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Original Articles

TREATMENT OF THE FEVER HEART *

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The treatment of the Fever Heart is a problem, if one may use a paradox, at once so simple and so complex, that I have had difficulty in delimiting the ground to be covered in discussing it.

Fever as a clinical condition is symptomatic of the toxæmia associated with many different forms of local or generalized microbial infection. The effect of these upon the heart varies with the nature of the infection, its intensity, duration, individual resistance and many other associated conditions. It is well known that the infective bacteria of many diseases—as pneumonia, typhoid, influenza, gonorrhoea, septicaemia, etc., may invade the heart, though in other diseases—as diphtheria—the injury to the myocardium is due to the toxæmia alone.

The treatment of the fever heart is *simple*, because often it is satisfactorily included in the proper routine management of the case, without any medication directed specially toward the heart. Thus rest, mental as well as physical, fresh air, proper regulation of the quality and quantity of food and drink, baths, relief of pain, efficient elimination; specific medication, such as anti-toxin in diphtheria or quinine in malaria, the drainage of septic cavities or the removal of foci of infection—all measures directed against the underlying infection—are important, directly or indirectly, in safeguarding the heart. Frequently nothing more is required.

It is important here to bear in mind the modern conception of fever as a conservative reaction designed to increase the resistance of the individual to the infection. Ordinarily it is only when fever assumes the type of a hyper-pyrexia that in itself it becomes the

*Read before Peterborough Meeting of the Ontario Medical Association, May 27th, 1915.

object of treatment. Then the use of baths, the application of the ice-bag to the precordium and like measures are our safest and most efficient remedies.

It is unnecessary at this time to caution against the use of the various coal tar preparations, as acetanilid, antipyrin, phenacetin and other depressant febrifuges, which formerly were so commonly used, with disastrous effects upon the heart and circulation.

The too common use by the laity of antikamnia, bromo-quinine and various headache powders containing coal-tar products, to relieve the pains of influenza (or other developing fevers) is responsible, I am sure, for some of the cases of cardiac failure and sudden death accruing in this disease.

The treatment of the heart in fever is *complex*, because, etiologically considered, it involves a knowledge of the specific action of the various infections upon the heart and circulation. In diphtheria, typhoid fever and other fevers the most competent authorities as yet are unable to apportion at all definitely the relative importance to attach to the heart and vasomotor mechanism for the resulting circulatory embarrassment. In other words, we lack the exact knowledge of the pathology of the condition which would enable us to direct our therapeutic aims against a definite objective point. We have, therefore, to rely to a large extent upon clinical experiences, and resort to symptomatic treatment for the circulatory trouble, whether due to the effects of the toxins upon the heart itself, the vasomotor centres or the vessels. In fact, recent investigations tend to show that, in the circulatory failure of the acute infections, vasoparesis, from poisoning of the nerve centres, is perhaps of greater moment than the primary cardiac depression. The two conditions, however, usually occur together and "the functions of the heart and vessels reciprocally affect each other to a marked degree."

It is manifestly impossible to discuss in detail the changes in the heart, with their variations in character and degree, in different infections. These may include cloudy swelling, fatty and hyaline degeneration of the muscle cells, congestion of the vessels, hemorrhages into the connective tissue, leucocytic infiltration, connective tissue proliferation, inflammation of the endocardium and pericardium with extension of the inflammatory process along the supporting connective tissue between the muscle fibres. These changes are important chiefly to the degree in which they weaken the efficiency of the heart muscle to maintain the circulation. It is very important for us to bear in mind that, owing to the tremendous degree of reserve power possessed

by the cardiac muscle, extensive pathological changes may be present without symptoms or signs of circulatory embarrassment to indicate them, at least before evidences of muscle insufficiency manifest themselves.

The mental attitude of the physician towards the dangers in the fever heart should be similar to that in regard to hemorrhage or perforation in typhoid fever—a clinical alertness based on a knowledge of pathology, which recognizes serious possibilities and takes measures to guard against them, even in the absence of all symptoms.

For this reason I believe that a knowledge of the pathological changes liable to occur in the heart in different infections is often a safer guide than signs or symptoms, especially for prophylactic treatment and the management following convalescence.

If we stop to consider the possible extent and degree of these changes, and especially the time that will be required for regeneration and repair in so highly organized a tissue as heart muscle, it will impress us with the necessity for sparing the organ as much as possible for a long period after the disappearance of the fever and other active evidence of the infection.

A careful observation of the heart, however, will enable us to detect important danger signals, such as feebleness of impulse, weakening of the muscle quality of the first sound, the dropping of beats, the pulsus alternans, development of soft systolic murmurs in the mitral and tricuspid areas or, at times, signs of even more serious import, as displacement of the apical impulse or the inception of auricular fibrillation.

The treatment of the fever heart naturally falls under two headings:

(1) *During the course of the fever*, when it cannot be separated clinically from the associated central vasomotor and peripheral vascular involvement.

(2) *During and following convalescence* when myocardial phenomena are of most importance.

As I have already stated, during the acute stages of the fever the treatment of the heart is often included in the proper routine management of the disease, and does not call for special medication.

Rest and comfort of the patient are of great importance. And here may I emphasize the influence of the cheerfulness, hope, encouragement and confidence inspired by the judicious physician and nurse, in inducing and maintaining the mental quiet which

every experienced clinician recognizes to be so important a factor in the management of cardiac cases.

The depressing effect on the heart and circulation of pain, restlessness and insomnia, are at times not sufficiently appreciated. In these conditions the administration of morphia, bromides or other sedatives to induce rest and sleep may be of the utmost value indirectly in relieving the heart.

Similarly the relief of digestive disturbance, and especially distention of the abdomen, should be borne in mind. A mercurial, followed by a saline, by depleting the portal circulation, may indirectly relieve the right side of the heart.

In vigorous patients, with evidence of overloading of the right side of the heart, especially early in pneumonia, venesection is a therapeutic measure which has perhaps fallen too much into disuse.

The ingestion of excessive quantities of fluid, necessitating increased work on the part of the heart to force it through the circulation, is a matter which is too often lost sight of in our endeavors to flush out the system.

The use of baths and the ice-bag to the precordium to quiet the circulation, reduce the fever, slow the pulse and improve the vascular tone, are all valuable means of assisting the heart.

