supervision of its installation. A recognition of these facts has led to the frequent and successful adoption of a plan whereby the architect is paid six per cent. on the cost of the building without equipment and three per cent. extra on the cost of the mechanical equipment, while the engineer is paid six per cent. upon the cost of the mechanical equipment only. While this involves the payment of an extra three per cent. on the cost of the mechanical equipment, it involves but a very small percentage of the total cost of the hospital, usually about one-half of one per cent., and the great advantages obtained by the employment of the consulting engineer certainly warrant this expenditure. In the first cost of installation, quality considered, and in the reduced annual cost of maintenance and operation this small extra expenditure will be saved over and over.

To the engineer should be entrusted the design and supervision of the entire mechanical equipment, including the power plant, heating and ventilating plant, lighting and other elec-

trical equipment, plumbing, elevators, refrigeration, vacuum cleaning, incinerators, and laundry and kitchen equipment. These are all parts of the mechanical equipment.

The plan of utilizing manufacturers' or contractors' plans and specifications for heating and ventilating, plumbing, lighting fixtures, elevators, laundry and kitchen equipment, as is frequently done by hospitals and architects, cannot be too strongly condemned. Many hospitals have, because of so doing, paid vastly too much for these equipments, and they have had foisted upon them apparatus which signally failed to meet the needs of the hospital and other apparatus for which no possible use could be found. These are engineering problems and should be left to the consulting engineer, and they should be entirely free from the prejudicial influence of contractors or manufacturers, who manifestly have selfish or personal ends to serve.

The selection of the builder is a most important matter. A poor builder means a poor hospital, and the best of committees or architects cannot alter this fact. Delays, annoyances and poor work will prevail throughout. Experience in hospital construction on the part of the builder is desirable.

The selection of the builder by means of competitive bidding is not the only possible method, nor is it the best. In such a case the service of a builder is not available in the early stages when such services will prove very valuable. The "cost plus percentage" method of employing the builder has many advantages which should be thoroughly investigated by the Building Committee. Under this plan the builder, who should be selected at the outset, guarantees that the cost of the hospital of a certain size shall not exceed a certain sum, and he is paid a certain percentage, usually five to seven per cent., upon the actual cost. This plan eliminates vexatious problems, such as extras, and makes the builder, from the first, a confidential associate of the committee rather than an antagonist or mere hireling.

Allied with the problem of the selection of the builder is the problem of selecting sub-contractors and equipment contractors. It is believed that such work as the heating and ventilating, plumbing and electrical work can best be let as separate contracts. This subject of contracts, however, is too large to be treated in this paper.

With an organization such as is above outlined cordially working in harmony the success of the venture is assured and the ways are prepared for real progress.

Immediately upon the formation of the joint committee a careful and expansive survey should be undertaken of the field and work of the new hospital and of the exact nature of the service to be demanded of the building and of its needs in detail. This should include a study of the class or classes of patients to be served, the probable number of private rooms or ward patients for which provision must be made, and of the requirements of the surgical, administrative, mechanical and other departments. Every need should be considered.

In the meantime visitations to other hospitals of a similar nature should be made extensively, and the needs, method, construction and equipment of the most modern hospital work and construction should be studied intensively so as to obtain the most practical and ideal results. In these visits and studies all members of the Building and Advisory Committees should take part. Co-operation in this work will surely bring wonderful results.

In these visits materials, equipment and methods should be the chief points of study. With these investigations as a basis the committee will be in a splendid position to consider methods, and especially materials, for the new building. Concerning the latter emphasis should be laid upon the fact that the use of cheap materials involves always high maintenance costs and often irremediable dissatisfaction. Extreme care should be exercised that only those materials shall be used which will exactly fulfill all requirements and prove durable. This should apply to every detail of the building and its equipment. Better sacrifice in amount than in quality.

At the beginning of the work of the committee a programme or plan of steps in the work should be outlined. First in this plan would be the study or survey of the work and needs of a hospital, followed by the visits to other hospitals, the selection of a site (unless same be already available), the lay-out of the plot, including the arrangement of the building or buildings, the orientation of the building, study of water supply, sewage disposal, gas and electric service and telephone service, founda-

tion problems, structural, exterior and interior materials, and so on into the many details involved.

A thorough study of all of these problems lays the best possible ground work for the preparation of the plans. The architect should then be called upon to prepare tentative sketches of the building, embracing the features determined upon by the Building Committee after conference with the Advisory Committee. These sketches should be presented to the joint committee as a basis for discussion. Multiple copies should be available, so that each member of the committee may have a separate copy. The Surgeon-in-Chief, the President of the Medical Board, and the Superintendent should take their copies of the sketches to their associates in the work of the hospital and confer with them. Thus many helpful suggestions may be secured. Such suggestions should, however, be considered with the Superintendent before being presented to the committee.

After a reasonable time the committee should again meet and a general discussion should be had. Such modifications in the sketches as may be agreed upon by the joint committee and approved by the Building Committee should be made by the architect. Revised sketches should then be submitted to the joint committee. In this work the consulting engineer should co-operate with the architect. When the plans have been put into the form best meeting the views of the joint committee and are approved by the Building Committee, the latter should authorize the architect and engineer to prepare working drawings for the construction of the hospital in accordance with the approved sketches. During the progress of this work many problems will arise which should be brought to the attention of the joint committee. Minor modifications of the plans may be deemed advisable from time to time, but if the preliminary work has been well done these changes will be slight.

When the architect's and engineer's working drawings are presented to the committee they should be carefully scrutinized to see that the previously agreed upon details have been embodied and have made a successful arrangement. If so these plans should be accepted and adopted, and after this date only the most urgent reason should lead to a departure from these

plans. The architect and engineer will then prepare specifications, and all is ready for actual construction to begin.

In the above little has been said concerning matters financial. It has been assumed that funds are available. If not, a separate problem is placed before the Building Committee. The subject is one for special treatment.

If funds are available it is perfectly possible to determine just how large a building may be built with the funds available. If funds must be raised the size of the building should be determined from which the cost may be obtained.

The cost of hospital buildings per cubic foot of space should be the governing factor in determining the size and character of the building to be built.

By a proper selection of the particular hospitals which in character and materials used nearest correspond with the proposed hospital and the use of careful judgment, a correct unit cost may be determined and thus the size of the building which can be built for the funds at hand, or the cost of a building of a certain size, may be determined. This data should be checked with the builder's estimates.

If a plan such as has been outlined above were applied to state, municipal and other public buildings it would not so often become necessary to rearrange or reconstruct new buildings in order that they may efficiently serve the purpose intended. Many hospital buildings when completed are not adapted for the purposes for which they were designed. In many cases the money is not available for alterations, and it becomes necessary to carry on the work under disadvantages to the patients, medical staff and others interested in the work. Large sums are annually expended in alterations in new buildings, and much of this money could be saved by careful study and planning.

The committee should endeavor to build the best possible building within their means and to obtain the best materials and equipment at a minimum of cost. A very grave mistake is made by many boards in attempting to build a million dollar building for seven hundred and fifty thousand dollars, or at that ratio. A one hundred per cent. perfect building cannot be built for a seventy-five per cent. appropriation. An attempt to do either thing but involves difficulty for the committee,

architect, engineer and builder, as well as for the hospital staff, who, with the patients, suffer the most in the end. Rather than make the serious mistake of attempting either of the above schemes it is urged that a building be undertaken which can be built within the available funds, using the best of materials and equipment, and that it be so done that it can be later added to as funds become available.

The increased interest of recent years manifested in this work by members of the Hospital Alliance, hospital trustees, by many architects, engineers, builders and hospital journals, has been a great factor in the advancement of hospital construction and equipment.

