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### The original antiseptic compound

**Q** Listerine is peculiarly free from irritating properties, even when applied to the most delicate of the tissues, whilst its volatile constituents give it more healing and penetrating power than is possessed by a purely mineral antiseptic solution; hence it is quite generally accepted as the standard antiseptic preparation for general use, for those purposes where a poisonous or corrosive disinfectant can not be safely used. **Q** It is the best antiseptic for daily employment in the care and preservation of the teeth. **Q** In the sick-room, the use of Liste: ine by means of spray or saturated cloths hung about is actively ozonifying and imparts an agreeable, refreshing odor to the atmosphere. **Q** For the bath, an ounce of Listerine in a pint or quart of water forms a refreshing and purifying application for sponging the body. **Q** As a prophylactic, in zymotic diseases, Listerine may be used to spray the throat and fances to diminish the dangers of septic absorption; for the infection.

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is a new and thoroughly sanitary method of keeping cadavers and can be easily installed in any refrigerator already built. The Support and Stretcher are both constructed **entirely of metal**, and thoroughly galvanized after the parts have been assembled.

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TRI-SEPTOL is superior to many of the foreign patent Germicides and being a Canadian product is worthy of your consideration.

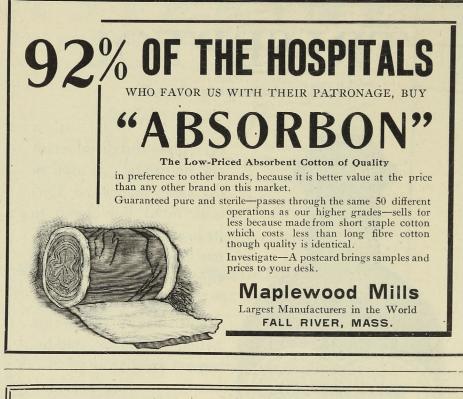
TRI-SEPTOL mixes well with water, making a clear solution.

A 2% solution is effective for surgical and obstetrical use, disinfection of hands, instruments and skin of patients.

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#### In order to effectively light the OPERATING ROOM, WARD, CORRIDOR or PANTRY of your Hospital, use

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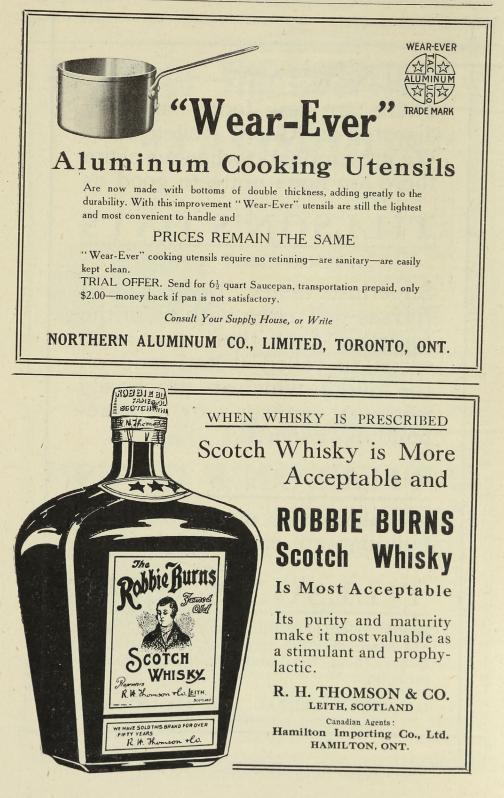
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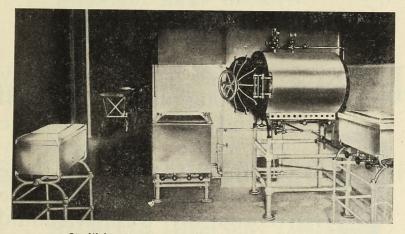
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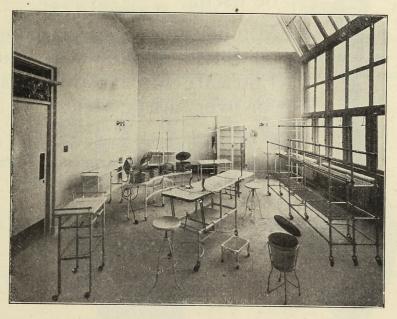


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AND

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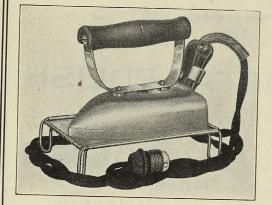
They are nice, new feathers, well cleaned and put up in good quality ticking

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They will please you so well that you will neither pay more in future nor try to buy for less

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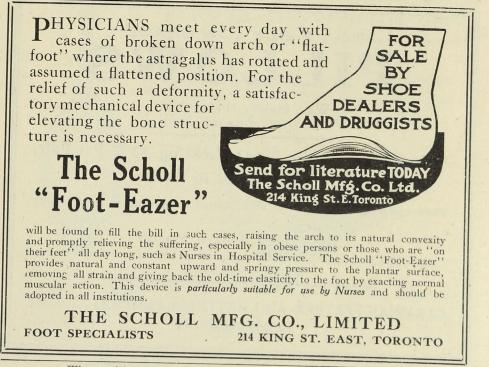


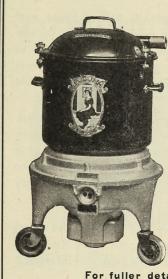
is scientifically constructed it has a grey iron reservoir which stores the spare heat units, so that it is possible to iron about one half the time with the plug off, thereby using one half the current, which means a saving of one half the usual expense.

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The weighs only thirty-two pounds! And the dust can, which detaches from it, is only nine pounds! The base with the motor is only twenty-three pounds!

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for Whooping Cough, Spasmodic Croup, Bronchitis, Broncho Pneumonia, Asthma, Sore Throat

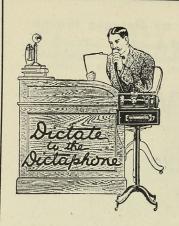
and the bronchial complications incident to Scarlet Fever and Measles.

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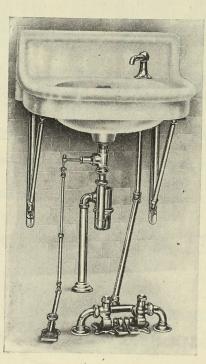
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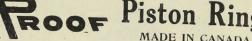
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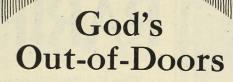
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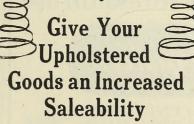
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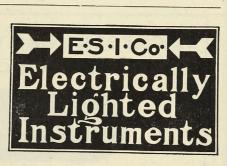
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Dec., 1914



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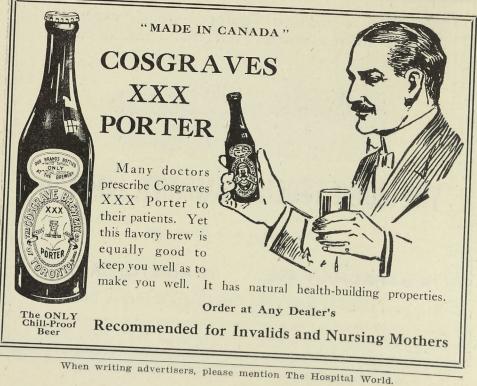
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(Incorporating The Journal of Preventive Medicine and Sociology)

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No. 6

### Editorials

#### **DR. FISHER HONORED**

THE Board of Trustees of the Presbyterian Hospital, New York City, have conferred upon Dr. C. Irving Fisher, their recently retired superintendent, the honor of electing him to the membership of their Board.

In taking this step, the Board were, perhaps acting in consonance with the remembrance that two or three years ago Dr. Hurd, for so long superintendent of Johns Hopkins Hospital, upon retirement, was appointed Secretary of the Board of that institution, which office he still fills.