In circulatory failure due to vasoparesis, with over-filling of the splanchnic area and depleting of the general circulation, the subcutaneous or intravenous administration of normal saline solution is of value, though to a less degree than is that resulting from hemorrhage.

The inhalation of oxygen I have found of value in maintaining cardiac action in some cases of failing circulation, especially where cyanosis is present.

It is impossible, from the nature of the function, to give the heart physiological rest, but whatever measures tend to lessen the frequency of the pulse without impairing the circulation are in the right direction.

The heart and vasomotor centres may be favorably influenced reflexly by sensory stimuli from the surface of the body, so that baths, friction, mustard plasters to the precordium and such measures have a rational justification for their use as circulatory stimulants.

Every clinician will recognize how often the history of a case of myocardial insufficiency may be traced back to an attack of fever—pneumonia, typhoid, influenza, rheumatism, septicaemia, etc., occurring a longer or shorter period before, even though no definite evidences of heart complication showed themselves at the time. Da Costa, many years ago, called attention to this in his

contributions on "Heart Strain in Soldiers." One cannot emphasize too strongly the necessity for avoiding any unusual or severe exertion until there has been time for myocardial regeneration after fevers. Failure to observe this precaution is a common cause of angina, or other form of irreparable damage to the heart.

The importance of chronic foci of infection in the tonsils, about the teeth, ears, accessory nasal sinuses, etc., as the sources whence pathogenic bacteria may enter the circulation and attack valves or endocardium—especially if previously diseased—should never be lost sight of. Recent investigations of the etiology of subacute and chronic bacterial endocarditis strongly emphasize this point.

Drugs in general have a more limited field of usefulness in the fever heart than in chronic cardiac diseases. Mackenzie says: "That apart from the probably specific action of salicylate in rheumatic cases the employment of cardiac or other drugs is of little avail. The heart is already in possession of a poison far more powerful than the drugs at our command, and these in medicinal doses are without effect. The man who puts his faith in drugs exclusively neglects too often the most useful methods."

I believe that the value of the salicylates in protecting the heart in rheumatism is very questionable, and may be a source of danger, if by relieving the pains which necessitate the patient's keeping at rest he is allowed up sooner than would otherwise be possible.

I do not propose to enter into a discussion of the difference of opinion among pharmacologists as to the action upon the heart, medullary centres and vessels of the various drugs recommended for their beneficial influence, nor of the fallacies involved in applying the knowledge of their action on the healthy organs of experimental animals to the diseased organs of man. The question of their value, after all, is a practical one, to be ultimately determined by critical investigation and accurate clinical observations in hospital wards and private practice. In this direction much work yet remains to be done.

I have never seen any benefit from drugs of the digitalis group in the cardiac weakness of fevers. They do not, ordinarily, slow the pulse, they may interfere with digestion, or induce vomiting, and in cases of intermittency of the pulse from involvement of the auricle-ventricular bundle, may induce heart block.

There is also a growing pessimism in regard to the value of strychnia, though it undoubtedly is a stimulant to the medullary centres and possibly exerts a favorable influence on the tone of the heart muscle.

Camphor, acting principally upon the nerve centres, has been a more recent favorite. I have used it extensively and have thought it of some use, though its effect is not striking.

Caffeine is a stimulant to the medullary and cerebral centres, and so increases the feeling of well-being, but in large and repeated doses may tend to induce sleeplessness.

I have never seen any benefit from the hypodermic administration of ether, which formerly was so extensively used in circulatory failure.

Adrenalin, intravenously or subcutaneously, may be used in cases with low blood pressures, though its influence is transient.

Despite the results of pharmacological investigations and the opinions of many excellent authorities, I believe alcohol is of real value in some cases of circulatory failure, though by no means the essential to treatment is was once considered.

To summarize I would say:

(1) That chief reliance should be placed upon general treatment—mental and physical rest, the relief of pain, insomnia, digestive disturbance, baths, diet, the ice-bag to the precordium, etc.

(2) Cardiac drugs occupy a secondary role in treatment.

(3) Coal-tar and other depressant antipyretics are dangerous and should be used, if at all, with great caution.

(4) A careful study should be made of the pathological changes liable to occur in the heart in the various fevers, as a guide to the care and time required for regeneration and repair of the damaged heart muscle.

(5) It is necessary to avoid over-exertion or strain during convalescence—for months or even a year after infection.

(6) It is important to guard against subsequent infections, such as tonsillitis, influenza, etc., in patients whose hearts have previously been damaged. Even short febrile attacks should be considered seriously and carefully treated.

OBSERVATIONS FROM 24 CASES OF EXOPHTHALMIC GOITRE— A NEW SYMPTOM*

D. SMITH, M.D., STRATFORD, ONT.

I desire to speak to the general practitioner, answering some of the questions that arise during the course of the disease, which are not referred to in the text-books, and to point out an important symptom that was found to be almost constant in this disease. I was led to give my experience with this symptom after reading a paper by Dr. Llewellyn Barker on the symptomatology of exophthalmic goitre, in which he makes no reference to it, nor has reference been found to it in the text-books.

I speak from an experience of twenty-four cases—twenty-one of which have occurred in my own practice—three in consultation with other doctors.

Sex—Male.....	3
Female.....	21

Enlargement of thyroid gland previous to development of symptoms of exophthalmic goitre was noted in thirteen cases out of twenty-one. One outstanding case was an unusually large goitre, quite as large as a foetal head in a woman sixty-three years of age, which had existed for thirty-five years. She had a very severe attack, developed insanity which lasted four months, finally recovered and died eight years later from influenza, with cardiac involvement and tracheal pressure.

Age—Old, 87. Youngest, 18.

In Case at Eighty-seven.

The pulse for a period of three months never fell below 160; the enlargement was entirely in the middle lobe, which became pulsating. She finally died of symptoms resembling cerebral hemorrhage.

Recurrence of Disease.

There was recurrence of the disease in four cases of the 21, two of which proved fatal. The other two have developed what might be called chronic exophthalmic goitre. The symptoms will light up in them with slight provocation, such as slight illness or nervous shock.

*Read at Annual Meeting, Ontario Medical Association, Peterborough, May, 1915.

Recurrence of the disease seems to be quite serious—somewhat akin to the behaviour of pernicious anæmia.

Two cases developed marked symptoms of exophthalmic goitre, during treatment of simple enlargement of the gland with iodine preparations, so there is a real danger there.

Insanity.