Society Proceedings

AMERICAN HOSPITAL ASSOCIATION

(Continued from October issue.)

Miss Pickard, of Pasadena: I want to say that the second paper is not really typical of the conditions, as I believe, of all hospitals in California. I want to state, too, that the hours of teaching, as one speaker has referred to, are not included in the hours on duty. Nurses can be taken to the bedside any time after the seven hours are up and taught; in fact, that is encouraged. We teach very much more than we ever have before, and the health of the nurses, I believe, has never been better than it is at the present time in most of the schools I have been able to see. I am not in sympathy with the eight-hour law, with the forty-eight hours a week, but I am greatly in sympathy with the better conditions that have come to light since this law has gone into effect.

Mrs. Mitchell, of Los Angeles: I would like, Mr. Chairman, to say a word. I want to say that while the forty-eight hour law came upon us as a thunderbolt—no one thought it would ever pass—and while we have struggled under it, it is

working out for the better. I do not think it has the best influence always upon the pupil nurse. I think that it has been just as hard for the pupil-nurse to adjust herself to the forty-eight hour law as it has for the people who are in charge of her. They have been at a loss to tell where they were. It has given a little more of an unfinished condition in their work which, no doubt, we will be able to overcome later; I hope so, but I feel that while the forty-eight hour law is very hard upon us, and it is an example for the rest of you to fight against and get your eight-hour schedule well under way, I do think that it has bettered things and that our training schools as a class are in better condition than they were when we started.

Miss Mary M. Goodrich, of New York: I am rather at a disadvantage because I only heard the last few lines of the paper on the eight-hour law. I feel very strongly in the matter. It seems to me, if I may put it briefly, that there was never a heavier indictment brought against our schools for nurses than that it was possible to include the pupil nurses in the eight-hour labor law. Had our schools been schools of nurses, this could not have happened. I cannot recall that in any case the pupils in any schools have been so worked that by any possible interpretation of the labor law they could come under it. So it seems to me that while we regret that they had to be included in the labor law, we cannot regret that a system which required the pupil-nurse to give such hours to actual physical labor, to hard work, should be interfered with in some way, and we feel that while the eight-hour law, coming as it has, must have worked a great hardship and must have made a very difficult proposition out here in California, it devolves upon the hospitals and training schools all over the United States to try to readjust their school system and prevent their nurses being classed in that way.

Now I cannot leave that last statement without just one other word, that I feel it is no humiliation to be placed under labor, inasmuch as I feel that every nurse—and I do not want this to sound sentimental, it is simply the way that I think we should look at it—so great a respect have I for the honest laborer that I feel the nurse who honestly gives of her service as a servant of the state is a laborer in the very highest sense

of the word. I do not know that I believe in the trades union, but if "trades unions" mean that such hours are arranged for the workers that they can broaden their minds and bring to their classes a fresher spirit, a greater enthusiasm, it is trades unions that we want. If it means that we are simply commercially controlled, that we desire only to have the shortest possible hours of labor with the greatest possible returns, then I do not believe in trades unions.

It does seem to me that if one considers what the man gives who is preparing for the medical profession, as compared with what the nurse gets, we must consider that while it is true that he pays for his professional education and that he gives four or five years, it is also true, as this very law in California has proved, that the nurse has been an actual economic asset to such an extent in the institution that it has been said that a number of hospitals in California would have to close; because, while the nurse may be receiving a small amount, sufficient to cover her uniform, and may be receiving her maintenance, is it not true that she is in actual service, giving more than she receives, otherwise it would not place these hospitals in such jeopardy? I believe that the time may come when nurses may pay for their education, when perhaps it is proper and right that they should pay for the theory which is part of their education and of which the hospital should be relieved; we are all struggling for such schools of nurses, but we also realize that it cannot come without an endowment. Medical schools are endowed; I do not think I have heard of a successful one without an endowment. Whether the state will see its way clear to this, we do not know; I think it should justly, feeling that the nurse is very definitely a servant of the state, a person whose services are very much required in building up the health of the state, which is its greatest asset. If the state realizes and appreciates what the value of the well-trained nurse is to it, it will, then, I think, assume some of the responsibility of the training of these women and see to it that a sound theoretical preparation, as well as the practical preparation, which has been our greatest asset, be furnished. We all realize that without our bedside instruction a nurse would be but a poor and failing person, but we also realize that she must have the theory to make that pos-

sible intelligently. It is simply in keeping with the entire vocational problem of the day. Everyone will agree that a person to be a success in any vocation must have a very highly intensified preparation in the particular subject in which he is going to work, and must also have a broad, general knowledge to make that training of the greatest value to the community.

Miss Charlotte Aikens, Editor of the *Trained Nurse*, was called upon to report for the committee appointed to consider the grading and classification of nurses. She said the committee had asked the National League for Education of Nurses to give its opinion on the tentative report presented last year. The president of that organization had promised to bring the matter to the League's attention. Miss Aikens had not been able to get in touch with the proper authorities of the American Medical Association, but hoped to at the present meeting of that body in San Francisco. Miss Aikens, in concluding, said:

"I think that we often forget that this Association must represent not alone the large general hospital, but must also represent the special hospital; it includes in its membership the struggling hospitals which may be out on the outposts, as well as the large hospitals in the medical centres. And any committee which undertakes this question must have a broad view of the whole field, and of the conditions which prevail not only in the United States, but in Canada. We have endeavored, I think, to do two things. I think we have had one clear-cut objective point before us in all this work, and there is one thing that we would like particularly to see as the result of this work. That is that in all classes of institutions, whether they are large or small, the nursing should be under the direction of duly qualified nurses. We even look further than that. We hope to some time see the nursing in the field outside, which is now in such a chaotic condition, done under the direction of the graduate nurse. We hope for those two things; we are working for them. We are trying to raise the standards of the care of the sick in all classes of institutions from the bottom up, as well as out in the field. This Association represents a tremendous money expenditure; it has been entrusted with tremendous responsibilities, and the public has a right to look to it to provide the kind of nurses needed to care for all classes of the sick,

at least, to help to provide. And we very much hope that as an outcome of this conference which is to be held we shall gain a clearer idea of just the kind of nurses the physician wants. Doctor Shutt, I think, has mildly suggested that we are not turning out the kind of nurses the physician wants. I am sure it is our wish to do so. We are working to improve the care of the sick in all classes of institutions, whether they are small or great, whether special or general, and that is the object we have in view in asking for this conference. We expect to continue our efforts towards this conference and hope to present a fuller report next year."

Miss C. A. Aikens, Editor of the *Trained Nurse*, presented the interim report of the committee on the grading and classification of nurses. Copies of the report were distributed; it will come up for discussion at the Philadelphia meeting next year.

The following resolutions by Dr. Hornsby were then adopted. (Included are the mover's comments.)

1. That the President be and hereby is requested to appoint a local committee on arrangements for the meeting of the Annual Convention; and,

Further Resolved, That the next President be requested to appoint a committee on transportation arrangements for the next Convention and that the duties of such committee shall include arrangements for any special trains, excursions, etc., and that the work of said committee shall be under the direction of the President and Executive Committee.

We have had a good deal of trouble during the last two or three years, this year included, getting our Convention arrangements made, and it seems to me that a responsible committee should be charged with that duty.

2. Resolved, That the next President and Executive Committee shall have the power of this Convention delegated to them to change the time and place of the next annual meeting, if at any time during the year it shall appear to them that arrangements in the city chosen by this Convention as the next meeting place are not satisfactory or that the time chosen is not propitious for the meeting.