Both of these gentlemen gave long and valued service as heads of these large hospitals, which, under their administration took and maintained first rank among the hospitals of America.

Expert knowledge such as that gained in the long and efficient administration of a modern public hospital is of too great value to remain unutilized. By their action the boards of these institutions have expressed both their recognition of this fact and their appreciation of the personality of these gentlemen.

Dr. Fisher and Dr. Hurd throughout their long hospital administration upheld and maintained not only high standards of efficiency in service, but a breadth of view and a personal honor and courtesy in public dealing, which should make their records an inspiration to the younger men of the profession.

#### HOSPITAL WAR POINTS

THE Bishop of London, in whom Canadians have a personal interest is giving not only himself, but his possessions to the service of his country. Recently he sent an urgent sick case from the camp where he was on duty to the Tunbridge Wells Hospital in his own motor car.

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The Admiralty has asked that a ward of the Hendon Hospital be reserved for cases of sick and wounded of the Royal Flying and Naval Service. This is the first instance of such a ward hospital on record.

While the war has had disastrous effect on the publishing houses at large, the publishers of First Aid and Red Cross manuals have nothing to complain of. It is an ill wind that blows nobody good.

The last mission of the Rheims cathedral was to serve as a hospital for twenty German wounded who had been carried into it under the Red Cross flag. A little later they were carried out one by one by French doctors, to prevent being burnt alive under the shelling of their own countrymen. It was a worthy last service for the magnificent old pile, which even the floating Flag of Mercy failed to save.

The Welsh people have provided and equipped a portable hospital to be erected at Netley as a section of the military hospital there, with funds to maintain it for six months or longer if needed. Later it may be donated to some hospital need in the colonies.

War office orders are that, while men with conscientious objections should not be vaccinated, every effort should be made to persuade the men to undergo vaccination on the ground that unless they submit they are not likely to be of much service in the field. The Chadwick trustees announce their intention of awarding, at the close of the present year, the Chadwick gold medal and fifty pounds each to that naval and military officer respectively who shall have distinguished himself most in promoting the health of the men in the army and navy.

The awardment will be noted with interest.

Retirement regulations in the Royal Army Medical Corps compel its officers to retire as early as fifty-five. Service beyond that age is for those only whose professional and administrative ability lifts them to the rank of Surgeon-General, in which case the age limit is sixty.

No hospital or convalescent institution of any kind can be utilized for the reception of sick or wounded soldiers and sailors unless the War Office or Admiralty have approved its equipment, staff and administrative arrangements.

Not only is vaccination enforced in the German armies, but the German military heads state that if necessary, it will be carried out on the inhabitants of hostile countries in which the German armies may be for the time located.

To destroy his crops, ruin his business, burn his home, commandeer his service, and then vaccinate him—provided he is not shot at the outset—is a sad fate for the unfortunate hostile inhabitant.

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The project to form a special cholera corps for army medical service in the east, which was under consideration in the early weeks of the war, was dropped in October, as there was then no likelihood of immediate call for such work. If the war continues through the coming year, the scheme may need to be revived.

A committee has been formed to further the appeal of Lord Roberts that, now that winter is at hand, provision may be made for the wounded and sick of the Indian contingent in the form of a hospital in a warm climate, in which they may be able to regain health. The present proposal is to establish such hospitals in Alexandria and Marseilles.

#### THE GREATER BURDEN

Not alone the War Office but the various boards that administrate civic and municipal affairs of the mother country are doing marvellous things in meeting the various relief demands thrust upon them by the war. Continually some fresh burden falls upon their shoulders and they meet it each time cheerfully and efficiently.

First, there is the care of the vast army in the field—then of that sadly large army of the wounded at the base. Concomitant with them is the provision for the dependants of the men at the front, the families of our soldiers. And then come the Belgian refugees in tens of thousands, to be protected and planned for. The sequestration of detained German civilians in centres where they must be guarded and provided for at the Government expense is yet another burden; while the latest responsibility is that of the families of these Germans, who must in some way be supported while their heads are kept in enforced, if temporary, idleness.

These responsibilities, arising one after another are thrust upon the nation by the war. They are part of what war means to the civil life that must go on under these emergent conditions. All these responsibilities must be assumed by the country together with the economic disturbances that mean suffering and need to a large unemployed during the ensuing winter.

The able manner in which administrative England is rising to the vast emergency is something to marvel at and admire. Cheerfully, willingly, day and night, the various agencies are working to cope with these conditions and needs as they arise. The call from the War Office, the House (Westminster), or the Guildhall, meets with ready response from Boards, Committees, Institutions and Hospitals; while the individual members thereof—England's most solid citizens—square their shoulders to meet each new responsibility laid upon them whatever it may be.

All of England's fighting and service in this war is not on the battlefield.

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#### FITNESS FOR THE FRONT

As the war progresses, much experience is obtained by the War Office in the matter of the army personnel.

The alarm has been sounded in connection with the medical department, that too many cases of tuberculosis have been discovered among the sick and wounded men brought in from the front.

The Hospital of October 17th, in an editorial on the subject, reasons that in the first rush of recruiting, when the pressure upon the medical examiners was at its highest, it was quite possible that incipient cases may have been passed unnoticed, especially if the applicant was eager to enlist, and therefore not disposed to reveal slight indications of weakness which the medical man only reads aright.

There is a natural tendency to attach much importance to a standard of physical measurement. As *The Hospital* remarks "a healthy man of five feet three inches would make a better soldier than a man of six feet with indications of phthisis or other progressive disabling disease. Yet the former would be rejected on sight, while the latter might easily pass a hurried examination, only to break down in the early days of his service."

Apart from the cost to the country of such instances is the far more serious consideration of the danger involved to the corps to which such cases are attached. In view of the crowded barracks, tents, or even trenches, where close contact together with the

favoring environment of wet, cold and physical strain, the slightest incipiency should be sufficient reason for rejection. An exceedingly stringent medical examination is the only preventive in this matter.

In contra-distinction to this is the consideration that a large number of would-be recruits rejected by reason of minor physical defects could be rendered available by brief medical treatment. It has been suggested that such be admitted to the territorial hospitals, where as provisional soldiers they may be treated for these minor ailments, and when pronounced fit sent into service.

In the majority of instances the applicants are unable to secure this treatment for themselves and where the defect is in teeth, feet, or other slight disabilities, the country would be well repaid if brief hospital treatment secured the enrollment of an efficient fighter who would otherwise be lost to the service.

The same suggestion might apply to the Canadian contingent, if at any time a fine type of applicant for enlistment was disabled by minor defects. But up to the present the rush of recruits for British service so far exceeds the demand that it makes a high standard of physical condition easy to maintain.

#### WHAT IS LACKING

At the time of this writing there are evidences that the magnitude of the war, the duration and violence of the assaults has outmeasured the first aid and field hospital provision of the allies. There are also indications that there has been a lack of co-ordination in the work of the various relief organizations, with a resultant unequal distribution of hospital forces in the field.

The hospital procession at the base as outlined on another page appears ample thus far, and once the wounded are landed in England their comfortable disposal is assured. But, on the continent, because of the length of battle line, the continuous fighting, and heavy loss, the medical and ambulance corps have been unable to adequately cope with the situation.

"Fifty soldiers who were only slightly wounded, died on the battlefield from exposure, because the ambulance corps were unable to give them attention. Large numbers of the wounded, many of whom lay in the rain for fifteen hours, were without the slightest surgical aid." Reports such as these coming so frequently from the front show that something is lacking in the organization of the first aid work.

There are three great relief forces with the fighting army—the Medical Corps, the Red Cross and the St. John's Ambulance Brigade. Each of these is a strong organization, endorsed or controlled by the War Office, with extensive equipment, almost unlimited funds, and trained workers at their command. With a proper measure of co-ordination between these forces it seems as if there should be no such instances of appalling neglect as that indicated in the above and other similar reports. The battle line should be covered. Relays of surgeons, nurses and

supplies should be rushed wherever the need is greatest. The wounded must have first aid, shelter, and the earliest possible transportation to the base hospitals.