Two cases developed insanity—one being treated in the hospital suddenly developed insanity in the night and quietly walked out of the hospital and home. This was a case of recurrence. She died in the course of three weeks. The other case recovered as reported above after four months of insanity. The characteristics of the insanity in both cases were, 1st, sudden development without warning; 2nd, they both wished to go away from where they were and required constant watching.

Surgical Work During Course of the Disease.

One case developed an acute infection of the gall bladder. I operated, drawing off nearly a quart of fetid pus. During the course of the operation and subsequent treatment the pulse was constantly above 160. The operation seemed to have no effect in the course of the exophthalmic goitre. The patient recovered and is still in good health.

Will the Eye Symptoms Recover?

This is a question very frequently asked by patients, and no answer was found to it in the text-books. But you can assure your patient that the eye symptoms will disappear, but in severe cases it may take four to five years.

Pulse Rate and Prognosis.

The prognosis seems to be directly in keeping with the pulse rate. If pulse rate does not go above 160, prognosis is good, above that it is in directly inverse ratio to the pulse rate. Two cases in this series had a pulse rate of 180, followed by recovery—no case where the pulse rate reached 190 recovered.

Death.

There were three deaths in the series—two of these were cases of recurrence. Death seems to come from direct wearing out of the heart muscle. The heart gradually becomes faster. In one I

counted the heart-beats with the stethoscope at 280 per minute, another at 240, the third at 220 in a woman 65 years of age. One of these was a very acute case. She was approached by a young man in the dark and greatly frightened, following this she developed the symptoms and inside of seven weeks from the fright she died of exophthalmic goitre, her pulse reaching 240.

A New Symptom.

The symptom to which reference is made in the title of this paper was noted in the sixth case treated, and has been found constant in all except one of the last 18 cases—the one case where it was absent was in the case referred to where the enlargement and activity were entirely in the middle lobe. No reference to this symptom has been found in the literature, hence the decision to put it before you.

The symptom is a to and fro blowing Bruit synchronous with the heart-beat, heard with the stethoscope at first over the region of the superior thyroid artery, and as the disease develops over the whole lobe, or the whole gland, if both lobes are affected. Both the "to" and "fro" part of the Bruit are about equal—in this way differing from a murmur produced by pressure of the stethoscope over an artery which produces a single murmur.

The Bruit appears very early in the disease—before exophthalmos or tremor, and generally before any noticeable enlargement of the gland. In one case it was heard when the pulse rate was only 85, and at this stage in development the disease yields well to treatment.

As the disease develops the Bruit spreads over the whole lobe or gland, and may be heard as a loud blowing Bruit over any part of an enlarged gland, and as the disease begins to abate, the Bruit recedes both in loudness and extent of area until it is again heard only over the superior thyroid artery.

One case applying for treatment showed in a marked way the importance of this symptom. It was a case of recurrence. One lobe was decidedly larger than the other and I expected to find it the active lobe, but to my surprise I found only the smaller lobe to be affected. In this case a surgeon removing one lobe, as is sometimes done, would have removed the wrong lobe and given rise to disappointment in results.

Next to increased pulse rate this is the most important symptom of the disease, as it enables positive diagnosis much earlier than waiting for the four classical symptoms with which you are all familiar.

THERAPEUTIC NOTES**THE USE OF KAOLIN TO REMOVE BACTERIA FROM THE THROAT AND NOSE***

L. HEKTOEN, M.D.; AND B. RAPPAPORT, M.D., CHICAGO.

KAOLIN is used in immunologic and other investigations on account of its great absorptive powers. The idea occurred to us that, on account of this absorptive power, kaolin might be of use in removing bacteria from the nose and throat, especially in diphtheria carriers. Accordingly, with the co-operation of Dr. George H. Weaver, tests have been made in suitable cases in the Durand Hospital of the Memorial Institute for Infectious Diseases.

We have found that, when properly applied, kaolin in the form of a dry powder removes not only diphtheria bacilli, but also practically all bacteria from the nose in the course of from three to four days. For this purpose the kaolin is blown into the nose six or seven times a day at two-hour intervals by means of a rubber bulb attached to a glass tube, the free end of which tapers a little. The insufflation is repeated several times at each treatment. The success of this treatment appears to depend largely on the free and thorough distribution of kaolin over the nasal surfaces. In cases of more or less obstruction of the nasal passages, the removal of bacteria by kaolin insufflation is more difficult.

In order to secure the most thorough application of kaolin to the mucous membrane of the throat, patients, if old enough, are instructed to swallow as slowly as possible one-third teaspoonful of kaolin four or five times an hour during the day. In the case of adults and older children who are anxious to get rid of diphtheria bacilli, this method, which has been selected after trial of several others, involves no special difficulty. In the case of small children, it is more difficult to apply enough kaolin, and the plan of mixing the kaolin with sugar in the form of tablets is being considered. In a number of cases, in some of which there were a great many diphtheria bacilli in the throat, complete and apparently permanent removal has been accomplished by means of kaolin in the way described in from two to four days, the throat to a large extent being freed from all bacteria.

We have found also that the insufflation of kaolin into the nose in cases of rhinitis in scarlet fever appears to improve the condition rapidly and to remove streptococci and other bacteria quite promptly.

*J. A. M. A.

We have not found kaolin to be irritative; when taken into the mouth it gives rise to a feeling of grittiness.

It seems, then, that kaolin, and probably also other substances of a similar nature, may prove of value in removing bacteria from various surfaces of the body by virtue of mechanical absorption. This may prove of advantage, not only in carriers, but also in conditions of acute infection. Our experience indicates that by means of kaolin, diphtheria bacilli and other bacteria are removed quite easily, especially from the nose.

TREATMENT OF POST-INFLUENZAL COUGH BY BRITISH-MADE LYSOL

To the Editor of *The Lancet*.

SIR,—In company with thousands of others I had my yearly attack of influenza six weeks ago. I remained in bed two days, then went to work again as usual, but felt quite limp for the next three weeks; at the end of which time I began to pick up, but never lost a troublesome cough. It kept me awake at night, and in the morning I coughed until I had got rid of quantities of mucus of all consistencies. Where it all came from I am at a loss to understand; it collected in the upper part of the trachea and larynx. I had no chest symptoms.