We might have had our Convention chosen at a town where, like San Francisco many years ago, some event might occur

which would absolutely prevent its being held; it might come at a time when the meeting would be out of the question because of the many attractions there. It seems to me that the Executive Committee should have some time to decide during the year on some things that might come up. It might become known to us that the city chosen could not or did not wish to take care of the Association. I think that power ought to be left in the hands of the Association to provide against any untoward accidents.

3. Resolved, That it is the desire of this Convention that there be created for the next annual Convention an adequate and comprehensive commercial exhibit; that the next President is hereby requested to appoint a proper committee to get up such exhibit; and that a sum, not to exceed \$500.00, be and is hereby appropriated for the use of such committee, to be expended under the direction of the President and the Executive Committee.

That resolution has a long point ahead of it. We ought to have a lot of money. We ought to have a permanent secretary, and in order to do that we must have money. I propose that we shall begin by creating a commercial exhibit that shall be most instructive and a most attractive feature of the Convention and that out of that commercial exhibit we shall make enough money to do some of the things that this Association ought to have been doing a long time ago.

4. Resolved, That the next President and Executive Committee be informed that it is the sense of this Convention that the American Hospital Association should have a paid permanent Secretary; and that the next President and Executive Committee seek ways and means to provide for such Secretary.

Now, these resolutions do not touch the Constitution at all, and it seems to me that we can pass them if we want to without a lot of delay and that we can do some things during the year that will not take us further than we would care to go. I would not care to go into the Constitution with some of these things, but we can pass them as the sense of this meeting and then if there is to-morrow an Executive Board created by the adoption of the changes in the Constitution these things can go to that Board, but I would like the Convention to pass on some of these things that seem very, very material to our welfare.

Dr. John W. Draper, of New York City, read a paper prepared by himself and his assistant, Dr. George D. Stewart, on "A New Era in Teaching and in Hospital Management."

The University of the City of New York has recently given the privilege to the department of surgery to grant the degrees of Doctor of Philosophy and Master of Science. Dr. Stewart thinks other universities will grant similar honors in the near future. This will mean that there will be a higher grade of students to work in the wards, because a part of the advanced credit work will be done in the wards.

The European war, which authorities anticipate will not soon cease, has thrown and will throw the burden of teaching medicine upon America.

The United States is infested with two types of men—the recent graduate who imagines he knows the indications for and can perform any operation; and the amateur physician-surgeon, who, as Munroe said, "Operates for the excitement of the fee."

To remedy this condition of affairs every practitioner should have at least one year of hospital training. With the rapid increase of hospitals this will be possible.

Research is essential to the development of surgeons and of the cultivation of their individuality. The surgeon should have received a thorough and broad instruction; and he should have had a privileged hospital residence and post-graduate study. There should be established some standard of attainment which must be reached by men to gain their general recognition by the profession.

The essayists think a preliminary compulsory academic year following high school course prior to a four years' course, plus the compulsory hospital year, makes a better course than to compel a man to possess an academic degree before entering medicine.

There is a danger in over-training, with consequent loss of initiative and efficiency. Too often men grow stale. Too long a period as an assistant spoils many a man. This is seen in Europe. Rare is the American surgeon who would choose to be operated on in Europe in preference to America. The technique is poorer; and the men have spent too long in the dead house.

To-day calls for corporate medicine, so well illustrated in certain Western communities. Team work in medicine is the desideratum. If to-day calls for corporate medicine, communal medicine may be the method to-morrow.

Laboratory methods in teaching surgery to undergraduates was introduced and stabilized by the far-sighted Halstead. We can depend on the laboratory to break the evil and antiquated conception of a distinction between medicine and surgery, and to give a new and healthy viewpoint.

Formerly universities considered surgery as a technical art. That day is past. Now this subject will be placed on the same basis as physiology, and degrees granted in science and philosophy for the study of surgical problems.

The modern department of surgery should have three divisions: Applied or therapeutic surgery, diagnostic or deductive surgery and experimental or inductive surgery. Principles, rather than technique, should be taught in the laboratories.

Hospital services should be mixed, but the mixture must be constant, not alternating. Medical and surgical wards should be much more closely identified. The so-called medical man will visit the surgical wards, and the surgeon the medical wards. If one considers the frequency with which the operating doctor visits and inspects the cavities of his patients, there to see the living pathology rather than terminal dead house conditions, he rather than the physician might justly be called the "internist."

THE OPERATING ROOM.

Dr. Herbert O. Collins, Superintendent of the City Hospitals, Minneapolis, read a paper thus entitled. The essayist defined an operating room to be: A workshop, in which everything is designed for the assistance of the workers, and where there is nothing that may be considered as superfluous or unnecessary, or planned for show; a scientific laboratory where many questions in anatomy and pathology or in surgical technique arise and are solved; a training school for young surgeons and nurses. Floors may be of tile, walls of hard plaster, well enamelled. Plumbing fixtures and furniture should be simple in construction, durable and no more than are necessary.

Skylights should be avoided. The *personnel* should consist of the operator, his assistant, an anesthetist, a sterile nurse and an unsterile nurse. The nurse in charge of the operating room should be responsible for the preparation of the patient for operation; and, if possible, should have supervision of the subsequent dressings. We owe it to our internes to give them some active work in the operating rooms. With a few weeks' experience the average hospital interne will be perfectly competent to fill the position of first assistant. As to anesthetics, except for minor operations, the interne must give way to the official anesthetist.

Mr. Howell Wright, Superintendent of Cleveland City Hospital, Cleveland, read a paper on "Efficiency and Progress in Hospitals." The essayist took issue with a statement of Dr. Hurd that the municipal hospital should be reorganized whenever it is necessary, to afford proper care for all cases of chronic diseases among dependent 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.

Mr. Wright believes that the interests of humanity demand a far greater sphere of activity for the modern municipal hospital. The municipal hospital is an institution of organized society provided by a city to care for the sick; a medical means to a social end—the public welfare. The city hospital must give a community scientific care for its sick, educate physicians, nurses and orderlies; and, above all, give a watchfulness over public health. Considering all the opportunities, there is not nearly enough to offer in the way of efficiency and progress in municipally-owned and operated hospitals, in proportion to what believers in popular government have a right to, and do actually, expect from them.

Boston City Hospital and the St. Paul City and County Hospital were two examples of long-continued efficiency. The former hospital had taken a questionable step when the Mayor of that city had appointed as Superintendent an untrained hospital administrator. Mr. Henry C. Wright's report on Bellevue and allied hospitals showed indications of efficiency and

progress. The City Hospital, St. Louis, has become affiliated with Washington University and with St. Louis University; the house staff has become reorganized; a three-year course has been established for nurses; and definite plans are being made to increase the laboratory facilities.

In Cleveland the first unit of a \$3,000,000 hospital is under construction. An affiliation has been effected with the Western Reserve University. Division chiefs are on duty the entire year. The house staff has been reorganized, and residents appointed; the school for nurses has been reorganized. A full high-school education or its equivalent is required of pupil nurses; and an eight-hour day established. Plans are under way for the nurses to receive instruction in nursing private cases. Great emphasis is being placed on the Social Service Department. The convalescent patient may be sent out to a farm, where patients can be cared for at 50 cents per day.

No municipal hospital is on a high plane of efficiency unless it includes provision for the scientific supervision of convalescence.

One great cause of the serious failures in municipal ownership is the failure of the city hall and the medical society or medical school to get together. Too often incompetent architects have been selected. It was a mistaken notion to suppose that the cheapest and best way for a city to take care of its sick poor was to pay somebody else to do it.

But the greatest hindrance and danger to efficiency and progress in municipal hospitals is found in the method or plan of administrative control. Too often city hospitals were a part of the changing city administration. It is a tremendous cost in time and money to have frequent changes of hospital officers. The immediate hope of the municipal hospital lies in placing the active administrative control in the hands of a non-partisan board of trustees, properly connected with the administrative and legislative branches of the municipal government, so as to prevent it from becoming isolated from other public welfare activities.