If there is not a sufficient staff with the forces to ensure this, then both doctors and nurses must be commandeered from the base hospitals, which by location are able to command extra service at all times. Of what avail are the many fully equipped base hospitals, the opened private homes, the outpouring of local kindness, if the men for whom these wait cannot be brought within the reach of their healing influence until too late to be of avail.

System, and a very perfect system is essential in so vast an organization as the present medical relief corps; but it must be as flexible as the army fighting line.

At this moment of writing three of London's eminent surgeons, Sir John Bradford, Sir William Harringham and Sir Almroth Wright have been sent to the fighting field as consultant surgeons, and following them Sir William Osler, who has been placed in entire charge of the medical hospital service at the front.

If red tape is in any measure stultifying the efforts of the three large relief organizations now in the field it will bend to the methods of Sir William Osler whose gift of reaching straight to the point and heart of things, without regard to form or boundaries, is well understood in Canada.

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# THE WAR HOSPITAL SYSTEM

THE adaptation of the hospital system to present war needs is not clearly understood by the general reading public on this side of the water. A brief outline of the scheme, defining the place and purpose of the several classes of institutions utilized may therefore not come amiss.

Hospital provision for the wounded in war is entirely under the control of the war office, and upon it rests the onus of any incapacity.

Three groups of hospitals enter into the present war service—the military, the territorial and the voluntary hospital. It is estimated that these will provide fifty thousand beds, a total which the war office hoped at the outbreak of hostilities would not be required.

The purely military hospitals which are permanent provide twenty thousand beds, the territorial which are emergent, twelve thousand, and the voluntary which correspond to the large general hospitals on this side of the water collectively about ten thousand, without breaking in upon the ordinary civilian service. In addition to these there have been many offers of private mansions to be used as hospitals and convalescent homes.

In the above three groups, the first and third being permanent institutions are clearly defined types. The territorial hospital, however, is emergent, being called into existence by war, and enduring only while its need endures.

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The organization of sufficient hospital accommodation for the wounded in event of an extended war was begun in 1907 by Sir Alfred Keogh, and his plan as then defined has been steadily adhered to. Steps were taken at that time to select buildings at central points throughout Great Britain, which in event of need could be converted into hospitals for the wounded. The selections were made vith a view, first, of permitting a minimum of five hundred beds, and, second, of providing adequate local treatment.

Many of the buildings chosen were of public character, such as schools, municipal offices, art museums etc., many of them with ample grounds that might provide additional accommodation if required. These provisional hospital centres 23 in number were selected 7 years ago, and adequate equipment for each was purchased, assigned and stored, ready to be transferred at the emergent moment. Four of the sites selected were in London, five in large northern cities, five in the south, two in the east, three in the west, including Wales, and four in Scotland.

When war was declared, and notice was given to the municipal authorities concerned that these various public buildings were required for hospital purposes there was remonstrance from the ratepayers against commandeering the school buildings for obvious reasons. The objections were allowed, and other buildings such as old asylums, portions of college and university buildings were selected in their place.

In the large cities it was deemed advisable to use wards or annexes of the city hospitals as part of the territorial service. Since the military sick and wounded must be under control and regulation of the war office, and the voluntary hospitals being essentially civil hospitals are under the control of civil boards, the difficulty was gotten over by placing entire wards or annexes at the disposition of the war office, and also making the attendant hospital medical staff temporary members of the Army Medical Corps. In this way the voluntary hospitals, while retaining their civilian character are yet able to help out the military need.

These twenty-three territorial hospitals represent a new feature in hospital history. Each is the centre of a county group, and while under the war office control is largely locally staffed. The wounded where possible are sent to the hospital located in their home district. Being emergent these territorial hospitals will disappear at the end of the war. But their existence serves the double purpose of preventing the congestion of the coast hospitals and keeping before the inland citizens active evidence of the great struggle and its cost.

# AMERICAN HOSPITAL IN FRANCE

THE American hospital in Paris, established largely by the generosity of Mrs. Whitney Hoff, formerly of Detroit, for the purpose of serving American citizens in the French capital, is an institution so perfectly

equipped and efficient that it has become international in reputation.

When war was declared the hospital at once offered its beds and service to the French Government for the sick and wounded, but because of its limitations was soon unable to meet the demands upon its accommodation. It was then decided that, using the hospital as a starting point, a military annex and an ambulance service should be established in connection with it which should be in charge of American surgeons and nurses, and supported by American contributions.

The French Government gave the use of a large public school then in course of construction. The American colony in Paris donated their services. American art students put on workman's blouses, took mechanic's tools and worked night and day to complete the building to a point sufficient for its hospital service. Since that time the record of the work has been little short of marvellous in its efficiency and magnitude. A recently returned American citizen gives the following details concerning it:

"A committee of business men prominent in the American colony in Paris devoted themselves to the business administration of the hospital and they have worked untiringly. To their efficient management is due much of the success of the hospital.

"Supplies were got together and the most modern equipment was donated so that when the first wounded were received the French and English surgeons frankly expressed their amazement. Sir Frederick Treves, surgeon major to the King of England, and other high authorities have declared the hospital to be of the finest type.

" In a few days a fund of about \$120,000 was raised among Americans who were in Paris. To their generosity and zeal is due the fact that this hospital is one of the best equipped that has ever cared for the victims of war. An x-ray plant was donated. Sterilizing plants for water, both for drinking purposes and for use in dressing wounds, were installed on every floor, where all dangers of infection from this source were removed by ultra-violet rays. A dental department was added under the direction of Dr. Davenport and Dr. Hays, two American dentists with international reputations, living in Paris. Medical and military authorities have been quick to recognize the value of this department in having expert advice not only in the case of wounds to the mouth, teeth and jaw, but in the wider field of infection through the mouth. It is probable that this American example will be followed and that hereafter no large military hospital will be without a dental department.

"Dr. Koenig, an American specialist of the highest standing, is at the head of the department which has care of wounds and diseases of the ear, nose and throat. Dr. Louis Borsch, an eminent American oculist living in Paris, was placed at the head of the branch of service which has particular care of the eyes.

"All of these men and the chief surgeons and physicians, Dr. Dubouchet, Dr. Blake, Dr. Magnin, Dr. Gros, Dr. Turner, Dr. Derby and the others, are volunteers, serving without pay. It must be realized that in no ordinary times could any hospital avail itself of the services of so many recognized experts, and it is because they are at its head that the efficiency of the American Ambulance has received the praise of leading professional and military authorities. The same standard of efficiency is maintained among the nurses and helpers, many of whom work without pay.

"Connected with it is an ambulance service. Twelve Ford motor cars with volunteer drivers and mechanics and many privately owned automobiles of other makes have been donated for this work. The ambulances bring in the wounded from the hospital trains with the least possible delay. During the time of the fighting near Paris the ambulances went often direct to the front, returning with the wounded. "In this war the appalling number of casualties has been beyond all expectation. It has been humanly impossible to foresee or provide for the emergencies that have arisen and the wounded on both sides have often been forced to remain for days on the field or in improvised shelters before they could be removed to hospitals in all parts of France. Railroad service is necessarily slow and uncertain and sometimes the suffering men must be kept for long hours in the trains. There is a most urgent demand for further ambulance service and the American hospital has need of many more motor cars. By no other means can it so quickly and effectively serve the cause of humanity as by bringing the suffering wounded to where they can receive surgical and medical attention.

"It is desired to extend this ambulance service and to establish auxiliary hospitals further on so that the ambulances can work nearer the battlefields and the wounded can be cared for and taken to the American hospital without the present delay. I have received within a few days from the American committee in France an urgent appeal for more motor cars.