I had on my table a bottle of British-made lysol sent as a sample. I was only interested in it because it was stated that used as an ointment, 10 per cent., it cured the worst cases of scabies, and I am getting it tried for mange and other skin troubles in dogs, so far with favorable results. Two days ago I was smelling at the bottle for some reason or other when it struck me that it might be good for my cough. I put about 4 oz. of boiling water into a small jug and poured on it about a drachm of the lysol and then inhaled the fumes about five minutes. They made my nose and throat tingle a little but had no other unpleasant effect. I coughed a bit afterwards, then my cough stopped and has given me very little trouble since. I slept quite comfortably that night and coughed about twice the next morning instead of thirty or forty times. I slept all the next night without waking and did not cough the next morning (May 16th).

On that day I tried myself pretty high. At 5 o'clock I paraded with about two hundred other special constables at Marlborough street police station; ninety-nine of us were marched to Oxford Circus station, from there we went by train to Bow, marched

from the railway station to the police station, were mustered with others in the station yard, and for the next four hours were in the streets in pouring rain and puddles galore under foot, or in the station in rooms reeking of wet clothing, with "draughts to the right of us, draughts to the left of us, draughts in front of us," and it may be added "draughts behind us." At eleven o'clock we were dismissed and returned to Marlborough street by the same route. I got to bed at 12.45 and slept soundly till seven. The following day I had no cough.

There may have been other causes in operation—for one thing the weather got much milder and the wind went out of the north-east, but I was inclined to believe that inhalation of lysol cured my cough, and I was convinced of it after trying it again. A night later I was coughing again, and I feel I must sound a note of caution here. I fancy it may have a stupefying effect. I used the remedy in an ordinary spirit boiler, and as soon as a good cloud of steam began to rise put my nose and mouth well into it, and as near the boiling fluid as possible, and breathed deeply. In about two minutes I got drowsy and was very near dipping the end of my nose into the hot liquid, which would no doubt have proved an excellent restorative. There may be a source of fallacy here, because it was my bed-time, and I had been in the streets for the greater part of the two preceding nights, and could have slept standing up against a wall. Another thing, I am not sure that lysol used in too strong solution or inhaled for too long a time may not be irritating to the respiratory mucous membrane, for on the last occasion I experienced something of the sensation which all of us who can remember when there were no other lucifer matches than the old-fashioned sulphur matches have felt if we tried to light a pipe or perform any such operation near the nose and mouth without waiting till the brimstone had burnt off.

I have given my experience for what it is worth, and hope it may be of use to others. I would suggest that the solution I used was too strong; it is somewhere between 1-60 and 1-30, very likely more, and I expect 1-100 is plenty strong enough. I did not measure the lysol; I have measured the whole mixture I used and it is four ounces.

I am, Sir, yours faithfully,

CHARLES HIGGENS, F.R.C.S., Eng.

Brook Street, W., May 29th, 1915.

P.S.—The inhalation might be tried in whooping-cough.—
The Lancet.

Reviews

Amoebiasis and the Dysenteries. By LLEWELLYN POWELL PHILLIPS, M.A., M.D., B.C. (Cantab.), F.R.C.P. (Lond.), F.R.C.S. (Eng.). Professor of Medicine in the Egyptian Government School of Medicine, Cairo, etc., etc. Price, 6s. 6d. net. London: H. K. Lewis.

Anyone who had to gain a good knowledge of this subject had, heretofore, to consult much scattered literature. The author has, therefore, rendered distinct service to scientific medicine in publishing a book of this character. In certain sections it is a subject of growing importance. The scientific reader will here find as complete description as it is possible to give of the whole subject of amoebic infection. A complete bibliography is incorporated.

Materia Medica and Pharmacy. For Medical Students, with an Appendix on Incompatibility. By REGINALD R. BENNETT, B.Sc. (Lond.), F.I.C., Pharmaceutical Chemist. Third edition. London: H. K. Lewis.

In this well-arranged book the medical student will find a concise account of drugs, chemicals and compound preparations of the B.P. They are arranged according to their physiological action, such as Delirifacients, Cathartics, Ecboolics, Antacids. There are Dose Tables, chapters on Chemical and Physical Incompatibility, and Latin Words and Phrases used as directions in prescriptions.

Catechism Series. Botany. Part II. Second edition. Revised and enlarged. Price, one shilling net. Edinburgh: E. & S. Livingstone.

Arranged in the form of question and answer, and aptly and richly illustrated, this forms a practical arrangement for the primary medical student. Volume II. treats of Histology; Cells and Tissues; Roots; Stems; Leaf; Physiology of Plants; Fern; Moss; Prirus; Schemes of Life Histories; General Character of Plants; Bacteria and Fungi; Algae; Practical Work. It is elementary but satisfying for the requirements of the medical student.

Radium. Its Physics and Therapeutics. By DAWSON TURNER, B.A., M.D., F.R.C.P., Edin., M.R.C.P., Lond., F.R.S., Edinburgh. Lecturer on Medical Physics, Surgeons' Hall, Edinburgh, etc., etc. Second edition. Revised and enlarged. Toronto: The Macmillan Company of Canada.

This revised and enlarged volume on an ever-increasing and enticing therapeutic agent, will be welcomed by those members of the profession interested in the subject of radium therapy. There are history, physics, methods of application, dosage, production and uses of emanations, as well as the citation of practical cases, which latter forms a good one-half of the book. The book may be taken as an authoritative exposition which will meet the requirements of practitioners.

The Clinics of John B. Murphy, M.D., at Mercy Hospital, Chicago. Volume IV, Number II (April, 1915). Octavo of 197 pages, 47 illustrations. Philadelphia and London: W. B. Saunders Company, 1915. Published bi-monthly. Price per year: Paper, \$8.00; cloth, \$12.00. Sole Canadian Agents: The J. F. Hartz Co., Ltd., Toronto, Ont.

In these clinics practitioners will find much of practical interest. Coming from a man of Dr. Murphy's undoubted standing in American surgery, they may be taken as expressing almost the final, or at least the modern, word upon each subject.

Arranged often in a dialogistic way, points are brought out which, in an ordinary paper or clinical address, might be overlooked. The arrangement lends interest to each subject dealt with as one can almost be participating in a clinic.

Loss of Hair. Baldness, Falling Hair, Prematurely Gray Hair and Seborrhœa Successfully Treated by the new Quartz Light Rays. Authorized translation from the German of DR. FRANZ NAGELSCHMIDT. By RICHARD W. MULLER, M.D., New York. New York: William R. Jenkins Company.

