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# The West Virginia Medical Journal

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## LOCAL ANAESTHESIA IN SURGERY OF THE COLON AND RECTUM

WILLIAM M. BEACH, A. M., M. D., F. A. C. S., Pittsburgh, Pa.

(A Lecture Delivered Before the Ohio County Medical Society, Wheeling, Va., November 17, 1916).

Surgical technique has attained its present high standard of excellence and refinement by virtue of the discoveries of anaesthesia, asepsis and anocia, to which may be added the developing science of biology and bacteriology as an aid in diagnosis.

No more important factor than a local anaesthetic is in evidence to encourage deftness and delicacy in the handling of tissues, insuring the minimum of trauma and shock. Moreover, cannot be gainsaid that the application of local anaesthesia is covering a wider range of use in general surgery where absolute unconsciousness is not necessary, and nowhere else has its employment proved more satisfactory than in pelvic surgery, which includes such procedures as prostatectomy, Herniotomy, appendectomy, Colostomy, cecostomy and all but major work in diseases of the rectum and anus. The author has employed its use in this group of cases frequently, and he has known other surgeons using it in surgery of the

upper abdomen, when there were marked contraindications to general anaesthesia.

### SOME PRINCIPLES INVOLVED

There are certain fundamental psychological principles to be recognized in order to use the agent successfully. It may be summed up by the term so recently written into our science, "Anocia" or "Anoci-association." If the personal equation is ignored both on the part of the patient and surgeon, the keynote of the propaganda is missed. The patient must be vouchsafed an environment, before an operation, wholly commensurate with contentment, reassurance, serenity of mind and a large degree of confidence. These mental states presuppose freedom from care, fear, disagreeable conversation with friends and relatives, awkward gesture or cynical remark from the surgeon or attendants, loud talking or much fussing with preparation. The surgeon himself, in approaching his patient, must exercise self control to a high degree, not allowing anything to ruffle or disturb his pleasing and masterful attitude. The modern surgeon studies his patient from every angle, that the object of his services may be achieved with the minimum of nervous disturbance with traumatism. The knowledge of physiology also occupies a large place in his technique to the end

that general organic functioning may not be disturbed.

While these elements have long been recognized by the educated surgeon, he has applied them rather intuitively or unconsciously, failing, however, at many points to preserve perfect continuity of order.

The term anocia is rather significant in that it describes the absence of both psychic and traumatic shock. Etymologically, the term is derived from the Latin "nocere," to hurt, with the negative particle "a" (without), signifying harmless or agreeable environment.

Briefly stated, the conception of anocia is a psycho-physiological process. In the great sensorium, impressions from the periphery are transmitted to consciousness, resulting in knowledge of the external objects of our environ. This process is at the expense of nervous energy, encountering certain chemic changes leading to exhaustion if indefinitely repeated, all of which is obviated by nerve blocking. This cerebral supply of nervous force, therefore, has its limitations, so that prolonged peripheral exposures exhaust its capacity to respond for protection.

The psychology of the pre-operative period is worthy further consideration, that the obsession of fear may be overcome. What is fear? Fear is a mental process common to all. It affects the physically weak and strong, many times to the advantage of the weak. It is a form of memory of previous injury. In its last analysis, fear is only a negative attitude which we ought never to have assumed and which can always be reversed by a consciousness of ability to cope with approaching danger. To aid the patient to minimize or overcome fear, becomes a distinctly surgic problem, requiring such a sympathy, mingled with firmness, that begets confidence,—the secret of success in surgery. The lack of proper recognition that fear incident to the preliminaries of an operation exhausts the patient should warn us to defer the period of trauma till complacency is established. Pain and suffering are often blessings in disguise, in that they conduce to mental equilibrium when curative measures are suggested to

obliterate the pathology.

Further principles involved in the welfare of the patient include the period of operation itself. It has long been known that surgic procedures under local anaesthesia are peculiarly free from shock, but it remained an enigma till explained by the principle of anocia. The local anaesthetic blocks of the field of operation from its connection with the subconscious and conscious centers, just as though each nerve in that area were severed with a knife. Anocia teaches us that even though a general anaesthetic is used, it is necessary to block the field with a local anaesthetic, in order to eliminate wasted energy caused by the surgeon's instrument upon the subconscious centers. It is urged further that rough handling and tearing of the tissues should be avoided, as they are conducive to shock. The positive cut with a sharp blade is always to be preferred, since such procedure disturbs the nerve supply the least beyond the area of blocking. The operator under these conditions may consume ample time in which to perfect his work, and the patient exhibit a normal pulse and respiration during the whole period,—a condition much to be desired, but rarely seen under old experiences.

The strict application of these principles will add to our success in doing painless surgery under local anaesthesia quite as much as the salt itself. Of course, we must exercise judgment in the selection of cases, the time consumed in operations, and certain other contraindication to the use of local anaesthesia exclusively. In surgery of the colon and rectum, we should exclude carcinoma, extensive fistulae and dense strictures.

#### THE AGENTS AND METHODS OF APPLYING LOCAL ANAESTHESIA

Various salts are used in local anaesthesia or blocking. The patient may have an idiosyncrasy toward some of them, and hence great care should be taken in drug selection and strength of solution. Among the avoidable products, and in the order of freedom from toxicity, may be mentioned,—novocain, stovain, tropa-cocain, eucain lactate and co-

cain. Owing to the scarcity, for obvious reasons, of many of these drugs, apothecine, which bears a close resemblance to novocain, is very satisfactory in my hands. It is a domestic product and therefore available.

Urea and quinine in (%1) solution is a powerful adjuvant in connection with the above agents, but should be applied to the deeper tissues only, for the reason that to the dermic structures it is painful and may cause sloughing; but to the deeper structures, its anaesthesia continues into the pots-operative period and no sloughing ensues.

There are two methods of applying a local anaesthetic,—first by conduction, secondly by infiltration. Conduction includes a deposit of the solution selected in the spinal canal or on a nerve trunk supplying the nerves to a given area. Infiltration is the injection of the solution into the field of operation and well beyond the site of traumatism. Failure to secure complete anaesthesia is due to undue haste in beginning the operation. At least five minutes must elapse when using novocain or kindred salts, and in the use of urea and quinine twice the interval should intervene between the application and the trauma.

To prepare a patient for an abdominal operation—in appendectomy for example, as much attention to detail, and perhaps more, should be practiced as when general anaesthesia is used. Dealing as we do with a conscious patient, it behooves us to preserve for him a calm mind, by the administration of morph. sulph. gr.  $\frac{1}{4}$  with atroph. sulph. gr. 1-150 two hours before the journey to the operating room. Morph. sulph. gr. 1-6 may also be given a half-hour before or on going to the operating room. Ingestion of milk, coffee or other mild nourishment or refreshment is not objectionable an hour or so before the operation. The abdomen is prepared previously, as for general anaesthesia.

#### THE OPERATION

The operating room should be as free as possible from unnecessary noises, conversations, etc.; besides, all instruments must be concealed, and the assistants and

nurses reduced to the minimum. What conversation, if any, is needed should be led by the sugroen himself or the patient. It is, indeed, my custom to engage the patient in a light vein, when about to make an incision or passing an important stage of the operation. I have frequently said to him, "I am now going to make a cut," after the incision has already been made unconsciously to him.

The table should be equipped with a warm thick pad and pillows. The patient, placed on his back, is allowed the greatest freedom. I do not cover his face, stuff his ears or strap him in any way,—any of which might arouse his suspicions.

The assistant making the final preparation of the abdomen does so very gently by applying the iodine smear. Locating the site of incision to be made, inject into the skin a  $\frac{1}{2}$  of %1 to %2 solution of novocain. The first puncture should be preceded by touching the point with phenol, the succeeding punctures to be made in the anaesthetized areas to the extent of five inches; the injected solution should invade the tissues laterally so that the infiltrated area is elliptical. Waiting five minutes, the incision is made to the fascia. Into the deeper structures, inject urea and quinine solution %1, but on reaching the peritoneum, again use novocain 1 to 400 strength. The abdomen opened, one can explore carefully the entire cavity, care being taken not to make traction on the mesentery. Such traction causes both pain and nausea. To avoid such discomfort in appendectomy, the nerve blocking should include the meso-appendix. The ideal case for this technique under local anaesthesia is a chronic or subacute appendicitis in a subject not too fat, and free from neurosis. Gentle technique and rapid, with deft hand, frees the patient from terror during the seance, and reduces to the minimum the unpleasant post-operative experiences following a general anaesthesia, such as pain in back, nausea and such other complications as pneumonia and nephritis.

To illustrate the application of local anaesthesia in rectal surgery, it is our purpose to describe a technique of the more common ailments of the rectum.

In this connection I would discourage the tendency to belittle the importance of such diseases as hemorrhoids, fissure, or fistula, to the extent that these can be as well operated upon in the office as in the home or hospital. I am fully persuaded that, no matter how minor the disease appears to be that requires operative measures, the patient should invoke the aid and comforts of a well regulated hospital and its operating equipment.

Patients suffering from hemorrhoids shrink from surgic treatment, for several reasons. The fear of general anaesthesia; the charlatan who improperly treats them and claims to cure without the knife; the recurrence which has been in evidence after operation by a good general surgeon; and finally the fear of incontinence or other post-operative result persuades them to forego further efforts in a surgical way.

The purpose of this lecture is not to discuss the merits or demerits of operative technique, but it may be suggested in this connection that the cause of recurrence of piles arises from the failure of removing the pathology by the methods in vogue,—such as ligature, clamp and cautery, crushing, etc. These methods are antiquated, besides much post-operative pain ensues, and a longer detention from business, from prolonged residence in hospital, is necessary.

These objections are successfully overcome by the principle of anaesthesia and the newer technique.

The preparation of a rectal case should be as thorough as in any other field. Twenty-four hours previously, a laxative, eom. cath. pill or oliveoil 1 oz. should be administered. The perineum should be clipped, not shaved, except for special reasons, and warm borie acid compresses applied, to be changed following a re-cleansing of the field after a stool. Three hours before operation, an injection of one-half pint of normal saline should be given, just sufficient to cleanse the rectal cavity. A larger injection would rise to the sigmoid and would not all be expelled but would trickle down during the operation, when the patient would be asked to bear down to aid in exposing the pile area.

#### HEMORRHOIDECTOMY

Observing all the rules above noted, on the patient's introduction to the operating room, place him on his left side, with thighs well flexed toward the abdomen, the right leg rather more than the left, with hips somewhat elevated (the proctologic position). Pour over the field 1 to 1,000 bichloride solution followed by alcohol. Hook the left index finger over the external sphincter, making gentle traction, with a previous touch of phenol on the point of a probe or hemostat about one-half inch from the orifice posteriorly; insert the sharp needle attached to a 20 c c barrel charged with a  $\% \frac{1}{2}$  warm solution of novocain or apothesine with adrenalin 1 to 1,000, directing the needle upward on one side, then withdrawing it sufficiently to engage it likewise on the opposite side, thus numbing the posterior sphincteric zone. Complete the anal circuit by blocking the anterior sphincter nerves. Waiting five minutes, seize the four quadrants with Allis forceps, making gentle but firm traction; and the patient bearing down, the pile area is readily exposed to view. Each hemorrhoid is isolated and now filled with urea and quinine. After six or eight minutes, the anaesthesia is complete.

A linear incision is made through the mucosa and submucosa from the upper limit of the hemorrhoid and down to the mucocutaneous junction. This incision may be enlarged into an elliptical shape, in large ulcerated piles. The contents are now dissected out carefully down to solid tissue or fascia covering the sphincter muscle. In cases of subjaent and external redundancies, excision is performed, making the entire line of incision continuous. Any spurting vessels are tied or torsioned. Each hemorrhoid is excised in like manner, taking care to leave an isthmus of mucosa between each dissected area, to avoid vicious cicatrices and stricture. I rarely apply a suture except in a large gaping wound which may be basted with a No. 1 cat gut. The suture does not facilitate healing, but retards it by reason of its becoming an object of infection. Nature has a very satisfactory provision in

the sphincter muscle which passively approximates the wound margins and controls hemorrhage. Smearing the field freely with sterile vaseline completes the operation. No plug is necessary.

This operation is the one essentially described by Dr. Pennington, and should supersede for the most part all the old methods of extirpating this common disease. Pennington continues to advocate the plug dressing, but I have abandoned its use on account of the distress accompanying it, and the belief that it is unnecessary as a haemostatic agent. Vaseline, on the contrary, is soothing and haemostatic as well. Any evidence of hemorrhage will show itself during the operation, when it can be controlled. I have never yet had a secondary hemorrhage follow when the details of this technique are thoroughly executed.

ANAL FISSURE

Local anaesthesia in excision of anal fissure need not be applied beyond the quadrant in which the ulcer exists. Under completed local anaesthesia, a wedge-shaped dissection is made of the ulcer, and the sphincter fibers severed about one-half through. The patient, as in hemorrhoidectomy, is able to ambulate on the third day.

I agree with Dr. Lewis H. Adler that in fistula we should prefer general

anaesthesia, since the extent of the burrowing is problematic and requires the utmost care and deliberation to ferret their courses,—a condition scarcely compatible with local anaesthesia.

Local Anaesthesia may be successfully used in polypi, cryptitis, prolapsus ani, proctoscopy, valvotomy, abscess and proctitis.

Some of the advantages of local anaesthesia in surgery may include:

1. Eliminating terrorism associated with operations under general anaesthesia.
  2. Absence of post-operative distress and complications.
  3. The anaesthesia is complete, thoroughly blocking the field, thus preventing shock.
  4. It persuades the patient to undergo an operation because the detention from business is shorter and post-operative pain is less.
  5. Skill in technique is achieved by virtue of the surgeon's care in gentle handling of a conscious patient.
  6. It will teach him to handle tissues more deftly in general anaesthesia, realizing that much pain and tendency to infection follows tearing and mutilating of soft parts.
  7. Local anaesthesia conserves the patient's peace of mind, as there are many who will testify to its efficiency and complete relief with so little inconvenience.
- 901 Bessemer Building.

OLD CONSTITUTION

ARTICLE I.

NAME OF THE ASSOCIATION

The name and title of this organization shall be the West Virginia State Medical Association.

ARTICLE II.

PURPOSES OF THE ASSOCIATION

The purposes of this Association shall be to federate and bring into one compact organization the entire medical profession of the State of West Virginia and

PROPOSED CHANGES IN THE CONSTITUTION

ARTICLE I.

NAME OF THE ASSOCIATION

The name and title of this organization shall be the West Virginia State Medical Association.

ARTICLE II.

The purpose of this Association shall be to federate and bring into one compact organization the entire medical profession of the State of West Virginia,

to unite with similar societies of other states to form the American Medical Association; to extend medical knowledge and advance medical science; to elevate the standard of medical education, and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to guard and foster the material interests of its members and to protect them against imposition; and to enlighten and direct public opinion in regard to the great problems of state medicine, so that the profession shall become more capable and honorable within itself, and more useful to the public, in the prevention and cure of disease, and in prolonging and adding comfort to life.

### ARTICLE III.

#### COMPONENT SOCIETIES

Component societies shall consist of those county medical societies which hold charters from this Association.

### ARTICLE IV.

#### COMPOSITION OF THE ASSOCIATION

Section 1. This Association shall consist of Members, Delegates, and Guests.

Sec. 2. Members. The Members of this Association shall be the members of the component county medical societies.

Sec. 3. Delegates. Delegates shall be those members who are elected in accordance with this Constitution and By-Laws to represent their respective component societies in the House of Delegates of this Association.

Sec. 4. Guests. Any distinguished physician not a resident of this State, who is a member of his own State Association, may become a guest during any Annual Session on invitation of the officers of this Association, and shall be accorded the privilege of participating in all of the scientific work for that Session.

and to unite with similar societies of other states to form the American Medical Association; to extend medical knowledge and advance medical science; to elevate the standard of medical education, and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to guard and foster the material interests of its members and to protect them against imposition; and to enlighten and direct public opinion in regard to the great problems of state medicine so that the profession shall become more capable and honorable within itself, and more useful to the public, in the prevention and cure of disease, and in prolonging and adding comfort to life.

### ARTICLE III.

#### COMPONENT SOCIETIES

Section 1. Component societies shall consist of those county medical societies which hold charters from this Association.

Sec. 2. All members in good standing of the component societies shall be *prima facie* members of this Association.

### ARTICLE IV.

#### COMPOSITIONS OF THE SESSIONS

Sec. 1. The sessions of this Association shall be composed of members, delegates and invited guests.

Sec. 2. Members: The members of this Association shall be members of the component county medical societies.

Sec. 3. Delegates: Delegates shall be those members who are elected in accordance with the constitution and by-laws to represent their respective component societies in the House of Delegates of this Association.

Sec. 4. Guests: Guests shall be such distinguished physicians or surgeons not residents of this state, who may be present at an annual session, and who have been invited by the presiding officer of the session to participate in the scientific work. They shall have the privilege of the floor during the session, but no vote.

ARTICLE V.  
HOUSE OF DELEGATES

The House of Delegates shall be the legislative and business body of the Association, and shall consist of: (1) Delegates elected by the component societies; (2) the Councilors; (3) all ex-presidents; and (4) *ex-officio*, the President and Secretary of this Association.

ARTICLE VI.  
COUNCIL

The Council shall consists of the Councilors, and the President and Secretary, *ex-officio*. Besides its duties mentioned in the By-Laws, it shall constitute the Finance Committee of the House of Delegates. Three Councilors shall constitute a quorum.

ARTICLE VII.

SECTIONS AND DISTRICT SOCIETIES

The House of Delegates may provide for a division of the scientific work of the Association into appropriate Sections, and for the organization of such Councilor District Societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies.

ARTICLE VIII.

SESSIONS AND MEETINGS

Section 1. The Association shall hold an Annual Session, during which there shall be held daily General Meetings, which shall be open to all registered members and guests.

Sec. 2. The month and place for holding each Annual Session shall be fixed by the House of Delegates, but the exact date shall be appointed by the Committee of Arrangements.

ARTICLE IX.

OFFICERS

Section 1. The officers of this Association shall be a President, three Vice-Presidents, a Secretary, a Treasurer and

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Sec. 3. Special meetings of either the Association or the House of Delegates shall be called by the President, giving the time and place of such special meeting, on petition of fifty members, or twenty delegates.

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ARTICLE VIII.  
OFFICERS

Sec. 1. The officers of this Association shall be a President, three Vice-Presidents, a Secretary and a Treasurer.

Sec. 2. The officers shall be elected annually. All of these officers shall serve until their successors are elected and installed.

Sec. 3. The officers of this Association shall be elected by the House of Delegates on the morning of the last day of

ten Councilors.

Sec. 2. The officers, except the Councilors, shall be elected annually. The terms of the Councilors shall be for two years, one-half being chosen each year. All these officers shall serve until their successors are elected and installed.

Sec. 3. The officers of this Association shall be elected by the House of Delegates on the morning of the last day of the Annual Session, but no Delegate shall be eligible to any office named in the preceding section, except that of Councilor, and no person shall be elected to any such office who is not in attendance upon that Annual Session, and who has not been a member of the Association for the past two years.

#### ARTICLE X.

##### RECIPROCIITY OF MEMBERSHIP WITH OTHER STATE ASSOCIATIONS

In order to broaden professional fellowship this Association is ready to arrange with other State Medical Associations for an interchange of certificates of membership, so that members moving from one state to another may avoid the formality of re-election.

#### ARTICLE XI.

##### FUNDS AND EXPENSES

Funds shall be raised by an equal per capita assessment on each component society. The amount of the assessment shall be fixed by the House of Delegates, but shall not exceed the sum of \$2.00 per capita per annum except on a four-fifths vote of the Delegates present. Funds may also be raised by voluntary contributions, from the Association's publications and in any other manner approved by the House of Delegates. Funds may be appropriated by the House of Delegates to defray the expenses of the Association, for publications, and for such other purposes as will promote the welfare of the profession. All resolutions appropriating funds must, if there be objection to the passage, be referred to the Finance Committee before action is taken thereon.

the Annual Session, but no person shall be elected to any such office who has not been a member of the Association for the past two years.

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#### ARTICLE X.

##### REFERENDUM

Sec. 1. A general meeting of the Association may, by a two-thirds vote of the members present, order a general referendum on any question pending before the House of Delegates, and when so ordered the House of Delegates shall submit such question to the members of the Association, who may vote by mail or in person, and, if the members voting shall comprise a majority of all the members of the Association, a majority of such vote shall determine the question and be binding on the House of Delegates.

Sec. 2. The House of Delegates may, by a two-thirds vote of its own members, submit any question before it to a general referendum, as provided in the preceding sections, and the result shall be binding on the House of Delegates.



## ARTICLE XII.

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Sec. 2. The House of Delegates may by a two-thirds vote of its own members submit any question before it to a general referendum, as provided in the preceding section, and the result shall be binding on the House of Delegates. It may also by a like vote refer any question, including the election of officers or any number of them, to the general meeting of the Association, a majority vote here determining the result.

## ARTICLE XIII.

## THE SEAL

The Association shall have a common Seal, with power to break, change or renew the same at pleasure.

## ARTICLE XIV.

## AMENDMENTS

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the Delegates present at any Annual Session, provided that such amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been published twice during the year in the bulletin or journal of this Association, or sent officially to each component society at least two months before the meeting at which final action is to be taken,

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## BY-LAWS

CHAPTER I.  
MEMBERSHIP

Sec. 1. The name of a physician on the properly certified roster of members of a component society, which has paid its annual assessment, shall be *prima facie* evidence of membership in this Association.

Sec. 2. No person who is under sentence of suspension or expulsion from a component society, or whose name has been dropped from its roll of members shall be entitled to any of the rights or benefits of this Association, nor shall he be permitted to take part in any of its proceedings until he has been relieved of such disability.

Sec. 3. Each member in attendance at the Annual Session shall enter his name on the registration book, indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of his society, he shall receive a badge which shall be evidence of his right to all the privileges of membership at that session. No member shall take part in any of the proceedings of an Annual Session until he has complied with the provisions of this section.

## CHAPTER II.

ANNUAL AND SPECIAL SESSIONS OF THE  
ASSOCIATION

Section 1. The Association shall hold an Annual Session in such month and at such place as has been fixed at the preceding Annual Session by the House of Delegates.

Sec. 2. Special meetings of either the Association or of the House of Delegates shall be called by the President on petition of twenty delegates or fifty members

## CHAPTER III.

## GENERAL MEETINGS

Section 1. All registered members may attend and participate in the proceedings and discussions of the General Meetings and of the Sections. The Gen-

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Section 1. The name of a physician on the properly certified roster of members of a component society, which has paid its annual assessment, shall be *prima facie* evidence of membership in this Association.

Sec. 2. No person who is under sentence of suspension or expulsion from a component society, or whose name has been dropped from its roll of members, shall be entitled to any of the rights or benefits of this Association, nor shall he be permitted to take part in any of its proceedings until he has been relieved of such disability.

Sec. 3. Each member in attendance at the Annual Session shall enter his name on the registration book, indicating the component society of which he is a member. When his right to membership has been verified, by reference to the roster of his society, he shall receive a badge, which shall be evidence of his right to all the privileges of membership at that session. No member shall take part in any of the proceedings of an Annual Session until he has complied with the provisions of this section.

## CHAPTER II.

Sec. 1. All registered members may attend and participate in the proceedings and discussions of the General Meetings and of the sections. The General Meetings shall be presided over by the President or by one of the Vice-Presidents, and before them shall be delivered the address of the President and the orations.

Sec. 2. The General Meeting may recommend to the House of Delegates the appointment of committees or commissions for scientific investigation of special interest and importance to the profession and public.

Sec. 3. The General Meeting may, by vote, require the Secretary to read for its information at the opening of each day's meeting, the minutes of the House of Delegates of the previous day.

eral Meetings shall be presided over by the President or by one of the Vice-Presidents, and before them shall be delivered the address of the President and the orations.

Sec. 2. The General Meeting may recommend to the House of Delegates the appointment of committees or commissions for scientific investigation of special interest to the profession and public.

#### CHAPTER IV.

##### HOUSE OF DELEGATES

Section 1. The House of Delegates shall meet on the day before that fixed as the first day of the Annual Session at an hour to be determined by the Committee of Arrangements. It may adjourn from time to time as may be necessary to complete its business, provided that its hours shall conflict as little as possible with the General Meetings. The order of business shall be arranged as a separate section of the program.

Sec. 2. Each component society shall be entitled to send to the House of Delegates each year one delegate, who shall be the society's Secretary, and one additional for every twenty-five or fraction thereof above ten members. In case the regularly elected delegate or delegates be not present at the annual meeting, the members of the component society to which he or they belong who are present shall select a delegate or delegates *pro tem*.

Sec. 3. The delegates and the councilors present shall constitute a quorum.

Sec. 4. The House of Delegates shall through its officers, Council and otherwise, give diligent attention to and foster the scientific work and spirit of the Association, and shall constantly study and strive to make each Annual Session a stepping-stone to future ones of higher interest.

Sec. 5. It shall consider and advise as to the material interests of the profession, and of the public in those important matters wherein it is dependent on the profession, and shall use its influence to

#### CHAPTER III.

##### HOUSE OF DELEGATES

Sec. 1. The House of Delegates shall meet on the day before that fixed as the first day of the annual session at an hour to be determined by the Committee of Arrangements. It may adjourn from time to time as may be necessary to complete its business, provided, that its hours shall conflict as little as possible with the General Meetings. The order of business shall be arranged as a separate section of the program.