When the average Mayor and his cabinet are, by reason of education, training and experience, public welfare workers, with

high business-like ideals for the development of the city's welfare activities, and are continually elected by the people on this basis, then non-partisan boards of trustees will not be necessary, because every change in a city administration will not necessarily result in a change of competent hospital officials and essential hospital policies.

War Hospitals

ONTARIO BASE HOSPITAL

On a breezy upland overlooking miles of the rich Kent countryside lies the site whereon Ontario's new English hospital is about to rear its wards. Situate some fifteen miles south of the mighty city of London, this quiet little town of Orpington is all but a suburb. From its pleasant villas and neat cottages a contingent of workers leaves every day to follow diverse vocations in London.

The "Boundary Estate," of whose one hundred and sixty acres the province has purchased thirty, was lately the property of a wealthy old gentleman, at whose death the place was offered for sale. No ancient park surrounds a mossy manor house. Thirty-eight years ago, when he "first took service with the squire," declared the old gardener, the whole tract was just a grassy meadow.

This veteran retainer's life has been devoted ever since to transforming the grounds into their present state of perfection. He posed for a picture surrounded by his handiwork—lawns of velvet turf, which would make Parks Commissioner Chambers verdant with envy, flower beds rich with foliage and blossom, gravelled walks and well-trimmed trees and shrubbery. As in most English estates, a high wall of mellowed red brick gives seclusion from the outside world.

"But they tells me I am to go on with Col. Pyne," remarked the grey-haired gardener with relief, as he presented a formid-

able brass ear-trumpet to the writer. "It would 'a gone hard with me to leave the old place now."

Colonel the Hon. Dr. Pyne and his staff, including Major Clarkson James, will occupy the house. To the right in the picture stretches an expanse of flower beds and orchard to the foot of a hill. A broad plateau of meadow opens out at the top of this slope. Here the hospital will be located. The high embankment of the South Eastern and Chatham Railway cuts through the property about a quarter of a mile from the proposed hospital—one of the busiest railways in England to-day, the line from London to Dover, over which thousands of soldiers and vast quantities of stores travel weekly. But the quiet-running British trains will not disturb the patients—no more than the supposedly loud cackling of the famous fowls bred hereabouts and named after the town.

A cawing multitude of crows and a huge flock of starlings rose from the meadows—the site of the hospital to be—when the visitor strolled over to peek down a queer fenced-in-hole in the ground called the Dane pit. Excavated in the chalky soil, forgotten centuries ago, the pit reveals five little lateral tunnels. Tradition says that in the olden time this weird well and its adjoining caverns were used as a hiding place from enemies.

Re-tiled new villas may be seen here and there over the wide sweep of landscape viewed from the hospital site. Little brown squares among the green, hedge-rowed pastures, speak of plentiful harvests in the diminutive but productive fields, from the dotted stooks of one of which issued a puff of smoke and a report as the visitor gazed. A farmhand, gun in hand, was scaring the birds from the "corn."

The hospital, which will be of similar construction to the other Canadian ones at Cliveden and Shorncliffe, will have accommodation for over one thousand patients. This section of the country, by reason of its altitude and porous, chalky soil, is considered very healthy. The location is most convenient and accessible by frequent trains as well as by excellent motor roads. Though the plans are under way, no building preparations were being made when your correspondent visited the place. Work will begin, however, at an early date. Ex.

Book Reviews

Playing the Lone Game Consumption. By THOMAS CRAWFORD GALBREATH. "Journal of the Outdoor Life" Publishing Co., 289 Fourth Avenue, New York City.

This book is piquant, pathetic, useful, in its histories and advice to fellow sufferers, from one who fell victim to this awful disease. He is now an arrested case. But he was unfortunate at first in receiving bad instructions from one physician, whose errors, happily, were offset by the wise counsel of another doctor, whom the author glorifies. He lays stress on the theory accepted everywhere now, that a man must be cured in the climate where he intends to spend his days afterwards at work. He also emphatically denounces the well-meant but badly-planned kindnesses of municipalities that pay a boy's way to Denver, but leave him in that germ-ridden city, where prices are so high, to become more ill and penniless, hopeless and dying. One point also is well taken in regard to students' dormitories. At the colleges, one student may follow in the same rooms a fellow who has had t. b., without any precautions as to cleanliness, sunshine, soap and water. To this he attributes, in part, his own illness.

The book breathes joy and hope to the t. bs., and it shows how to construct a cabin that will have firm flooring, sun, air without billowy breezes, and warmth, as well as companionship, with perfect safety for the companion. There are many pointed "what not to dos."

Altogether it is an excellent tonic to anyone to read this little work of only seventy-five pages.

In regard to the cabins, I saw a very fine arrangement at Weston, Ont. The hospital there employs superannuated street cars, lined up in rows, end to the long board-walk to the main pavilion. Any little town or village could procure these for any sort of disease requiring isolation, couldn't it?

A. A. S.

Colon Hygiene, comprising New and Important Facts Concerning the Physiology of the Colon and an Account of Practical and Successful Methods of Combating Intestinal Inactivity and Toxemia. By J. H. KELLOGG, M.D., LL.D., Battle Creek, Michigan. Good Health Publishing Co., 1915.

This is a new book by the indefatigable superintendent of Battle Creek Sanitarium. In the preface he says:—

“Forty years’ experience and observation in dealing with chronic invalids, and careful study of the results of the modern X-ray investigations of the colon, together with observations made at the operating table in many hundreds of cases, has convinced the writer,—

“That constipation, with its consequences, is the result of unnatural habits in relation to diet and colon hygiene which prevail among civilized people.

“That some mechanical obstruction is the cause—a fold, a kink, a redundancy, a contraction.

“That, by observing certain rules and the faithful and continuous use of safe and simple means, the colon may be made to perform its functions in a regular and efficient manner without the use of irritating laxative drugs.”

The anatomy and physiology of the colon and ileocecal valve are discussed. A study is made of bowel action and bowel contents; the influences which excite or lessen intestinal movements; toxemias; forms of constipation; diet in constipation; baths and exercises in constipation. Various electrical methods of treatment are discussed, and also special treatments of the different types of constipation. A chapter is devoted to the treatment of disorders which result from constipation—colitis, proclitis, hepatic and splenic enlargement, fecal tumors, valvulus, gastric disorders, arterio-sclerosis, premature senility, headache, insomnia, etc., etc.

The book finishes up with the “Colon Code” in an interesting chapter on “Bowel Habits of Civilized Man,” the pith of which shows that nations whose peoples are vegetarians do not suffer from constipation and its consequences as do the meat-eating races.

Neurasthenia or Nervous Exhaustion, with Chapters on Christian Science and Hypnotism, "Habits" and "the Blues."
 By J. H. KELLOGG, M.D., LL.D., Superintendent Battle Creek Sanitarium, Good Health Publishing Co., 1915.

Facing the title page of this second edition of Dr. Kellogg's book we read the following, which gives an idea of the contents:—

DON'T WORRY—CHEER UP.

"Worry wears worse than work. Worry destroys, work produces. Worry wastes energy, work utilizes it. Worry subtracts, work multiplies. Worry dwarfs, depresses, confuses, kills.

"Worry stops digestion, paralyzes the bowels, slows the heart. Worry anticipates failure and creates disaster.

"Worry is a mind malady—a mental unsoundness. Anxiety in the face of grave danger is natural and unavoidable.

"Worry about petty troubles, or even big ones, is useless and may become calamitous. Worry is often a habit and may be cured by an effort of the will.