Whilst Kromayer's quartz lamp has been used for some time in American, English and Continental hospitals for treating irritating and itching skin affections, it possibly did not accomplish much over the Finsen light X-ray and other methods of treatment, With Nagelschmidt's modification of this lamp, however, such splendid results have been achieved that this method of treatment

will attract wider and more universal attention. The results are seen in the following: Of 132 cases of alopecia areata treated, eighty per cent. were cured, sixteen improved, eight remained unimproved. In twenty-two cases of total baldness, all were cured except six cases, which failed to return for treatment. All the fifty-three cases of alopecia seborrhoea or prematura were cured without exception. The lamp may prove to have a very useful field in the prevention of baldness.

Occupational Affections of the Skin. A brief account of the trade processes and agents which give rise to them. By R. PROSSER WHITE, M.D., Ed., M.R.C.S., Lond. Senior Physician and Dermatologist, Royal Albert Edward Infirmary, etc., etc. London: H. K. Lewis.

So much has the study of occupational diseases advanced in the past few years that it is not surprising that books along special lines are appearing. This book shows evidence of wide search, as so many articles are quoted which have appeared in the medical press. Whilst it will assist practitioners in arriving at the causes, and so help in preventive treatment, in our opinion, it would have added to the value of the book if the author had incorporated his methods of treatment. On the whole it adds to a branch of medicine becoming yearly more important.

Medical Electricity and Rontgen Rays and Radium. By SINCLAIR TOUSEY, A.M., M.D., Consulting Surgeon to St. Bartholomew's Clinic, New York City. Second edition, thoroughly revised and enlarged. Octavo of 1,219 pages, with 798 practical illustrations, 16 in colors. Philadelphia and London: W. B. Saunders Company, 1915. Cloth, \$7.50 net; half morocco, \$9.00 net. Sole Canadian Agents: The J. F. Hartz Co., Ltd., Toronto.

Upon electricity, X-ray, fluoroscopy, radiography, Rontgenotherapy, phototherapy, radium and radiumtherapy those interested in these subjects will find in this work one of standard significance; the ambition of the work is to be a useful working companion to those engaged in electro-therapeutics and the light therapies in all branches.

After some general considerations upon medical electricity and Rontgen rays, the reader is introduced to elaborate chapters upon static and dynamic electricity. One can imagine these to be thorough and as up-to-date as it is possible to make works upon these subjects, in which, almost daily, new methods, theories, etc., are being propounded. The physiologic effects, electropathology, electrodes, ionic medication, electricity in diseases of the nervous system, all receive careful and extended treatment.

The subject of high-frequency currents is dealt with in an exhaustive manner, leaving little to be said further along that line. Some few pages are devoted to phototherapy, which has probably not as yet come into its own.

The X-ray occupies probably one half the volume, and step by step, clearly and ably, the distinguished author presents this enticing and absorbing topic. One can well believe he is reading from the work of one of the master minds, so well is the subject matter set forth. The illustrations throughout are of the first order. Some might have wished fuller details as to treatment.

Radium is the completing chapter.

As this is the second edition many will appreciate the efforts of the author to revise and enlarge, and so keep the work as near perfection as possible.

Pathological Technique. Including Directions for the Performance of Autopsies and for Clinical Diagnosis by Laboratory Methods. By F. B. MALLORY, M.D., Associate Professor of Pathology, Harvard Medical School; and J. H. WRIGHT, M.D., Pathologist to the Massachusetts General Hospital. Sixth edition, revised and enlarged. Octavo of 536 pages with 174 illustrations. Philadelphia and London: W. B. Saunders Company, 1915. Cloth, \$3.00. Sole Canadian Agents: The J. F. Hartz Co., Ltd., Toronto.

That it has reached its sixth edition shows this to be a popular and well-received book by the profession and teachers and students in pathology. The sixth edition embraces several new features, such as Bielschowsky's silver impregnation stone for nerve-fibres, etc.; Bensley's methods for the demonstration of mitochondria and other cytoplasmic granules, etc.; the complement-fixation test for gonorrhœal infection, as well as Lange's colloidal gold test for syphilis of the central nervous system. The main object of this book is to present the more useful and reliable methods of technique.

International Clinics. Volume II.; Twenty-fifth Series, 1915. Philadelphia and London, J. B. Lippincott Company. Canadian Representative, Mr. Charles Roberts, Unity Building, Montreal.

With the present volume of this excellent publication of timely and important papers, and advances in the realm of medicine, a new binding is used, which is more tasty than the previous uniform cloth boards. The illustrations are as usual of the first order, and include amongst the large number of them four colored plates. There are six papers on Diagnosis and Treatment—one, "Animal Extracts in the Treatment of Medical Diseases," by Dr. Graham Chambers, Toronto. Pediatrics comes next with six papers. Medicine has six papers; Surgery five. Well-known names appear as the authors of these papers. The book is a valuable addition to medical literature, and *International Clinics* is deserving of a place in every medical man's library.

News Items

The Hon. Dr. Henri Beland is reported to have been interned from Belgium where he was when the war broke out.

Dalhousie University, Halifax, N.S., has* received a sum of \$30,000 towards the endowment of the chair of anatomy.

Dr. Alan H. N. Kennedy, Macleod, Alberta, has been appointed medical referee under the Workmen's Compensation Act of Alberta.

Professor Starkey of McGill University, Montreal, has organized a sanitary corps in connection with the Canadian Militia for overseas service.

Dr. Robert D. Rudolf, Toronto, is home on short sick leave. Dr. Rudolf was in command of No. 2 General Hospital, with the first Canadian Overseas Expeditionary Force.

Hon. Dr. R. A. Pyne, Minister of Education, Ontario, has gone to England to confer with the War Office regarding the offer of the Ontario Government of a hospital for wounded soldiers.

Mr. Irving Heward Cameron, Professor of Surgery in the University of Toronto, has gone to England, where he has been appointed consulting surgeon to the King George Hospital, London.

At the recent meeting of the Ontario Medical Association in Peterborough, Dr. Harry B. Anderson, Toronto, was elected President; and Dr. F. Arnold Clarkson, Toronto, was re-elected general secretary.

Dr. J. N. E. Brown, sometime superintendent of the Toronto General Hospital, but latterly superintendent of a general hospital in Detroit, has been appointed superintendent of the Ford General Hospital of 2,000 beds in Detroit.