Sec. 2. Each component society shall be entitled to send to the House of Delegates, each year, three delegates. In case the regularly elected delegate or delegates be not present at the annual session, the members of the component society to which he or they belong who are present, shall select a delegate or delegates *pro tem* to serve in place of the absentees until the close of that session.

Sec. 3. Thirty delegates shall constitute a quorum.

Sec. 4. The House of Delegates shall keep constantly in view the purposes of the Association as set forth in Article II. of the Constitution, and by its conduct of the business of the Association, strive to increase its educational value to its members and its measures of usefulness to the public.

Sec. 5. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.

Sec. 6. It shall, upon application, provide and issue charters to county societies organized to conform to the spirit of this Constitution and By-Laws.

Sec. 7. In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies to be designated so as to distinguish them from district and other classes of societies, and these societies, when organized and chartered, shall be entitled to all the privileges and representation provided herein for county societies, until such counties have been organized separately.

secure and enforce all proper medical and public-health legislation, and to diffuse popular information in relation thereto.

Sec. 6. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality, and shall continue these efforts until every physician in every county of the State who can be made reputable has been brought under medical society influence.

Sec. 7. It shall encourage post-graduate and research work, as well as home study, and shall endeavor to have the results utilized and intelligently discussed in the county societies.

Sec. 8. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.

Sec. 9. It shall, upon application, provide and issue charters to county societies organized to conform to the spirit of this Constitution and By-Laws.

Sec. 10. In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies to be designated by hyphenating the names of two or more counties so as to distinguish them from district and other classes of societies, and these societies, when organized and chartered, shall be entitled to all the privileges and representation provided herein for county societies, until such counties may be organized separately. (See Section 4, Chapter VII.)

Sec. 11. It shall divide the State into Councilor Districts, specifying what counties each district shall include, and when the best interest of the Association and profession will be promoted thereby organize in each a district medical society, and all members of component county societies, and no others, shall be members in such district societies. When so

Sec. 8. It shall divide the state into Delegate Districts, specifying what counties each district shall include, and, when the best interest of the Association and profession will be promoted thereby, organize in each a district medical society, and all members of component county societies, and no others, shall be members in such district societies. Until otherwise ordained by the Houses of Delegates, these districts shall be six in number, and shall be composed respectively of the counties that compose the Congressional Districts, into which the state is divided, and they shall be numbered like the said Congressional Districts.

Sec. 9. It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates. Such committees shall report to the House of Delegates, and may be present and participate in the debate on their reports.

Sec. 10. It shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective.

Sec. 11. It shall annually fix the salaries of all the salaried officers of the Association for the ensuing year. It may create other salaried offices, or abolish existing ones, in its discretion. But no additional salaried office shall be created except by a two-thirds vote.

Sec. 2. It shall fix the amount of the bonds required, respectively, of the Secretary and Treasurer, and such bonds to be approved by the President and deposited in his custody.

#### CHAPTER IV. ELECTION OF OFFICERS

Sec. 1. All elections shall be by ballot and a majority of the votes cast shall be necessary to elect. The ballots may be taken by tellers in the usual way, or by pay-roll, each delegate depositing his ballot with the Secretary when his name is called, as the House may elect.

Sec. 2. The election of officers shall be the first order of business of the House of Delegates after the reading of the minutes on the morning of the last

organized, from the presidents of such district societies shall be chosen the Vice-Presidents of this Association, and the presidents of the county societies of the district shall be the vice-presidents of such district societies.

See. 12. It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates. Such committees shall report to the House of Delegates, and may be present and participate in the debate on their reports.

See. 13. It shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective.

#### CHAPTER V.

##### ELECTION OF OFFICERS

Section 1. All elections shall be by ballot, and a majority of the votes cast shall be necessary to elect, provided, however that when there are more than two nominees, the nominee receiving the least number on the first ballot shall be dropped and the balloting continue until an election occurs.

See. 2. The election of officers shall be the first order of business of the House of Delegates after the reading of the minutes on the morning of the last day of the General Session.

See. 3. Any person known to have solicited votes for or sought any office within the gift of this Association shall be ineligible for any office for two years

#### CHAPTER VI.

##### DUTIES OF OFFICERS

Section 1. The President shall preside at all meetings of the Association and of the House of Delegates, unless both bodies are in session at the same time when he shall delegate a Vice-President to preside over the general meeting; he shall appoint all committees not otherwise provided for; he shall deliver an annual address at such time as may be arranged, and shall perform such other duties as custom and parliamentary

day of the Annual Session.

See. 3. Any person known to have solicited votes for or sought any office within the gift of the Association shall be ineligible for any office for two years.

#### CHAPTER V.

##### DUTIES OF OFFICERS

See. 1. The President shall preside at all meetings of the Association and of the House of Delegates, unless both bodies are in session at the same time, when he shall delegate a Vice-President to preside over the general meeting; he shall appoint all committees not otherwise provided for; he shall deliver an annual address at such time as may be arranged, and perform such other duties as custom and parliamentary usage may require.

In case of a vacancy by death, resignation, or otherwise, in the office of Secretary, Treasurer or Editor of the Journal, he shall appoint a successor *ad interim*, until the office is filled by regular election. He shall be entitled to one vote on all questions and no more.

See. 2. The Vice-Presidents shall assist the President in the discharge of his duties. In the event of the President's death, resignation, removal, or inability to act, the Vice-President, first in the order of election, who is available, shall succeed as Acting President until another President is elected.

See. 3. The Treasurer shall demand and receive all funds due the Association, together with the bequests and donations. He shall pay money out of the Treasury only on a written order of the President, countersigned by the Secretary; he shall subject his accounts to such examination as the House of Delegates may order, and he shall annually render an account of his doings and of the state of the funds in his hands.

See. 4. The Secretary shall attend the General Meeting of the Association and the meetings of the House of Delegates, and shall keep minutes of their respective proceedings in separate record books. If both bodies are in session at the same time, he shall delegate some member to act in his stead in the general meeting.

usage may require. He shall be the real head of the profession of the State during his term of office, and, as far as practicable, shall visit, by appointment, the various sections of the State and assist the Councilors in building up the county societies, and in making their work more practical and useful.

Sec. 2. The Vice-Presidents shall assist the President in the discharge of his duties. In the event of the President's death, resignation or removal, the Council shall select one of the Vice-Presidents to succeed him.

Sec. 3. The Treasurer shall give bond in the sum of \$2,000. He shall demand and receive all funds due the Association, together with bequests and donations. He shall pay money out of the Treasury only on a written order of the President, countersigned by the Secretary; he shall subject his accounts to such examination as the House of Delegates may order, and he shall annually render an account of his doings and of the state of the funds in his hands.

Sec. 4. The Secretary shall attend the General Meetings of the Association and the meeting of the House of Delegates, and shall keep minutes of their respective proceedings in separate record books. If both bodies are in session at the same time he shall delegate some member to act in his stead in the general meeting. He shall be *ex-officio* Secretary of the Council. He shall be custodian of all record books and papers belonging to the Association, except such as properly belong to the Treasurer, and shall keep account of and promptly turn over to the Treasurer all funds of the Association which come into his hands. He shall provide for the registration of the members and delegates at the Annual Sessions. He shall, with the co-operation of the secretaries of the component societies, keep a card-index register of all the legal practitioners of the State by counties, noting on each his status in relation to his county society, and, on request, shall transmit a copy of this list to the American Medical Association. He shall aid the Councilors in the organization and improvement of the county societies and in the extension of the power and usefulness of this Association. He shall conduct the

He shall be custodian of all record books and papers belonging to the Association, except such as properly belong to the Treasurer, or Editor of the Journal, and shall keep account of, and promptly turn over to the Treasurer, all funds of the Association which come into his hands. He shall provide for the registration of the members and delegates at the Annual Session. He shall, with the co-operation of the secretaries of the component societies, keep a card-index register of all the legal practitioners of the state by counties, noting on each his status in relation to his county society, and, on request, shall transmit a copy of this list to the American Medical Association. He shall aid the Advisory Committee in the organization and improvement of the various county societies and in the extension of the power and usefulness of this Association. He shall conduct the official correspondence, notifying members of meetings, officers of their election and committees of their appointments and duties. He shall employ such assistants as may be ordered by the House of Delegates, and shall make an annual report to the House of Delegates. He shall supply each component society with the necessary blanks for making their annual reports; shall keep an account with the component societies, charging against each society its assessment, collect the same, and at once turn it over to the Treasurer. Acting with the Committee on Scientific Work, he shall prepare and issue all programs. The amount of his salary shall be fixed by the House of Delegates.

Sec. 5. Both the Secretary and Treasurer shall give bond in such sum as the House of Delegates shall direct.

#### CHAPTER VI. COMMITTEES

Sec. 1. The standing committees shall be as follows:

A Publication Committee; An Advisory Committee; A Committee on Scientific Work; A Committee on Public Policy and Legislation; a Committee on Arrangement, and such other committees as may be necessary. Such committees shall be elected by the House of Del-

official correspondence, notifying members of meetings, officers of their election and committees of their appointment and duties. He shall employ such assistants as may be ordered by the House of Delegates. He shall supply each component society with the necessary blanks for making their annual reports; shall keep an account with the component societies, charging against each society its assessment, collect the same, and at once turn it over to the Treasurer. Acting with the Committee on Scientific Work, he shall prepare and issue all programs. The amount of his salary shall be fixed by the House of Delegates.

#### CHAPTER VII. COUNCIL

Section 1. The Council shall meet on the day preceding the Annual Session, and daily during the Session and at such other times as necessity may require, subject to the call of the chairman or on petition of three Councilors. It shall meet on the last day of the Annual Session of the Association to organize and outline work for the ensuing year. It shall elect a Chairman and a Clerk, who, in the absence of the Secretary of the Association, shall keep a record of its proceedings. It shall, through its Chairman, make an annual report to the House of Delegates.

Sec. 2. Each Councilor shall be organizer, peace-maker and censor for his district. He shall visit the counties in his district at least once a year for the purpose of organizing component societies where none exist, for inquiring into the condition of the profession, and for improving and increasing the zeal of the county societies and their members. He shall make an annual report of his work, and of the condition of the profession of each county in his district at the annual session of the House of Delegates. The necessary traveling expenses incurred by such Councilor in the line of the duties herein imposed may be allowed by the House of Delegates on a proper itemized statement, but this shall not be construed to include his expense in attending the Annual Session of the Association.

Sec. 3. The Council shall be the Board of Censors of the Association. It shall

regate, unless otherwise provided.

Sec. 2. The Publication Committee shall consist of the Editor of the Journal and two assistants, who shall be elected annually by the House of Delegates. It shall render an annual report to the House of Delegates, which shall specify the cost of publishing the Journal and all other publications for the preceding year, all receipts and expenditures, and an account of all other property belonging to the Association under its control. It shall superintend the publication and distribution of the West Virginia Medical Journal, and all proceedings, transactions and memoirs of the Association, subject to the control of the House of Delegates. Until otherwise directed by the House of Delegates, the advertising policy of the Journal shall conform to that of the Journal of the American Medical Association.

All reports and all discussions and papers heard before the Association shall be referred to the West Virginia Medical Journal for publication. The editor, with the approval of his assistants, may curtail or abstract papers or discussions, and may return any paper to its author which may not be considered suitable for publication, but where a radical change is made, it should be submitted to the author.

Sec. 3. The Advisory Committee shall consist of one delegate from each Delegate District to be elected by the House of Delegates, at the same time that the officers of the Association are elected, and they shall be selected from a list of the delegates who are entering upon the third year of their service as delegates. Provided, that for the first two years after the adoption of this section, they may be selected from the general body of the house.

The Advisory Committee shall be the Board of Censors of the Association. It shall consider all question involving the rights and standings, of members, whether in relation to other members, to the component societies, or to this Association. All questions of an ethical nature brought before the House of Delegates or the General Meeting shall be referred to the Advisory Committee

consider all questions involving the right and standing of members, whether in relation to other members, to the component societies, or to this Association. All questions of an ethical nature brought before the House of Delegates or the General Meeting shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members or component societies, on which an appeal is taken from the decision of an individual Councilor, and its decision in all such matters shall be final.

Sec. 4. In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies, to be suitably designated so as to distinguish them from district societies, and these societies, when organized and chartered, shall be entitled to all rights and privileges provided for component societies until such counties shall be organized separately.

Sec. 5. The Council shall provide for and superintend the publication and distribution of the *West Virginia Medical Journal*, and all proceedings, transactions and memoirs of the Association, and shall have authority to appoint an editor of the *Journal* and such assistants as it deems necessary. All money received by the Council and its agents, resulting from the discharge of the duties assigned to them, except the *Journal* receipts, must be paid to the Treasurer of the Association. As the Finance Committee, it shall annually audit the account of the Treasurer and Secretary and other agents of this Association and present a statement of the same in its annual report to the House of Delegates, which report shall also specify the character and costs of all the publications of the Association during the year, and the amount of all other property belonging to the Association under its control, with such suggestions as it may deem necessary. In the event of a vacancy in the office of the Secretary, the Treasurer or the *Journal* editor, the Council shall fill the vacancy until the next annual election. In the event of one or more vacancies in the Council, the President shall be empowered to fill the same by appointment until the next regular meeting.

without discussion. It shall hear and report on all questions of discipline affecting the conduct of members or component societies.

The Advisory Committee shall be the Finance Committee, and as such, it shall annually audit the accounts of the Treasurer and Secretary and other agents of this Association that may be referred to it, and present a statement of the same in its report to the House of Delegates. The Advisory Committee, in addition to these duties, shall consider, and as soon as practicable, report upon such other matters as may be referred to it by the House of Delegates. In order to facilitate its business the committee may appoint from its members such sub-committees as may be deemed necessary.

Sec. 4. The Committee on Scientific Work shall consist of three members, of which the Secretary shall be one, the other two to be named by the President. It shall determine the character and scope of the scientific proceedings of the Association for each session, subject to the instructions of the House of Delegates. Thirty days previous to each Annual Session it shall prepare and issue a program announcing the order in which papers, discussions and other business shall be presented.

Sec. 5. The Committee on Public Policy and Legislation shall consist of three members, to be elected by the House of Delegates, and the President and Secretary. Under the direction of the House of Delegates, it shall represent the Association in securing and enforcing legislation in the interest of public health and of scientific medicine. It shall keep in touch with professional and public opinion, shall endeavor to shape legislation so as to secure the best results for the whole people, and shall strive to organize professional influence so as to promote the general good of the community in local, state and national affairs and elections.

Sec. 6. The Committee of Arrangement shall be appointed by the component society in which the Annual Session is to be held. It shall provide suitable accommodations for the meeting places of the Association and of the House of Delegates, and of their respective com-



Sec. 6. All reports and all discussions and papers heard before the Association shall be referred to the *West Virginia Medical Journal* for publication. The editor, with the approval of a majority of his assistants, may curtail or abstract papers or discussions, and may return any paper to its author which may not be considered suitable for publication, but where a radical change is made it should be submitted to the author.

#### CHAPTER VIII. COMMITTEES

Section 1. The standing committees shall be as follows:

A Committee on Scientific Work.

A Committee on Public Policy and Legislation.

A Committee on Arrangements and such other Committees as may be necessary. Such committees shall be elected by the House of Delegates, unless otherwise provided.

Sec. 2. The Committee on Scientific Work shall consist of three members, of which the Secretary shall be one, and shall determine the character and scope of the scientific proceedings of the Association for each session, subject to the instructions of the House of Delegates. Thirty days previous to each Annual Session it shall prepare and issue a program announcing the order in which papers and discussions shall be presented.

Sec. 3. The Committee on Public Policy and Legislation shall consist of three members and the President and Secretary. Under the direction of the House of Delegates it shall represent the Association in securing and enforcing legislation in the interest of public health and of scientific medicine. It shall keep in touch with professional and public opinion, shall endeavor to shape legislation so as to secure the best results for the whole people, and shall strive to organize professional influence so as to promote the general good of the community in local, state and national affairs and elections.

Sec. 4. The Committee on Public Policy and Legislation shall be appointed from a list, two names to be submitted by each ex-President, the appointment to

mittees, and shall have general charge of all the arrangements. Its chairman shall report an outline of the arrangements to the Secretary for publication in the program, and shall make additional announcements during the session as occasion may require.

#### CHAPTER VII. COUNTY SOCIETIES

Sec. 1. All county societies now in affiliation with this Association or those which may hereafter be organized in this state, which have adopted principles of organization not in conflict with this Constitution and By-Laws, shall, on application, receive a charter from and become a component part of this Association.

Sec. 2. As rapidly as can be done after the adoption of this Constitution and By-Laws, a medical society shall be organized in every county in the state in which no component society exists, and charters shall be issued thereto.

Sec. 3. Charters shall be issued only upon approval of the House of Delegates and shall be signed by the President and Secretary of this Association. The House of Delegates shall have authority to revoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

Sec. 4. Only one component medical society shall be chartered in any county. Where more than one county society exists, the member of the Advisory Committee for that district shall endeavor to unite them in one organization. In case they do not unite, the House of Delegates shall decide which one shall be recognized as a component society of the State Association.

Sec. 5. Each county society shall judge of the qualifications of its own members, but, as such societies are the only portals to this Association and to the American Medical Association, every reputable and legally registered physician who does not practice or claim to practice, nor lend his support to, any exclusive system of medicine, shall be eligible to membership. Before a charter is issued to any county society, full

be made by the incoming President from this list not sooner than ninety days after his election; the term of service to be five years, unless terminated by a two-thirds vote.

Sec. 5. The Committee of Arrangements shall be appointed by the component society in which the Annual Session is to be held. It shall provide suitable accommodations for the meeting-places of the Association and of the House of Delegates, and of their respective committees, and shall have general charge of all the arrangements. Its chairman shall report an outline of the arrangements to the Secretary for publication in the program, and shall make additional announcements during the session as occasion may require.

#### CHAPTER IX. COUNTY SOCIETIES

Section 1. All county societies now in affiliation with this Association or those which may hereafter be organized in this State, which have adopted principles of organization not in conflict with this Constitution and By-Laws, shall, on application, receive a charter from and become a component part of this Association.

Sec. 2. As rapidly as can be done after the adoption of this Constitution and By-Laws, a medical society shall be organized in every county in the State in which no component society exists, and charters shall be issued thereto.

Sec. 3. Charters shall be issued only on approval of the Council or House of Delegates, and shall be signed by the President and Secretary of this Association. The Council or the House of Delegates shall have authority to revoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

Sec. 4. Only one component medical society shall be chartered in any county. Where more than one county society exists, friendly overtures and concessions shall be made, with the aid of the Council or the District if necessary, and all of the members brought into one organization. In case of failure to unite, an appeal may be made to the Council, which shall decide what action shall be taken.

and ample notice and opportunity shall be given to every such physician in the county to become a member.

Sec. 6. Any physician who may feel aggrieved by the action of the society of his county in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the House of Delegates.

Sec. 7. All appeals arising under the preceding section shall be referred to the Advisory Committee acting as a Board of Censors. In hearing appeals, the said committee may admit oral or written evidence as in its judgment will best and most fairly present the facts. But in case of every appeal, all reasonable efforts at conciliation and compromise shall be made before a decision is arrived at. All such decisions or judgments made by the committee shall at once be reported to the House of Delegates for final action.

Sec. 8. When a member in good standing in a component society moves to another county in this state, his name shall be transferred, without cost, to the roster of the county society into whose jurisdiction he moves, upon presentation of a certificate of membership, properly authenticated from the Society from which he has removed. When a physician removes from the state, his membership in both County and State organizations is terminated thereby.

Sec. 9. A physician living on or near a county line may hold his membership in that county society which is most convenient for him to attend, on permission of the society in whose jurisdiction he resides, and any physician residing in a county having no medical organization, may join a society in a neighboring county until his own county is organized.

Sec. 10. Each component society shall have general direction of the affairs of the profession in its county, and its influence shall be constantly exercised for bettering the scientific, moral and material condition of every physician in the county; and systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

Sec. 11. At some meeting, not later

Sec. 5. Each county society shall judge of the qualifications of its own members, but, as such societies are the only portals to this Association and to the American Medical Association, every reputable and legally registered physician who does not practice or claim to practice, nor lend his support to any exclusive system of medicine, shall be eligible to membership. Before a charter is issued to any county society, full and ample notice and opportunity shall be given to every such physician in the county to become a member.

Sec. 6. Any physician who may feel aggrieved by the action of the society of his county in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Council, and its decision shall be final.

Sec. 7. In hearing appeals the Council may admit oral or written evidence as in its judgment will best and most fairly present the facts, but in case of every appeal, both as a Board and as individual Councilors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

Sec. 8. When a member in good standing in a component society moves to another county in this State, his name shall be transferred without cost to the roster of the county society into whose jurisdiction he moves.

Sec. 9. A physician living on or near a county line may hold his membership in that county society which is most convenient for him to attend, on permission of the society in whose jurisdiction he resides, and any physician residing in a county having no medical organization, may join a society in a neighboring county until his own county is organized.

Sec. 10. Each component society shall have general direction of the affairs of the profession in its county, and its influence shall be constantly exerted for bettering the scientific, moral and material condition of every physician in the county; and systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

Sec. 11. At some meeting in advance of the Annual Session of this Association,

than April 1 of each year, each county society shall elect three delegates to represent it in the House of Delegates of this Association. The term of such delegates shall be three years. At the first election of delegates after this Constitution goes into effect, one delegate shall be elected for one year, one for two years, and one for three years. Every year thereafter one shall be elected for the full term of three years. The Secretary of the society shall send a list of such delegates to the Secretary of this Association, not less than ten days before the Annual Sessions.

Sec. 12. The Secretary of each component society shall keep a roster of its members and of the non-affiliated registered physicians of the county, in which shall be shown the full name, college and date of graduation, date of license to practice in this state, and such other information as may be deemed necessary. In keeping such roster the Secretary shall note any changes in the personnel by removal to or from the county, and in making his annual report he shall aim to account for every physician who has lived in the county during the year. He shall report each death, as it occurs, within his county or district, to the Editor of the Journal, together with a becoming obituary.

Sec. 13. The Secretary of each component society shall forward its assessment, together with its roster of officers and members, and list of non-affiliated physicians of the county, to the Secretary of this Association on or before April 1.

Sec. 14. Any county society which fails to pay its assessment, or make the report required, on or before April 1 in each year, shall be held as suspended, and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

#### CHAPTER VIII.

##### BOARD OF MEDICAL DEFENSE

Sec. 1. A Board of Medical Defense, consisting of three members, who may be chosen indifferently from the general

each county society shall elect a delegate or delegates to represent it in the House of Delegates of this Association, in the proportion of one delegate and one additional to each twenty-five members or fraction thereof, above ten, and the Secretary of the Society shall send a list of such delegates to the Secretary of this Association at least ten days before the Annual Session.

Sec. 12. The Secretary of each component society shall keep a roster of its members, and of the non-affiliated physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. And, furthermore, he shall report each death in his district, as it occurs, to the *Journal*, and every two years a complete and official list of our honored dead shall be printed in its columns. In keeping such roster the Secretary shall note any changes in the personnel by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

Sec. 13. The Secretary of each component society shall forward its assessment, together with its roster of officers and members, list of delegates, and list of non-affiliated physicians of the county, to the Secretary of this Association on or before April 1.

Sec. 14. Any county society which fails to pay its assessment, or make the report required, on or before April 1 in each year, shall be held as suspended, and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

#### CHAPTER X. MISCELLANEOUS

Section 1. The President shall annually appoint an orator in medicine and an orator in surgery, each of whom shall deliver an address at the next session.

Sec. 2. No address or paper before the Association, except those of the President and orators, shall occupy more than

membership or the delegates, shall be elected by the House of Delegates. They shall be elected for the term of three years, provided, that at the first election one member shall be elected for the term of one year, one for the term of two years, and one to be elected every year thereafter.

Sec. 2. It shall be the duty of the Board to assist in the defense of suits for mal-practice, brought against members, in good standing, of this Association, that, after full investigation, are deemed by it proper cases to defend; to make all rules and regulations to govern its procedure or that of the defendant in the conduct of any suit; to provide all blanks and instructions needful for a proper investigation and supervision of the defendant's case; to employ counsel and assist in procuring witnesses; and to authorize such expenditures as may be needful within the limits that the House of Delegates may impose; provided, that the defense herein provided for shall be available only for those who were residents of this state, and members in good standing of this Association, at the time the alleged mal-practice was committed; and provided further, that the Board shall not pay or obligate the Association to pay any judgment rendered against any member upon the final determination of any such suit.

Sec. 3. When the Board, after full investigation, shall decide that the case of an applicant for aid is not a proper one for the Board to defend, the applicant may appeal to the House of Delegates for a re-hearing and its decision shall be final. In case the decision on such appeal shall be adverse to the applicant, it shall be communicated to him only. All rules, regulations and procedures made or instituted under these by-laws by this Board, shall be subject to the approval of the House of Delegates.

#### CHAPTER IX. MISCELLANEOUS

Sec. 1. The President shall annually appoint an orator in medicine and an orator in surgery, each of whom shall deliver an address at the next session.

Sec. 2. No address or paper before

twenty minutes in its delivery; and no member shall speak longer than five minutes, nor more than once on any subject, except by unanimous consent.

Sec. 3. All papers read before the Association or any of the Sections shall become its property. Each paper shall be deposited with the Secretary when read.

Sec. 4. The deliberations of this Association shall be governed by parliamentary usages as contained in Roberts' Rules or Order, when not in conflict with this Constitution and By-Laws.

Sec. 5. The Principles of Medical Ethics of the American Medical Association shall govern the conduct of members in their relation to each other and to the public.