"During the time I was in France I heard many high tributes to our country for the generous impulse of its citizens as shown in this hospital and to the high efficiency that has been demonstrated. General Gallieni, governor of Paris, General Fevrier, who is at the head of the Medical Corps of the French army, and several officers of high rank of the British army have been frequent visitors and they are unanimous in their praise. Need I insist further upon the international importance of the work I believe that long after this war is over the nations of Europe will remember gratefully the American Ambulance in Paris not only because of its humane, impartial mission, but because of the high order of scientific ability shown by the men who are at its head.

"The hospital building has room for 1,000 beds, but the present funds have permitted the installation of only 400, all of which have been filled. There is the most urgent need for the entire 1,000 beds and for auxiliary hospitals nearer the front. The men and women who are giving themselves to the suffering at the hospital work indefatigably night and day. The surgeons have often operated for ten hours at a time. These devoted men and women are confident that their fellow-Americans will come to their support with sufficient funds. It is calculated that \$500,000 is needed; about \$120,000 has been raised in Paris and in this country about \$110,000, in addition to which the American Red Cross, recognizing the value and importance of the service the American Ambulance is rendering, has contributed \$25,000, making a total of about \$255,000.

"Because so much of this service of the highest order is gratuitous the cost is kept at a minimum. There are no expenses of administration, no paid secretaries or clerks and no salaried officers, so that every cent is devoted to the purposes for which it is given."

# ERRATA

MR. Edward Stevens, hospital architect, of Boston, writes us that this journal was incorrect in its report of his most interesting paper read at the St. Paul Meeting of the American Hospital Association, "The Need of Better Hospital Equipment for the Medical Man."

Mr. Stevens showed a series of pictures of European hospitals, their bath houses, various baths and provisions for administering aerotherapy, heliotherapy, mechanotherapy, as well as hydrotherapy, to patients in the medical departments. One did not see such provision in American hospitals. Mr. Stevens inquired if it was not time such provision was being made in American hospitals. "How much longer," asked he, "will the medical men stay quiescent and allow their brother practitioners who have taken up the surgical side of the profession to get all the equipment, all the choice rooms, all the plums?"

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. . . . "Are the builders of the great modern public hospitals of Europe wrong in their theory and practice ?"

We hope to allude, editorially, at greater length to this paper in an early issue of THE HOSPITAL WORLD, and meanwhile gladly apologize to Mr. Stevens for a most unintentional misrepresentation of what added materially to the interest of this year's meeting of the American Hospital Association. Mr. Stevens' paper appears in full in this issue of THE HOSPITAL WORLD.

# Original Contributions

# THE NEED OF BETTER HOSPITAL EQUIPMENT FOR THE MEDICAL MAN\*

# By Edward F. Stevens, A.I.A., Boston, Mass.

IN discussing the subject assigned to me, "The Need of Better Hospital Equipment for the Medical Man," it is not my intention to tell you, who are medical and hospital people, how you should treat your patients, but to show you some of the methods used in some of the charity hospitals in Europe, and to ask your advice as to whether we, in America, wish to do likewise.

As one visits the more or less modern hospitals of the United States, he will generally find beautiful operating suites with modern plumbing, equipment and instruments, the best that science has developed, in order that the *surgeon* may do his best work. But what do we find for the medical branch of the staff? A medicine closet for drugs, the ordinary bathtub two-thirds the length of the patient, the hot-water jugs and compresses, and a more or less up-to-date X-ray outfit. That is generally the extent of the equipment. How much longer will the medical men stay quiescent and allow their brother practitioners who have taken up the surgical side of the profession to get all the equipment, all the choice rooms, all the plums? Shall we go on building our hospitals without thought of the medical man or shall we devote a little space for his needs?

Are the builders of the great modern public hospitals of Europe wrong in their theory and practice? In every modern public hospital on the Continent one will see the great medical department building or bath-house equaling, and generally surpassing the "operation" building in size and equipment. Unless this means the relief of human suffering, would the

<sup>\*</sup> Read before the American Hospital Association, St. Paul, October 1914.

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German, the Danish and the Dutch Governments spend the vast sums that they do in this splendid equipment? Or are all these departments mere fads and fancies of a few influential members of the staff, who wish to work out some new theory? This might be true in one institution but would it be repeated in all of the newest institutions, each one a little more complete and far reaching that the others? For one will find in the medical department such sections as:

Mechano-Therapy,	Sand Baths,
Hot-Air Baths,	Sulphur Baths,
Warm-Air Baths,	Mud or Peat Baths,
Steam Baths,	Sun Baths,
Light Baths,	Inhaling and Pneumatic Cham-
Electric Baths,	bers,
Gas Baths,	Rontgen-ray, with all its rami-
Radium Batha	faction
Radium Baths,	fications.

To the student of hospital architecture the question naturally arises: If these methods of treatment are essential for the well-being of the poor and indigent across the sea, why should we not practice them, or some of them, in our institutions? Just to show what some of the later European hospitals are doing along the line of medical equipment, I will refer to a few examples.

The Eppendorf, at Hamburg, is not now considered one of the newest hospitals, but you will see, has devoted a goodly space to the medical treatment building.

The Virchow, at Berlin, devotes even more room to this department than to the surgical.

In the St. Georg, at Hamburg, while the bath-house is not so large in proportion, it is several stories in height and most complete in equipment.

At the Barmbeck, Ruppel's latest hospital, at Hamburg, the bath-house is given the place of honor on the main axis, while the operating pavilion occupies a secondary position.

Bispebjerg, at Copenhagen, the newest large Scandinavian hospital, has devoted a large space to this department, which is entered by semi-underground passages

But in Munich-Schwabing, one of Germany's best hospitals, one will find a most complete equipment. If we study this plan in detail we will find baths of every kind for the relief of suffering humanity. Commencing at the left is the Rontgenray department, the inhalation department, the rest rooms, pneumatic chamber, massages and mechano-therapy; and in the centre the various baths are arranged-the Fango or Italian volcanic earth bath, the mud or peat bath, sand baths where the sand is heated and applied to the patient, the CO<sup>2</sup> bath, the light, the general hydro-therapeutic room with its spray of every description, its warm and cold plunge, its wading bathall of these placed in a most magnificent room. On the second storey of this building is the great sun-bath room, so arranged that if the sun is too warm the surface of the glass can be covered by a water curtain, as it were, so reducing the temperature of the room.

In this hospital I first saw the pneumatic chamber used for treatment. A patient needs rarified air and is sent to the hospital. He is placed on one of these rooms, surrounded by his books and papers. Pressure in the room is reduced to the desired amount and the patient is getting the rarified air of the high mountains right at home; or perhaps he is ordered a greater than atmospheric pressure, in which case the chamber is put under pressure instead of a vacuum.

The water bed is used for the relief of many troubles and is considered one of the indispensable pieces of equipment. At the St. Georg I saw one poor fellow in this water bed, who had been for months in this position, eating, sleeping and reading, and who could not have lived under other conditions. The water-bed, or full-length tub with adjustable hammock, one will see in many wards in Germany and Austria. In one hospital that I visited, each medical ward had its water-bed, and in other wards each bed was provided with pipes from the wall, for cold water circulation in place of ice caps.

The sand bath, where the patient is packed in sterile sand at the proper temperature, is found in almost every large European hospital.

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The hydro-electric bath, the carbon dioxide bath, the plunge and those mentioned before, are just a few of the examples one will find in the general public hospitals of Europe. I am not referring now to the various sanatoria which one finds all over the world, but to the general hospitals for the care of the poor and indigent.

Should we not in America provide such equipment that the patient suffering from arthritis, chronic rheumatism or cellulitis, let us say, might have the proper mechanical, electrical, heat and massage treatment, or the water-bed for severe bodily burns

Should we not provide separate accommodation for the psychopathic patient? Why should we send our contagious case and our tubercular case to separate institutions, when with proper equipment and segregation which can be afforded in the general hospital, this care can be maintained with economy under one administration than under many ? greater

Nearly every large hospital has some of these things and few modern hospitals are built without the airing balcony, where the medical, as well as the surgical, patient may have the fresh air and sun treatment. But there are few hospitals in the world which have a more complete mechano-therapy equipment than the Massachusetts General Hospital, at Boston, in its splendid Zander room. But even here the service is largely

To-day nearly every hospital, large or small, has its Rontgen or X-ray outfit. In many a more or less complete hydrotherapeutic department is provided.