Dominion Medical Monthly

And Ontario Medical Journal

EDITED BY

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No. 1

COMMENT FROM MONTH TO MONTH

Pasteurized Milk is a subject upon which there is a lack of unanimity between medical officers of health, bacteriologists and clinicians. In the main it might be said medical officers of health, bacteriologists and some physicians favor the pasteurization of all milk. A few physicians, here and there, claim to have found out its disadvantages.

High authorities in America and abroad can be quoted in favor of pasteurization, whilst a few, quoting their practical experiences, have found it does not agree with some of their patients, and so condemn the whole process.

Before pasteurization was required many physicians often found raw milk injurious. There can be no doubt that several epidemics of different diseases have been traced to raw milk.

The whole milk question is becoming almost as vexing as the alcoholic and smoke problems. Clean milk, pasteurized, versus raw milk, should win out in any medical court. Possibly when we had raw milk we watched our little patients better. We may have felt too secure with pasteurized milk. Still, when a large body of medical men can be got together to say they are not satisfied with



pasteurized milk, the time would seem opportune to reopen the whole question.

The unanimous opinion is that the ideal milk for infant feeding is certified milk. At twenty cents a quart it is prohibitive to poor people; so it is stated. Poor families, however, should make some sacrifices to gain this milk for the member requiring it for two or three years. The gain would be worth the sacrifice.

Certified milk, in some way, should be reserved for the infants and the sick. It may be that the article is procured for the rich table. If the well-to-do are able and willing to pay the price they will get the article. Municipal control of certified milk would solve the problem. Surely no one would wish to prescribe raw milk when certified milk was placed within the reach of all.

With better care and sanitary surroundings the babies of the well-to-do and rich have a better chance in life with pasteurized milk than has the poor or institutional baby. Even with raw milk, given baby for baby, the balance is in favor of the baby with the better sanitary environment and more intelligent care. The chance for the baby in the institution should be almost as good. In the insanitary environment, with often indifferent care, the chance of the babies is below par. For them certified milk should in some way be available. It should not be a staple article for any household to buy. It should be safeguarded in every direction and should be prescribed for those only who need it. Municipal control, therefore, of certified milk seems the only alternative.

Even with raw milk, previously, it was often found it would not agree with many babies. It had to be modified in many ways, in fact, in so many ways, that scarcely any two authorities agreed upon an exact modification. Physicians were almost disgusted with the many plans and details. Then recourse was had to the proprietaries. Upon these many babies thrived, and as upon raw milk, and even pasteurized milk, many died. Practitioners, at their wits' end, jumped from proprietary to proprietary, as they had before skipped from modification to modification, to boiling, to what not. Now we claim to have the ideal milk in certified milk. In the name then, of common sense, why not have ideal distribution to those who need it? The baby, first—the sick, second—others, not at all!

Editorial Notes

YE OLDE TYME VYLLAGE DOCKTOR

By J. S. SPRAGUE, M.D., BELLEVILLE, ONT.

Partly as observed or experienced by the author, and partly as narrated sixty-five years ago to the author, by his parents and grandparents, who all had noticed or experienced in their lifetime the facts they related, or had received the correct information from their parents, and their grandparents; therefore this poetical legend, written by request of and dedicated to James S. Sprague, M.D., Belleville, Ont., is a perfect life-like pen and ink descriptive picture of Ye Antique Village Doctor, and his "modes" and "means," "schemes" and "customs," extending possibly as far back as the sixteenth century, with no allusion whatever to physicians of the present golden epoch.

Sojourning where enchanting scenes
of childhood met my gaze,
Surrounding sites reflected
startling reminiscent rays
That brought to memory's fond
review, vast visions of the past,—
Life's "morning" hopes of happiness
that "evening" sorrows blast,
and end in death at last.

Forgotten folly, freak and fun
re-occupied the brain;
In mystic recollection dream,
I lived a boy again,
And in the phantom-haze beheld
him versed in human ills,
Who posed as VILLAGE DOCTOR,
knight of sticking salve and pills,
amidst the hills, and rills.

He wore his wonted, winsome smile,
for rich and for the poor,
Betrayed bewitching courtesy
where pay is prompt and sure,
And had retained his hearty shake
with puny, physicked soul,
Who wasted wealth on malady
no doctor can control,
nor shun the "shallow shoal."

Appeared in ye brass-button coat,
high-collared "cutaway,"
Boots, belt, tie, gloves and "dicky"
added tone to his array,
Vest corded-camlet, silken "tile,"
pants corduroy, buff-shade,
Of full inflated "bosom,"
reigning craze in that decade,
that caught the modest maid.

He rode a knee-sprung Tippto nag,
stiff, steady in its jog,
Of step so uniform each joint
seemed set with wheel and cog,
While thistles decorated mane,
that stemmed the gusty gale,
Bunched burs bedecked the foretop,
and pea-straw adorned the tail,—
seized for debt at forfeit sale.

His saddle-bags of wolf skin,
that he tanned with salt and lime,
They bore a score of pygmy phials,
the custom in his time,
Containing sure specifics
that "ye olde" profession true
Up to those hours primitive,
for man's ills ever knew;
Physicians now eschew.

Smoked Cavendish tobacco
 in ye "Irish meershaum" pipe;—
 For ailments of the stomach
 always recommended tripe;—
 Believed the hair of a canine
 will "surely cure his bite,"
 And him who dared to disagree
 he dubbed "a blatherskite";—
 An ignoramus, quite.

A country call to come at once
 he always answered quick,
 Then in his meekly, manly manner,
 sweetly soothed the sick;
 And oft-times when departing
 low and lovingly he said
 That only for his prompt response
 the patient's life had fled,—
 and tears with others shed.

Each month his itemized account,
 in full, was sure to come,
 Not merged all into one condensed,
 incomprehensive sum;
 If charges were excessive,
 blushes hid behind his "smirk,"
 To veil fears of detection
 that in guilty conscience lurk;—
 Ancient trick to trouble burke.

Complaisant, gracious, generous,
 subscribed to every want;
 When called, or sent, he freely went
 to pauper's hovel-haunt;
 To church at week-day prayer, was
 there, and let his voice be heard;
 And bills, if paid on Sunday,
 only fools, he said, demurred;—
 too often it occurred.