CHAPTER XI.  
MEDICAL DEFENSE

Section 1. The Committee on Medical Defense shall consist of the Board of Councilors, three of whom shall be chosen each year from that body to constitute and act as its Executive Committee. In case this Executive Committee fails to agree on any subject pertaining to the Medical Defense, the question in dispute shall be referred to the Council as a whole for disposition.

Sec. 2. The Executive Committee of Medical Defense shall employ an attorney for legal advice. In case of litigation the attorney employed must be agreeable to both Council and defendants. If said defendant wishes additional legal advice, the expense of such must be borne by said defendant.

Sec. 3. On and after July 11, 1912, it shall be the duty of the Executive Committee to investigate all claims of malpractice against members properly brought to its attention, and if in its judgment the case is one worthy of defense, the defendant must forward the papers connected with the case to the Chairman of the Council, who in turn shall forward same to the Executive Committee; but the Committee shall not pay, nor obligate the Association to pay, a judgment, claim or settlement against any member. The same benefit is to be extended to the estate of a deceased member.

the Association except those of the President and orators, shall occupy more than twenty minutes in its delivery; and no member shall speak longer than five minutes, nor more than once on any subject, except by unanimous consent.

Sec. 3. All papers read before the Association or any of the sessions, shall become its property. Each paper shall be deposited with the Secretary when read.

Sec. 4. The deliberations of this Association shall be governed by parliamentary usage as contained in Roberts' Rules of Order, when not in conflict with this Constitution and By-Laws.

Sec. 5. The Principles of Medical Ethics of the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

CHAPTER X.  
AMENDMENTS

These By-Laws may be amended at any Annual Session by a majority vote of the House of Delegates present at that session, after the amendment has laid on the table for one day.

Sec. 4. The Executive Committee shall have charge of the Medical Defense Fund, which fund shall be secured as follows: Each member of the State Association shall be assessed \$1 a year for this fund alone, to be paid with the State Association dues, and which shall be placed in the hands of the Executive Committee by the Treasurer of the State Association as soon as the latter receives the same from each component society. But the payment of this defense fee of \$1 shall be optional on the part of the member, the non-payment of which shall not affect his membership in the State Association. No member can become a beneficiary under this fund unless this fee, together with his association dues, has been paid prior to the date of the alleged offense.

Sec. 5. The Executive Committee shall at each annual meeting of the State Association make to the Council a detailed report of all expenses incurred and work done during the year ending the first of the month in which the annual meeting of the Association takes place, and Council in turn shall transmit as much of the report to the Association as it deems wise or necessary.

Sec. 6. No action shall be taken by the Executive Committee with reference to an act committed prior to Jan. 1, 1911, or before the date of qualification of the accused as a member of the Association. Also, no action shall be taken by the Executive Committee for members who become habitually intoxicated, or who are addicted to the use of drugs, or members accused of criminal offense. The defense shall be granted only to members residing in West Virginia and not to non-resident or affiliated members.

Sec. 7. Any member desiring to avail himself of the provisions of this article shall proceed as follows: He is to obtain a written statement from the Secretary of his official local society that he is a member of that society and in good standing, and has paid his dues and assessments for the current year, in accordance with Section 4 of these amendments. This statement shall be sent to the chairman of the Council, who in turn will refer it to the Executive Committee for investigation. In any case the defendant

is to act in conjunction with the Executive Committee.

Sec. 8. The Executive Committee shall furnish all necessary legal service, all medical expert services, and pay all the necessary expenses connected with the case, provided that nothing in this understanding between the State Association and its members shall conflict with united action in the defense by the officials of any corporation organized for this specific purpose with which the member may be connected, and provided that when such connection exists, the State Association's share of expenses shall not exceed one half.

## CHAPTER XII. AMENDMENTS

These By-Laws may be amended at any Annual Session by a majority vote of the House of Delegates present at that session, after the amendment has lain on the table for one day.

### Miscellaneous Announcements and Communications

Fairmont, W. Va., May 16, 1917.

Dr. James R. Bloss,  
Huntington, W. Va.

Dear Doctor Bloss:—

You will see by the red type on this letter head that the Marion County Medical Society means business in regard to the anniversary meeting here in October, and we are not going to leave any stone unturned to make the meeting a success.

We very much desire you to give it as much publicity as possible, for we are assured by the officers of the State Association that it is their intention to have some of the best men in the profession on the program.

Our new hotel will be completed and opened to the public on the 4th of July, and our meeting will be the largest to hold its session in the new building.

You are at liberty to use any part of this letter you may wish in your write-up. With best wishes, I am truly and fraternally,

C. O. HENRY.

Charleston, W. Va., June 20, 1917.  
Dr. J. R. Bloss,  
Editor W. Va. Medical Journal,  
Huntington, W. Va.

Dear Doctor:—If it is not too late for the July number of the Journal, I would be more than glad if you would put in this little article.

I also enclose some literature which I thought you might possibly want to use; the article on "Punishing Patriotism" is an interesting one at this time.

Sincerely yours,  
J. E. CANNADAY, M. D.

### PUNISHING PATRIOTISM

A SUGGESTED METHOD OF MEETING THIS EVIL.

Undoubtedly in the past civilian doctors who have been patriotic and who have served their country in the army or navy have been in a measure punished for such service by finding their practice dissipated and gone on their return home. The knowledge of this has naturally acted in preventing many a physician entering the Officers' Reserve

Corps of the United States at this time. To meet this situation the Maryland State Committee on Medical Preparedness, of which Dr. Gordon Wilson, Baltimore, is secretary, has devised the following plan to be presented at the annual meeting of the state society (Medical and Chirurgical Faculty), to be held in April.

This plan has already been endorsed by the Baltimore City Medical Society.

The committee proposes to have offered the following resolutions:

1. *Resolved*, That the Medical and Chirurgical Faculty of Maryland recognizes the patriotism of those members of the medical profession resident in Maryland who volunteer for the service of the U. S. Government, and in appreciation of this we recommend that should these members of the profession be called into active service, the doctors who shall attend their patients should turn over one-third of the fees collected from such patients to the physician in active service or to his family.

2. *Resolved*, That the secretary of the society shall have prepared letter blanks according to the form attached, to a number sufficient to supply those physicians who are called into active service, with a sufficient number so that they can send a filled-out form letter to each patient, a carbon copy going to the doctor who has agreed to look after the physician's practice, and a second carbon copy to be sent to the secretary of the state society.

The secretary of the state society is instructed to file the carbon copies received by him, and on notification by a physician that he has terminated his service with the government and has resumed his practice, the secretary of the state society shall then send out to each of the patients of this physician whose names and addresses he has received in the filed letters a letter stating that the physician has resumed the practice of medicine, and requesting the patient in the name of the society to recognize the physician's patriotism by summoning him should he be in need of medical attention.

This method is the only one devised which can in any way meet the situation that confronts the physician who is pa-

triotic, and who is penalized for his patriotism by the loss of his practice. By this method the profession at large is "put on its honor," the patients of the physician are urged to retain his services, and this urging is done, not in the physician's name, but in the name of the profession and as a patriotic duty.

It is proposed, should these resolutions be adopted, to send a description of the plan to every member of the profession, a copy of the form letter, and also two cards, one to be signed by the physician endorsing personally the first resolution, and the other an application for admission to the Medical Reserve Corps.

Below are a specimen of the proposed form letter and two cards.

PROPOSED FORM LETTER.

(Regular Letter-Head of Medical and Chirurgical Faculty.)

Mr.....  
 Street.....  
 Postoffice.....

Dear Mr.....: As a member of the Reserve Corps of the United States Army (Navy), I have been ordered into active service by the Government, and on that account I am writing to you of this fact, so that, in case of illness, you may summon some other doctor to attend you. In my absence Dr. ....of.....Telephone No..... has kindly consented to attend my patients, and I can heartily recommend him. Sincerely,

RESOLUTION ADOPTED BY MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND

"Resolved that the Medical and Chirurgical Faculty of Maryland recognizes the patriotism of those members of the medical profession resident in Maryland who volunteer for the service of the U. S. Government, and in appreciation of this we recommend that should these members of the profession be called into active service, the doctors who shall attend their patients should turn over one-third of the fees collected from such patients to the physician in active service or to his family."



Please present this letter to any doctor whom you may call in to attend you.

CARDS.

I agree to abide by resolution adopted in relation to fees for attendance on patients of doctors ordered into active service for the government.

In the remote chance of misunderstandings or disagreements arising under this resolution I agree to submit the facts to the board of censors of the society and abide by their decision.

(Signed).....

RESERVE CORPS

I hereby make application for appointment to membership in Reserve Corps of U. S. Army (scratch one out).

Navy

(Signed) .....

(Address) .....

HOW THEY PROTECT THE ABSENT PHYSICIAN IN ENGLAND.

The medical profession in England has presented to the physicians who stay at home the following suggestions:

1. When a new patient presents himself, the physician staying at home should ask the name of the doctor who last attended him. If this doctor is absent on service, and has left a locum tenens, an attempt should be made to induce the patient to go to the locum tenens.

2. If the last doctor who attended him is on military service, it should be explained to the patient that attendance will willingly be given on behalf of that practitioner and on no other terms.

3. Any attendance on behalf of such patients should be carefully and separately recorded, and a list of such attendances sent at regular intervals to the representative of the absentee.

4. An attempt should be made to ascertain the fees charged by the absentee, and a charge not less than this should be made on his behalf.

5. Accounts rendered on behalf of the absentee should mention the absentee's name, and moneys received should be di-

vided according to the scheme adopted by the local Medical War Committee.

6. The rule of dividing the fee should apply to all kinds of work.

7. New patients introduced by a patient of an absentee should be regarded as belonging to the absentee's practice.

8. In cases in which the patient's frequent change of physician leads to doubt as to who should be regarded as the regular attendant, the absentee should be given the benefit of the doubt.

9. No patient attended on behalf of an absentee should be attended by the deputy for at least one year after the absentee's return.

10. The greatest discretion should be used as to the introduction of a partner or assistant, or in commencing a new practice in an area from which men are absent on service.

11. Physicians newly located in a given district should be doubly scrupulous in regard to the practices of absentees, and should at once ascertain and join in any arrangements that have been made for the protection of absent practitioners.

12. The honor of the profession is involved when a vacancy occurs through the death of a practitioner while in service. Definite arrangements have been made to meet such a contingency in some communities, and should be made in all. Every assistance should be given in enabling the successor to get a fair start. Local practitioners should carry out the same procedure with regard to the successor as they had undertaken with regard to the man who has fallen while in service.

13. In all cases of doubt as to what is the right course of action as regards an absentee, the practitioner should consider what he would like his neighbor to do if he were absent on military service. The local Medical War Committee, or the Central Medical War Committee are always ready to advise.

In January, 1915, the Scottish Medical Service Emergency Committee issued a statement dealing with the carrying on of the practice of medical men on active service. Later in the same year the Central Medical War Committee for England and Wales issued a similar circular. In both of these it was pointed out that

the men going on active service have a right to expect that their interests would be protected by those who remain at home, and it was suggested that where the locum tenens could not be provided, the work should be done by a division of the money earned by the practice of the absentee along the following lines:

a) *Town Practice*: An equal division of the proceeds between the absentee and his deputy or deputies.

(b) *Combined Town and Country Practice*: Three-eighths to the absentee and five-eighths to the deputy, the latter to pay the expenses.

(c) *Country Practices Where Traveling Expenses are Important*: One-fourth to the absentee, three-fourths to the deputy.

Since human nature is what it is, and physicians are human, these rules have not always been followed, and the Central War Committee has endeavored to call the attention of the profession in England to the following general principles:

(a) No scheme will be satisfactory which has not behind it (1) the good will of the men who are to work; (2) the confidence of the men who are going into active service, and (3) the strong moral support of the local Medical War Committee. This presupposes that the scheme has been fully discussed at a meeting of the whole local profession.

(b) It is preferable that there should be a local agreement between the absentee and his deputy or deputies, although it is recognized that this may be impracticable in some cases.

(c) The local Medical War Committee should, in such an agreement, be vested with the power of dealing with any disputes which may arise between the absentee and his deputies. The decision of the committee should be binding. The committee should also have the power of appointing another deputy in case of need.

(d) Any such agreement should contain provisions whereby the absentee is indemnified against all acts of negligence committed by the deputy.

(e) The scheme and agreement should in all cases bind the deputies to refuse to act as the medical attendant of the pa-

tients attended for the absentee until a specified time (one or two years) after the absentee's return.

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#### DOCTORS MUST NOT CONTINUE IN APATHY.

Unless the physicians and surgeons in West Virginia awake to the imperative need which obtains on the part of the government for their services, this state will be on the War Department's black list. Several months ago, in fact, when war was first declared against Germany, there was requested of the state as her quota 200 medical men. Of this number a few over one-half have responded. This insufficient number of men have put the call of the country and of service to the nation's defenders above the call of the almighty dollar, as Dr. Gordon Wilson, secretary of the Medical Reserve Corps, expressed it. What is even more alarming is that during the last two weeks the number of medical men who apply for service has steadily fallen off and the campaign seems to be at a standstill despite the efforts of those in charge of recruiting to raise immediately the full quota.

Dr. Joseph Colt Bloodgood, of Johns Hopkins, who is secretary of the Southern Medical Association and the Committee of Medical Preparedness, speaking of the failure of Maryland's physicians to answer the call of patriotism, said: "The medical man under 55 who does not volunteer his services to the government not only fails to perform his patriotic duty to his country and to his profession, but also does an injustice to his colleagues who have volunteered their services.

The medical departments of the government are responsible for the examinations of recruits, the hygiene of camps and the care of the wounded. The surgeon generals as yet have not been given full authority and ample means to meet this responsibility. The President, as commander-in-chief, can give the surgeon generals full authority. Congress can give them the ample means. But up to the present time neither the President nor Congress has been able to give them sufficient number of men from the med-

ical profession, as it is a volunteer service. If the President gives the medical departments the authority, and Congress gives them the means, it is up to the medical profession of the country to furnish the men. And the men will be forthcoming, either of their own accord or without their consent.

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New York, June 13, 1917.

Dr. James R. Bloss,  
West Virginia Medical Journal,  
Huntington, W. Va.

Dear Doctor:—

While the resolution to secure doctors for the Medical Reserve Corps of the U. S. Army and Navy was introduced at the meeting of the American Medical Editors' Association, it was not with the intent to confine our work to the members of the Association only.

This work is for the good of the country at large and we most heartily solicit your cooperation in securing additional officers in the Medical Reserve Corps for both the Army and Navy, by the publication in your estimable magazine of the personal application blank and other information as laid out herewith.

Will you contribute a sufficient amount of space for the good of the cause and send a marked copy of your journal to the Surgeon General's Office, Washington, D. C., attention of Major R. E. Noble?

Courteously yours,  
J. MACDONALD,  
Sec'y & Treas.

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Dear Doctor:—

The Surgeon General's Office has appealed to the medical press of this country to aid in securing the necessary quota of physicians for the great Army now in course of organization.

Major Noble, in a letter, informs me that the Department must depend upon the medical press for assistance, and at the last meeting of the American Medical Editors' Association, held in New York, the enclosed resolution was presented and unanimously passed.

Much enthusiasm was manifested by those present and we are depending upon every member of the American Medical Editors' Association, as well as every

editor of every medical journal in this United States, to aid in a most effective way.

First, please read the enclosed Resolution. I am handing you a copy of the personal application blank referred to therein. Will you please publish this in the next issue of your journal among the reading pages and editorially support the efforts which the Government is making to secure Medical Officers.

Will you carry a foot note on the bottom of the personal application blank, calling attention to the very important requirements to accompany each application when filled out, which are as follows:

First, this application, after being filled out, must be sworn to before a Notary Public.

Second, it must be accompanied by a County Clerk's certificate certifying to the fact that the applicant is a licensed practitioner.

Third, two letters from citizens testifying to the character of the applicant must accompany the application.

As a matter for editorial comment, here is the situation.

We must raise 20,000 physicians, and the members of the American Medical Editors' Association, I feel, are going to do their share.

At the present time there are less than 500 physicians in the regular Medical Army Corps, about 2,500 in the Medical Reserve Corps, and about 800 in the militia, or a total of about 3,800 physicians, when we must have 20,000.

Commissions are accorded in the Medical Reserve Corps on the basis of the First Lieutenant, Captain and Major, with respective pay of \$2,000, \$2,400 and \$3,000 a year. No physician is commissioned lower than a First Lieutenant.

At this time of our great National crisis, will you aid the Surgeon General's Office in securing the number of physicians required and please emphasize the fact that when these applications have been made out in accordance with the above instructions, they should be sent to the nearest Chairman of the Examining Boards (a list of which is enclosed and should be printed), when appointments will be made for the appli-

cant to appear for examination.

Courteously yours,  
J. MACDONALD, Sec'y & Treas.  
Amer. Med'l Ed. Assn.

TO THE MEMBERS OF THE AMERICAN MEDICAL EDITORS' ASSOCIATION.

Your committee appointed June 4th, to consider appropriate ways and means to aid in recruiting the personnel of the medical reserve corps of the United States military forces, desires to present the following resolutions and emphatically urge their immediate adoption.

WHEREAS, The need of Medical Reserve Officers for both the Army and Navy is the paramount question of the day, therefore be it

*Resolved*, That (1) the members of this Association pledge themselves to publish prominently at least three times within the ensuing three months, a copy of the official personal application blank with an explanatory comment on the proper procedure to be employed in transmitting the same to the Surgeon General's office.

(2) That all medical journals of this country be urged to present editorially the needs of the military services in this crisis and the immediate necessity for securing the full complement of medical officers for the same.

(3) That this committee be continued in office after this meeting and be empowered to expend for carrying out the provisions of this resolution a sum not to exceed two hundred and fifty dollars.

(4) That a copy of these resolutions be forwarded to the Surgeon Generals of the Army and Navy and that the Association of American Medical Editors in convention assembled herewith pledges its hearty and unstinted support of all measures designed for the development of the medical forces in this hour of need.

Seale Harris, M. D., Sec'y Southern Medical Society; editor of The Southern Medical Journal.

T. L. Stedman, M. D., New York. Editor of the Medical Record.

H. E. Lewis, M. D., New York. Editor American Medicine.

D. S. Fairchild, Clinton, Iowa. Editor

Iowa State Journal of Medicine.  
G. W. Kosmak, M. D., New York. President American Medical Editors' Assn. Co-editor American Journal of Obstetrics.

Robert M. Green, M. D., Boston. Editor Boston Medical and Surgical Journal.

J. MacDonald, Jr., M. D. Secy American Medical Editors' Assn. Mgr. Editor American Journal of Surgery.

APPLICATION FOR APPOINTMENT IN THE MEDICAL RESERVE CORPS, U. S. ARMY.

.....  
.....191.....

To the Surgeon General, U. S. Army,  
Washington, D. C.

Sir:—I hereby make application to be examined for appointment in the Medical Reserve Corps, U. S. Army, and inclose testimonials as to my character and habits. \*

I certify that to the best of my knowledge and belief that I am laboring under no mental or physical infirmity or disability which can interfere with the efficient discharge of any duty which may be required of me if appointed in the Medical Reserve Corps, U. S. Army, and that the answers given to the interrogatories below are true and correct in every respect.

I furthermore state my willingness to proceed to such point for examination as may be designated by the Surgeon General, with the understanding that the journey entailed thereby must be made at my own expense.

#### INTERROGATORIES

1. What is your name in full (including your full middle name)?

2. What was the date of your birth?

3. Where were you born? (Give State and city or county; if foreign born give country.)

4. When and where were you naturalized? (For applicants of alien birth only.)

5. Are you married or single?

6. Have you any minor children; if so, how many?

- 7. What is your height, in inches?
- 8. Your weight, in pounds?
- 9. Give the nature and dates of all serious sickness and injuries which you have suffered.
- 10. If either parent or brother or sister has died, state cause and age in each case.
- 11. Do you use intoxicating liquors or narcotics; if so, to what extent?
- 12. Have you found your health or habits to interfere with your success in civil life?
- 13. What academy, high school, college or university have you attended? State periods of attendance from year to year, and whether you were graduated, giving date or dates of graduation.
- 14. Name any other educational advantage you have had, such as private tuition, foreign travel, etc.
- 15. Give all literary or scientific degrees you have taken, if any, names of institutions granting them, and dates.
- 16. With what ancient or modern languages or branches of science are you acquainted?
- \*Testimonials as to character and habits from at least two reputable persons must accompany this application. Political recommendations are not necessary.
- 17. How many courses of lectures have you attended? Names of colleges and dates.
- 18. When and where were you graduated in medicine?
- 19. Have you been before a State examining board? If so, state when, where, and with what result. \*
- 20. Are you a member of any State medical society? If so, give its name.
- 21. Have you had service in a hospital? If so, state where and in what capacity, giving inclusive dates of each kind of service.
- 22. What clinical experience have you had in dispensary or private practice?
- 23. Have you paid particular attention to any specialty in medicine; if so, what branch?
- 24. What opportunities for instruction or practice in operative surgery have you had?
- 25. Have you previously been an applicant for entry into the United States service? If so, state when, where, and

- with what result (if rejected state why.)
- 26. Are you a member of the organized militia? If so, state with what organization and in what capacity.
- 27. Have you been in the military or naval service of the United States as cadet or otherwise? If so, give inclusive dates of service with each organization, designating it.
- 28. What occupation, if any, have you followed other than that of student or practitioner?
- 29. What is your present post-office address?
- 30. What is your permanent residence?
- 31. (Signature of applicant).....
- 32. The correctness of all the statements made above was subscribed and sworn to by the applicant before me this .....day of.....191....

\*This application must be accompanied by a certificate from the proper official that the applicant is duly registered to practice medicine in the State in which he resides.

The National Committee for Mental Hygiene has created a subcommittee on furnishing hospital units for nervous and mental disorders to the United States Government, the project having been approved by Surgeon General W. C. Gorgas of the U. S. Army.

This subcommittee, of which Dr. Pearee Bailey of New York is chairman, is authorized to secure the services of alienists and neurologists to be commissioned in the Officers' Reserve Corps, Medical Section, and to serve in the neuro-psyehiatric units which are to be attached to the base and other hospitals of the military service of the United States. Further information will be given, and application forms sent to physicians qualified in this branch of medicine, on application by letter or in person to The National Committee for Mental Hygiene, 50 Union Square, New York City.

Morgantown, W. Va.

Dear Doctor Bloss:

"I move we adjourn"—that the dia-

tribes on contract practice cease. Dr. McDonald and Dr. Hardy both lack that equipoise of temperament that allows a judicial discussion of the merits of the matter. They both seem chock full of vindictive arrogance that brooks no external interference from their "enemies."

I wrote up their first unwarranted assault, and ransacked all the dictionaries of the University library for words to express the thoughts set forth. I was too successful. The thing was so sizzling hot and blistering acrid that the good editor of the *Journal* sent it back, with the injunction to cut out some of the words and tone it down. I couldn't. It would have been just like cutting a hole in the molasses can—it would muss things. I didn't emasculate it. But it would have been entertaining. So we'll drop it.

C. H. MAXWELL,  
Blood-money Getter.

Huntington, W. Va., June 27, 1917.

Dr. J. E. Rader has been honored by an appointment, from Governor Cornwell, as a member of the State Defense Council, and made chairman of the Bureau of Medicine and Surgery. The tasks and objects of which, among other things, are the co-ordination of the civilian and military medical activities and to advise regarding the fundamental medical problems of defense from the State's standpoint.

Each member of the Council is requested to appoint a committee of seven members representing the particular field covered by him in his Bureau. This committee is to be known and designated as an Auxiliary Committee of the State Council of Defense. One member is to be appointed from each congressional district, and one at large, whose duties will be to assist and co-operate with the State Defense Council in carrying out the suggestions already mentioned, and in addition give aid and encouragement to any and everything that will be of service to the State and Federal Governments and authorities in the conduct of this great war. Dr. Rader has named the following well known physicians and surgeons as members of his Auxiliary

Committee:

First Congressional District—Dr. F. L. Hupp, Wheeling, W. Va.

Second Congressional District—Dr. W. W. Golden, Elkins, W. Va.

Third Congressional District—Dr. C. R. Ogden, Clarksburg, W. Va.

Fourth Congressional District—Dr. G. D. Jeffers, Parkersburg, W. Va.

Fifth Congressional District—Dr. E. H. Thompson, Bluefield, W. Va.

Sixth Congressional District—Dr. J. E. Coleman, Beckley, W. Va.

At Large—Dr. G. A. Aschman, Wheeling, W. Va.

#### AN EXPLANATION.

There seems to be a mistaken idea in regard to the State Council of Defense and the State Committee of Defense. The West Virginia State Council of Defense is a creation of the extraordinary session of the legislature and consists of the Board of Public Works which is known as the Executive State Council of Defense, and fifteen citizens designated as the Advisory State Council of Defense. The Advisory Council is appointed by the Governor with reference to their special knowledge of agriculture, labor, industries, public utilities, natural resources, sanitation, finance, transportation, or other subjects relating to National or State Defense. The President of the West Virginia Medical Association is the only physician on this Council and is chairman of the Bureau of Medicine, Surgery and Sanitation. Said Councils of Defense are created for the duration of the war and six months thereafter.