With the knowledge of the therapeutic value of the various treatments employed abroad, why do we not grasp the opportunity to relieve our fellowmen? Is it because our medical schools and our teaching hospitals have not awakened to these possibilities? Or have our American medical men some more

In my discussions with various medical specialists they acknowledge the value of equipment and recommend it where possible, especially the full-length continuous bath or water bed, the hydro-therapy and baking. In the later hospitals in which I

have been interested, I have endeavored to set apart certain rooms and reserve them for the medical treatment rooms, believing that within a very short time the medical men will demand equipment.

In the new St. Luke's Hospital, at Jacksonville, about onehalf of the second storey of the Administration Building is set apart for medical treatment. This portion is not equipped, but is ready whenever the demand comes and the funds necessary to equip and maintain it are obtained.

In the plans of the private pavilion of the Royal Victoria at Montreal, a large space is to be set apart for medical equipment, a small psychopathic department, Rontgen-ray department, hydro-therapy, electric, Nauheim and continuous baths, rest and massage rooms.

May I give one example of a contagious department built in connection with a general hospital?

At the new Ohio Valley General at Wheeling, a complete isolation department is built on the fifth floor, entirely isolated from the main hospital by cross fresh-air passages, with separate serving kitchen and sink rooms, airing balcony, etc. Every room is completely equipped with sinks having elbow faucets, doors without knobs, but with hook handles on the inside for opening with arm or elbow. In this department the individual bath is given in a shallow tub, placed on wheels so that the top of the tub is level with the bed. Floor connection is established with the waste pipe and the patient is given a spray bath with clean water.

At Mount Sinai Hospital, New York, the physical-therapy department, under Dr. Wolf, is doing splendid work for the relief of many.

The help given to the so-called chronic invalids at the new Robert Brigham Hospital, Boston, by scientific treatment, is referred to as little short of miraculous.

I have mentioned only a few cases where the medical man is being considered in the planning of new hospital buildings, and I hope the discussion will bring out others and that you will tell us what we should provide.

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Dr. Mayo told you this morning the necessity of the conservation of human life and the tremendous amount of time gained for the patient by speedy convalescence. If the modern devices and equipment for the help of the medical patient will accomplish shorter convalescence, should these not be carefully considered in our newer hospitals, and would not the medical treatment department soon be as important as our operating department is to-day?

Preventive medicine and treatment is much discussed. Will not the medical treatment or bath-house department, with its many treatment and rest rooms, soon be as important a factor in our hospitals as our operating department is to-day ?

# Society Proceedings

## AMERICAN HOSPITAL ASSOCIATION (Continued from last issue.)

Dr. Andrew R. Warner, Superintendent Lakeside Hospital, Cleveland, conducted the round-table conference on out-patient work.

1. Does the average hospital in a city of moderate size need an out-patient department?

2. In what way can an out-patient department be of most service to the hospital with which it is connected?

We will take up those two questions together, and discuss the need for the dispensary in the average hospital, and the service of the dispensary to the average hospital. The meeting is now at your service.

MR. PLINY O. CLARK (Wheeling): In Wheeling we have been considering for the past two years the advisability of a dispensary hospital. We are a town of 125,000 population, and have never had a real general dispensary. We have had tuberculosis meetings, one hour twice a week, but that does not cover the ground, in my opinion, and it has seemed to me that with so large an industrial population as we have, with so many of the foreign class, that there is a need for a dispensary, and my observation has been that there are a great many other towns not so large even as Wheeling, who need a dispensary, who can well afford to have a dispensary.

It would seem to me they need it really to carry out the intent and purpose of a general hospital doing both charity and paying work. We must serve all classes, and we cannot get right down to this lowest class who can be taken care of properly at home, unless we do have this out-patient department, because the average practitioner is not going to spend the time to go and look up the little things, the things which may develop a little later into something very serious, but which, if taken in their very first stages, will mean heading off something much more serious. I may say that most of our staff, I think the most—I know fifty per cent.—are opposed to it. And the only reason I can get out of them—I am going to ask them to give it to me in writing before long,—but the only spoken reason is that they have been doing this way, getting along with a dispensary ever since the beginning of history, and they see no reason for starting some new fool stuff like that; that they have been willing to do charity work in their own offices. One man gives us the same old story that you have in your established dispensaries, that we will take away some of his practice. I could not show him right off the reel that we would take away from him only the practice that he did not want, because he was a man of established practice, he did not need the clinical material, it was not that at all, it was simply—I had a hunch afterwards—he wanted that many patients seen coming in at his office door. I really could not think of what else lay at the bottom of it

I am here to learn to-night whether it really is the right thing for us in Wheeling to have one or not. In my own mind, I rather think that it is. It seems to me that a hospital can do its duty best to the community, and also can provide another attraction for our resident staff—we only have three men—but we will get better men if we provide this clinical material, it seems to me.

CHAIRMAN: Is there some other discussion of this question? Any one else in doubt?

MISS HARRIET LECK (Kansas City): It seems to me an outpatient department is very necessary for the training of the nurses. In Kansas City, at the general hospital, we send our nurses to the Visiting Nurses' Association for a certain number of hours. There they are given training in public health nursing. We see that public health nurse, we know that she is in demand, and we must prepare her for that work. Now, with the moderate-sized hospital it would be a very good idea, it seems to me, for them to establish this out-patient department, if for nothing else, than for the training of the nurse. Of course, for the patient comes first, but we must train our nurses in that line of work, because the public demand it. The charity assotrained in this line of work.

It seems to me another argument was brought out very forcibly in Dr. Mayo's paper, the necessity of keeping the patient in the hospital for a very short time. How can we get the patient out of the hospital unless we do follow-up work, unless the public welfare nurse follows her into the home and reports her condition to the doctors. In that one way the out-patient department would be of very great value to the hospital. Of course, we hear much about looking after the mother-to-be. The Visiting Nurses' Association take that up and go into it very thoroughly, and yet we get the patient into the hospital. Now, if we had that first work, why, it would be of very great value to the patient as well as to the hospital.

CHAIRMAN: I would like to ask Miss Leck to state if her nurses that are sent to the dispensary enjoy the dispensary work, if they appreciate it, and if the pupil nurses think it worth while.

MISS LECK: In our short experience of some two years, they have found it very valuable, and a great many of the graduates have taken up this work definitely in preference to private nursing, as a result of the experience they have had in the Visiting Nurses' Association, and I feel sure that in Kansas City we will establish this out-patient department, and it will be of very great value to the training school.

CHAIRMAN: If there be anyone here representing a dispensary in which the nurses do not enjoy the dispensary training and do not feel that it is well worth while, and do not feel that it is an especially interesting period in their training, I would like to hear from that representative. (No response.) Evidently the dispensary is of value in training nurses. Are there no questions about the average hospital's needs as to dispensaries?

MR. BORDEN: I do not see how any community of 125,000 population, such as Mr. Clark speaks of, can get along without some responsible clinic to which people can send patients who need extra attention. The clinic should not consist of only one physician, a clinic should consist of different departments, with specialists to whom the patient may be referred from one to another. That is recognized by the question, the topic which is before us to-night, because the question is asked later on, whether or not two fees should be charged. Where I live we have a population of about 125,000 people; we have clinics for nose, throat, ear, eye, orthopedic, nerve, skin, medical and surgical depart-

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ments. The majority of the people who use those clinics are school children whose parents are either unable, or refuse to provide proper medical attention. Now, if that is not the duty of the community, or the hospital of the community, to provide such facilities, I am very much mistaken in the objects for which our hospitals are intended.