"Ofttimes worry is due to loss of sleep, tea or coffee, indigestion or constipation. Take a neutral bath at bedtime, eat biologically, abjure tea and coffee, move the bowels three times a day, and

CHEER UP."

The book is written in an easy, popular style, and is full of information for sufferers from the "American Disease." Some good hints are given on the question of rest, exercise, diet and bathing. There are a goodly number of practical illustrations.

John Shaw Billings: A Memoir. By FIELDING H. GARRISON, M.D. Illustrated. G. P. Putnam's Sons: New York and London. The Knickerbocker Press. 1915. Price \$2.50.

Dr. Garrison holds that Dr. Billings though eminent in the military world and well-known as the director and up-builder of the New York Public Library will be best remembered as the most eminent bibliographer in the history of medicine, the planner of some of the finest hospitals and laboratories in the world, notably Johns Hopkins. Equally eminent as a sanitarian and statistician, war surgeon, medical historian and civil administrator.

Billings was born in the Hoosier State, which is now becoming so well known through the work of some of its later born literary sons—Riley, Tarkington, Nicholson, Ade. Billings was born on a farm; worked for his father in a country store; read omnivorously; began of his own initiative Latin and Greek; worked his way through college—like many Edinburgh boys in the old days—cooking his own meals, and otherwise climbing the steep and thorny way to fame. Following his struggles to acquire a general education, we read of his experiences at Miami Medical College; of his association with Drake, Blackman, Mendenhall, Wright and other pioneers in medicine of the Middle West; of his early hospital experiences in Cincinnati and his association as a teacher in the Medical College of Ohio. Then come his rich experiences as a medical officer during the Civil War; his letters and notes of which form a distinct contribution to the literature of the great struggle.

A chapter of great interest is that devoted to the founding of the Johns Hopkins Hospital. In addition to the planning of this great group of buildings, it fell to Dr. Billings to choose the men who have made the institution so famous. Dr. Henry M. Hurd was chosen superintendent in 1889. The calling of Prof. Welch followed. Osler writes of his call:—

“In the spring of 1881 he (Billings) came to my rooms in Philadelphia. . . . Without sitting down, he asked me abruptly, ‘Will you take charge of the Medical Department of the Johns Hopkins’ Hospital?’ Without a moment’s hesitation I answered, ‘yes.’ ‘See Welch about the details; we are

to open very soon. I am very busy to-day. Good morning.' And he was off; having been in my room not more than a couple of minutes."

Dr. Billings' *Description of the Johns Hopkins' Hospital*, a quarto of 116 pages, illustrated with 56 plates, was published in 1890, and became a kind of text-book on the subject of hospital construction and ventilation. The writer ran across a copy of this while prowling through an old bookshop on Entaw Street, Baltimore, last fall.

A number of eminent men were asked to submit plans and ideas on hospital construction to the Trustee Board—a sort of competition. Billings' contribution was selected as the best, and he was chosen in an advisory capacity to the Board. The volume containing all these contributions is out of print; and you are lucky if you can find one in any old bookstore in Baltimore or anywhere else. The writer failed to find one in Baltimore; but he hopes to look again.

Lay hospital workers, as well as members of the medical profession, will do well to have Billings' biography in their libraries.

State Registration for Nurses. By LOUIS CROFT BOYD, R.N., Graduate of the Training School for Nurses of the City and County Hospital, Denver, Colorado. Second edition, enlarged. Octavo volume of 149 pages. Philadelphia and London: W. B. Saunders Company, 1915. Cloth, \$1.25 net. Sole Canadian Agency, The J. F. Hartz Co., Ltd., Toronto.

This work represents a vast amount of labor and patient research, since it collects the full text of all the laws governing registration of nurses, in all the states of the Union, as well as the terms on which a nurse's license may be revoked, the requirements for application for license, and every other conceivable feature relating to the legal status of a nurse. It presents, therefore, in accurate concise form, every fact that a nursing organization needs to look up, in taking the steps preceding registration. It should be in the reference library of every nurse training school, and will be of great value to every super-

intendent engaging nurses for her staff, or to any registrar to whom strangers apply for the privilege of getting calls for private duty.

A Text Book for First Year Pupil Nurses. By CHARLOTTE A. AIKENS, Detroit. Published by W. B. Saunders Co., Philadelphia and London.

Miss Aikens is a woman of whom all Canadians should be proud. Formerly superintendent of Columbia Hospital, Pittsburgh, and of Iowa Methodist Hospital, Des Moines, then director of Sibley Memorial Hospital, Washington, D.C., she has lived through every phase of hospital administration. She has learned to set a high value on the practical needs of hospitals, to get into close touch with patients, rich and poor and middling poor, and to understand the difficulties of pupil nurses.

Anything from her pen is interesting, useful and exhaustive, whether it be on hospital office work, housekeeping or nursing. Of these works there are several, and the proof of their usefulness is the fact that they go rapidly into second and third editions, as for example the Primary Studies. Miss Aikens has many other interests in which she is actively engaged, all of which combine to give her such wonderful breadth and humanity of aim.

"Primary Studies" contains all that is necessary for the pupil in her first year, and if the time ever comes when textbooks will be standardized in training schools, Miss Aikens' book should have first claim, since the possession of it would enable a pupil to face any first year problem. The subject matter is correct, and up-to-date, and presented in direct simple language.

The new points about the book are the questions appended to each chapter, the spaces set in for note-taking, and the addition of material in the sections on Anatomy, Bacteriology, Asepsis, and Materia Medica.

Reading the book through, one feels that it must carry with it the author's strong influence for whatever is industrious, humane, charitable and right.

HOSPITAL SUPPLIES COMMITTEE, ACADEMY OF MEDICINE, TORONTO

THE following report of the work recently accomplished by the Hospital Supplies Committee of the Academy of Medicine, Toronto, was made by Dr. N. A. Powell at the Academy meeting on October 5th:—

To Fellows of the Academy of Medicine, Toronto:

GENTLEMEN,—One year ago the Academy in its wisdom appointed a Committee on Hospital Supplies. The work of this Committee has been reported in detail to the Council from month to month, and under the instruction of that body it now becomes my duty to summarize these reports for you. The energies of this Committee have been directed chiefly to the securing of money with which to buy materials for surgical dressings, to the making up of this material into standard dressings, to their packing and sterilization, and to the forwarding of these supplies through Red Cross and Base Hospital channels to our representatives at or near the front.

In this work we have been splendidly assisted by groups of good women meeting almost daily in rooms provided for them in the Academy buildings. God bless every one of them for what they have done and are doing.

During the summer months members of the Committee and of the Council organized the summer visitors on the Muskoka Lakes and the Magnetawan River District into groups for work of a similar kind. As a result of this nearly 100,000 separate dressings were forthcoming. American visitors vied with our own people in these efforts, proving that their hearts are with us in the conflict now being waged between humanity and a foul-fighting despotism.

The Committee's money outlay for materials was only about \$1,200, but the value of the dressings packed and sent over to the sterilizers at the General Hospital was far in excess of that sum. In response to urgent appeals for aid to our brethren in Belgium your Committee were able to secure and place at the disposal of the Belgium Relief Fund Committee more than 700

surgical instruments in good usable condition. These were not archaic relics of a by-gone age, but were such as any of us would employ in our daily work. The members of your Committee reserved for themselves the pleasure of meeting the cost of having the instruments sent put into good condition by expert cutlers.

The net value of the instruments and of about 5,000 ligature packages also sent from the Academy to military hospitals would easily exceed \$3,000.

Our thanks are due to the instrument dealers of Toronto for sympathetic co-operation in this department of the work committed to us.