The State Committee of Defense is a creation of the General Medical Board of the Advisory Commission of the Council of National Defense, which has been in operation for fifteen or eighteen months, and originally consisted of nine physicians from each State and known as the State Committee of Medical Preparedness. In May of this year the General Medical Board of the Advisory Commission of the Council of National Defense, of which Franklin H. Martin of Chicago is chairman, announced that it had found it necessary in order to co-

ordinate the activities of the various organizations now engaged in promoting medical preparedness to merge these organizations into a single body in each State. The merged committee is to be known as the State Committee of National Defense, Medical Section. The following constitute the newly formed committee for our State:

Dr. J. E. Cannaday, chairman,  
Charleston.

Dr. H. D. Hatfield, Huntington.

Dr. J. E. Rader, Huntington.

Dr. W. W. Golden, Elkins.

Dr. C. S. Hoffman, Keyser.

Dr. F. L. Hupp, Wheeling.

Dr. J. H. Anderson, Marytown.

Dr. A. P. Butt, Davis.

Dr. W. H. StClair, Bluefield.

The above are the nine members of the original committee, and the following are the newly appointed members:

Dr. S. L. Jepson, Charleston.

Dr. J. Ross Hunter, Huntington.

Major C. C. Hogg, Huntington.

Dr. John N. Simpson, Morgantown.

Dr. A. A. Shawkey, Charleston.

J. E. R.

Huntington, W. Va., June 15, 1917.  
TO ALL MEMBERS:

Having consulted with the Chief Surgeon and with the Presidents of other Associations of Railroad Surgeons, I find it will be unwise for us to attempt to hold a meeting of the Surgeons of our Company this year, owing to the unsettled condition of the country due to the war, and the prospect of a poorly attended meeting because so many of our members are being called to military service.

The regular Annual Meeting of the Association of Surgeons of the Chesapeake and Ohio Railway Company, which was to have been held at Fort Monroe, Va., in August, 1917, is, therefore, postponed one year, and the Secretary-Treasurer has been instructed to make no collection of dues from the Surgeons for the year 1917.

Very respectfully,

C. R. ENSLOW,

Approved: President.

W. T. OPPENHEIMER, Chief Surgeon.

#### IMPORTANT MEDICAL POSITION

The Municipal Civil Service Commission of New York City announces an examination for Chief Medical Examiner, for which applications will be open in a week or two. Full particulars and applications may be obtained at Room 1400 Municipal Building. The examination is open to all citizens of the United States, but persons accepting appointment must thereafter reside in the State of New York. The compensation proposed is \$7,500 annually for full-time service, and candidates must be at least 30 years of age before the closing date for the receipt of applications.

The incumbent of this position will be in charge of the office of the Chief Medical Examiner of the City of New York, and will perform the duties heretofore performed by the Coroners of the various boroughs. Candidates must have a degree from an approved institution, and present evidence of having done, in an official connection, at least *ten* years' work in the pathological laboratory of a recognized medical school, hospital, asylum, or public morgue, or in other corresponding official capacity. They must have performed at least 1,000 autopsies. Special consideration will be given to administrative experience, preparation and presentation of evidence in court, and definite published contributions to the science of Legal Medicine. Copies of such publications should be submitted with the application.

The examination will consist of a practical test with a weight of 3, 75% required; an experience statement with a weight of 4, 70% required, and an oral test with a weight of 3, 70% required. In the practical test, candidates will be required to perform an autopsy and to report in writing on their findings. Candidates will appear before an examining board for the oral test as to their personal qualifications and fitness for the position including a thorough cross-examination.

This position is one of the most important in civil service in the medical and legal lines and the substantial salary and splendid opportunities offered should attract candidates of high standing in the medical professional.

# The West Virginia Medical Journal

JAS. R. BLOSS, M. D., EDITOR  
 C. R. ENSLOW, M. D.  
 J. E. RADER, M. D. ASSISTANT EDITORS

Huntington, W. Va., July, 1917

THE JOURNAL issued on the first of each month.

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All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notices of deaths, removals from the State, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

## CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

## ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

## REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: Miller-Ritter Building, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinions or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

## OFFICERS OF THE STATE ASSOCIATION

PRESIDENT—J. E. Rader, Huntington, W. Va.

FIRST VICE-PRESIDENT—W. S. Young, Sistersville, W. Va.

SECOND VICE-PRESIDENT—E. H. Thompson, Bluefield, W. Va.

SECRETARY—J. Howard Anderson, Marytown, W. Va.

TREASURER—H. G. Nicholson, Charleston, W. Va.

DELEGATES TO A. M. A.—Frank LeMoyné Hupp, Wheeling, W. Va.; C. R. Ogden, Clarksburg, Va.

ALTERNATE—B. B. Wheeler, McKendree, W. Va.

CHAIRMAN OF THE COUNCIL—G. D. Jeffers, Parkersburg, W. Va.

## COUNCIL

FIRST DISTRICT—H. R. Johnson, Fairmont, W. Va., one-year term; J. W. McDonald, Fairmont, W. Va., two-year term.

SECOND DISTRICT—T. K. Oates, Martinsburg, W. Va., one-year term; C. H. Maxwell, Morgantown, W. Va., two-year term.

THIRD DISTRICT—C. R. Ogden, Clarksburg, W. Va., one-year term; M. T. Morrison, Sutton, W. Va., two-year term.

FOURTH DISTRICT—G. D. Jeffers, Parkersburg, W. Va., one-year term; R. H. Pepper, Huntington, W. Va., two-year term.

FIFTH DISTRICT—E. F. Peters, Maybeury, W. Va., one-year term; W. H. St. Clair, Bluefield, W. Va., two-year term.

SIXTH DISTRICT—B. B. Wheeler, McKendree, W. Va., one-year term; P. A. Haley, Charleston, W. Va., two-year term.

# Editorial

Attention is called to the communication from Dr. C. O. Henry in regard to the coming meeting of the State Association. Do not forget the date of this meeting—October 2nd, 3rd and 4th—and make your plans to be there. This is the semi-centennial of our Association and it is to be hoped that the attendance will be a record-breaking one.

Do not forget that you must read over the Constitution and the proposed changes in it. For convenience, the Editor has printed them in parallel columns. In this way you do not have to turn the pages for comparison.

These changes are of great importance and each member of the Association should be familiar with them.

## DUTY CALLS—LET US NOT FALTER.

The following is from an editorial in the June number of the Southern Medical Journal.

### THE PHYSICIAN'S OPPORTUNITY FOR SERVICE.

The mobilization of the vast physical resources of this country is a huge undertaking and presents, to every loyal physician, an opportunity for patriotic service heretofore



not offered to the present generation of doctors. Modern medicine and surgery have established the fact that proper sanitation and hygiene should be given a place in the foremost ranks in any military activity on a large scale.

Our National Government, after a sad and retrospective glance into the pages of history recently written by the experience of the Spanish-American War, determined that this chapter, replete with death and disability from preventable diseases, should not be rewritten. The fly and mosquito, justly pronounced a serious menace to any community in times of peace, can be and must be forbidden entrance to any and all of our mobilization camps. The pale spirochete and the gonococcus of Neisser require equally rigid surveillance in order to hold to a minimum the ravages wrought by these unwelcome, yet ubiquitous hosts. To no one more than to the doctor do these plain facts appeal.

The numerical strength of the Medical Department of our present standing Army, even before the declaration of war, was deficient; now that war is upon us and with the determination by our Government of equipping and training an army commensurate with the dignity and rank of this Nation, there will be needed from 20,000 to 30,000 medical reserve officers. These men can and must be supplied from the physicians in regular practice. It should be clearly understood that the National Government desires to disturb the civilian doctor as little as possible.

One of the most important duties which has been undertaken by the various state committees for Medical Preparedness has been to catalogue and properly to appraise the medical talent in each state, so that undue hardship would not be served upon those men entering the Medical Reserve Corps. This information is now on file and at the disposal of the Surgeon-General of the Army. Those men who have re-

ceived application blanks to join the Reserve Corps should fill them in promptly and forward them to Washington.

#### THE CALL FOR YOUNG PHYSICIANS.

The older men of the profession can do much toward encouraging and stimulating the young men, more especially those not yet firmly anchored by family ties, promptly to enlist in the Reserve Corps; or, if their fancy dictates and their education and training is sufficiently broad, to join the regular Army or Navy. It is unquestionably true that the advantages offered by the Medical Department of the Army and Navy, both for patriotic service and for rapid promotion, have not been before, and will not soon again, be paralleled.

It was gratifying indeed to the writer, at the recent meeting of the Alabama State Medical Association, to witness the earnestness and zeal with which this subject was discussed, and to learn what splendid progress had been made in this work by the State Committee for Medical Preparedness, of which Dr. J. N. Baker, of Montgomery, is chairman. This one instance is, he is sure, but an index as to what is being done by every other like committee in this country.

In this discussion, one factor in particular was superlatively stressed, namely, the sacred duty devolving upon those members left behind to care for and to preserve intact, in so far as this was possible, the practices of those men who went to the front. This factor of mutual aid and assistance must constantly be borne in mind, and when this spirit becomes properly operative, our armies, large though they be, will not be lacking in skilled medical men to guide their destinies.

#### THE S. M. A. COMMITTEE.

At the request of the Council of National Defense, President Duncan

Eve appointed Dr. Joseph Bloodgood of Baltimore, Dr. Richard Barr of Nashville, and Dr. E. L. Gilreest of Dallas, Tex., as the Committee from the Southern Medical Association. Dr. Bloodgood, who has been an enthusiastic member of the Medical Reserve Corps of the Army for a number of years, has sent a personal letter to the Editor, which is published under Correspondence in this number of *The Journal*. In this letter Dr. Bloodgood gives much valuable information for physicians contemplating entering the Medical Department of the Army or Navy. He also calls attention to the fact that Southern physicians have been slow to enlist, a condition that is greatly deplored.

The South should be well represented in both the Army and Navy. No region of the country is more patriotic and none has a higher class medical profession. Every physician under thirty, unless there are unusual conditions why he can not leave his present work, should enlist at once either in the Medical Corps of the Army or Navy or in the National Guard. The older men should also enlist at once in the Officers' Reserve Corps to be called upon when their services are needed.

Further information may be obtained from the Committee on Medical Preparedness from the Southern Medical Association, the State and County Committees of National Defense, or directly from Surgeon-General W. C. Gorgas of the Army, or Surgeon-General W. C. Braisted of the Navy, Washington, D. C.—*Editorial from the Southern Medical Journal*.

Fellow members, our country needs us—not next week, not next month, not next year—but now. God forbid that it shall ever be said of any physician in our State or Society, "He had to be drafted."

I hope each and every member of our Society will read and re-read the above editorial and then sit down and quietly take an inventory of himself, and ask himself the following questions: Am I

doing my duty? If I am undecided as to just what my duty is in this grave crisis in the world's history, God help me to decide it *Right*.

In closing his address at the recent meeting of the American Medical Association in New York, the President, Dr. C. H. Mayo, makes the following appeal: "Medical men, your Country needs you now and always. You must remember that the State is permanent and does not exist for the good of the individual, but the individual exists for the good of the State." J. E. R.

## Society Proceedings

### CABELL COUNTY SOCIETY.

The Cabell County Medical Society met May 17, 1917, at the Frederick Hotel in room No. 227.

Dr. Rowsey, the president, being absent, Dr. Fitch was elected chairman pro tem. Dr. Fitch being called away, Dr. E. B. Gerlach became chairman of the meeting.

The minutes of the last meeting were read and approved.

The members present were: Drs. Fitch, A. K. Kessler, E. B. and H. P. Gerlach, Mathews, Marple, Vest, Watts, Rader, J. A. Guthrie, Goff, Hunter, Bloss, Pepper and Dr. Middlekauff, a visitor, was also present.

After a report of clinical cases the secretary reported a recent meeting of the State Council in Charleston.

The application for membership of Dr. M. E. Jones, of the Huntington State Hospital, which had been referred to the board of censors and had met with their approval, was unanimously elected to membership into the Society.

It was moved by Dr. Bloss, and seconded by Dr. Watts, that Dr. H. P. Gerlach be appointed as a censor to fill the unexpired term of Dr. Campbell, deceased. Carried.

It was moved by Dr. J. A. Guthrie, and seconded by Dr. Fitch, that the committee to confer with Slayton of the Salvation Army, in regard to rooms for holding medical clinics of the Society, be dismissed, as they had given no report. Dr. Fitch offered an amendment that the committee be honorably discharged,

which was carried.

The following committee, to present or report clinical cases for the next regular meeting, was appointed by the chair: Drs. Bloss, Hunter, J. A. Guthrie and Fitch.

On motion the Society adjourned.

R. H. PEPPER, Secretary.

The regular meeting of the Cabell County Medical Society met May 31, 1917, at the Frederick hotel in room No. 221.

Dr. J. H. Rowsey, the President, being absent, Dr. I. C. Hicks was elected chairman pro tem.

The members present were: Drs. I. C. Hicks, Hunter, Hume, H. P. and E. B. Gerlach, McGuire, Fitch, Yost, Steenbergen and Pepper.

Dr. Hunter reported a case of hernia with bleeding from the bowels. Diagnosis: New growth of the lower bowel.

Dr. Fitch reported a case of erythematous rash with bleeding from the bowels and bladder and later some purpuric spots appeared on the skin. He also reported a case of pregnancy with nephritis with heavy albumen and some casts in the urine.

The committee to report or present clinical cases were: Drs. Bloss, J. A. Guthrie, Hume and Steenbergen.

On motion the Society adjourned.

R. H. PEPPER, Secretary.

#### MINGO COUNTY SOCIETY.

Matewan, W. Va., June 19, 1917.

Dr. James R. Bloss,

Huntington, W. Va.

Dear Doctor:—I am pleased to advise you that the Mingo County Medical Society has been completely resuscitated after several months of constant effort. Today we had an extremely interesting meeting which was attended by thirteen members and one visitor. Dr. L. Francis Boland, of Stone, Kentucky, read a most interesting and highly instructive paper on "Carrel and Dakins Treatment of Wounds." He gave the formula for and the method of making the solution of choice and reported some several cases in which this preparation and method of treatment had given him good results. The paper was ably discussed by Dr. A.

S. Richardson, of O'Keefe, President of the Society, and Dr. Tunis Nunemaker, of Williamson.

Several interesting clinical cases were reported and discussed, among them including "Cholera Infantum," Infantile Hydrocele, Infective Jaundice and Septic Sore Throat complicated with Rheumatism.

A resolution was adopted, and a copy thereof forwarded to His Excellency, Governor John J. Cornwell, endorsing Dr. Tunis Nunemaker, of Williamson, for the vacancy soon to be created in our State Public Health Council.

A large attendance and another good meeting is practically assured for our July meeting.

Yours very truly,

W. H. TRIPLETT, Secretary.

Matewan, West Virginia,

June eleventh, 'seventeen.

Dear Doctor:—On May 14th I sent out a circular letter to every member of this Society, a copy of which I am sure reached you. I again call your attention to that letter if same does not happen to exist as ashes or repose in the bottom of your waste basket. I want to point out that I asked *you*, as a member, a sustaining part of this organization, to write me specifically just what I could expect from you in regard to furthering the existence of the society.

I regret very much to advise that as yet only two members have honored me with a reply. Surely, my efforts as Secretary, the one supporting column of the superstructure, availeth but little. Suppose that I would lay down calmly on my job, as the members have done, how long would we be known as a medical organization? How long would *you* enjoy the privileges of membership in the American Medical Association, the West Virginia State Medical Association, and last, but by no means the least, our own little organization which we have tried to sustain—but failed because *you* didn't do your part?

I wish that you could just feel what I have to endure, the realization of the fact that the individual members of this society positively will not take enough interest in their own interests to help me pro-

fect them—then you would doubtless wake up and try to help me make a real medical society out of this little organization I am trying to waft along.

The nineteenth is our regular meeting day and as yet I have only one paper promised for the program, altho I have asked for a half dozen so as to be sure of two or three. Will you try to have something for us? I think it is about time for every member of our band to come out in the front of the ranks if we expect to have a medical society at all. What think ye? Will you voice your thoughts?

Thanking you in advance, I am,  
Fraternally yours,  
W. H. TRIPLETT, Secretary.

### MONONGALIA COUNTY MEDICAL SOCIETY PROGRAM

#### FEBRUARY

- 6th—Anatomy of the Nervous System, Dr. S. J. Morris.  
20th—Physiology of the Nervous System, Dr. Jno. N. Simpson.

#### MARCH

- 6th—Infantile Paralysis, Dr. S. S. Wade.  
20th—Neuritis, Dr. Irvin Hardy.

#### APRIL

- 6th—Epilepsy, Dr. S. L. Brock.  
17th—Chorea, Dr. R. B. Cox.

#### MAY

- 1st—Hysteria, Dr. C. H. Maxwell.  
15th—Paranoia and Mania, Dr. W. C. Moser.

#### JUNE

- 5th—Melancholia, Dr. Page A. Gibbons.  
19th—Neurasthenia, Dr. R. W. Fisher.

#### JULY

- 3rd—Syphilis of the Nervous System, Dr. Aaron Arkin.  
17th—Paralyses, Dr. R. Cole Price.

#### AUGUST

- 7th—Insomnia and Headaches, Dr. L. W. Cobun.  
21st—Heart Diseases, Dr. T. Jud McBee.

#### SEPTEMBER

- 4th—Defective Special Senses in Children, Dr. C. B. Wylie.  
18th—Skin Diseases of School Children, Dr. S. S. Wade.

#### OCTOBER

- 2nd—Traumatic Emphysema, Dr. H. C. Powell.

- 16th—Diabetes Mellitus, Dr. C. H. Maxwell.

#### NOVEMBER

- 6th—Etiology of Rheumatism, Dr. A. Arkin.  
Treatment of Rheumatism, Dr. S. L. Brock.  
20th—Blood Pressure, R. W. Fisher.

#### DECEMBER

- 4th—Colds, Dr. L. W. Cobun.  
20th—Clinical Cases, Any Member.  
Election of Officers.  
S. S. WADE, President.  
C. B. WYLIE, Vice President.  
C. H. MAXWELL, Secretary.  
Committee.

### TYLER COUNTY SOCIETY.

The Tyler County Medical Society met at the office of Dr. R. F. Thaw, in Sistersville, Tuesday, June 12th, and re-organized by electing the following officers:

President, Dr. M. M. Reppard, Middlebourne.

Vice President, Dr. R. F. Thaw, Sistersville.

Secretary-Treasurer, Dr. O. S. Campbell, Middlebourne.

Delegate to State Association, Dr. R. F. Thaw, Sistersville.

The next regular meeting will be held at Middlebourne, Tuesday, July 10th, at three p. m.

O. S. CAMPBELL, Secretary.

## State News

### DOCTORS WHO HAVE APPLIED

FOR COMMISSIONS IN THE MEDICAL OFFICERS' RESERVE CORPS SINCE THE JUNE NUMBER OF THE JOURNAL.

Dr. W. H. Howell, Murraysville, W. Va.

Dr. F. K. Vass, Gassaway, W. Va.

Dr. E. Fred Gott, Bluefield, W. Va.

Dr. Wm. Nelson, Hansford, W. Va.

Dr. J. W. Fontaine, Charleston, W. Va.

Dr. J. O. Hicks, Huntington, W. Va.

Dr. E. E. Archer, Auxier, Ky.

Dr. A. C. Harper, Amma, W. Va.

Dr. H. A. Brady, Beckley, W. Va.

Dr. H. G. Hammond, Eckman, W. Va.

Dr. W. B. Robertson, Quincy, W. Va.  
 Dr. Maury Anderson, Ward, W. Va.  
 Dr. W. G. Harper, Beverly, W. Va.  
 Dr. W. H. Green, Camden, W. Va.  
 Dr. J. D. Biggs, Greenup, Ky.  
 Dr. C. E. Park, Parkersburg, W. Va.  
 Dr. F. C. Shafer, Roanoke, W. Va.  
 Dr. J. A. Arbuckle, Elkins, W. Va.  
 Dr. D. P. Crockett, Hardy, Ky.  
 Dr. F. L. Pratt, Linneus, Mo.  
 Dr. C. F. Sayre, Mason City, W. Va.  
 Dr. Ivy Shirkey, Carbon, W. Va.

—o—

Drs. M. I. Mendeloff, of Charleston; R. H. Eanes, of Widen, and Eugene Davis, of Charleston, have left for Fort Oglethorpe for a three months' intensive medical military training.

—o—

Dr. O. O. Cooper, of Hinton, has contributed \$100.00 to Ambulance Corps No. 22, Charleston. This Ambulance Corps is the first to be organized in the State of West Virginia and has enlisted up to full strength and is ready for orders from the War Department. Dr. T. L. Barber, Jr., is in charge. The other doctors connected with this ambulance corps are: Dr. W. B. Robertson of Quincy, Dr. Maury Anderson of Ward, Dr. Howard Sarver of Charleston, and Dr. W. B. Hite of Tornado, W. Va.

—o—

Dr. J. E. Cannaday, Major, Medical Officers' Reserve Corps, has received orders from the War Department instructing him to make physical examinations for applicants to the Dental as well as the Veterinary Reserve Corps.

—o—

Dr. Will Farley, of Holden, was a recent visitor in Huntington.

—o—

Mrs. N. S. Woodyard, superintendent of the Marlinton General Hospital at Marlinton, took her vacation in Huntington in June.

—o—

Dr. John Herschel, of Wheeling, during June, visited in Huntington.

—o—

Dr. Tom A. Williams, the well known neurologist of Washington, D. C., has received an appointment from the French government as a neurologist on its medical staff, and will leave for his

post of duty soon.

—o—

The Navy Department authorizes the statement that more than 2,000 medical officers will be required to care for the greater Navy Marine Corps, Naval Reserve and Coast Defense force, the Naval Aeronautic Corps, Hospital Corps and auxiliaries. When all these branches are recruited to their full strength the Naval Medical Corps will have to care for more than 250,000 men.

—o—

The American Red Cross Hospital was formally opened in Paris on May 31st. The President of France conferred the Legion of Honor on Dr. Joseph Blake, of New York, organizer of the hospital.

—o—

Dr. J. C. King, of Radford, Va., has been appointed by Governor Stuart a member of the board of the Eastern State Hospital.

—o—

The southern section of the American Rhinological and Otolological Society will convene in Huntington in January, 1918. Dr. T. W. Moore, who attended the convention held in Atlantic City in June, was elected a vice-president of the national society, and hence chairman of the southern sections. The convention will bring scores of specialists to Huntington.

—o—

Dr. John T. Thornton, of Wheeling, has been recommended for a position as a base-hospital physician.

—o—

Dr. T. Judd McBee, of Morgantown, has been accepted for the post of first lieutenant in the medical reserve corps of the army.

—o—

Dr. F. C. Robertson, of Mullens, W. Va., will be associated with Dr. J. A. Guthrie, of Huntington, in his office in the First National Bank building.

—o—

Dr. I. M. Austin, of Morgantown, was a recent visitor in Huntington.

—o—

Dr. C. T. Taylor, of Huntington, spent some time recently in Chicago.

—o—

Dr. C. M. Hawes, of Huntington, visited Richmond, Va., and New York City

during June.

—o—

Dr. A. U. Tieche, of Winding Gulf, W. Va., and Miss Florence McCulloch, of Huntington, were united in marriage on June 30th at the summer home of the bride near Point Pleasant. Congratulations are extended to the doctor.

—o—

Dr. Van Pelt, formerly connected with the C. & O. hospital as resident physician, has gone to Winding Gulf, W. Va., to do relief work for a short time.

—o—

Dr. Harry W. Keatley and Dr. Joseph W. Lyons, both of Huntington, have been recommended to the War Department for appointment in the regular army in the medical corps with the rank of first lieutenant. They will go to Fort Benjamin Harrison for examination.

#### MEDICAL MEN OF B. R. T. AND THEIR DOINGS.

Dr. W. W. Golden has been conducting classes in Davis Memorial Hospital, at Elkins, giving instruction in first aid and care of sick and injured. He has also given lectures to the Elkins High school.

—o—

Dr. H. W. Daniels has given instruction as to the aid that can properly be given to the injured in emergency cases.

—o—

Dr. H. K. Owens is aiding in instructing the public as to the proper way to administer to the injured in the absence of the physician or a trained nurse.

—o—

Drs. R. H. Powell, H. K. Owens and H. W. Daniels, we learn, have passed the preliminary examinations, at Charleston, for army medical service. It is to be hoped that our citizens may not be called to a foreign soil to fight for liberty and humanity, but, should they be so employed, we can commend these physicians as capable, as well as for patriotism, and admire the spirit that prompted them to proffer their services to their country in its time of need. They surely cannot be classed among the *slackers*.

—o—

It is said that when two of the physicians from Elkins visited Charleston, for

examination, one being quite tall and the other very short in stature, the boys of Charleston mistook them for a part of the troupe of a variety theatre and said: "There goes Mutt and Jeff," greatly to the confusion of the M. D.'s.

—o—

Since it has been generally known that "Uncle Tom Wilson" has serious contemplations of committing matrimony, his correspondence is so great that he has employed an amanuensis to take charge of his letter writing. We learn that Miss Linn has been secured for that arduous task, and we feel sure she is thoroughly equipped for the service.

—o—

Dr. C. W. Birdsall is now located at Weaver and is looking after the health of that section, as well as "hunting for bears." The Doctor was informed by Captain Harry Sluss that he should not go to Weaver unless he was well armed, as the bears were quite numerous there. The Doctor did not know Harry well, and so the day after his arrival Dr. Birdsall was seen on the streets of Weaver carrying his gun, looking each way for the bear that was liable to pounce upon him at any time. Suffice it to say the bear has not yet been seen, and there is some question as to Harry's veracity.

—o—

Dr. L. W. Talbott is the champion fox chaser of Elkins. He would rather hear the music of the fox-hound, on a hot trail, than the sweetest strains that ever echoed from organ or piano. No night is too dark, nor way too rough, to deter "Doc" from his favorite sport.