MR. MICHAEL M. DAVIS, JR.: Mr. Chairman, Ladies and Gentlemen,-First the topic seems to me to divide itself into two questions. The question whether a hospital, assuming as the question states, the hospital of a city of moderate size. whether the hospital needs an out-patient department; second, whether a community in which such a hospital is located needs an out-patient department, the two things are not necessarily the same. I know of a community of about a quarter of million of people, where three hospitals are located, in which, in the judgment of those much concerned with charitable work, the community needs an out-patient department connected with them. But apparently, in the judgment of many of those connected with the medical work, the hospital either does not want or does not need an out-patient department. Although, during the . past few years, two public meetings have been called by those interested in charitable work in that community for the purpose of arousing public sentiment to secure an out-patient department, or a dispensary, neither meeting has brought results, chiefly for the reason that the medical profession was absent. The medical profession of the town was not willing to support the project, at least those who were willing did not come forward The people in that town are now taking the and manifest it. following plan: They want to get some concrete facts indicating that there is a need in the community. Some of the physicians say, "But we are ready in our private offices to take care of any poor patients whom you charitable organizations may send to us." They are willing to do that; they have proved that they do it with a relatively small number of such patients sent to them occasionally. But some of the charitable workers in that town feel that if a string of half a dozen patients were daily waiting in the physician's office, the willingness might somewhat diminish, if those patients were mixing with private patients of the physician daily. It is a question of numbers.

If concrete facts can be secured, it probably will be seen that there is a need for a dispensary. Personally, I cannot think of any other way by which you could convince yourself or anybody else that a community needs an out-patient department for treating the sick poor, better than by getting some facts on the subject. Social workers or visiting nurses must secure these facts at first hand from their contact with the poor. Twenty actual cases collected will have more weight than hours spent in persuasion.

The second, a certain part of the question referred to the relation of the out-patient department to the hospital. It seems to me that what has been already said as to the value of the out-patient department to the hospital in perfecting the medical work, is the strongest sort of an argument for the out-patient department. Following up cases after discharge certainly promotes better complete care of the patient. This assumes that the out-patient department is organized with the hospital as the same medical institution. But this does not always exist. We all know of cases where the out-patient department is practically a separate organization, whose doctors may have no connection with the house staff. That will work to the disadvantage of both There should be an intimate medical relationship besides. tween the out-patient and the house staff, so that the discharged patient from the house can go and will go to the out-patient department for necessary medical assistance. It has been suggested that one province of the out-patient department is the training of nurses; the training of medical students, of course, comes also in the larger institutions. One more point is the increased efficiency. An appeal can certainly be made to business men for an out-patient department on the basis of economy, because the out-patient department saves hospital money. It ought to keep people out of a hospital by detecting diseases and treating them before they become sufficiently serious to require a hospital bed, out-patient service costing from one-third to one-tenth of what a ward patient costs. At the other end, the out-patient department, by making possible the somewhat earlier discharge in many cases from the ward, saves hospital service again. I am sure a properly managed out-patient department is an actual financial economy because it makes a given number of hospital beds go further.

CHAIRMAN: The Committee wish to know what proportion of those representing an interest before, or what percentage representing after interest, are present here. Therefore, we would like to have those who have dispensaries already to please stand. Twenty.

All those representing hospitals or institutions not having dispensaries, please stand. Nine. Thank you very much. We wish that ratio.

The next question is a specific one, that somebody must be interested in, otherwise the question would not be in this list. Somebody sent it in.

(3) What is the best system for charging fees in a dispensary?

I don't know that anybody can answer it, or that we know the best system yet. But I would like to hear of anyone who thinks that they have a good one; or we would like to hear from anyone who thinks they have a bad one, and want to have a better one.

Dr. W. G. NEALLEY: Last winter a bill was introduced in the New York legislature, known as the Neilson bill, which provided that all dispensaries treat their patients, medical and surgical, free of charge. This bill was proposed by a coterie of physicians representing themselves as the Physicians Economic League, or some name to that effect. A hearing was held in the Capitol at Albany, and arrayed on one side were about half a dozen physicians representing the League, on the other side were representatives from the Associated Out-patient Clinics of New York and Brooklyn, representing about sixty dispensaries. The matter of fee system, the amount of money that dispensaries make, and the amount that they lack was gone into in detail. The physicians claimed that practically all the private dispensaries of Greater New York were making barrels of money. It was shown to the satisfaction of the Committee that there was not one dispensary in New York, coming anywhere near paying its expenses. At the end of the hearing the bill was withdrawn.

I think this gives us a pretty good index to the amount of money, or the expenditures that the dispensaries in Greater New York are incurring. I think that shows that there should be a charge. The physicians who were in favor of the bill, so

far as we could see, were men who were disgruntled because they had already been dismissed from a dispensary staff, or could not get on a dispensary staff. The institution which I represent charges a fee of ten cents per visit. If medicine is required, ten cents additional is charged. If it is an expensive medicine, that charge may be up to twenty-five cents. In the nerve clinic, ten cents is charged for massage because in that clinic they have to pay a masseuse in order to get prompt and efficient treatment for the patient.

CHAIRMAN: Any other discussion? The Chair will make one comment. In charging a fee one large factor is the prevention of the pauperization of the patient, and any fee system undoubtedly assists the social workers of that community in preventing the pauperization of patients through the medical charities.

Questions 4, 8 and 9, all belong to that big problem of dispensaries that usually comes in for the lion's share of discussion, and that is the problem of dispensary abuse. The largest, the longest, the most enthusiastic meeting the Cleveland Academy of Medicine ever held, had those two words for a subject. They could not find time for all that wished to speak. Dispensary abuse is a topic that is being discussed very extensively, and from many angles throughout the country. Three out of the twelve questions handed in deal with dispensary abuse.

(4) How can "Dispensary abuse" be best prevented ? How far should we attempt to prevent it?

(8) How can the Dispensary Rounders best be cared for?

(9) How can the patient undeserving of charity best be eliminated?

It is all "Dispensary abuse." If there were but half a dozen representatives of the practicing medical profession of Cleveland, we would need to use the gavel to close this meeting. I do not know how it is in other communities, perhaps there are some here, at any rate we will be glad to hear both sides of the question.

 $D_{R}$ . BABCOCK: I have been asked to say something on the subject, as it is a subject that we have given some attention to, in Detroit. The question is badly worded, I do not like

to use the word "best." I cannot attempt to give you the best method of preventing dispensary abuse, but I can tell you how we have made the attempt.

In the first place, dispensary abuse, I take it, will vary in different cities. The geographical location of the hospital in the city will have something to do with dispensary abuse. Second, the character of the population in the vicinity of the hospital is another factor of great importance. Our hospital is located contiguous to several colonies of foreigners of different nationalities, and we have observed two or three years ago that two classes of population were extremely versatile in their ability to cover up their resources and their income, the Greeks and the Russian Jews, and I think our social service worker who first talks to every new applicant to the dispensary-our dispensary is not a large one, by the way, we have from fourteen to fifteen or sixteen thousand visits a year, and it is possible for our social service department to see each new patient-I am sorry to say that, but she pays more attention to those two classes than any other. So the character of the population in which the hospital is located has much to do with the matter of dispensary abuse.

The nature of dispensary organization is another factor in the matter of abuse, whether special dispensary or general dispensary. Another feature, and that is one that we perhaps have not often heard discussed as a factor, is the reputation of one or more of the specialists who do work in the dispensary. Two or three years ago we had a very enthusiastic reorganization of our out-patient department, and starting soon after our social service work, the organization was placed on such a plane that we were able to obtain the services of some of our best specialists in the eye and ear department and other departments of the hospital, men who represent in the in-patient department the senior positions in the department in some instances.