In cases where 'twas naught but
 scare, when pulse the doctor felt,
 Magnesia aqua, tintured, he
 prescribed, and deftly dealt,
 Then ordered table-spoon full
 dose, each hour for the spine,
 To be continued strictly 'till
 he called again at nine
 with milder anodyne.

Occasion in a wealthy home,
 he never deemed it wrong
 To practice tact, that many lacked,
 "attendance to prolong,"
 In which he oft succeeded well,
 his faithful friends among,
 And diagnosed dyspepsia
 as congestion of the lung;—
 And many a heart he wrung.

He'd mince-meat any "blawsted quack,"
 if "spotted" spooning 'round;
 Possessed sufficient calibre
 himself to cover ground;
 The ailments flesh is heir to,
 were, by him, all understood;
 Itinerant empiric greet
 the doctor never would;
 One of stone, or wood, as good.

In sporting he was leader
 of each antiquarian game,
 To dire disease he failed to cure
 he gave a Hebrew name;
 And claimed to be professionally
 wise, and very great,
 But born, 'twas thought, too early,
 or alas! conceived too late
 with brain not over weight.

Used opodeldoc, honey balsam,
 antidote for germs,
 Pukes, plasters, Wister's Pectoral,
 and vermifuge for worms,
 Unguentum, radway, oil of spike,
 Mustang for women's woes,
 With Fanstock, asafetida,
 and drugs nobody knows,—
 prescribed for deathly throes.

Bond's pain destroyer, Brandreth's
 pills, magnetic ointment, rum,
 Hive syrup, Giles emulsion,
 bark and gum of spruce and plum,
 Medicamentum, paragoric,
 Lightning oil for aches,
 With Ashford's cordial, sovereign
 balm and remedy for "snakes,"
 that thirst for liquor slakes.

Goose oil, interhal liniment,
 eye-salve, herb, shrub and root;
 Precipitate and poultice
 he applied from head to foot,
 Then "tapped" the arm to ascertain
 if blood was rich and red,
 And bled and blistered, till a fellow
 might as well be dead;
 when such a life is led.

He bled the fat to make them lean,
 the thin to make them stout,
 For pimples, tumor, inflammation,
 abcess, ague, gout,
 Lumbago, salt rheum, rickets,
 ulcer, vertigo, catarrh,
 Colds, cancer, wen, consumption,
 and sent many "cross the bar,"
 To radiant realms afar.

<p>Bled too for gangrene, dropsy, sprue, hives, chicken-pox and sprain, Piles, whooping-cough, itch, asthma. chill, croup, gripese, and gravel pain, Rheumatics, measles, milk-leg, mumps, fits, fevers, running sore, Boil, bunyon, cramp and carbuncle, and scald-head by the score;— Barbers bled in times of yore.</p> <p>Steele's liniment, internal, mentioned, neighbor-nurses told, Would stop the movement of the bowels, and harmlessly withhold For twenty days; and during term, none helpless need to shift, And every day escaped the awful suffering from the "lift";— They thought it heaven's gift.</p>	<p>If bleeding, broth and blistering, the patient could endure, Next calomel, and jalap gave, that either kill or cure, Then mouth, if sore, the molars loose, and bile the powders drew, The cottage he placarded:— "PATIENT LIKELY TO PULL THROUGH"; None doubted that he knew.</p> <p>From retrospection here portrayed, The inference may be drawn Of doctor's skill and practice in ye periods past and gone; All handed down, in verbal and historical relays, Delineated in this sketch of doctors' wiles, and ways, in dark primeval days.</p>
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The above lines were composed by an old family friend, the late and brilliant writer, S. Stanley Howell, Esq., of Cobourg, when he had passed some several years beyond the three score and ten period and which I now can record in brief: *Vixi sexaginta et decem annos*. I may mention that while we are always engaged in instructive and varied studies, it is decidedly pleasing to learn that many admitted truths from sources least expected often present themselves, serving to establish our confirmed views, to confound them or to reject them. "Truth is true to the end of reckoning." It is a truism to state as our mission we have to study "men's desires and adorations, winged persuasions and wild destinies, splendors and glooms, and glimmering incantations of hopes and twilight fantasies." Not only these, but "men's blinded hopes, diseases, toil and prayers and winged troubles peopling daily air." Among the dearest of my aureoled memories are those of my preceptor in medicine—one of two village successors of the type my learned and venerated friend has so superlatively depicted, for we both were born in the same Prince Edward county village, but he was in his maturity when Medical Knighthood was in flower. One fact is we may say of him—the one so well delineated that he was one of those of our profession "o'er whose tomb immortal laurels ever bloom and his name and labors on Fame's eternal head-roll are worthy to be filed; and has landed safe in heaven with his shining saddle-bags."

He was skilled, and skilful enough to have lived still, if knowledge could be set up against mortality. Henley could have said of him as he said of Lord Lister: "He was sweet, unaggressive, tolerant, most humane. Wild artists liked his kindly elderhood

and cultivated his 'Philistinism,' and his smiles were full of certainties." With the words of Macbeth we should console ourselves, for our cause of sorrow must not be measured by his worth, for then it hath no end. "Yes, every god did set his seal to give the assurance of a man, and "when Nature stamped him she the die destroyed for men like him are loved, adored at home, revered abroad, and do the noblest work of God."

No other calling, says J. W. Streeter, in his book, "Doctor Tom, The Coroner of Breet," offers such opportunities for usefulness as does the practice of medicine, and this is especially true when the practice falls among people whose lives are narrowed by lack of opportunities, or restricted by physical boundaries which are difficult to overcome. A wise, cultivated, energetic and sympathetic doctor has an unlimited field of usefulness and he can daily sow the seeds of all the virtues.

He is welcomed, he is respected, he is trusted and he is loved. His example is followed, his suggestions are heeded, his orders are obeyed. It is in his power, then, to make every word, action and detail count for good to every family with which his vocation brings him in contact.

Called upon to minister to their necessities, he becomes familiar to their weaknesses and their infirmities, and the way is cleared for him to mend them. He sets an example of personal care and physical health, he suggests changes which add to the comfort of the household, and his precepts make for the general good. He is insidious, rather than aggressive, and most of the changes wrought are without apparent influence or direction, though there are times when his methods must be peremptory and forceful. In brief, to use the words of Isaiah 49: 18-23, "Kings shall be their nursing fathers, and their queens shall be their nursing mothers."

The question arises, Are our universities supplying men—doctors—like Mr. Howell's "Village Doctor," or Mr. Streeter's "Doctor Tom, The Coroner of Brett"?