—o—

We regret to note the serious and near-fatal accident which came to Dr. N. B. Michael, his wife and son, on a railroad crossing at Hendricks recently. The Doctor and family were crossing the tract in their auto and a switch engine, without lights or a watchman, ran back on them, demolishing the auto and seriously injuring all, the wife most seriously. They were all taken to a hospital in Baltimore by order of railroad officials, where they have been for some weeks. We are glad to learn, however, that in time perfect recovery is expected.

J. C. I.

# The West Virginia Medical Journal

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Under the Direction  
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Committee on Publication

JAS. R. BLOSS, EDITOR  
Huntington, W. Va.

C. R. ENSLOW, } ASSISTANT EDITORS  
J. E. RADER, }  
Huntington, W. Va.

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## PELLAGRA.

By DR. CHAS. A. BARLOW, Supt. Spencer  
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(Read at State Association Meeting,  
Wheeling, May, 1916.)

Prior to 1907 American physicians had not given much thought and attention to pellagra, as it was unknown in this country and only existed in Spain, Italy, Austria and other foreign countries. It was first recognized in the United States in 1907. It appears to be conclusive that many cases existed before that time, unrecognized. Since 1907 much attention has been given to the disease and American physicians have become more and more familiar with the symptoms and manifestations until we have cases reported from practically every section of the United States. The increase in most of these has been great and a health officer of one of the southern states claims there were 50,000 within his state. While it has appeared in all sections of the United States it is more prevalent in the southern states. Dr. Sandy, Medical Director of the State Hospital for the Insane, at Columbia, South Carolina, in a paper read before the American Medico Psychological Association last month, says:

"During six months there were ad-

mitted six hundred and six patients of whom one hundred and sixty or 26% were pellagrins, that is, had some actual clinical manifestations of the disease.

The Surgeon General in his 1912 report says, "In many sections of the country the disease now prevails in epidemic form and is menacing the lives and health of the entire population. All governments with experience unite in regarding it as a national calamity, both from financial and public health standpoints.

"When consideration is given to the nature of the disease, its chronicity and termination often in invalidism, insanity or death, the lack of definite knowledge as to its causation, the unsatisfactory results of treatment, the rapid and continuous spread and the uneasy state of public mind in many places, then the thorough investigation of this mysterious disease assumes immediate importance."

In 1910 our government sent Dr. Lavinder to Italy to study this disease and while there he met Dr. Sambon of the British Pellagra Investigation Committee, upon the same mission. The Public Health Service has been giving considerable study and attention to this subject and a hospital has been equipped in Spartanburg, South Carolina, solely for this purpose.

Several states have appointed commissions for the investigation of pellagra

and many men have devoted their lives in looking for the cause of this disease, yet with all this, the secret as to the cause is not known.

The first case coming to our attention at the Spencer State Hospital was in 1911 and since that time we have treated 18 cases. The Weston State Hospital has treated 30 cases, and the Huntington State Hospital has treated cases? ? ?

No doubt many cases have occurred throughout the state unrecognized and for this reason we deem it of great importance that the members of our profession familiarize themselves with the symptoms and manifestations of the disease. Like most other diseases early recognition is very important, if we expect to get the best results from treatment.

The only case coming to us which was recognized by the family physician, was a man sent by Dr. Walkup. This patient had suffered with pellagra for two years prior to his admission to the hospital. He was admitted October 1915, and discharged as recovered March, 1916. Time alone will tell, whether or not, he will have a recurrence.

We now have a young girl who has fully recovered from an attack of pellagra. She contracted the disease some years after admission to the hospital. We attributed faulty diet as cause for this attack. While the diet of all the patients is practically the same; this girl would refuse to eat full meals for several weeks, thinking that she was getting too fat. It was immediately following one of these periods that she developed pellagra. We believe that something was omitted from the food which she ate that caused the disease to develop.

Several states have made it a reportable disease, and we believe it should be so considered by our State Board of Health.

#### SYMPTOMS.

The disease occurs in all ages, from infancy to old age, but is more common in those of middle life. It occurs oftener in the female than in the male. Of 316 cases reported by the Tennessee Pellagra Commission there were 98 white males, 200 white females, 4 colored males

and 14 colored females. Dr. Lavinder found more among female negroes, but Wood and other authorities claim that the white females are more susceptible.

It is a systematic disease characterized by a skin eruption, symptoms of gastrointestinal disturbances, and more or less well marked general debility and emaciation. The only reliable diagnostic system is the skin eruption which begins as a bright red erythema or dermatitis generally upon the backs of the hands; this resembles very closely the solar erythema (sunburn). This color becomes more copper-colored in the course of a few days with thickening of the epidermis especially about the knuckles and often with fissures which bleed easily. In severe types bullæ form which may rupture, thus giving rise to superficial ulcers. In the course of two or three weeks the color becomes gradually darker from increased pigment deposits and begins to desquamate. This stage lasts a variable time from a few weeks to several months, at the end of which the appearance of the skin is pink and delicate-looking like that of an infant. Following this it gradually returns to a normal condition. The chief points in diagnosis are the course; the more or less absolute symmetry on the two sides of the body; the sharp line of demarcation from the healthy skin; and the absence of marked itching and pain. The commonest sites are the backs of the hands and lower parts of the forearm often extending as a cuff around the wrist just above the palm; the elbows and areas on the inner sides of the arms and forearms; the forehead and cheeks; the neck, and finally the dorsa of the feet. At times the eruption is widespread over the whole body. Denudation and swelling of the tongue with sometimes ulcerations, inflammation and even ulceration of the mucosa of the cheeks, gums and lips should probably be regarded as similar manifestations to the skin eruptions. Excoriations about the anus and genitalia, with inflammation of the mucosa of the vagina are fairly common.

The gastro-intestinal symptoms are very frequent but not always marked and may be absent. They consist of diarrhœa with liquid putrescent stools



of peculiar odor, which is thought by some to be characteristic. More or less anorexia is present as a rule, but sometimes the appetite is excessive.

Emaciation and general weakness are present in a degree more or less corresponding with the severity of the gastrointestinal symptoms.

Besides these features there is a great tendency to the development of mental disorder of delirious types and in the late stages to the occurrence of the central neuritis syndroms.

The course of the disease is extremely variable. In many cases it consists of annual exacerbations lasting one or two months with apparent recovery in the intervals. Some patients seem to have one attack and then to recover, at any rate without a recurrence during one pellagra season. The attacks in this section usually come on during the months of May or June. If the season is early they may make their appearance in March or April. There are few cases which make their appearance in the fall. This disease may be a sequel to such diseases as tuberculosis, hook-worm disease, thyroid disease, syphilis, malaria, senility and in fact any chronic disease which lowers the power of resistance. The last case occurring in our institution was that of a female having tuberculosis. From autopsy we found one lung completely gone, yet this was a typical case of pellagra.

#### PROGNOSIS

The prognosis of pellagra as given by the different investigators and writers is variable. Lavinder estimated the death rate in the United States at 25% and in asylum cases 67%. At any rate it is a very grave disease, yet the mortality rate is being lowered through the dietetic treatment. The younger the patient the more favorable the prognosis. Very few if any, children succumb to the disease. As in most other diseases the stage of recognition plays a very important part in the prognosis.

#### ETIOLOGY

With regard to the etiology of pella-

gra numerous theories have been promulgated and owing to its great importance I want to give you an outline of some of the more important ones.

Casal the first writer upon the subject claimed maize was the cause and his theory was held for nearly two centuries.

Lombroso spent 25 years of his life studying the disease and was an ardent believer in the maize theory.

Strombio in 1784 said, "Pellagra has an infinite number of causes. Bad food is an important but not a sole cause and finally no single factor alone is likely to bring it forth."

Towards the middle of the nineteenth century all writers adopted the idea that pellagra was a disease of malnutrition.

In 1905 Sambon advanced the theory that it was an infective disease and the probable causative agent was caused by some blood-sucking insect.

Sandwith, in an address before the Society of Tropical Medicine and Hygiene, said there are four prominent theories under consideration today.

First, that pellagra is in some way associated with maize."

Second, that pellagra is a protozoal disease, probably transmitted by a simulum or some other insect."

Third, pellagra is contracted in different zones where the drinking water comes from streams in argillaceous soil, or from streams and stagnant pools in clayey districts."

"Fourth, that pellagra is due to a streptobacillus found in Prof. Tizzoni's Laboratory in Bologna, during the last three years in the blood; in cerebrospinal fluid, in the feces during life and in organs after death."

Thompson-McFadden Commission reported in 1914, "No specific cause of pellagra has been recognized."

Siler, Garrison and McNeal report: "First, no definite connection between occupation and pellagra.

"Second, in 80% was found evidence of close association with a pre-existing case.

Third, in house to house canvass of the homes of 5,000 living in six endemic foci of pellagra, no relation of the disease to any element of the dietary was found.

"Fourth, that flies of the genus *simulium* have nothing to do with pellagra.

"Fifth, no evidence of inheritance."

Johnson in (April 1915), "Without question the absence of hydrochloric acid is an important feature of the disease, not essential to its development, nor determining its course but significant of its gravity and prognostic of its results. The disease is distinctly one of perverted metabolism, having its first expression in the epithelial structure of the alimentary tract."

Sander's reports (March, 1915) the examination of spinal fluid from pellagrins. Found a few organisms of oval shape, which grew on blood serum but no growth on agar-bouillon. Organism highly motile. Changes from oval shape to small bacilli.

Page (Jan., 1915), calls attention to bacillus found in feces of pellagrins. "It is motile, aerobic, sporogenous, stains readily and grows on culture medium.

"Animal inoculation experiments have not been successful.

"In 53 cases the bacilli were seen in great numbers and have not been found in healthy individuals, or those suffering from other diseases.

"The use of one per cent ichthyol seemed to effect a cure in the average case, the symptoms and bacilli disappearing."

Young (Jan. 1916) reported examination of 39 hospital cases. He examined the blood and excretions, including the Wassermann reaction, with a view to ascertaining if possible, complications existing which affect the blood count, other than the diarrhoea, which if present of course renders the blood count more or less variable. Conclusions: "In pellagra there is a constant and marked lympho-cytosis, which persists after all acute symptoms have subsided, and there is a higher lymphocyte after the acute symptoms have subsided. This persistent lymphocytosis is probably due to an infection of a chronic nature."

Special expert W. F. Lorenz assigned for investigation at the Georgia State Sanitarium reports the results of his investigation and especially the examina-

tion of the spinal fluid in 153 cases as follows:

"Lymphocytosis of the cerebro-spinal fluid does not occur in uncomplicated pellagra; that globulin excess of the spinal fluid is only occasionally observed; that Lange's colloidal gold chloride test is uniformly negative in pellagra; that the Wassermann is negative with a few exceptions (In this investigation the exceptions were moribund cases which gave weakly causative reaction with blood serum; and that the spinal fluid fluiding would seem inconsistent with a conception that pellagra is an infectious disease of the central nervous system.")

Surgeon E. Francis, in 1913, in continuation of the animal inoculation studies, begun in the previous year, reports as follows: "Although every kind of tissue, secretion, and excretion from a considerable number of grave and fatal cases was obtained and inoculated in every conceivable way into more than 100 rhesus monkeys, as well as a large number of guineapigs and rabbits, the results were uniformly negative."

After years of investigation by the United States Public Health Service, the Surgeon General in his annual report for 1915 gives the following results: "The experiments of Dr. Goldberger and his assistants, as confirmed also by the service officers at Savannah, Ga., and Spartansburg, South Carolina, seem to justify the conclusions (1) that pellagra is not a communicable (neither infectious or contagious) disease, but that it is of dietary origin; (2) that it is dependent on some yet undetermined fault in a diet in which the animal or leguminous protein component is disproportionately small and the non-leguminous vegetable component disproportionately large; and (3) that no pellagra develops in those who consume a mixed well balanced and varied diet.

"In the light of Dr. Goldberger's experiments, the prevention and eradication of pellagra will therefore depend essentially on the substitution of a mixed well balanced, varied diet for the restricted one-sided diet that the individual will be found to have consumed prior to the development of symptoms. The evidence is daily becoming stronger that

in the south this could be largely accomplished by the introduction of common dried legumes into the winter dietary. A valuable step in this direction would be an increase in the cultivation of some of the varieties of beans or peas and their preservation in the dried state for the winter consumption.

"It would appear that the investigations under Dr. Goldberger have already resulted in working out a rational and practical method for preventing the disease, which has assumed such serious importance in the southern states."

You will note that we have given considerable attention to the theories of etiology because we deem them of interest to the profession. Relying upon our study of the results as obtained by others, and our observation of cases under our care, it is our belief that the cause of this disease is as outlined in the report of Surgeon General given above.

You will note this same theory was held almost universally in the middle of the nineteenth century, and, in fact, all authorities agree that it is a contributing cause, if not the sole one. At any rate we can rest assured that if there is another cause for pellagra the American physician is the one who will discover it, and at the present time we can depend upon the dietetic treatment to render us good service in the prevention as well as the cure.

#### TREATMENT.

Medicinal treatment has seemed to have but little, if any, effect upon the course of the disease. Regulation of diet has given the best results. Rest in bed and avoid sun rays.

The diet should be rich in animal protein. Meat broth, milk and eggs until the gastric symptoms have cleared up, then a carbohydrate free diet, consisting of fresh meat and vegetables.

Arsenic was highly recommended years ago but is found to be of no value at the present time. Sodium Cacodylate grs. III intermuscular every third day for three doses then every second day for three days, then every other day until the patient is improved. Good results have been reported from the use of one

per cent Icthyol.

For the skin lesion use a soothing preparation like zinc oxide and lime solution.

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#### ERYSIPELAS.

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O. H. HOFFMAN, M. D., Thomas, W. Va.

(Read at State Association Meeting,  
Wheeling, May, 1916.)

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Mr. President and Gentlemen: When a man who has done no medical laboratory work comes to you with the title for a paper such as I am trying to offer, it might indicate a good deal of presumption, especially when the paper is offered on such an old-fashioned disease as Erysipelas, a disease which every surgeon, if not every physician, looks upon with a feeling that he is disgraced if he ever has the disease to treat, whether it comes to him from cases he has operated upon, or from accidental causes. Not only so, but I am tempted to apologize for introducing the subject from the small number of cases that would appear to present themselves for treatment, if I may judge by the word of a surgeon who once informed me that, in a practice of some twelve or fourteen years, he had seen less than ten cases. At any rate, I shall not tire you with any lengthy discussion and to that end will not take up the symptoms nor much description of the disease. It is a self-limited disease with a tendency to recovery, but nevertheless about six per cent die under the old forms of treatment, which, as far as mortality goes, makes the consideration of the disease and its treatment as important as the treatment of typhoid fever, for instance; the greater number of cases of the latter being the only reason for its greater importance.

Erysipelas is recognized as being dependent upon some wound which destroys the continuity of epidermis to the extent of making it possible for a germ to enter a lymph space of the epidermis. The particular germ is generally believed to be a streptococcus, and the streptococcus pyogenes is found with such obstinacy that it may be looked upon with reasonable certainty as being the prin-

cial factor in the etiology.

For our purposes, we may divide erysipelas into two kinds, the superficial and the deep, the latter appearing as a cellulitis and being probably always phlegmonous; the two forms demanding different kinds of treatment, which we will now try to take up.

Some twenty-five or more years ago, after having had a few cases of erysipelas, I was called upon to treat a young, apparently strong woman for diphtheria. We had no antitoxin then, but she got well, notwithstanding the case was a severe one. When she was scarcely able to get out of bed, she was taken with purpura hemorrhagica, and this had not entirely subsided when erysipelas appeared in both feet at about the same time, coming, as I remember, between the first and second toes on each foot. It spread upward and outward until it had traveled up to both knees, and encircled both legs. I tried in every way I could to stop its progress, using iodine to the extent of vesication, used compresses hot and cold, medicated and plain, drying powders and ointments, but with no avail until I followed the recommendation given by Dr. Samuel D. Gross in his first volume of Gross' System of Surgery, sixth edition, issued in 1882. Here Dr. Gross tells us that Mr. Higginbotham recommends the use of nitrate of silver in solution, and now note the strength, please, of three drachms of the salt to the ounce of water, with the addition of a small quantity of nitric acid. You will find that I have copied this exactly as written, but I want it understood that I have not tried and do not recommend any such strength. Dr. Gross tells us that "nitrate of silver, used in the strength of thirty to sixty grains to the ounce of water is another very valuable agent in the treatment of this disease."

Following this direction in the case I then had, I carefully washed the limb above the knee with soap and hot water, rinsed the soap off carefully, and dried the surface, using no disinfectant whatever, and no application of any kind had been previously made to that location. I then painted a two-inch band around the limb just above the knee joint, using six-

ty grains of nitrate of silver to the ounce. At the time the application was made there was no eruption manifest within two inches of the circle I painted, but, in twenty-four hours the eruption and swelling had reached the lower margin of the then blackened skin, and to my surprise and intense delight, the erysipelas stopped right there as completely and positively as though stopped by some magic. In cases of erysipelas coming after that I tried it again and again, and always with the same gratifying results.

My work has been such that I have had to have helpers in it, until it now takes seven of us. This has made it so that I have had to get new assistants to take the place of those leaving from time to time. As each new one has come in, and a case of erysipelas has presented itself, I have insisted upon his trying any new treatment that his school or hospital might have recommended, in the belief that our large medical centers should know and use the latest and best. If they have had anything new to present, or anything old to use in a different way, it has been tried, and, after that, since not one of them has proven of any appreciable value, the nitrate of silver has been applied, often in the case where the new things have been tried, and have failed, and the same magical results have almost invariably resulted. I can not, indeed, remember a case where it has failed to produce prompt and positive cures in the superficial forms, except in the case of one very young infant that was affected over a large area before the silver was applied, and one young girl in a family where erysipelas had occurred before and where we were not allowed to use the silver until just before death. Those physicians who have seen its results have adopted its use thereafter. In support of this I present through the courtesy of Dr. M. H. Maxwell of Keyser, the following cases reported by him in a paper read on erysipelas to one of his county medical meetings:

Case 1: An American man, aged 24. Some years previously his right forearm had been seriously injured, and every year thereafter he had suffered with erysipelas in the forearm. When he came

to me there was an area of erysipelas covering several square inches but not very distinct nor well-defined. I tried various preparations without effect other than that the erysipelas kept spreading. Finally, upon suggestion of Dr. O. H. Hoffman of Thomas, I painted the surface with an 80-grain solution of nitrate of silver. By this time the greater part of the forearm was involved. The day after the first application, the disease had extended beyond the painted area in one direction. A second application, extending further beyond the line of demarkation, arrested the progress of the disease, and the man went to work before the painted area had finished peeling.

Case 2: A Lithuanian girl about two years old was brought to my office with a small abrasion on the inner surface of the lower part of the thigh, and an area of erysipelas extending from more than half way up the thigh to below the knee. The leg was considerably swollen and very tender; the glands in the groin were not enlarged, and the constitutional symptoms were not severe. An area, including the entire erysipelatous patch and extending from one to one and one-half inches beyond the border was painted with a 60-grains-to-the-ounce solution of nitrate of silver and allowed to dry. There was no further spreading of the disease, and in about two days the swelling had entirely disappeared, and no evidence of the trouble remained except the discoloration produced by the nitrate of silver, and this was soon gone.

Case 3: An American man about 30 years old, a hard drinker the most of his life; had delirium tremens twice to my knowledge, and when I saw him had been on a spree for two weeks and was on the verge of another case of delirium. I found him with a case of erysipelas of the face and the scalp. The face was enormously swollen, the greater part of one side being inflamed, that eye completely closed, and about one-fourth of the scalp involved. He had taken scarcely any nourishment for more than a week lying around in the gutter most of the time, and covered with filth. His general symptoms were marked, and he complained of intense itching and burning of the affected area. An eighty grain

solution of nitrate of silver was applied at once, and in a few hours the pain and fever had to a large extent subsided, although the swelling increased until the next day, when both eyes were closed. The second day, as the disease had extended beyond the painted surface, on the scalp, a second coating was applied. In two days more the pain and fever were entirely gone, and the swelling had greatly diminished. In a week there were no signs of the disease except where the black scales had not come off.

Dr. J. C. Tappan, now of Alton, New Hampshire, and before my acquaintance with him, a lecturer on nervous diseases in one of the government medical colleges in Washington, writes me as follows: It had been, as you know, my custom to treat erysipelas with the ichthyol and iron chloride treatment, or with iodine or carbolic acid locally, and the iron internally, up to the time of my coming to West Virginia, and, in all of my fourteen years experience in the hospital and dispensary service, and private practice, I do not recall a single case of erysipelas that did not require ten days and usually more to respond to treatment. You can therefore imagine my surprise and delight, when, on using the nitrate of silver solution at your suggestion, a case of facial erysipelas which involved the scalp, and in which the patient was a very sick man, indeed, cleared up in less than twenty-four hours, after the use of the silver, and I found the man up, out of bed, and saying he felt about all right, and had no further return or symptoms of the disease. That has been my experience in nearly all of my subsequent cases, and I do not hesitate to recommend the treatment to any of my colleagues.

Dr. Tappan gives the following recent experience: A railroad man, living in Alton, but working in Wolfboro had an attack of erysipelas on the right foot, following an injury from a lump of coal falling on the foot. His work kept him from home, to which he came about twice a month, and he had consulted a physician in Wolfboro, who gave him the usual ichthyol and iron treatment. As he got worse instead of better, he came home, and I was called. The disease had by

this time spread as high as the knee, and was accompanied by fever and chills, etc. I painted the entire leg from the foot up to about one inch beyond the margin of the eruption with a solution of nitrate of silver, forty grains to the ounce, and, at the end of twenty-four hours, there was decided improvement, and, after forty-eight hours, there was absolutely no sign of inflammation except immediately around the site of injury, which kept him confined for some time on account of an abscess, which had to be incised and drained in the usual way.

Near the close of 1915, Dr. H. K. Owens called me on the phone, told me he had a very bad case of erysipelas which a consulting physician had said would die, and which looked very unpromising. Dr. Owens asked me about the details of the nitrate of silver treatment. He has kindly furnished me with the following details of the case: Last year I had a severe case of erysipelas which started in the patient's nostril, gradually spread up over the nose, out to the ear, on the forehead, and down behind the ear. The patient became badly exhausted, with an evening temperature of 104 for two or three days. I tried the usual internal remedies, and used everything I could think of in the way of local remedies. I then tried a sixty-grain-to-the-ounce of water solution of nitrate of silver on him, (was a little afraid of the eighty-grain), and in a week he was practically well. I did not put the solution on over a large enough area the first time but the second application was put on beyond the margin, and it certainly fixed him.

Dr. Owens adds: About a month ago I had another case of erysipelas of the ear, which in twenty-four hours took in the whole side of the face. I gave him a vigorous painting of a sixty-grain solution of nitrate of silver, and stopped the disease instantly. I am fully convinced that it is *the* treatment for erysipelas. My consultant in the first case said the man would die, but he did not. The second case responded most beautifully, almost instantly.

The foregoing cases have been taken from the experience of other men. To

these might be added case after case occurring in my own and my partner's immediate work, for I have been using the nitrate of silver applications for more than twenty-five years, and, as my work has been largely among a class not living under the best hygienic conditions, it has afforded probably a larger number of cases than in a different class of work.

You will notice that in the beginning of this paper, I divided erysipelas into a superficial and deep. This was not for the purpose of fitting my own ideas, but because that is the actual condition. In the superficial variety the inflammatory trouble and the germs are found mostly in the epidermis or superficial layer of the skin, in its lymph spaces. I have no theory to present as to how the nitrate of silver does its work. Dr. Gross in his article on the subject thinks the action of the silver may be to coagulate the albumen of the tissues occupied by the erysipelas germs, thus destroying the germ and so changing its habitation that the germ can not make any further progress. This would seem to be borne out by the fact that, if the skin is not painted to the distance of one and one-half to two inches beyond the margin of the eruption and swelling, the disease will not be arrested at that point. The slight burning and pain caused by the silver application for sometimes an hour or two, and the fact that it is occasionally followed by more of a bleb than might usually appear in erysipelas, would indicate that its action is sufficient to go as deeply as suggested by Dr. Gross.

Before leaving this part of the subject I must carefully call to your attention the manner of making the applications and their strengths. The former we consider very important, the latter next in importance. For infants or persons with very delicate skins, I have generally used not over 60 grains to the ounce, and often only 40 or 50. To get results, it must be applied so that it will take hold of the skin, and must extend not less than one and one-half inches beyond the margin of the swelling and eruption. In applying it to the scalp, the hair must be clipped close or, better, shaved off. The skin must be free from grease, and this is to be secured by thor-

ough washing with soap and real warm water, and then it should be washed with alcohol or ether if these are at hand. It does not do to merely brush it over the surface with a camel's hair pencil or feather. It must be rubbed into the skin with a cotton or gauze mop on the end of a stick that is stiff enough to admit of some pressure, or, as Dr. Maxwell suggests, lay a piece of gauze over the surface to be treated, and saturate the gauze with the solution, and allow to dry there before removing the gauze; and he claims it gets in better. I have found the mop satisfactory, and that it takes less of the solution, which is a point to be considered during these war times.