Take the department of diseases of women, we have had patients come to the dispensary and insist on seeing Dr. So-and-So. In this particular department that I speak of, there is one specialist who has a reputation in that neighborhood, has a reputation, in fact, in the city, and a number of patients have come to the dispensary for the purpose of consulting him, and having treatment by him. We asked why they did not go to

his office. The general reply is made, that his office is down town, it is a high-toned office, we are very moderate people, and we feel out of place there, hence we come here to get his service. Suffice it to say that of course such patients, if able to pay a physician, are told they must see a private physician, or consult their favorite physician.

At the time our out-patient department was reorganized some years ago, owing to discussion attendant upon reorganization occurring over a period of time, and more or less a matter of newspapers, when the departments were opened, we had quite an interesting condition appear in our statistics. We found that during the first seven or eight months of its reopening, that, I think for two months of that period, the social service worker at the head of the department turned away one month twenty per cent., another month a slightly less percentage, of the applicants. A very unusual feature, which we recognized at that time. I might say that after the dispensary had become settled in its work, the social service department has covered this territory, and the neighborhood understands whom we will treat and whom we will not treat. Our percentage of rejections has fallen gradually down to two and a fraction.

It is a common experience in out-patient departments to have physicians in the different departments complain that now and then they receive patients whom they consider quite able to pav. I have always insisted that those who make that complaint give the name of the patient and the dispensary number, so as to afford an opportunity for an investigation and the head of the social department is asked to make a complete report on that case in writing, and a copy of that report is sent to the physician making the complaint. I think if you do that, you will eliminate a good majority of the complaints, because with two or three exceptions, where we find the complaint of a physician is justified in the statement that a patient can pay, the social service department will find that he is not able to pay. I recall one instance of a clergyman who brought his wife to the out-patient department, and the doctor who made complaint stated that the clergyman appeared in his Prince Albert coat and had every appearance of having means. Investigation showed that the minister was an aged, retired minister, who

lived, with his wife, in a single room, with barely enough to eat, and what they were wearing was the survivals of many years.

It was stated in the discussion before this Association two or three years ago by a speaker that they thought the proportionate amount of "abuse" in an out-patient department was in ratio to the size of the medical department, which was a new point to me, and since listening to that discussion I took occasion to watch that feature, and at least as far as our out-patient department goes, we have not made observation that the medical department was any more prone to have referred to it cases of that character, than any other department.

If, in the organization of your dispensary, you can arrange for your social service department, or some trained worker, to see all new patients, and make a thorough investigation, you will soon be able to gain the confidence of the physicians who are interested in the hospitals, or the physicians at large in the community. I think that in Detroit, as far as numerous physicians in our hospital are concerned, that we have almost eliminated criticisms referable to the dispensary, and I venture to say that no such condition exists there in the city as Dr. Warner has mentioned as existing in Cleveland, though I do not know why a city so near alike in industrial work and other features should have that difference.

Detroit has, as perhaps I might say, only three dispensaries, or out-patient departments of any consequence, and all of them, up to the present time, have been relatively small. We have found a small proportion of applicants applying to our dispensaries, whose families are able to pay, to be minors, and inquiry by the social service department has developed the fact, I think, in many instances, that these minors whose parents were able to pay a family physician, were children from twelve to eighteen years of age, whose parents neglected, or were indifferent to conditions that needed remedying, and it is one of the hardships of the social service department to have to turn back to a family children who appear under those circumstances, and it has become a rule with us to have the social service department follow up these cases, have a conference with the family, and see in one way or another that that particular child, or youth, or girl, gets

treatment. It is sometimes a dental case, sometimes an eye case, and sometimes a case of something else. It is a point in our organization to keep everlastingly after, and, if, in the minds of the social service department, we find that we can cover the field, at least with us where the dispensary is not large, so as to be quite confident that there are but very few cases that will come into the dispensary that will be subject to criticism. One of the first questions asked a patient by the social service department is, "Who is your family physician?" And a record is made on a card, of the name of the patient, so that if it develops in the investigation that any particular patient is able to pay a family physician, the patient is given a card to that particular doctor. If the patient states he has no family physician, as they do in the great majority of cases among the foreigners, they are given a card which bears the name of the physician in that particular department to which he would be sent if he were admitted to the dispensary.

As to a criterion, or a line of demarcation for turning back patients, we have felt that a family or patient whose wage earner is earning from \$12 to \$15 is not a subject for dispensary care, unless a family is burdened with one or more cases of sickness, or has had reverses, which they are always glad to explain, if such are apparent.

MR. BARTINE: Dr. Babcock, may I ask you this one question? Of a number of cases of abuse, how many do you find have been referred to your hospital by a family doctor, simply sent to you for advice, for diagnosis?

DR. BABCOCK: I hardly know how to answer that question any other way than to say that I am inclined to think that we have had an occasional instance of that character, but too infrequently, perhaps, to be of consequence.

I might say, in answer to Question No. 8, "How can dispensary rounders best be cared for," that one of the questions asked of any new patient always is, "What out-patient departments of this city have you visited within the last year?" And a record is made of those.

MR. BARTINE: The league that Dr. Nealley spoke of a moment ago, brought out a meeting by the State Board of Charities held in the city, and the question was brought up

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of the great amount of abuse, and I told one member of the State Medical Society that the great amount of abuse that we had in our institution was brought about by the medical profession itself, and he got up and brought out the statement that the dispensary and the State Board of Charities were very much interested, and I told him the following day that I had followed up very carefully whatever we could, and a representative of the State Medical Society and myself followed up every suspicious case, and I should judge, out of about 200 or 250 cases a day in our out-patient department, and out of that number we could not average but four or five suspicious cases in a day. He and I looked them over, and we simmered it down to about three a day. Well, out of about fifteen cases that we looked into, we found that eight the medical profession were responsible for. They had referred them to us for diagnosis, in some cases the diagnosis having been returned to the practitioner, in other cases simply referred them to us for treatment, because they were unable to handle the case. Our institution is a special institution, taking care of orthopedic cases. That would not apply to the general hospital.

THE CHAIRMAN: I would like to pass that question on to one more, because my own impression is that the number is greater than Dr. Babcock would lead you to think, from his reply. I should like to ask Dr. Seem what he thinks of it at the Johns Hopkins.

DR. SEEM: We find a great many patients who apply to us for treatment, that might ordinarily come under the head of abusing the privileges of the dispensary, are those who have made the round of the physicians, or have been going to physicians for a considerable period of time, probably have spent all their savings, and have come to us as the court of last resort, so to speak. Thus we have been very broad in our construction and have always tried to make a mistake rather on the side of safety, than at the cost of the patient.

THE CHAIRMAN: I might say, we have found in the Lakeside Dispensary, that this condition exists to such an extent, that we have put in a classification and prepare to take those cases in this way. We have a routine admission making those cases what we call Class "D" cases, and cases admitted to

Class "D" are written at the request of physicians for consultation or any special laboratory work only, such as blood examination, etc., for any general consultation, X-ray, or anything else which the ordinary practicing physician cannot do readily in his office. The report is made to the physician sending this case in, and the case referred back to him for treatment with recommendation.

MR. BARTINE: Why would not that doctor refer them to a private physician? That is what I call an "abuse." The State Board of Charities should not allow itself to be used for that purpose, as far as I interpret it.

(To be continued next month.)

# **Book Reviews**

Personal Power. By KEITH J. THOMAS. Cassell & Co., Limited, London, New York, Toronto and Melbourne. 1912.

This is a book worthy of perusal by all. We do not remember in years coming across a volume that contains so much good philosophy as Keith J. Thomas' "Personal Power." It is divided into three parts, the first being devoted to "Power in the Making," part two to "Power in Use," and part three to "Pleasures of Power." Particularly to young men training as public speakers we commend the work. The universities and students, too, are under a debt of gratitude to the author for his latest effort.

The Cancer Problem. By William Seaman Bainbridge, A.M., D.Sc., etc., Surgeon to the New York Skin and Cancer Hospital, Professor of Surgery in the Polyclinic Hospital and School for Post Graduate Study, New York City. Toronto, New York, London: MacMillan Co.