Another question is: Has the young doctor realized what are or will become his life-work? Has he been taught that he has been "called and commissioned to wage war on the powers that lie in wait to overcome and overthrow human life (Osteopaths, Christian Scientists, Chiropractics, etc., etc., not considered) and that he will be reminded of the risks men insanely run from exposure to hostile elements, or still more hostile germs of what 'pricks and cracks.'"

“Befall the flesh through too much stress and strain, whereby its wily vapor fain would slip back and rejoin its source before its term?”

Brother, these amalecta and memorabilia are as segments or as subjects which my thoughts briefly touch.

APPRECIATION OF THE MEDICAL PROFESSION

DURING the present week (May 27th) we have had a visit—or as the irreverent might say, a visitation—of about half a thousand doctors from all parts of the province. This circumstance calls the attention of the thinking to the place of the physician in our social, civic and municipal economy; and will give new play to appreciation of, as well as prejudice against, the profession. There is a popular prejudice, mostly founded, as most prejudices are, upon ignorance, against doctors as a class, and there is no limit to the disparagement, associated with this prejudice. To show that they are unfounded, it is only necessary to mention one instance—doctors, the ignorant say, write their prescriptions in Latin so that the patients won't know what poisons they are being served with. Prescriptions were first written in Latin at a time when Latin was a universal language, the language of diplomacy, the language with which every educated man was familiar. A prescription written by a Canadian physician in Latin, if presented to a druggist in any country in the world, could be properly compounded through the medium of the universal medical language. This is only mentioned as a type of the ignorance and misunderstanding that create popular prejudice against physicians. Companion to this is the practice of a patient waiting till he is nearly dead before he calls a doctor, and because a miracle of healing is not done the doctor is blamed.

But in spite of all this, the doctors flourish and humanity is the gainer. Medical research, and improvement in surgical science, have made tremendous strides. Operations that a few years ago were considered capital and only to be trusted to some distinguished and expensive specialist, are now classed as minor and common with the humblest rural doctor. Not only has the healing branch of the art been vastly improved and human life prolonged, and human suffering mitigated, but the higher branch of the healing art—prevention—has made immense advance; and improvement in sanitation, in face of bitter opposition from ignorance and the indifference of ignorance, has added immensely to

the promotion of the national health. When, as told at the meeting of the Medical Health-Officers, as a type of general provincial conditions, systematic sanitation has in the short space of fourteen years reduced the death rate in the city of Toronto nearly seven-fold—from forty per 100,000 to seven, credit cannot be withheld from medical science applied to solving the problem of disease prevention, promotion of public health and human happiness.

We make the doctors the butt of dull wits, but as a class the doctors of Canada, as well as other countries, are the cream of professional philanthropy and human benefaction. Their intimate association with humanity in its direct needs, begets a wide catholicity of sympathy, and we find among the physicians of any town or city, doctors leading in all good works, for the welfare of its citizens. The part doctors have taken in the sublime work of caring for the suffering caused by war makes them heroes in their class. We may poke weak fun at the doctors, but they stand between us and the grim monster many a time, and only the fact that humanity is not immortal, prevents a larger demonstration of the value of their services. We have about 500 doctors in convention here now, and it is probable that in no gathering of similar numbers could be found greater collective intellectual force, applied with more trained skill, in the interests of humanity and the well-being of the community, than is to be found among the half thousand physicians now in consultation over the case of the patient, Ontario.—*Peterborough Examiner*.

SANITARY WORK IN SERBIA

THE account of British relief work in Serbia issued by the Press Bureau last week, forms one of the most stirring chapters in the history of sanitary science and effort. If the state of things prevailing in Serbia in February had continued not many months could have elapsed before the whole nation would have been wiped out. When Colonel Hunter and Lieutenant-Colonel Stammer arrived at Nisch in March, apart from wounded men, there were 37,000 sick in the army, including 15,000 cases of fever, of whom more than 8,000 were suffering from typhus. There were also nearly 8,000 cases of relapsing fever, and about 1,500 of enteric. Nor was the state of the civilian population much better. Hundreds of men, women and children were to be seen by the wayside suffering untold agonies, and typhus fever making rapid inroads into the hamlets and villages as well as the larger towns. Nisch

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was but a type of what was prevailing everywhere. In the hospital the patients were lying three and four in one bed with one covering for the whole, while others lay on the floor and even under the beds. At one time there were 700 patients in 200 beds, with only two doctors. There were no sanitary arrangements, no bathrooms, and the sewage from typhoid patients was discharging into an open ditch just outside the ward. In the presence of such pestilential surroundings the two representatives of the British sanitary service might well have given way to despair; but, grasping the situation, they at once set to work to bring about a change. Acting in co-operation with the Parliamentary Sanitary Committee, quarantine stations were established behind the lines; notice was given that all railway communication would be suspended for fifteen days; and, in addition, all leave from the army was stopped, soldiers on leave were immediately recalled, so that there might be no danger of re-infecting the railway after the disinfection which was to be carried out during the stoppage.

These were the first steps; what followed was a marvellous demonstration of how even the worst diseases may be fought and conquered. Supplies had to be obtained from this country. Hospitals and nurses were sent forward with all possible haste, for in the meantime Sir Thomas Lipton had issued his stirring appeal for help in this country. Pending the arrival of help, however, the two officers worked incessantly to stop the disease spreading. Disinfection was carried out with very crude agents, especially in the conflict with typhus. Lieutenant-Colonel Stammer fitted up wine barrels as disinfectors and sent them broadcast through the towns and villages. The first object was to kill the lice which swarmed the rags of the natives. Clothes, blankets, or linen were placed in the barrels and were freed from vermin within half an hour. Notification of disease was enforced and infected patients were removed from their homes to hospitals, the houses they came from being thoroughly cleansed, and their other inhabitants kept in isolation for fourteen days. Finally, it was laid down that no infectious patients should be discharged from hospital in less than four weeks. The sanitary staff went from place to place in a train specially fitted up with all necessary appliances and containing sleeping accommodation for all on board. They were gratefully welcomed by the stricken people, who were only too willing to follow any instructions that promised to relieve them of their plagues. Englishmen, knowing no word of Serbian, struggled manfully to convey their meaning in broken German to such citizens as knew a few words of that language. Happily they were fortified with pamphlets and leaflets in Serbian. And