Erysipelas of the deeper tissues usually results in abscess formation, and, if the poison has been carried there before the silver is applied to the skin, the abscess must be treated by incision, by disinfectant irrigations, and drainage. I have not had many cases of phlegmonous erysipelas to treat where the abscess was not already established before the treatment with the silver could be applied. I have believed that it tended to limit the extent of the abscess, and it soon finished the superficial evidences of it. I have also had practically no cases of phlegmonous erysipelas to treat since antistreptococic serum has been used, but I shall try that the first time a patient will allow me to do so, using either the regular serum, or the phylacoen for erysipelas if I rightly understand that.

My limited experience with antistreptococic serum, mixed, in scarlet fever, especially with the bad sore throats, is such as to make me a strong advocate of it in almost any disease where there is a streptococcus.

You may now ask me why I have called applications of nitrate of silver a specific for erysipelas if it will not cure all of the forms of the diseases, and I do not know how it cures what it does. Quinine is a specific for malaria. Does it cure all cases and forms of malaria? Neither will mercury nor Salvarsan, etc., cure all cases of syphilis, nor the salicylates cure all cases of inflammatory rheumatism, and yet they are called specifics, in these disorders, and you will tell me just how they act when they do cure?

Let me caution you if you try silver nitrate in erysipelas to first tell the patient that the painted surface will get black in a few hours, and remain black for a few days or a week. I have never seen it do permanent harm to the most delicate skin. Let me caution you again: If you have erysipelas in a house, be sure to have that house thoroughly disinfected. We have had houses where we have had recurrent cases of erysipelas coming as long as a year apart, and in different families, and we have seen this so positively that we have been very careful not to allow any surgical case to be taken to those houses, or remain in them if gotten there without our knowledge. In other words, we believe in its having a specific germ, and that it is positively infectious, as well as contagious, and that the germ is long-lived.

I have one favor to ask. If any of you try the silver nitrate treatment in erysipelas, will you not be kind enough to let me know the result?

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#### "SINS OF THE FATHER."

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By W. C. SLUSHER, M. D., Bluefield, W. Va.

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"Oh, God! Oh, God! I'd rather die!"

This was the wail of a child in anguish; one who had suffered agonizingly and knew he must suffer again. It was a boy of nine years affected with hereditary syphilis, confined to a darkened room where he had been for six weeks, with the prospect of weeks more confinement; then probably the loss of sight in one eye, certainly permanent impairment in both eyes.

He lay shrinking in his bed, pale, emaciated, pleading to be spared the pain incident to his treatment. This manifestation of syphilis was particularly rebellious to all treatment and the most heroic measures had to be employed.

During all the weeks of this enforced confinement his mother had been untiring, patient and solicitous of his every comfort in the knowledge that the boy as well as herself and other children of the family were victims of syphilis. No matter if everyone knew that she and her children were innocent victims of syphil-

is they would be shunned and pointed at with the finger of shame.

Why? From time immemorial syphilis has been associated with immorality and the discussion of it tabooed in polite society.

During the reign of Henry VIII, when syphilis devastated armies and depopulated cities, freedom from the disease was a mark of morality; and unless the light of publicity is turned on this scourge, false pride laid aside, mothers and innocent babes will continue to be sacrificed. Volumes have been written about the menace to civilization of the great "White Plague;" space is freely given by every lay periodical to warn the public concerning the cause, cure and prevention of this dreaded disease, but a fear of offending modesty has closed these same pages against warning them of equally as great if not a greater peril—syphilis.

Until this mock modesty is overcome and the public made acquainted with the direful damage done by this preventable evil, its almost unbelievable prevalence and methods of prevention, it will continue to spread.

Why should a poisonous old prostitute be permitted to ply her profession or an abandoned roue run riot spreading this disease without let or hindrance while measles and mumps, smallpox and scarlet fever are quarantined? The answer is: Ignorance—plain ignorance; and it is high time the public was getting its eyes opened.

If one speaks to a mother or father about informing the girls and boys of this and like diseases and their horrible consequences, they almost die with fright. No; their minds must not be polluted with the knowledge of such things. The poor, dear innocents! But, alas, they learn. The boys in pool rooms and like places where rakes and roues congregate to boast of villianous doings, educating and inspiring their youthful audiences to emulation. And the girls are allowed to receive these same individuals into the sanctity of their homes to be educated through a similar but more insidious process.

Right here social and moral means of prevention play a most important role in

checking the spread of syphilis and venereal diseases. Statistics show how important it is that our young manhood and womanhood be informed of the dangers of syphilis as it is most often contracted between the ages of 16 and 25 years.

If laws cannot be enacted that will assist in controlling the spread of these diseases, is it not the binding duty of parents to see that their children are properly informed concerning the facts of sexual life and the great menace these diseases are to their health and happiness as well as that of the generations to come?

Educating the boys and girls and the public is the greatest factor in eliminating these dreadful diseases and must be the first step toward enactment of laws tending to prevent their spread.

Another means of preventing syphilis is treated under the head of "prophylaxis." Some may object to this with the sophistry of encouraging vice; but the sexual appetite being a function of nature, and, after hunger, the most powerful influence in the social relations of man, such reasoning is absurd. It cannot be controlled. Then every means of preventing the spread of syphilis should be put before the public. If you cannot regulate a man's sexual appetite make him acquainted with the methods of prevention and spare the innocent mothers and babes unborn.

This method is the application of a 33% calomel ointment to exposed area. There must be a break in the skin or mucous membrane to admit the infectious material, but this abrasion may be so small and insignificant that it will escape notice; so whenever there has been a possibility of infection this ointment should be well rubbed into the exposed surface. If used within eight hours after exposure it makes the danger of contracting syphilis very slight.

If this method of prevention were adopted and widely known it would prove of great importance, especially as a means of prevention to doctors, dentists, midwives, nurses and all persons exposed to syphilis on account of their occupation.

It is impossible to estimate the num-



ber of cases of syphilis contracted from drinking glasses. Two cases have recently come under my observation that I am thoroughly convinced were contracted in this manner, and the number of unrecognized and untreated cases thus contracted must be large. Every doctor has seen cases of obscure diseases and nervous disturbances that have no specific history that only responded to specific treatment.

A syphilitic, with infectious sores in his mouth, goes to a fountain or public drinking place; after his libation the glass is dipped into some water and handed to you. You may escape infection; then you may not.

What are you going to do about it? Continue to take chances in silence or raise your voice in protest? The public must know about these things and demand a remedy before the lawmakers will take them seriously.

Now, will you take advantage of every available opportunity to give this matter publicity, or fold your hands and say a prayer?

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### Miscellaneous Announcements and Communications

July 9, 1917.

Dr. J. R. Bloss,  
Ed. W. Va. Med. Jour.,  
Huntington, W. Va.

Dear Doctor:—

Enclosed find copy of an article from last month's Journal of the A. M. A. I hope you will publish it in the West Virginia Medical Journal.

Sincerely yours,  
J. E. CANNADAY.

### CASUALTIES IN THE MEDICAL CORPS OF THE BRITISH ARMY.

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*The Journal of the American Medical Association, July 7, 1917.*

There has been such an astonishing amount of misinformation, exaggerated and sensational statements, published in this country regarding the casualties among medical officers in the British army that Col. T. H. Goodwin of the British Army Medical Service, now in

this country, cabled to the British War Office for the actual facts. He received the following data: The total casualties among medical officers of the British forces, on the western front, from the beginning of the war to June 23, were: Killed, 195; wounded, 707; died of disease, 62. Hence the total number of casualties from actual war injuries on the western front was 902, of which 195 were killed. This is entirely different from some of the statements which have received wide publicity in this country—some even semi-official in character—which have reacted to the detriment of the efforts to secure officers for the Medical Reserve Corps.

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Fort Oglethorpe, Ga.,  
June 29, 1917.

My Dear Doctor:—

Slowly the panorama of war is being revealed and the role of the medical officer is being more and more apparent as the various details of military operations are being explained to us. The last week was spent on instructions on various paper work, as making out reports. We get various problems on making out military reports of sick and wounded and intricacies of the paper work are legion. They will baffle the skill of the most proficient scholar in bookkeeping. At first you wonder what relation has this with a doctor, but when you understand that the success of a battle depends upon the speed with which you can transport the wounded from the battle field to a place where the wounded are to secure adequate attention, and that this can be attained when every man knows his work and can be performed without a hitch, then you can readily understand that unless the transportation is carried out systematically, the battle orders will be confused and progress of the troops materially interfered with. Then the equity of adjudicating claims for pensions, with matter of equity to the soldiers and government comes in,—all these depend on correct reports.

The real medical and surgical treatment are carried on at the field hospitals or at base hospital or evacuation hospital most of the medical men are assigned to regimental aid stations, which must fol-

low the commanding officer, leaving the wounded to a subordinate officer for their proper transportation. Very soon we will have instruction in treating cases of suffocation from noxious gases.

The camp is being gradually augmented by new men, some volunteering, others from National Guard organizations. Among the recent arrivals we have Dr. Wm. Pepper, Dean of the University of Pennsylvania, Pfeifer, assistant to Deaver and Dr. Babcock all from Philadelphia. Dr. Howard Fox, the dermatologist from New York is also here. Col. Munson was here and he gave us a short address. The spirit among the men is good despite the work and the heat. Each one is trying his very best.

There are 75 men from Pennsylvania and as many from New Jersey and North Carolina. What is the matter with our state?

Hoping to hear from you soon, I am,

Yours,  
M. MENDELOFF.

#### YOUNG DOCTORS NEEDED.

Dr. J. C. Bloodgood, who is the chairman of the committee on preparedness of the Southern Medical Association, yesterday received a letter from a physician at one of the training camps for members of the Medical Reserve Corps, which almost startlingly revealed the dearth of volunteers among the younger physicians, who are badly needed by the army for field work. The letter stated that in the camp where the writer is stationed 80% of 400 doctors under training are more than 35 years old.

"This is a distressing index to conditions," said Dr. Bloodgood, in commenting upon the statement. "There is a crying need for doctors under 35 in the Medical Reserve Corps; the army must have them, and the nation and the profession should take the fact to heart.

"Men under 35 must bear the burden of the medical work on the battlefields. In general, older men cannot stand up under it. There are some who could, of course, but not the general run of the older men. The work is too strenuous. And yet the doctors under 35 are not coming forward in anything like sufficient numbers; most of those under that

age who have volunteered are from the country districts.

"I have a few figures that will show more plainly than any words I can use the insufficiency of the number of volunteers under 35 years for the Medical Reserve Corps—the astonishing insufficiency, as compared with the number of volunteers over 35 years. At this time 3,700 men have received commissions, and commissions are being issued for acceptance to 7,300 other men, a total of 11,000. We really need 20,000 doctors, I may say, in passing. But of the 11,000 mentioned, who have received commissions or for whom commissions are being issued, only about 700 are under 31 years and 400 between 31 and 35 years to my information.

"The mere statement of that is enough to demonstrate conclusively that the doctors under 35 years are sadly behind in volunteering. But when I add that there are about 45,000 doctors under 35 years of age in the country, the dearth of volunteers among them will appear more plainly.

Compare that 45,000 with 11,000 under 35 years who have volunteered."

*TO The Chairman of the State Committee of National Defense of the Southern States.*

*FROM Joseph Colt Bloodgood, Chairman of the Committee on Preparedness of the Southern Medical Association.*

Dear Doctor:—

You have Dr. Long's letter asking for an expression of opinion in regards to a draft. This will take time and the problem before us is what to do in the meantime.

Maj. Robert E. Noble, of the Surgeon General's Office, just informs me that there are 3700 men commissioned and that 7300 commissions are passing through the Adjutant General's Office. If these are accepted there will be 11,000. This number is not sufficient to allow any selection as to the age, training and specialty.

Maj. Noble also informs me that the number of commissions, either accepted or passing through the Adjutant General's office of medical men under 31 is

only 750. Between the ages of 31 and 35 only 400. This shows that the number of men who are commissioned or who have applied for a commission are over 35 years of age. The most important problem before us is how to properly present the government's need to the Medical men under the age of 35.

Maj. Noble also informs me that the Surgeon General would be willing to order on active duty any member of the State Committee who has a commission in the Medical Reserve Corps. It is my opinion that this offer should be accepted and if your chairman or secretary has not a commission, it might be wise to select someone who has a commission and make him secretary of your State organization. This will allow him to draw his pay, devote his entire time and act directly under the orders of the Surgeon General. I am inclined to think that this will simplify our difficulties and work for efficiency.

Do you not think it would be a good plan for your State Committee to find out exactly how many members of the medical profession in your state under the age of 35 are commissioned, or waiting for a commission, and the reason why the others have not applied for a commission.

This is an informal letter and has no official authority, except that in regard to the statement of Major Noble which I have just received over the telephone. It is an endeavor to see whether we can ascertain the best way to accomplish results in the shortest period of time.

Very sincerely yours,  
JOSEPH COLT BLOODGOOD.

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Medical Officers' Training Camp,  
Ft. Oglethorpe, Ga.,  
Monday, June 18, 1917.

My Dear Doctor:—

I have been in the fort since Friday and I found it a rather interesting place. The place is a part of the government reservation (Chickamauga) occupying about 6,000 acres and is mostly level though it adjoins the Lookout Mountains. The fort is about seven miles from Chattanooga but the city does not present any alluring features judging from

the small number of men going there. There are about 15,000 men at present at the fort, of them there are about 450 medical officers; there are also two regular divisions in the medical, the 11th Infantry and the 11th Cavalry; there is also a training camp for officers, the Officers' Training Camp. The number of doctors is expected to reach 1,000 and preparations are under way to house all the doctors. When I came here my barracks was not yet finished, but since then about ten have been built and construction for more is underway. In fact, the pounding of hammers is incessant and hundreds of carpenters are engaged in construction. By the way, we have 800 Fritzes (interned Germans) right here; I saw them yesterday; they are a sturdy, somewhat apathetic bunch which I understand does nothing except a little gardening. They regard you in your khaki with a good deal of curiosity. Their houses are surrounded by double set of barbed wire and needless to say, are heavily guarded.

Now as to the calibre of the men. Most of them are past 31, at least about 85% of the men who came up until Saturday were between 35 and 45. On Saturday and Sunday young men under 31 were very much in evidence. The men here represent the better stratum of our profession; the mere fact that they are here bears testimony to the statement; most of them have given up very lucrative practices; some dropped hospitals which they owned, some gave up important hospital appointments to serve the country, others have left families entirely dependent upon them for financial support. But there is no complaint, no grumbling and though everybody desires a peaceful settlement of this European struggle, no one would for a moment entertain the idea of leaving the barrack or back out of this position in which they have voluntarily placed themselves. Naturally the feeling runs high against the young medicos who have refused to volunteer, they are called slackers and if any pressure could be brought about to enforce them to dig ditches or serve as orderlies to the regular officers of the Medical Reserve Corps, they would certainly do it. Though cheerful and jovial we are fully

aware of the responsibility and obligations which we have undertaken and we all know that after three months of training we will be sent to France. At least this is the way the subject is discussed in our barracks. This can be accounted for by the presence in our barracks of some fellows whose joviality and good humor helps to keep the boys from plunging into periods of depression. These men feel that they are doing their duties no matter what the rest of the profession does and though everyone wishes speedy end of the war no one would for a moment entertain the idea of leaving for home at this juncture. We get together quite frequently and talk of the past and present but nothing about the future. The future is weird and shrouded in mystery. We have here with us some few very interesting men. For instance the son of late Dr. J. H. Musser of Philadelphia; Dr. Thomas, a celebrated surgeon of Philadelphia; Dr. Piersol son of Dr. Piersol of the same city. There may be here quite a number of celebrities, particularly among those who are quiet and modest and make poor showing at drill. In fact, my experience teaches me that those proficient in drill and soldiery are usually a failure in their professional career. But everybody is trying hard to master the intricate knowledge of the military warp and woof and the various details of it constitute legion. Everything has to be done in one way only, with no ifs; regulation is the word and the manual our bible. We are treated as rookies and the discipline is exacted from us is very strict. Still we are not grumbling and are satisfied and pleased.

Now our work is the regular routine. We get up at about 5 a. m., various roll call and calisthenics last until 7 a. m., then breakfast and drills and other works according to the schedule enclosed in this letter. All the men take conversation in French by various men in our barracks who have served with the various ambulances in France.

Wishing you the best of success, I remain,

Sincerely yours,

M. MENDELOFF.

June 30, 1917.

Dr. J. R. Bloss,  
Ed. W. Va. Med. Jour.,  
Huntington, W. Va.

Dear Doctor:—

Enclosed find an article which has been adapted from the Ohio Medical Journal. This was written by Col. Wilcox and Dr. Jepson suggested that I send it to you for publication.

Sincerely yours,

J. E. CANNADAY.

Never has the profession of medicine been called to do anything bigger, more necessary and more worth doing than it is now called on to do. It will probably never in the future be called on for more tremendous assistance than that it must give today. A physician worthy of the name will respond to a call to keep a patient. A higher call is that to help his country. Let us get down to plain facts.

WAR: Especially modern war— is conducted on the most highly developed and organized business principles, and to conduct war successfully the medical profession must play a vital part. A great deal of our work required special training. The greatest part is purely professional—medical and surgical—and for this any well qualified physician is by his education well adapted.

In war, and when grave danger threatens, every man must do what is best for him to do. The physician's duty is as plain as is the duty of the man who enlists in the line. To do our duty demands sacrifice in many cases, but personal sacrifice is expected.

Every physician must ask himself one question and one alone: "Where and how can I render the best service?" If a man has dependents and if his leaving would involve serious hardship and suffering, he should stay at home and practice his profession. If subsequent disaster should call even him, he can respond later when needed. Every man must examine himself. It is very easy to manufacture untold reasons to stay

safely at home, and a man may be able to fool his own conscience or make himself believe that he is fooling it, but he can not for one minute fool his friends and associates. They know who should go to the front and work, and who should remain at home and work; and by what a man does now he will always be judged. There is serious work ahead for all of us, work at home and work away from home. It is not a question of where we want to work, but a question of where all things considered, we should work.

This is a basic fact: The country needs physicians at once and needs a great many more than have already responded. Men who say they will come later if needed are dodging the issue. They are needed today. They must be available, must be commissioned, must be equipped, must be on hand. A man who is "willing to come later" is of as much value to his country as is an uncaught fish to a hungry sportsman. He is not satisfying a pressing need. If a fire is burning our friends homes we do not sit quietly and wait for it to spread to our homes. We go to the fire and help how best we may to extinguish it.

I want to emphasize the immediate and urgent need for physicians, and to point out our duty so that no man can possibly misunderstand, and say that he did not realize, or was in doubt as to what to do.

The older men and the middle-aged men have responded well. Many have temporarily sacrificed lucrative practices and many have sacrificed home ties. Some, however, have volunteered their services but have, when called, failed to show the stuff men are made of—they have laid down when they had the chance of a lifetime to stand up and do something big. The younger men (at least in this section of the country) have up to the present failed in a crisis. A few have entered the service and to them all honor and credit is due. Many recent graduates have not established practices,

many have absolutely no ties that bind them, and these are the men who should come to the front. Some will in the natural course of events be drafted into the service as privates, and a young man who has to be unwillingly dragged in to do his plain duty cannot later expect to be commissioned as an officer until he by hard service shows that he has the physical and moral stamina that he neglected to show when called on earlier in the game. We do not want to believe that our younger men are of weaker fibre than were their parents—nor do they want to enter life having this believed of them. It is in their heads—let them show what they are.

I will point out very clearly how a man may enter the service. The way is simple. Write, if in West Virginia, to—

MAJOR J. E. CANNADAY,  
Charleston, W. Va.

or

CAPT. J. ROSS HUNTER,  
Huntington, W. Va.

Or write to the Surgeon General, War Department, Washington, D. C., giving age and requesting a blank form to fill out. The applicant reports to an examiner for physical and professional examination bringing with him (1) his application blank properly filled out and sworn to before a notary; (2) two testimonials as to his citizenship and character, (3) a certificate that he has a state license to practice. Those who pass a very reasonable and practical examination are commissioned as First Lieutenants, further promotion depending on the man's ability and the character of service he performs. If a man fails physically he has done his duty and no man can do more. No man able to practice his profession need worry about the professional examination.

A soldier cannot select his duty. He is given duty where his service will be of the greatest value. So

with the medical officer. He is assigned where and when he will do the greatest good. Now that we have such an opportunity, let us seize it and not be called slackers and quitters—and let no young man make the tremendous mistake of believing for an instant that he will escape merited censure and condemnation by any lame reasons for not responding to an urgent call from his country. His mistake will not only hurt him now, but will follow him through life; and no decent man wants to purchase a few extra dollars and a little added comfort at the price of his good name.

I have spoken plainly. It is time to speak plainly. It is time to act, and to act decisively and promptly. The young physician has had his duty plainly shown him. Let him do it. His life in the army will be an interesting one, will broaden and help him in every way. When he returns, he returns with the satisfaction of having done well a man's work—and of being better fitted to resume his place in his own community.

Dartmoor, July 17, 1917.

Ed. Med. Journal:—

Just now news is scarce in this section. The doings of the U. S. and state officials, in the great preparation for our part in this terrible war, together with what is transpiring in the battle front, is absorbing the main interest. Those within the draft age, 21 to 31, are anxiously awaiting the fate that may decide who is to go to the front, and who shall be permitted to remain at home.

The indications now seem to indicate that several of our physicians will be commissioned to take their part in this titanic struggle for "justice and humanity." Drs. H. K. Owens and H. W. Daniels of Elkins, have already received commissions and are awaiting orders to report. Dr. J. A. Arbuckle has tendered his services, passed the examination and is awaiting a call to service. Dr. Glen Harper of Beverly is commissioned; also Dr. J. T. Little of Mill Creek. Dr. R. E. Davis of Junior, is

now at Charleston to take his examination, and Dr. N. R. Davis of Henry, expects to tender his services. Since Dr. A. P. Butt had a tussle with his auto, coming out second best with a fractured arm, he has concluded that army service is safer than running an auto, and he is seriously considering the advisability of tendering his services.

Dr. R. H. Powell, formerly a member of the B. R. T. Society, but now of Marion County Society, has already been called to the cantonment in Georgia.

The epidemic of measles which has swept over this entire section, has about terminated, for lack of material. Smallpox is a thing of the past, but we learn there are two or three cases of infantile paralysis reported from Tucker County, and some in other sections of the state. We hope our section may be spared the ravages of this monster among the ills of childhood.

We regret to report that Dr. O. H. Hoffman, formerly of Thomas, W. Va., one of our oldest, most successful, and respected physicians, has located in Baltimore, and engaged in the practice of his profession. We learn he is taking the place of his nephew, who is leaving for army service.

IRONS.

APPLICATION FOR APPOINTMENT  
IN THE MEDICAL RESERVE  
CORPS U. S. ARMY.

.....  
.....191.....

To the Surgeon General U. S. Army,  
Washington, D. C.

Sir:—

I hereby make application to be examined for appointment in the Medical Reserve Corps U. S. Army and inclose testimonials as to my character and habits.

I certify that to the best of my knowledge and belief I am laboring under no mental or physical infirmity or disability which can interfere with the efficient discharge of any duty which may be required of me if appointed in the Medical Reserve Corps, U. S. Army, and that the answers given to the interrogations below are true and correct in every respect.

I furthermore state my willingness to proceed to such point for examination as

may be designated by the Surgeon General, with the understanding that the journey entailed thereby must be made at my own expense.

INTERROGATORIES

1. What is your name in full (including your full middle name)?

2. What was the date of your birth?

3. Where were you born? (Give state and city or county; if foreign born, give country.)

4. When and where were you naturalized? (For applicants of alien birth only.)

5. Are you married or single?

6. Have you any minor children; if so, how many?

7. What is your height, in inches?

8. Your weight in pounds?

9. Give the nature and dates of all serious sickness and injuries which you have suffered.

10. If either parent or brother or sister has died, state cause and age in each case.

11. Do you use intoxicating liquors or narcotics; if so, to what extent?

12. Have you found your health or habits to interfere with your success in civil life?

13. What academy, high school, college, or university have you attended? State periods of attendance from year to year, and whether you were graduated, giving date or dates of graduation.

14. Name any other educational advantages you have had, such as private tuition, foreign travel, etc.

15. Give all literary or scientific degrees you have taken, if any, names of institutions granting them, and dates.

16. With what ancient or modern languages or branches of science are you acquainted?

*\*Testimonials as to character and habits from at least two reputable persons must accompany this application. Political recommendations are not necessary.*

17. How many courses of lectures have you attended? Names of colleges and dates.

18. When and where were you graduated in medicine?

19. Have you been before a state examining board? If so, state when, where, and with what results.\*

20. Are you a member of any state medical society? If so, give its name.

21. Have you had service in a hospital? If so, state where and in what capacity, giving inclusive dates of each kind of service.

22. What clinical experience have you had in dispensary or private practice?

23. Have you paid particular attention to any specialty in medicine; if so, what branch?

24. What opportunities for instruction or practice in operative surgery have you had?

24. Have you previously been an applicant for entry into the United States service? If so, state when, where, and with what result (if rejected state why.)

26. Are you a member of the organized militia? If so, state with what organization and in what capacity.

27. Have you been in the military or naval service of the United States as cadet or otherwise? If so, give inclusive dates of service with each organization, designating it.

28. What occupation, if any, have you followed other than that of student or practitioner?

29. What is your present post-office address?

30. What is your permanent residence?

31. (Signature of applicant).....

32. The correctness of all the statements made above was subscribed and sworn to by the applicant before me this .....day of....., 191.....

*\*This application must be accompanied by a certificate from the proper official that the applicant is duly registered to practice medicine in the state in which he resides.*

## Things of Interest

### ADVANTAGES OF GERMICIDAL SOAP.

On solution in water Germicidal Soap

(McClintock) liberates a small quantity of free alkali. This prevents the coagulation of albumin and permits the mercuric iodide contained in the soap to thoroughly penetrate bacterial and tissue cells.