Dr. Bainbridge's book gives a good review of the work done on the cancer problem and of what has been written about it. One section of the book is devoted to the bibliography of cancer, which the student of the subject will find valuable.

The author first reviews the history of cancer and points out the difficulty of ascertaining whether or not it is on the increase. The misfortune in the United States is that statistics are quite unreliable. Registration in many quarters is wholly inadequate and in many others unreliable.

Dr. Bainbridge discusses analogous diseases in the plant kingdom; but concludes that there is no disease that quite corresponds with malignant disease in the human species. In the animal world, on the other hand, cancer is common, a good deal of study having been given to its occurrence among horses, cattle, dogs, cats, etc. Besides being found among domesticated

animals, it has been found in wild animals, both those which have been captured and caged and those at large which have been shot by hunters.

There is nothing to show that cancer has been communicated from the lower animals to man; but experimentally it has been communicated from animal to animal by inoculation in the research laboratories. There is no absolute proof that it is contagious in the human species. Strange to say, unlike the infectious diseases, cancer appears to be less prevalent proportionately to population among the lower classes where filth and squalor abound than it is among people who live in comfortable homes, amid sanitary surroundings and who fare well.

An interesting chapter of the book is devoted to a discussion of the means of lessening the disease and lessening the mortality therefrom. While heredity may have something to do in creating a predisposition to the disease, one of its main contributory causes is continued irritation of epithelial structures; and to lessen the number of cases of cancer all sources of irritation should be avoided. Concrete examples were seen in the scrotal cancers of chimney sweeps, in the lip cancers of claypipe smokers, in the abdominal cancers of certain inhabitants of India, caused by the impingment of loaded baskets against their abdomens.

The many various cancer cures extolled both by the laity and the medical profession were described, and an explanation given of their reputed virtues. But, unfortunately, each sort alike, scientific and non-scientific, has failed to be in any sense specific. In the comparatively early stages of superficial malignant neoplasms, radium and caustic do effect cures, but up to the present nothing takes the place of the surgeon's knife, and the earlier the better, the more complete the removal the better. In this connection Dr. Bainbridge pays credit to the splendid work of Stiles and other investigators, whose studies have shown the insidious extent to which tissues adjoining malignant neoplasms have been permeated by the infection, and which have led to the extreme care surgeons have since taken to eradicate, as far as possible, all invaded areas. THE HOSPITAL WORLD.

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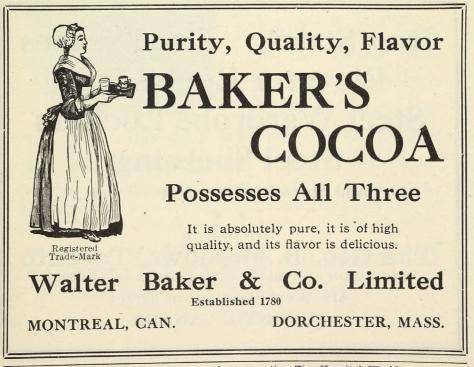
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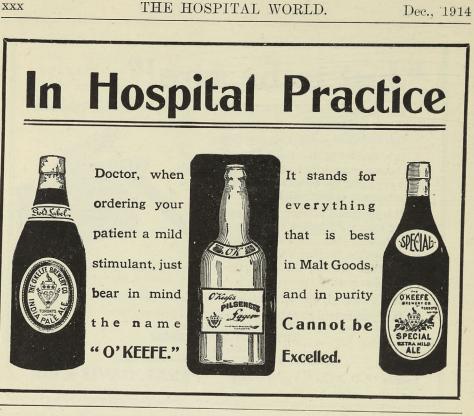
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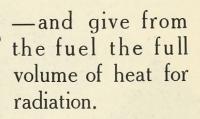
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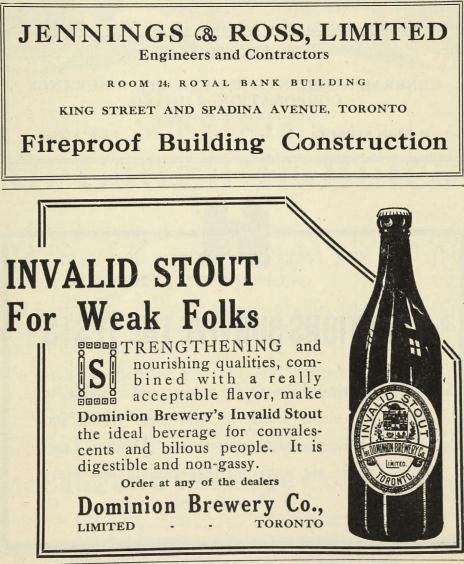
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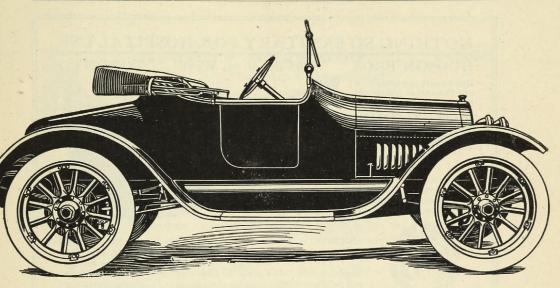
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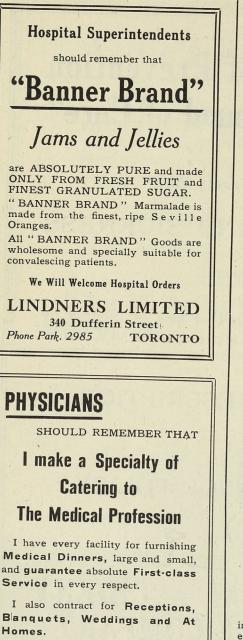
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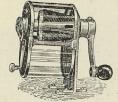
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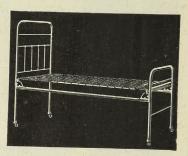


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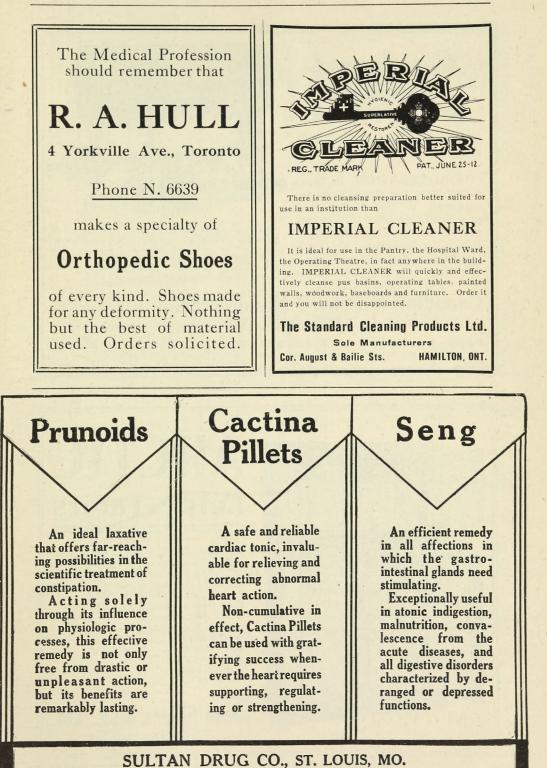
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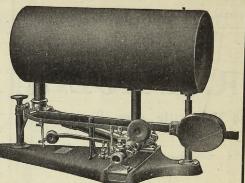


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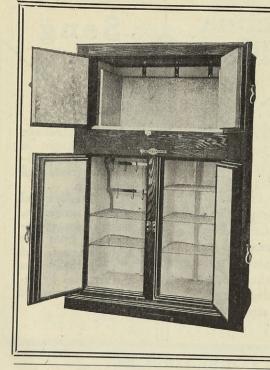
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