We appeal now and through each one of you for funds to carry on what is in progress. At least \$500 is needed at once if trying interruptions are to be prevented. Close contracts for materials have been made and we have the facilities for transforming this material into what is most in demand by hospital units now across the water.

An unlimited shell supply is hardly of greater importance. Who can estimate the value of even a single sterile dressing applied to the wounds of a son, a brother or a close friend hit when on duty in the trenches?

Funds will be forthcoming if the need for them is properly presented. Response to other calls has been splendid. Let this part of our common duty have its fair share of attention.

N. A. POWELL,
Chairman Hospital Supplies Committee.

THE NEW VENTILATION

THE *Lancet* of London, in its recent issue, contains an article by James Keith, a leading authority on ventilation, describing new methods introduced coincidentally with what Mr. Keith calls the "epoch-making" address delivered before the British Association by Dr. Leonard Hill, President of the Section of Physiology. Dr. Hill asked the consideration of nothing higher than a stuffy room. He said that the popular mind, supported by all the elementary text-books of hygiene and most standard works, is imbued with the idea that ventilation is a question merely of chemical purity of the air, whereas chemical purity is the last thing to consider and is practically negligible. Dr. Hill asserted in a letter to this newspaper, following his address, that there was continually more oxygen in a closely packed room with all the doors and windows shut than in an equal space of rarefied air in certain celebrated mountain resorts. It is a matter of scientific proof, which Dr. Hill cheerfully submitted. There is danger of bacteria in the crowded room from the exhalation of many lungs, while its heat and the windlessness of the atmosphere are most to be dreaded. Indeed, if the air breathed by the crowd were perfectly pure the room would not, in Dr. Hill's view, be at all well ventilated until it were cooled and set in motion.

The cooling and vigorous circulation of the air we breathe constitute the essential problem of ventilating engineers. The Smithsonian Institution has lately published a study by Dr. Hill, Martin Flack, James McIntosh, R. A. Rowlands, and H. B. Walker, from the physiological laboratory of the London Hospital Medical College, which shows that the chief fault of modern ventilating systems lies in their failure to keep the air moving. Therein is the virtue of open-air schools and of living out of doors—that the air is changed, and acts constantly upon the skin to stimulate the circulation and free the lungs. Mr. Keith's *Lancet* article is illustrated with cuts of mechanical devices lately installed in New York's newest skyscrapers and in the engine-rooms and stokeholds of the newest ocean liners.

which supply thousands of cubic feet of fresh "live" air every hour without discomfort from draught, besides a number of devices for ventilating offices, living rooms, cabins, and sleeping cars. With respect to the new ventilation in factories, Mr. Keith makes this observation of interest to owners:

It may be added that not only does good and healthy ventilation on the lines indicated tend towards increased efficiency, health, and happiness of the workers in crowded and overheated inclosures, but an immense saving per annum may be effected in the wear and tear of running machinery and in lubricants by the reduction of the atmospheric temperature in sultry, and often almost "tropical," engine-rooms, etc., to a more natural, normal, and less "vicious" degree; so that all round (as our American cousins might be inclined to say) better or more nearly perfect ventilation is really, after all, a paying proposition.

Incidentally, by this constant change of air, emphasized in the new system, chemical purity is practically attained. But the difference between the new and the old systems is marked, in that the new scheme includes the regulation of temperature to a requisite moisture and coolness, and the all-important features of rapid displacement. It is an article that should be consulted by the experts in this country and by capitalists and public men who contemplate the installation of ventilating plants.

McLAUGHLIN AMBULANCES

THE McLaughlin Carriage Co., Oshawa, Ont., have been favored during the past year with a large number of orders for their ambulance for overseas service. It certainly speaks volumes for this firm that they have received orders almost every month since the war started and, judging from letters that have recently come from the front, the McLaughlin Ambulance is standing up well. The McLaughlin Carriage Co. are making daily improvements on their ambulance, adapting it better to the needs of the service. For instance, the ambulances are now

much wider and are equipped with four berths with linoleum covering and metal binding, leaving an aisle down the centre for attendants to attend the patients.

There is a large box on one side to keep the tools and extra equipment for the car; on the opposite side is a box for carrying three days' rations, and in another compartment of the same box is a supply of bandages.

Inside of the body there are two compartments for carrying medical supplies, and in a box beneath the driver's seat is another compartment for carrying extra supplies in the way of medicines, etc., thermos bottles, etc.

The regular equipment includes a canopy lamp inside of the top—a portable lamp that can be carried to each berth, with a suitable fastener for attaching it. These four berths can be folded up and the car used for carrying twelve people sitting up, or six sitting and two lying down, or four lying down; also the driver and one or two attendants in the front seat and also accommodate the kits of the wounded soldiers. They are all equipped with self starters and the famous Overhead Valve Engine.

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Only the best materials are used,

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A Letter

DOCTOR,—When consulted by patients on the important question of the laundry, won't you bear in mind the following facts regarding Taber Laundry Works, 444 and 446 Bathurst Street, Toronto: Our laundry is one of the most up-to-date and best-equipped institutions of the kind in Canada. Every department is conducted along the strictest sanitary lines. Each and every piece entrusted to us is not only washed but sterilized, and dried with super-heated air, rendering impossible the transmission or existence of germ life. Taber Laundry Works exercise also the greatest care in not taking work from houses or places where there exists contagious disease. Our patrons are protected in this way from danger. It has been our rule for years that each and every customer receives personal attention. Telephone College 8333 and 5143 for our van service. Note.—In the past few years laundry chemists and engineers have developed the modern power laundry so that it now ranks high in the public service. Sanitation has been the mainspring of their efforts. We invite professional men and visitors to call on us. For the above reasons, we ask the endorsement of physicians.

A Powerful Antiseptic

As hospital superintendents are aware, they have had considerable difficulty for many years past in finding a really satisfactory disinfectant for use in institutions, particularly so now in view of the very high price of carbolic acid. Hospital authorities should look into the claims made for Polusterine, a new antiseptic and most effective germicide and disinfectant. Polusterine is soluble in water and is also non-poisonous and non-corrosive. It will be found to have a most pleasant odor for use in the sick room, the proportion for such use being a tablespoonful in a basin of water. For use in contagious disease cases, three tablespoonfuls of Polusterine placed in the slop jar or basin of water will be found most effective. The patient's linen should be wrung out in this solution before being moved from the room, and all night vessels should be kept one-third full of the solution at this strength. All discharges should be disinfected in this way, before being disposed of. This will be found particularly important in typhoid and other contagious fevers. Polusterine used in the proportion of two to ten drops in a tumbler of water makes a most effective and pleasant mouthwash. One tablespoonful in a pail or basin of hot water acts as a quick deodorant, and for spraying purposes one tablespoonful in half a pail of water. Polusterine can also be used for

The Spatula is Mightier Than The Sword—

especially when wielded by the Physician, in Pneumonia, for example, to spread on previously verified and properly heated

Antiphlogistine
TRADE MARK

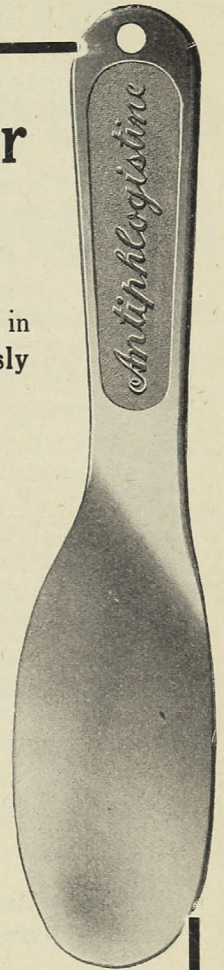
“ About five per cent of all physicians still adhere to the theory that pneumonia, being a so-called self limited disease, admits of no active treatment, but requires only good nursing and patient watchfulness. The other ninety-five per cent, out of their individual and collective experiences, are convinced that, with prompt treatment of the right kind, pneumonia can be often greatly lessened in its severity, shortened in its course, or (as some affirm) actually aborted. We are of the opinion that about seventy-five per cent of the physicians believe there is no single or similar remedial measure which equals Antiphlogistine in its prompt effectiveness in the treatment of this disease.”