Germicidal Soap is a valuable disinfectant in surgery, in gynecology, in obstetrics, and in routine practice. It is not only detergent, but it is a penetrating antiseptic at the same time. It is an excellent lubricant for sounds and catheters. It is always ready for use. No weighing or measuring is necessary. There is no waste. Hands, instruments and field of operation are quickly disinfected with the one material.

Germicidal Soap does not attack nickle or steel instruments, as does bichloride of mercury. It will not cause numbing of the hands as does carbolic acid.

Germicidal Soap is supplied in two strengths: Germicidal Soap, two per cent mercuric iodide—large cakes, one in a carton; Germicidal Soap, mild, one per cent mercuric iodide—large cakes, one in a carton—small cakes, five in a carton; Germicidal Soap, soft, one per cent in collapsible tubes; and Germicidal Soap Surgical, one per cent in cylindrical cakes wrapped in perforated paper and enclosed in a nickel-plated case. It is well to specify "P. D. & Co." in ordering.

#### AFLOAT AND ASHORE.

Two new products which are attracting unusual attention, both in this country and abroad, are Chlorazene (Abbott), Dakin's New Antiseptic, and Parresine (Abbott) the improved, hot-wax dressing for burns. Both of these remedial agents have been passed by the Council of Pharmacy and Chemistry of the American Medical Association, to appear in their "New and Non-Official Remedies," and have been ordered by the United States Navy to be placed on every ship.

The results which are reported by surgeons and hospitals in the use of Chlorazene and Parresine are so remarkable that it would surely pay every physician to become better acquainted with these products.

Literature will be sent on request to

The Abbott Laboratories, Chicago, Ill.

#### THE WHOLESOMENESS OF GELATINE.

Gelatine is distinctly a modern food. In our grandmother's day the preparation of a gelatine dessert was a task requiring such a degree of skill, patience and effort that it was not frequently attempted. But today, when the many brands of commercial gelatine make its use simple and convenient so that it has become an everyday article of diet—the question of its dietetic value becomes of interest.

Gelatine is a wholesome article of diet because of a rather peculiar property. While it is not, as some suppose, a good substitute for albumen or protein foods, it has the faculty of saving albumen in the body from destruction. It dissolves more easily than albumen and acts as a guard between albumen and the body fluids which would destroy it. It thus saves albumen to the body, which is equivalent to supplying new albumen.

In addition to this indirect nutritive value, gelatine provides a most valuable means for conveying other kinds of nourishment in an appetizing and easily digested form. This is well illustrated in the case of persons who cannot assimilate ordinary milk readily, but the moment gelatine is added find it easily digestible. Gelatine is used today in many ways not ordinarily supposed. It is used in French soups, in the preparation of cold bouillon and consomme, in jellies, jams, candy, ice cream—as well as the well known dessert preparations. It is also used extensively in many dishes for the sick and convalescing. In every case the use of gelatine may be said to increase the value of the dish.

In the jelly powders of commerce an incidental pure food problem arises in the matter of flavoring materials. The fruit flavorings that are mixed in powdered form with the powder are sometimes not made from the actual fruit juices, but are synthetic and subject to some of the criticisms that have been made of synthetic flavorings used at soda fountains.

Probably the only manufacturer who has entirely overcome the flavoring diffi-



culties is Mr. Otis E. Glidden, for 17 years the leading expert in gelatine desserts, and now general manager of the Waukesha Pure Food Company, makers of the new Jiffy-Jell. He has put all his years of experience into this dessert and in addition to guaranteeing an ultra-superior grade of gelatine made by special processes in what is termed the model kitchen of the world, actual fruit flavors are furnished in liquid form, small glass vials of concentrated fruit juices, being enclosed in the packets of gelatine. In the few months it has been on the market Jiffy-Jell is leading all older gelatines in sales.

The new plan has made possible the use of the finest fruits in obtaining fruit essences and has enabled the company to include in its list of flavorings pineapple, which has never been properly made in powder form. The company also offers a hitherto novel gelatine flavor in mint, which is proving highly popular for serving as a garnish or relish with meats and other entrees, or in making salads.

Gelatine with these actual fruit and mint flavors especially recommends itself for desserts, salads, and garnishes for early spring, when fresh fruits and herbs are scarce, not always fresh, and high-priced.

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The nutritive value of oatmeal as compared with that of wheat flour, has been firmly established and for thousands of years the oat has been the advocated food.

It contains a higher percentage of albuminoids than any other grain, viz., 12.6—that of wheat flour being 10.8—and less percentage of starch 58.4, as against 66.3 in wheat. It has rather more sugar, viz., 5.4—wheat flour having 4.2—and nearly three times the amount of fat, 5.6, as against 2.0 in flour. Salts amount to 3.0 per cent in oats, but are only 1.7 in wheat.

The rolled oats marketed by The Quaker Oats Company, of Chicago, are worthy of particular note as only selected, plump oats are used, one bushel of grain yielding but ten pounds for the finishing process.

The nutritive value of whole wheat as a permanent article of diet has long been known and its use has been advocated by physicians for years. One objection of the past has been the unpalatableness of the usual forms and especially has this been true in the feeding of children.

It is interesting to note the change in the attitude of the child since the popular invention of Prof. A. P. Anderson (Puffed Wheat) has been marketed. No longer does the junior member of our household refuse. Quite the contrary—he demands.

The invention itself is no less interesting. Sealed in guns, the whole grains of wheat are revolved for an hour in 550 degrees of heat. Thus the moisture in each food cell is turned to superheated steam. When the guns are shot these food fells—over a hundred million per kernel—explode. The whole wheat grain is transformed into thin, airy, flaky bubbles, eight times their normal size.

By this remarkable process, The Quaker Oats Company, of Chicago, has received the endorsement of physicians for their product.

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Since acidosis is now known to be much more frequent than it was formerly thought to be, and also because it is an important factor in diseased conditions, the Battle Creek Sanitarium now includes the test for it in the general examination of all patients who enter the institution. Fortunately the evil can best be corrected by a proper diet. The direct test of the blood is objectionable on account of the amount of blood required, while urinary analysis is not sufficiently certain. The most practical means is the analysis of expired air, because there is a known relation between acidosis and the CO<sub>2</sub> contents of expired air, this being diminished when acidosis is present. A method has been devised at the institution for collecting expired air which is simpler than any in use hitherto and further more can be employed under all circumstances. The cooperation of the patient is not necessary, so that even in cases of unconsciousness there is no hindrance.

# The West Virginia Medical Journal

JAS. R. BLOSS, M. D., EDITOR  
 O. R. ENSLOW, M. D.  
 J. E. RADER, M. D. ASSISTANT EDITORS

Huntington, W. Va., August, 1917

THE JOURNAL issued on the first of each month.

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All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notices of deaths, removals from the State, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

## CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

## ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

## REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: Miller-Ritter Building, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinions or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

Below appear several communications from Major Geo. S. Wallace in regard to the military census taken June 5th. The Editor publishes this at the request of the War Department in order that members of the profession throughout the state may be in possession of the facts of the President's order, as authorized by Congress.

MILITARY DEPARTMENT STATE OF W. VA.  
*Department Military Census and Enrollment.*

CHARLESTON.

April—1917.

Dear Sir: The governor desires that I bring to your attention a letter mailed

## OFFICERS OF THE STATE ASSOCIATION

PRESIDENT—J. E. Rader, Huntington, W. Va.

FIRST VICE-PRESIDENT—W. S. Young, Sistersville, W. Va.

SECOND VICE-PRESIDENT—E. H. Thompson, Bluefield, W. Va.

SECRETARY—J. Howard Anderson, Marytown, W. Va.

TREASURER—H. G. Nicholson, Charleston, W. Va.

DELEGATES TO A. M. A.—Frank LeMoyne Hupp, Wheeling, W. Va.; C. R. Ogden, Clarksburg, Va.

ALTERNATE—B. B. Wheeler, McKendree, W. Va.

CHAIRMAN OF THE COUNCIL—G. D. Jeffers, Parkersburg, W. Va.

## COUNCIL

FIRST DISTRICT—H. R. Johnson, Fairmont, W. Va., one-year term; J. W. McDonald, Fairmont, W. Va., two-year term.

SECOND DISTRICT—T. K. Oates, Martinsburg, W. Va., one-year term; C. H. Maxwell, Morgantown, W. Va., two-year term.

THIRD DISTRICT—C. R. Ogden, Clarksburg, W. Va., one-year term; M. T. Morrison, Sutton, W. Va., two-year term.

FOURTH DISTRICT—G. D. Jeffers, Parkersburg, W. Va., one-year term; R. H. Pepper, Huntington, W. Va., two-year term.

FIFTH DISTRICT—E. F. Peters, Maybeury, W. Va., one-year term; W. H. St. Clair, Bluefield, W. Va., two-year term.

SIXTH DISTRICT—B. B. Wheeler, McKendree, W. Va., one-year term; P. A. Haley, Charleston, W. Va., two-year term.

to the sheriff of your county relative to the creation of the board known as the Board of Military Census and Enrollment, of which you are a member and custodian of its records. A reading of this letter will explain the workings of the board and your duties in connection therewith.

Full confidence is felt of your complete and hearty co-operation. Your services will be recognized and the government prompt to express its appreciation.

By order of the governor:

GEO. S. WALLACE,

Major Judge Advocate General, O. R. C.,  
 United States Army.

April—1917.

Sheriff of \_\_\_\_\_ County.

Dear Sir: The governor desires that I bring to your attention the Act of Congress just passed, commonly known as the Conscription and Selective Draft Plan, to be put into effect forthwith to prepare an army for the common defense.

The bill contains the following provision:

“Sec. 5. That the president is hereby authorized to utilize the services of any or all departments and any or all officers or agents of the United States, and of the several states, territories, and the District of Columbia, in the execution of this Act, and all officers and agents of the United States and of the several states, territories, and the District of Columbia, are hereby required to perform such duties in the execution of this Act as the president shall order and direct, and officers and agents of the several states shall hereby have full authority for all acts done by them in the execution of this Act by the direction or request of the president.”

In the execution of this act the president has called upon the governor of this state to provide forthwith the necessary machinery to enroll persons designated in his proclamation. To that end the following has been adopted:

In each county—excluding the cities of Wheeling, Fairmont, Martinsburg, Clarksburg, Parkersburg, Huntington, Charleston, and Bluefield, in which cities separate boards will be organized—there is hereby created a board, known as the Board of Military Census and Enrollment, consisting of the sheriff, who is the executive officer thereof, the county clerk, who is the custodian of its records, a physician who will pass upon the physical fitness of those who are selected for service, and two citizens of opposite politics. This board shall be charged with the duty of supervising the enrollment of all persons of the class indicated in the president's proclamation, and when the class from which soldiers are to come is to be segregated by draft,

of making the selections from the drafted persons whose military services the nation most needs and whose civil and domestic services can best be spared.

Emphasis is placed upon the provisions of this act making the duties thereunder compulsory upon yourself and the other person designated by the governor under the president's direction.

In making the enrollment the registrars appointed for the last general election have been and are designated registrars to conduct the enrollment of the persons indicated in the president's proclamation. It is the duty of the persons of the indicated class to present themselves at their respective voting precincts for enrollment, and the failure so to do subjects them to pains and penalties. The registrars will sit at the voting places within their respective precincts on the day or days indicated in the president's proclamation, and register all persons presenting themselves. And on the day following begin to enroll all persons of the designated class within their respective precincts who did not present themselves for registration. They shall complete the work as rapidly as possible and turn over the registration to the county clerk of the county. In this connection it is the duty of the sheriff of each county to furnish, if necessary, a sufficient number of deputies to see that all persons of the designated class present themselves for enrollment, and when necessary to make arrests of those who may refuse to be registered, or who in any way interfere or impede the registrars in their work.

For the purpose of expedition the registrars have been notified to call on you forthwith for their supplies, which have been sent you direct from the War Department. And you are instructed to advise this office forthwith by wire if any registrar fails to present himself in time.

Your attention is invited to the fact that two registrars have been employed in each precinct, and two persons of opposite politics have been put on your board. The reason for this is obvious. Our country is in a great war. It is necessary that we utilize and conserve our man-power. We must not have any

suspicion of partisan or unfair methods in the execution of this law.

It is hoped and urged that you take steps to get the registrars started promptly, and that your board get together and organize at its earliest convenience, advising this office of such organization. Wire for any information desired, and do not hesitate to wire or telephone at its expense when, in your judgment, this is necessary.

While the duties are compulsory, it should be borne in mind that if these duties are well and conscientiously performed you are performing a patriotic service for your country in the time of a great war, and the government will be prompt to express its appreciation.

By order of the governor:

GEO. S. WALLACE,  
Major Judge Advocate General, O. R. C.,  
United States Army.

Very respectfully,  
GEO. S. WALLACE,  
Major, U. S. Army,  
Chief of Department.

The W. Va. Medical Journal,  
Huntington, W. Va.

Dear Sir: By direction of the governor, I am enclosing herewith the following letters relative to the creation of the Board of Military Census and Enrollment in the several counties, and the enrollment of persons for military service under the Act of Congress, commonly known as the Conscription and Selective Draft Act:

1. Letter from governor to members of the board.
2. Letter from Chief of Department to county clerk.
3. Letter from Chief of Department to sheriff.
4. Letter from Chief of Department to registrars.

It is desired by the president in the execution of this act that it be decentralized as much as possible and to that end he has called upon the governors of the several states to furnish the machinery to put it in operation.

The governor, fully in sympathy with the president, and desiring to co-operate to the fullest extent and with the desire that any person selected to render military service to the country in this crisis be selected by a board of his neighbors and friends, has in addition to selecting on such boards, men in whom the people

have already expressed their confidence by electing them to office, selected two additional members of high class men of opposite politics, hoping in this way there will be absolutely no partiality in making the selection. It is desired that the press keep the people of the state fully informed of the workings of the law and of the purposes of this department and it will from time to time mail out copies of all circulars or instructions and stands ready at all times to give any information desired.

The letters enclosed were prepared in advance of the president's proclamation, and you are requested not to publish either of them prior to the date of such proclamation.

Dr. H. J. Campbell, a veteran physician, widely known not only in Huntington, where he practiced for years in the Fourth ward, but also in Cabell and Mason counties in this state and in Lawrence and Gallia counties, Ohio, died at his home, 155 Sixth avenue. He was a victim of dropsy, the result of heart disease, from which he had suffered since Christmas. Interment took place at Swan Creek, Ohio.

Dr. Campbell was born in Gallia county, O., December 21, 1859, dying at the age of fifty-seven. He was educated in the schools of his native county and subsequently graduated in medicine at the University of Louisville and took his Bachelors degree at the Ohio State University at Columbus.

He began practicing at Blainesville, O., but came to Huntington after a time. Later he left here and went to Glenwood where most of his active career was passed. He built up a large practice in four counties bordering on the Ohio near Glenwood. Nine years ago he located for the second time in Huntington, opening offices in the Twentieth street bank building and, until his health failed, enjoyed an extensive city practice, numbering among his patients many whom he had treated in the days

of his rural work.

Twenty-one years ago, on May 22, 1895,, Dr. Campbell married Miss Eveline Clark, of Mercers Bottom, Mason county, who survives him. There are no children. He leaves one brother, Clayton Campbell, of Klamath Falls, Oregon.

Dr. Campbell was a Mason and Knight Templar and a member of the Knights of the Golden Eagle. In faith he was a Methodist and he held his membership in the Seventh Avenue church in this city. He was a member of the Cabell County and West Virginia State Medical Associations.

## State News

A report on Huntington's hospital facilities has been forwarded to Washington at the request of authorities there. The city's hospitals may be called upon in case of war emergency.

Dr. and Mrs. J. I. Miller and children of Huntington have taken a cottage at Atlantic City for the summer.

Governor Cornwell has announced the appointment of three members of the State Health Council to succeed Dr. W. W. Golden of Elkins, Dr. W. J. Davidson of Parkersburg, and Dr. J. E. Robins of Charleston, whose terms expired June 30. The physicians appointed are Dr. V. T. Churchman of Charleston, Dr. H. L. Clark of Kyle, and Dr. H. E. Gaynor of Parkersburg.

Dr. Tom A. Williams of Washington, D. C., has gone to France as a neurologist in the French service. He expects to return in October, 1918. His practice will be in charge of Dr. E. G. Mitchell until his time of service is over.

Dr. Jesse Jenkins formerly located at Fairview has purchased the property of Dr. Trach of Farmington, and is practicing there. Dr. Trach has gone to Fairmont.

Dr. Wade H. St. Clair of Bluefield, who has been quite seriously ill, spent some time recently at Atlantic City.

Dr. T. G. Matheny formerly of Me-Kendree, is now located at Forest Hill, W. Va.

Dr. H. H. Haynes of Clarksburg is an applicant for a commission in the medical reserve corps. Dr. Haynes who was once in hospital service in Maryland, wants to go with that state's unit, or rather that unit wants Dr. Haynes' commissioned and assigned to it.

Dr. B. L. Hume of Huntington has been appointed assistant superintendent of the Huntington State Hospital. The appointment became effective on July 10. Dr. Hume is well qualified for the position, as he has had a number of years of experience in this line of work in an institution in Virginia.

Dr. and Mrs. Lawrence Barber of Charleston were in Huntington recently enroute to their home from a motor trip through Ohio and Kentucky.

Dr. I. R. LeSage, one of the veteran physicians of Huntington, has applied for a commission in the Medical Reserve Corps of the army. Dr. LeSage hopes to see service in France, the land of his fathers.

Dr. J. E. Rader of Huntington spent some time recently in Richmond.

Announcement was made recently in Huntington of the purchase of an apartment building on Sixth Street by Dr. C. C. Hogg, representing a syndicate of of physicians and others. A vacant lot next to the apartment was also purchased. It is proposed to construct a wing of approximately the size of the apartment and convert the entire building to hospital purposes, probably making it the new home for the Huntington General Hospital. Those associated with Dr. Hogg in the deal are Dr. C. T. Taylor, Dr. L. T. Vinson and other Huntington men.

### DOCTORS GET COMMISSIONS.

A number of physicians and surgeons of Huntington have already received commissions and still others have ap-

plied. All of these are continuing their practices here and will do so until the call for service comes. Among those already commissioned are Dr. Henry D. Hatfield, former governor of West Virginia, who was given the rank of Major; Dr. J. Ross Hunter, who received a captain's commission; Dr. R. J. Wilkinson, superintendent of the Chesapeake & Ohio Hospital; Dr. R. M. Bobbitt, Dr. C. M. Buckner, eye, ear, nose and throat specialist, and Dr. W. H. Van Pelt, interne at the Chesapeake & Ohio Hospital commissioned as first lieutenant.

Dr. Cronin, Dr. J. C. Shultz, Dr. J. O. Hicks and Dr. E. B. Gerlach are among others who have applied for commissions.

Dr. Herman Crary, formerly of this city, now practicing at Millersport, made application here yesterday.

Dr. C. C. Hogg of this city is a major in the medical department of the West Virginia National Guard and Drs. W. W. Point, Joseph Lyons and H. W. Keatley, all Huntington men are now in active service in the guard corps.

#### WANT COLORED MEN.

The Council of Defense has also sent out a call for colored physicians who, upon enlistment, will be held in reserve until units of colored troops are formed. This matter has been taken up with some of the colored physicians of Huntington and vicinity and early enlistments are anticipated.

The Kanawha Medical Society voted to guarantee that any physician who is a member of the society and goes into the medical service of the army shall receive at least \$3,000 a year salary, the difference between his salary in the service and that to be made by the members who stay at home.

Assessments will be made on the resident members each month to make up the sum needed for distribution.

Major J. E. Cannaday, president of the state committee of the Council of National Defense, medical section, has announced the names of the other mem-

bers of the committee as follows:

Dr. H. D. Hatfield, former governor; Dr. J. E. Rader and Dr. J. Ross Hunter of Huntington; Dr. W. W. Golden, Elkins; Dr. C. S. Hoffman, Keyser; Dr. F. L. Hupp, Wheeling; Dr. J. H. Anderson Marytown; Dr. A. P. Butt, Davis; Dr. W. H. St. Clair, Bluefield; Dr. S. L. Jepson, Charleston, secretary; Major C. C. Hogg, Huntington; Dr. J. Simpson, Morgantown, and Dr. A. A. Shawkey, Charleston.

The chief function of the committee will be to urge enlistment of medical men of West Virginia in the reserve medical corps.

The first Huntington physician to be called to service under the terms of enlistment in the Medical Reserve Corps was Dr. R. M. Bobbitt. He received orders on July 17 to report for duty in New York.

Dr. Hugh G. Nicholson and son of Charleston were recent visitors in Huntington.

Plans to take care of the families of physicians of the state who go to war will be worked out at the meeting of the State Association which meets at Fairmont in October. This was decided at a conference between Dr. Hugh G. Nicholson of Charleston and Dr. R. H. Pepper of Huntington. These physicians are members of a committee of the Council of the Association.

Dr. Chas. G. Hill, well known Neurologist and Alienist of Baltimore, was the guest recently of Dr. L. V. Guthrie of Huntington.

Dr. M. R. Casey of Weston has been appointed a member of the staff of physicians at the Weston State Hospital.

Upon receipt of information that four additional cases of Infantile Paralysis had appeared in Monongah, Marion County, Dr. S. L. Jepson, State Health Commissioner issued an order establishing a quarantine in the town affecting all children under 16 years of age. He went to Monongah to take personal

charge of a campaign to stamp out the disease there and prevent its spread to other places.

—o—

Dr. J. O. Hicks of Huntington has received his commission as a member of the Medical Reserve Corps, being appointed a first lieutenant. He has been instructed to await further orders from the department, but to hold himself in readiness to report.

—o—

Dr. and Mrs. Karl C. Prichard of Huntington spent some time in July touring in their automobile through the mountains of West Virginia and Virginia.

—o—

Dr. C. M. Buckner, well known eye, ear, nose and throat specialist of Huntington, who was recently commissioned as a first lieutenant in the Medical Reserve Corps has been ordered to report to the Army Medical School at Washington. Mrs. Buckner will accompany him and take up first-aid work under the American Red Cross in Washington with a view to enlisting for service in France as a nurse's assistant.

—o—

Dr. W. W. Tompkins of Charleston has returned from a trip to Old Point Comfort.

—o—

Drs. G. C. Schoolfield and H. G. Nicholson of Charleston have returned from a visit to the Mayo Clinic at Rochester, Minn.

—o—

List of doctors who have applied for commissions in the Medical Officers' Reserve Corps since the July number of the Journal: Dr. C. F. Sayre, Mason City, W. Va.; Dr. U. G. Arnett, Pt. Pleasant, W. Va.; Dr. D. P. Crockett, Hardy, Ky.; Dr. W. S. Link, Parkersburg, W. Va.; Dr. H. C. Kincaid, Summersville, W. Va.; Dr. B. B. McClure, Welch, W. Va.; Dr. H. H. Haynes, Clarksburg, W. Va.; Dr. L. A. Hilton, Wilcoe, W. Va.; Dr. S. W. Bull, Spencer, W. Va.; Dr. Chas. H. Laws, Elkins, W. Va.; Dr. J. M. Whittico, Williamson, W. Va.; Dr. G. F. Bagby, Covington, Va.; Dr. Hiram Winter, Looneyville, W. Va.; Dr. John Folk, Bridge-

port, W. Va.; Dr. Geo. Shriver, Clendenin, W. Va.; Dr. S. W. Varner, Kingwood, W. Va.; Dr. T. C. McClung, Ronceverte, W. Va.

#### DENTISTS

Dr. William E. Paul, Summersville, W. Va.; Dr. C. B. Walters, Louisa, Ky.; Dr. J. Ford Gawthrop, Huntington, W. Va.; Dr. Harry T. Halstead, Huntington, W. Va.; Dr. Neal R. Gunn, Pt. Pleasant, W. Va.; Dr. Luther F. Compton, Alderson, W. Va.

## Society Proceedings

### BARBOUR-RANDOLPH-TUCKER SOCIETY.

The Barbour-Randolph-Tucker County Medical Society met at Davis on July 12 at the residence of Dr. A. P. Butt. Those who came by rail were met at Thomas by Drs. Butt and Miller in autos and taken to Davis. Those present besides Dr. Butt and wife were. Dr. J. L. Miller and wife, Dr. H. W. Daniels and wife, Dr. F. S. Hoysberry and wife, Dr. Farber and wife of Pierce, Dr. Scherr and wife of Elgin, Dr. Irons and daughter Polly, Dr. C. W. Myers of Coketon, Dr. L. J. Lanich of Kempton, and Dr. N. R. Davis of Henry.

The meeting was promptly called to order by Dr. Butt, vice-president, and each one present seemed intent on doing his part in making the meeting both pleasant and profitable.

After allowing a few bills, the topics were called, and Dr. S. G. Moore, who was down for a paper on Pre-paralytic Phases of Poliomyelitis, not being present, this prevalent disease was discussed in its various phases by Drs. Myers Miller, Daniels and Butt, each giving their experiences, observations and what knowledge they had gathered from reading and discussions. There seems to be a tendency among many, to believe that Infantile Paralysis is only a form of grippe affecting the nerves.

Dr. Miller reported a very interesting case of septicemia resulting from an infected boil on breast, which proved intractable to all treatment, resulting in death in three or four days. Several

cases of septicemia were recited in the experience of physicians present.