(From Pneumonia Booklet sent on request.)

Physicians should WRITE “ Antiphlogistine ” to AVOID “ substitutes ”

“ There’s Only One Antiphlogistine ”

THE DENVER CHEMICAL MFG., CO.
MONTREAL



washing cuts, sores, ulcers, etc., in the proportion of two to three teaspoonfuls in one gallon of water. This preparation is manufactured by the Polusterine Products Co. of Canada, whose head office is in Toronto.

The Canadian Steam Boiler

THE Canadian Steam Boiler is made of cast iron. It might be made of sheet metal, but then water has a chemical action on steel, causing it to corrode and building a heavy layer of shale upon it that will, in time, seriously diminish the heat-producing capacity of the sheet steel boiler.

The Canadian Steam Boiler is made up of a series of small boilers, joined at the top by a "header," which equalizes the pressure from each section. There is safety and economy in the design—and lasting satisfaction; because if, by any accident, a Canadian Boiler should be injured in one of its sections, that section may be taken out and replaced without disturbing the boiler as a whole.

For many reasons the boiler is *eminently suited for installation in hospitals and large institutions*, and in these days, when so much money is being spent in hospital equipment, hospital superintendents should bear in mind *The Canadian Steam Boiler* as not only one of the most economical, but one that gives the best heating results.

The Canadian Steam Boiler is made by Taylor-Forbes Company, Limited, Guelph.

The Value of Glyco-Thymoline in Treating Intestinal Disturbances

THE condition of the alimentary canal in all diseases of that tract is one of either congestion or depletion of the villi.

Auto-infection follows a condition of depletion, and while this condition is not the direct cause of the "self-poisoning," the restoration to normal conditions would undoubtedly prevent septic absorption.

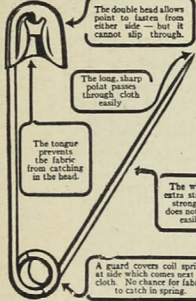
The condition in diarrheal diseases is one of stasis with a great amount of exudation of serum, the villi being greatly distended.

In either case a return to normal conditions is most readily effected by an agent producing an exosmotic action—in the one case to deplete and in the other to promote the exudation necessary to wash out the intestines and prevent auto-infection.

That Glyco-Thymoline will do this effectively has been demonstrated time and time again, and many clinical reports from many physicians testify to its great power as a curative agent in all such cases.

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Stewart's Duplex Safety Pins



MADE of superior higher grade of brass wire. Will not bend or unfasten easily. Both head and coil are absolutely protected by the guards. Rust-proof. We manufacture all grades and sizes of Safety Pins. Pack them especially for hospital use—5 gross in a substantial box—loose—ready for use at a moment's notice.

Samples and price list free on application.

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It is with perfect frankness, and with the utmost sincerity that, without pretending to cure every case of Epilepsy, we recommend to the medical profession **GÉLINEAU'S DRAGÉES**, which have given to their inventor the most complete satisfaction for 30 years and have earned for him the gratitude of numerous sufferers. **GÉLINEAU'S DRAGÉES** offer to the practitioner a superior weapon, giving him the possibility of a triumph in ordinary cases, and in all cases the certainty of at least a marked improvement.

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There are no instances of Infectious Diseases arising from the use of Gail Borden Eagle Brand Condensed Milk. It contains **NO BACTERIA** that produce Infection. In epidemics many dangers to infants can be avoided by the use of



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THE PHYSICIAN WILL FIND IN "EAGLE BRAND" THE MEANS OF LESSENING THE DEATH RATE IN OUTBREAKS OF INFANTILE DISEASES. This result is due to the modern and sanitary methods of production and manufacture strictly enforced by the Borden Company.

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THE drinking of mineral waters is an established therapeutic custom. The multitude of persons who indulge in the water drinking at the spas, as well as the large number of physicians who repeatedly advise the treatment as an established routine, make it seem more than probable that the practice is a well-founded one. Strongly alkaline waters of the Vichy type have a rational use. Laxative waters find an explanation of their effects in the presence of known purgative salts. In the latter class, Pluto Water easily ranks first. It produces a mildly tonic effect upon the mucous membranes of the stomach, due to both its gases and its salts, and, owing to its water and its salts, it is also diuretic. It is exceedingly useful when taken half an hour before meals, to cleanse the gastric membrane and to prepare it for the reception of food. It also serves to dilute and wash out waste material from the system through the kidneys. Patients will usually drink Pluto Water who will not, or cannot, drink sufficient ordinary water. A glass taken an hour or two after meals promotes digestion and helps remove the effete products from the blood. Samples, clinical data analysis and literature descriptive of the hygienic methods employed in bottling Pluto will be promptly forwarded on application to The French Lick Springs Hotel Company, French Lick, Indiana.

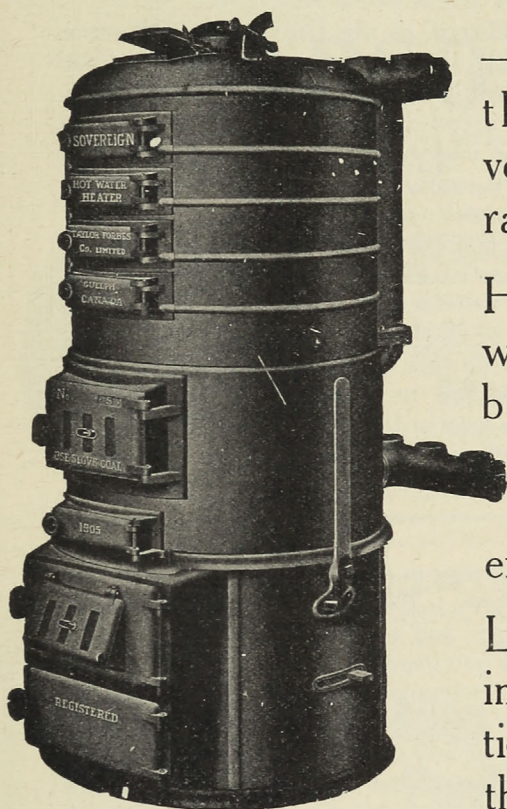
Disposal of Hospital Garbage

HOSPITAL superintendents should enquire particularly into the merits of the "Heenan" type of garbage incinerator. It is one of the best manufactured. It is *economical* in every sense of the word, *no fuel being required* but the refuse itself. It is also essentially *sanitary*, the garbage being burned at a high temperature and *emits no odors* of any kind. Hospital men can at once satisfy the most ardent critic on these points by looking over the magnificent plant recently installed in the new Toronto General Hospital.

Absorbent Cotton for the Millions

OVER seventeen years ago, when little was known about Absorbent Cotton, and when its uses were largely confined to the medical profession, the Maplewood Mills were established in Fall River. At that time their plant was quite unpretentious, but with the popularizing of Absorbent Cotton came a tremendous increase in demand, and the Maplewood Mills had to grow correspondingly until they now are the largest manufacturers of these goods in the world, producing a goodly share of the total quantity of Absorbent Cotton made in America.

THE "SOVEREIGN" WILL BURN ANYTHING THAT'S BURNABLE



— and give from the fuel the full volume of heat for radiation.

Hard coal, soft coal, wood, or anything burnable, makes useful heating fuel in the "Sovereign."

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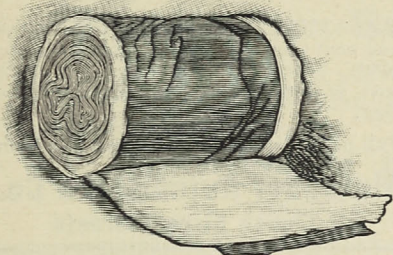
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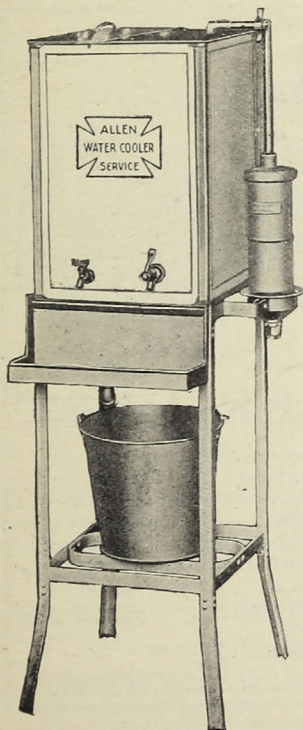


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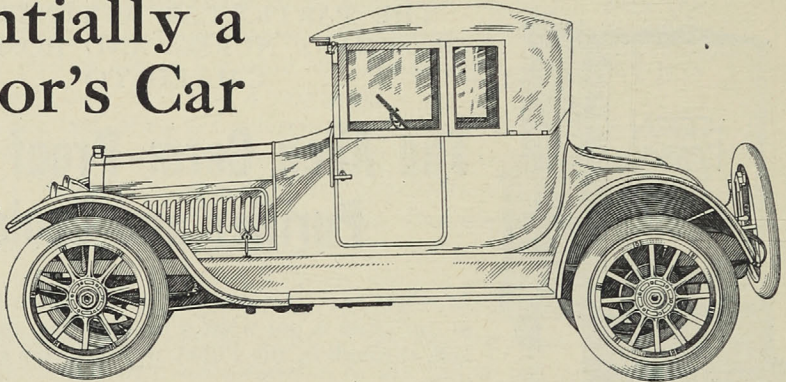
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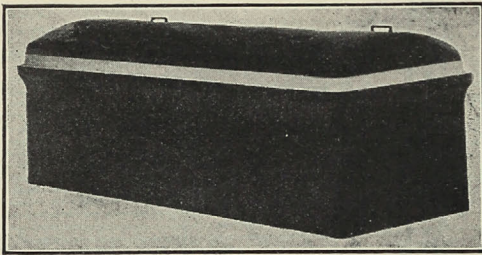
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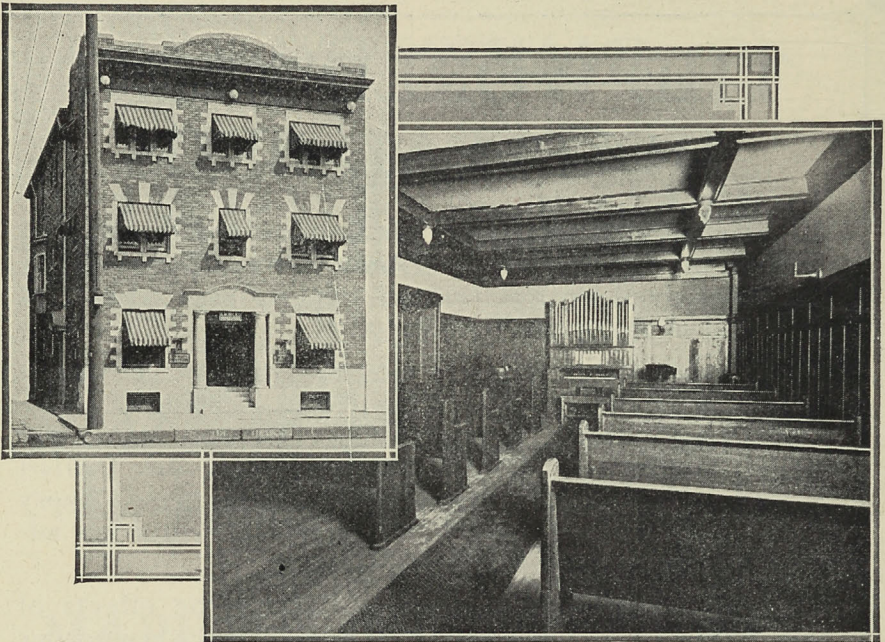
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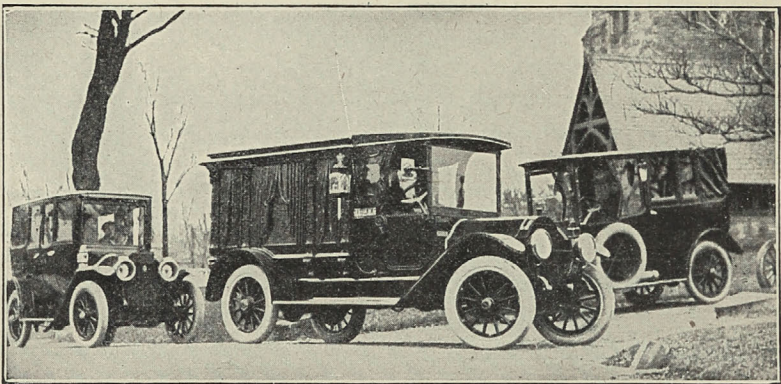


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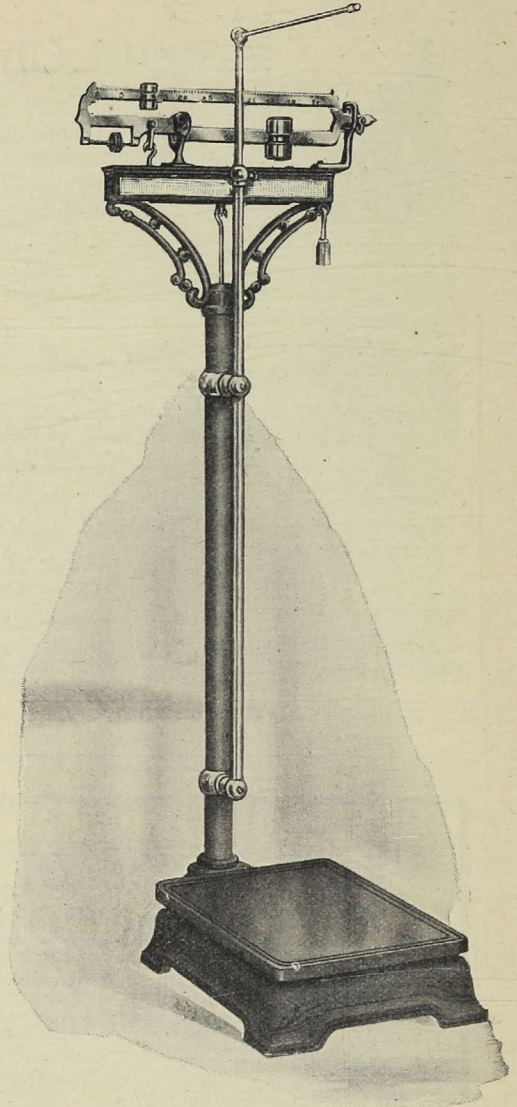
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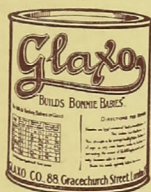
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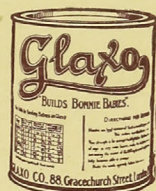
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