Dr. Butt is holding strongly to the opinion that many of the various diseases, specifically described and treated, such as rheumatism, erysipelas, etc., are only forms of infection with definite manifestations.

Dr. Butt called attention to the loss our society has sustained by the removal of Dr. O. H. Hoffman who has gone from Thomas, where he has had a large and successful practice for many years, to Baltimore.

On motion, Dr. Butt was authorized to appoint a committee to draft suitable resolutions showing the appreciation of the society of the many good qualities of Dr. Hoffman and our regrets for his absence from among us. (The committee was not named.)

At this point the most enjoyable portion of the occasion was entered upon, When Dr. Butt invited the society to his dining room, where his estimable wife had spread a most bountiful feast for the ten physicians who filled his table and then proceeded to fill themselves. The ladies were feasted in another room. A feeling of relaxation from the cares and anxieties of the serious matters of the profession and each gave himself to pleasant reminiscences to add relish to the delicious victuals set before us in profusion.

After the supper the society gave a hearty vote of thanks to Dr. and Mrs. Butt for their unbounded hospitality. (Drs. Myers and Lanich were elected members.)

The society then adjourned to meet in Elkins in October and those who wished to leave by rail were taken to Thomas in abundant time to get the train.

The beautiful scenery, the balmy air, the interesting discussions and the gracious entertainment made this one of our most pleasant meetings.

We are sorry that those who were on for papers failed to be present, but we are consoled with the fact that they possibly missed more than we did.

J. C. IRONS, Secy.

## CABELL COUNTY SOCIETY.

Huntington, W. Va.,  
July 16, 1917.

Dr. J. R. Bloss,  
Huntington, W. Va.

Dear Doctor:—

I am sending you a report of the last two meetings of the Cabell County Medical Society.

The Cabell County Medical Society met at the Hotel Frederick June 14, 1917, in the assembly room.

The members present were: Drs. Hunter, Henley, I. C. Hicks, Mathews, Marple, H. P. and E. B. Gerlach, Morrison, Bloss, Kessler, Cronin, Rowsey, Fitch, Prichard, Yost and Pepper.

In the absence of President Rowsey and the Secretary, Dr. J. Ross Hunter was elected chairman pro tem and Dr. E. B. Gerlach secretary pro tem. Both the president and secretary arrived later and presided.

Dr. Henley reported a case of compound fracture of the leg with non union in two months. The case was in the hospital twice for a few days. The tibia and fibula both were fractured at the junction of the lower and middle third. He took charge of the case himself and got good union. Discussed by Drs. I. C. Hicks, Bloss and H. P. Gerlach.

Dr. Bloss reported a case, male, age 64, since last October failing health and five weeks ago discovered a mass in the left side around the bladder. Gained 25 pounds in weight. Pus and albumen in the urine. Had enlarged prostate. Hydronephrosis. One-half gallon residual urine. The case was discussed by Drs. Bloss, Mathews, Kessler and Hunter.

Dr. Bloss also reported a case of osteomyelitis of the tibia. Discussed by Drs. Henley, Kessler, Hicks, Hunter, Fitch, Pepper and Bloss. It was moved by Dr. Hunter and seconded by Bloss that the immediate opening of osteomyelitis be the sense of this society. Carried unanimously.

The secretary then read a letter from Dr. J. H. Robinett, president of the W. Va. Osteopathic Association, in which he invited the members of the Cabell County Medical Society to the meetings of the former. It was moved by Dr. Bloss and



seconded by Dr. Hunter that the secretary thank Dr. Robinett for the invitation.

The bill of J. W. Dudley Sons Co., for floral emblem for \$8 was allowed and ordered paid.

The committee to present or report clinical cases for the next meeting were Drs. J. A. Guthrie, Hume, Steenbergen and Mathews.

On motion the society adjourned.

R. H. PEPPER, *Secy.*

—  
June 28, 1917.

The Cabell County Medical Society met at the Frederick Hotel in room 226.

The president, Dr. Rowsey, being absent, Dr. H. P. Gerlach was elected chairman pro tem.

The following members were present: Drs. Fitch, I. C. Hicks, Yost, Morrison, H. P. and E. B. Gerlach and Pepper.

Dr. Goff reported that the case he presented to the society several weeks ago was improving.

The society then went into an informal social session and a number of interesting experiences were given in the treatment of hysteria.

The committee appointed last meeting to present or report clinical cases was continued for the next meeting.

On motion the society adjourned.

R. H. PEPPER, *Secy.*

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EASTERN PANHANDLE SOCIETY.  
Ed. W. Va. Med. Jour.

The Eastern Panhandle Medical Society met at the Hilltop House, Harpers Ferry, June 13, 1917. The meeting was called to order by the president and an interesting program was rendered. There were thirteen members and five visitors present. The following members were present: Drs. McCune, Rossa, T. K. Oates and O. B. Eagle of Harpers Ferry; Wm. Neill, Pitman, A. O. Albin, F. M. Phillips, J. M. Miller, Charles Town; Howard Osborne, Rippon, Womack, Summit Point. The visitors: Drs. Willse, Rolensave and Wm. Neill, Jr., Baltimore; Littlefield, Cumberland, and Rossa of Martinsburg.

Papers were read as follows: Uterine Infections, by Dr. B. B. Ransom. Extra

Uterine Pregnancy, Dr. J. R. Littlefield. Carcinoma Uteri, by Dr. Willse.

The papers were discussed by Dr. Neill, Jr., and others.

Dr. Brown read a letter to the society by Dr. J. E. Cannaday of Charleston, relative to our duty as physicians to the Medical Reserve Corps. After which the society took action and instructed the secretary to so inform the proper authorities of the Medical Reserve Corps and to inform them of any future action by the society.

Dr. A. H. S. Rouss of Kabletown was elected a member of the society at this meeting.

A vote of appreciation was given Dr. Willse and Dr. Littlefield for their presence and valuable papers.

The society adjourned to meet at Harpers Ferry on the first Wednesday in September, 1917.

C. C. JOHNSON, *Secy.*

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MINGO COUNTY SOCIETY.

.....Matewan, W. Va.,  
July 17, 1917.

Dr. Jas. R. Bloss,  
Huntington, W. Va.

Dear Doctor:—

The Mingo County Medical Society held a meeting today in Williamson, which was attended by the following members: Drs. Richardson, Nunemaker, Conley, Slayden, Heatherman, Tabor, Salton, Turner, Rutherford, Irvine and Tripett. Under clinical cases, the following were reported and discussed: Ischio-Rectal Abscess, Infantile Hydrocele and Cholera Infantum.

Dr. Tabor of Glen Alum read a highly instructive paper on "Pellagra," same having been inspired by a recent case of this malady occurring in his own practice, and one in that of a neighbor.

In discussing this paper Drs. Nunemaker, Turner and Richardson all reported having treated many cases. Dr. Turner having at present three cases in one neighborhood. In discussing the cause all agreed with the opinion advanced by the U. S. Public Health Commission that it is a national disorder coming from a low protein diet and the opinion was unanimous that the treatment par excellence is: "Best possible

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hygienic conditions; (2) high protein diet, especially fresh meat every day, and (3) cacodylate of sodium in large doses repeated as often as patient will tolerate it.

Dr. Richardson presented specimen of gall stones and appendix which he had recently removed.

Dr. Rufus M. Musick of Gilbert was elected to membership in the society. He having been favorably reported by the Board of Censors.

Dr. Nunemaker expressed his deep appreciation of the activities of the membership of the society in his behalf, when he was so favorably mentioned recently as a probably appointee to the State Health Council from this district. A big meeting is anticipated in August.

Yours very truly,

W. H. TRIPETT, *Secy.*

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Wheeling, W. Va., Feb. 26, 1917.

The Ohio County Medical Society of Wheeling, W. Va., held its regular meeting at the Windsor Hotel Friday evening, February 23, 1917. Dr. Alfred Stengel of the University of Pennsylvania, Philadelphia, Pa., delivered an address on the Diagnosis and Treatment of Chronic Nephritis. The paper was discussed by Dr. J. O. Howells, Dr. Andrew Wilson, Dr. J. T. Thornton and Dr. H. E. Oesterling.

During the meeting the new state law pertaining to fee splitting was discussed and the following resolution offered:

*"To the Members of the Ohio County Medical Society, Wheeling and the Ohio Valley:*

Gentlemen:—

Fully realizing that the time for immediate action has arrived, your attention is called to a matter of vital importance. Namely: that barter of human flesh, commonly known as fee-splitting, the scavenger of our profession.

This illegitimate practice of commercialism has lowered the respect, dignity and honor of the profession, to such a degree, that it is our duty to earnestly cooperate with the agent of the law in the fulfilling of his sworn obligation.

Written on the statutes of the

state of West Virginia we have the following law:

Sec. 1. It shall be unlawful for any physician or surgeon in this state to directly or indirectly divide, or agree to divide any fee or compensation of any sort whatever charged for a surgical operation or for medical services, with any other physician, surgeon or other person, who brings, sends or recommends a patient to such surgeon or physician for treatment, without express knowledge and consent, previously had, of the person paying such fee or compensation, or against whom the same may be charged.

Sec. 2. It shall be unlawful for any physician, surgeon or other person residing in this state to accept any fee or any compensation from any other surgeon, physician or other person not residing in this state for taking, sending or recommending a patient for treatment to such non-resident physician, surgeon or other person.

Sec. 3. Any person violating the provisions of this act shall be guilty of a misdemeanor, and upon conviction thereof shall be fined not less than one hundred nor more than one thousand dollars for each offense; and, in the discretion of the court or judge, may be imprisoned in the county jail not to exceed twelve months in addition to said fine.

Sec. 4. If any person shall be convicted of a second offense under the provisions of this act, the state board of health shall revoke the certificate licensing such person to practice medicine, surgery or osteopathy in this state, as provided in section ten of chapter one hundred and fifty of the code of West Virginia.

This resolution is hereby submitted:

#### RESOLUTION

*"Resolved;* That we, the members of the Ohio County Medical Society heartily endorse Senate Bill No. 79, Code of West Virginia, for the protection of patients prohibiting the division of fees of physicians and

surgeons with other persons.

"Be it further Resolved, That the Ohio County Medical Society appoint an investigating committee to cooperate with the county authorities, and assist in rigidly enforcing this recent act of the legislature.

Signed,

DR. LEECH K. CRACRAFT.

Committee: Drs. Leech K. Cracraft, chairman, A. J. Noome, Robt. J. Reed, D. B. Best, R. J. Hersey.

J. R. CALDWELL.

## Health News

DO YOU KNOW THAT—

Peace hath her health problems no less than war?

Constant vigilance is the price of freedom from flies?

The physical vigor of its citizens is the nation's greatest asset?

Idleness is the thief of health?

Infected towels spread eye diseases?

Half the blindness in the world could have been prevented by prompt and proper care?

—o—

"Hygiene is the art of preserving health; that is, of obtaining the most perfect action of body and mind during as long a period as is consistent with the laws of life." So wrote a man who devoted all his adult life to the promotion of the public health and who died at the age of 56 of pulmonary tuberculosis. Edmund Alexander Parkes, born March 29, 1819, physician, surgeon, sanitarian and author left perhaps a greater impress on sanitary science than any Englishman of the nineteenth century. His work ranges from the theoretical consideration of the minutest details of chemical and physiological research to the practical consideration of the cleansing of a sewer or the lightening of the soldiers' knapsack. India, the Crimea and London saw his labors and benefited thereby.

War brings some good things in its train. Just as the Napoleonic campaigns perfected the art of transporting the sick, and the loss of life from preventable disease in the Spanish war quick-

ened the sanitary conscience of the American people, so the horrors of the Crimean campaign made Parkes a professor of military hygiene. He organized a complete course of instruction based on the principle that the student must be able to practically apply the lessons which he learned. Many of the sanitary reforms which he inaugurated are now bearing fruit in the improvement of the wellbeing of the community at large.

Health is the efficient reaction of the mind and body to its environment. Self interest, state benefit and pecuniary profit require that the whole nation be interested in the proper treatment of every one of its members and "in its own interest it has the right to see that the relations between individuals are not such as in any way to injure the well-being of the community at large." This is being realized in the United States today as never before and on every hand the general government, the state and local health authorities and the general public are seen striving toward the accomplishment of this ideal.

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A recent investigation of the causes and prevalence of miners' consumption among the metal miners in Southwestern Missouri forms the subject of Public Health Bulletin No. 85, issued by the U. S. Public Health Service.

Miners' consumption consists essentially of a mechanical injury to the lungs due to the prolonged inhalation of hard rock dust. It has been recognized as being prevalent in some American mining districts, particularly in the Joplin zinc and lead districts. It was to determine its actual prevalence, and its relationship to pulmonary tuberculosis that the investigation was undertaken.

In the Joplin district certain mines are known as "sheet-ground" mines, in which the ore is found imbedded in an exceedingly hard flint. In drilling and other mining operations this flint rock is finely pulverized. The minute rock dust particles enter the lungs, in the process of natural breathing, and by their irritating action cause the formation of fibrous, or scar-like tissue. The effect of this is to lessen the lungs' abil-

ity to expand and contract, with the result that the victim first notices that he is becoming short winded. With continued exposure to this silica containing dust, the difficulty of breathing increases, until the miner is no longer able to perform active physical labor. It was found also that men with dust injured lungs were especially liable to develop tuberculosis, the dust irritation lessening the ordinary resisting powers of the lungs. While miners' consumption is not in itself infectious or contagious, it predisposes to tuberculosis. The greater the amount of rock dust injury the greater the liability to tuberculosis; the far advanced cases of miners' consumption practically all become tuberculous after their death.

Under an entirely voluntary system 720 miners presented themselves for physical examination, of whom 433 were found to have had their lungs injured by the inhalation of rock dust; of these 103 were also tuberculous, the amount of tuberculosis infection being greatest among the advanced cases of the rock dust disease.

Five years' steady work with exposure to flint dust is fairly certain to find the miner in at least the first stages of miners' consumption. If the miner continues his work after being affected, death usually results within ten years from the time that exposure to flint dust commenced. Poor housing conditions were found to be prevalent and to add to the liability of tuberculous infection. Apparently tuberculosis is now occurring at an earlier stage of miners' consumption than was formerly the case. The report lays emphasis on the necessity of preventing the spread of tuberculosis through these cases, especially among miners' children. The fact that miners' consumption is a forerunner of tuberculosis necessitates that it be treated with the same hygienic precautions as is the latter disease.

The report concludes that aside from the hygienic supervision of underground working places, the education of the miner against the spread of infection and supervision of miners' children, especially those of consumptive parents, are matters of vital importance.

In the early period of the European War, many cases of lockjaw or tetanus developed in the wounded of the allied armies. This very fatal disease is caused by a bacillus which is often found in garden soil, street dust, and in the earth in the vicinity of stables. In order to cause tetanus, the germ must lodge in a wound and find suitable conditions for its growth. Injuries in which clothing or foreign matter is forced widely or deeply into the tissues are the most dangerous because the tetanus germ can only flourish in places into which oxygen cannot penetrate, just as toadstools grow best when sheltered from the sun.

As soon as the stress of war conditions permitted, all badly wounded men were immediately given injections of the serum against tetanus as a routine procedure to prevent this dreaded disease. The use of the anti-toxin caused a prompt reduction in the number of cases and the control of tetanus in the armies can be justly cited as one of the ways in which science is helping valor to win the war.

This subject is of especial interest at the present season because fourth of July injuries, especially from blank cartridges, are apt to be followed by lockjaw if they are not promptly and properly treated. The general adoption of the "sane fourth" has done much to reduce the number of these accidents and suitable medical attention has prevented the development of tetanus in almost every instance.

In view of the serious results which may occur, it seems wise to again warn all parents that wounds from toy pistols, firecrackers, and firearms are always dangerous and all persons hurt in this way, even though the injury appears trivial, should be taken at once to a competent physician for treatment, especially to ascertain if the serum should be injected.

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#### CHILDREN IN WAR TIME.

FIRST ARTICLE: CHILD LABOR ON ENGLISH FARMS.

The various propositions which are now being made for the use of children

in farm work lend interest to the English experience with farm labor of children. England is putting her all into this war, and if she has found, in spite of the increasing strain of the passing months, that children's welfare has been needlessly sacrificed, surely the testimony of her officials is timely and important for us.

England has been granting special exemptions from school attendance. Between the outbreak of the war and the first of May last year, 28,000 children of school age had been excused from school for farm work. What do the English official records show about the need of these children's help and the effect upon them of their employment?

The granting or withholding of exemptions has been in the hands of the local education authorities and their policy has not been uniform. Many of them in all sections of the country have consistently refused to excuse children from school. The farmers of these districts have clamored as loudly as others for child helpers, but it appears from available reports that they have managed without the children when the school authorities stood firm.

The Board of Education, during the first year of the war, advised the local authorities as follows: Exemptions should be granted only to individual children after personal investigation of each case; no general breakdown of the laws in any district was intended; the employment of children of school age should be regarded as an exceptional measure and should be allowed only where the authority were satisfied that no other labor was available. The authorities were to ascertain that application had been made to the Labor Exchanges with an offer of adequate wages. In no case were the authorities to excuse children if older children past the age of compulsory attendance were available; the authority should secure particulars of the work, the wages offered, and the period for which the labor was required; the work should be light and suited to the capacity of the child.

A year later the board of education urged a stiffening of these conditions. They laid special emphasis on the fact

that the urgency of the need for the child's help might be tested by the amount of wages offered; also, they said, a register should be kept of children exempted, and exemptions should be reviewed at least once in three months to ascertain that the conditions under which they were granted still existed.

In spite of this, the latest report of the chief medical officer of the board of education says: "The board have already expressed their concern to local education authorities at the large number of exemptions which have been granted far too freely and without sufficiently careful ascertainment that the conditions of exemption prescribed by the government were fulfilled."

The British Board of Trade speaks of various other ways in which the shortage of men for farm labor has been met. Older children have been employed. Women have volunteered for farm work. Machinery has been increasingly used.

The Labour Gazette refers also to the low wages offered by the farmers. And in the Parliamentary debates on child labor in agriculture the farmer's liking for a boy who will work for sixpence a day is given by some members as an important reason for the demand for child labor. Unofficially it is stated that in those parts of the country where rural wages are highest the least use has been made of children.

That the best interests of the children themselves have been sacrificed is recognized. As the Chief Medical Officer of the Board of Education puts it in his last report: "To withdraw the child from school at an earlier age than that contemplated by the attendance bylaws is to arrest his education on the threshold of the years when he is probably just commencing to assimilate and consolidate the instruction he has received and is receiving at school. His introduction to labor at this time renders him liable to conditions of strain detrimental to his physical well being."

A fuller statement of the English situation with quotations from the English reports can be secured from the Children's Bureau, U. S. Department of Labor, Washington, D. C., upon application.

## Medicine

### THE USE OF INEXPENSIVE DRUGS IN PRACTICE.

By LOUIS T. DE M. SAJOUS, B. S., M. D.,  
Philadelphia.

Although in recent months a tendency toward recession in the prices of many drugs from the high marks reached early in 1916 has been noticeable, the cost of the various remedies still remains in many instances so high as to impose not only a distinct hardship on patients of moderate means and the practitioner solicitous of safeguarding their interests, but also an unexpected strain on the financial resources of hospitals and dispensaries in which free remedial treatment is given. A cursory inquiry into the situation seems to indicate that unnecessary expense is constantly being incurred through failure to utilize to the full extent the resources which the U. S. Pharmacopœia actually affords, in particular as regards substitution of the less for the more expensive drugs. Brief consideration of some of the possibilities which present themselves in this and related directions appears, therefore, in order.

Beginning with the narcotics and hypnotics, we find opium and its alkaloidal derivatives now selling at an advance of approximately fifty per cent. over 1914 prices. In the case of these essential agents, it would seem that little can be done to reduce expenses. Yet certain opportunities suggest themselves. Thus, where a hypnotic effect is desired, advantage could sometimes be taken, where many cases are under treatment, of the potentiation which has been shown to occur when morphine and the less expensive agent, chloral hydrate, are simultaneously administered, less than a half dose of each of these drugs being under these circumstances required to produce the hypnotic effect which a whole dose of either remedy would exert if given alone. Likewise effective in reducing drug outlay in suitable cases, e. g., where pain is to be relieved and sleep secured in the absence of any tendency to weak heart action, is the substitution

of acetanilid for a portion or all of the morphine otherwise to be given, remembering that in some inflammatory and organic pains the latter is a more efficient remedy. Possibly cannabis, now maintained at a definite degree of potency by the physiological standardization requirement of the new Pharmacopœia, may in some cases be successfully substituted for opium for analgesic and narcotic purposes, though at best it is a somewhat uncertain remedy. It is less than one-fourth as costly as opium, dose for dose.

Codeine, though it has not advanced in price quite as markedly as morphine in the last three years, remains more expensive than morphine, weight for weight. In view of the much larger dose required to produce an equal effect, codeine would be distinctly inferior to morphine from the expense standpoint were it not for the fact that it possesses the advantage, in its special province of relieving cough of acting without producing the unpleasant side effects of morphine, such as constipation, digestive disturbance, and headache. The dose of morphine required for this purpose, however, being in many instances small, these side effects are not apt to be pronounced, and the substitution of codeine for morphine, even in the relief of cough, seems unnecessarily expensive. Both these agents are, perhaps, surpassed by diacetylmorphine (heroin), which, while about one-third more costly than morphine or codeine, weight for weight, is said to depress the cough reflex in doses somewhat less than those required in the case of morphine, and has the additional advantage of largely avoiding the unpleasant side effects of the latter, though more toxic in larger doses (Harnack). The difference in dose and expense between diacetylmorphine and morphine is, of course, much less than that between codeine and morphine. As Sollmann states, as little as 1-32 grain of morphine may be sufficient to lessen the cough reflex.

The relative inexpensiveness of the entire drug, opium, as compared to its alkaloidal derivatives is particularly to be borne in mind, the effect on the cough reflex being obtainable with less than one-fifth the expense entailed in the case

of morphine, in spite of the fact that certain of the minor alkaloids in opium act in direct antagonism to the contained morphine on the respiratory centers. The more marked constipating action of opium is a disadvantage in the use of the entire drug, but the difference in this respect is doubtless relatively insignificant except in cases of such severity as to require large doses. Opium has, moreover, been held superior to morphine in these cases on the ground that it induces less nausea and depression of breathing and acts more persistently than the alkaloid.

In bronchial asthma morphine probably cannot well be replaced by diacetylmorphine, for according to Higgins and Means (1915) as little as 1-12 grain of the latter is capable of causing bronchoconstriction—an effect opposite to that required for the relief of this condition. In dyspnea in general, morphine acts better than any of its congeners, as it reduces the sensitiveness of the respiratory center to carbon dioxide more than they do. In obstinate excessive peristalsis and diarrhoea, on the other hand, opium is in most instances superior to the various alkaloids from both the therapeutic and expensive standpoints. In the minority of these cases in which substitution of morphine for opium seems desirable because of its more rapid action and greater anodyne power, advantage may, perhaps, be taken of the observation of Takahashi (1914) that in colocynt diarrhoea potentiation occurs when morphine and codeine are combined, the resulting effect being so marked that, in using a mixture of these alkaloids in equal parts, the dose of morphine can be reduced to one-fourth that ordinarily required.

In all the above mentioned uses of opium and its derivative alkaloids the customary precautions to obviate habit formation are, of course, to be given due consideration. In this respect codeine is by far the safest remedy of the group; but in many of the milder cases an effort should be made to substitute other sedative drugs for the members of the opium series.—*N. Y. Med. Jour.*, 3-24-17.

#### USE OF EMETINE.

Alfred C. Reed (*Boston Medical and Surgical Journal*, September 14, 1916) gives a summary of the history, pharmacology, and toxicology of emetine, and discusses its uses. Its predominant use is in the treatment of amebic dysentery, in which it seems to be specific in direct proportion to the acuteness of the attack. Benefit will usually appear early, ordinarily by the third or fourth day, if at all. It must be supported by symptomatic treatment, such as correct diet, catharsis, and rest. Chronic dysentery and carriers are not influenced directly by emetine as a rule. Emetine has very definite use in the presupplicative stage of amebic abscess of the liver, and after actual abscess formation, it may be a valuable adjunct to the surgical treatment, particularly when the abscess has ruptured and spread amebas through the contiguous tissues. It cannot be said that emetine is a specific for pyorrhea, that emetine alone will cure it, or that it cannot be cured without the use of this drug. The same is true of other bony and oral abscesses and infections, but given the pathogenic ameba, emetine is the specific remedy, provided that the infective agent is not walled off in an abscess. In so far as emetine excites a mild nausea, it shares the action of ipecac as an expectorant. It has been lauded as almost a specific for hemorrhage in certain chronic disease, especially for hemoptysis in pulmonary hemorrhage, but there is no experimental evidence that it has the slightest influence on hemorrhage directly, or that under any circumstances it promotes coagulation. Emetine lowers the blood pressure, weakens the heart, and depresses the central nervous system. Whatever beneficial action in tuberculosis it has would seem to be due to its expectorant properties, but even so, other preparations are preferable. A beneficial action in hemorrhage may be due to the indirect result of decreasing blood pressure, yet if so, other drugs would be safer and more effective. The use of emetine enemata for constipation does not seem to be well advised. Emetine has proved serviceable in the treatment of certain other diseases caused by animal parasites, especially

protozoa, but its main uses are due to its amebicidal action.—*N. Y. Med. Jour.*, 9-30-16.

#### RHUS POISONING.

Syracuse, N. Y., Nov. 6, 1916.

To the Editor.

Nearly every year I am a victim to ivy poisoning, and beside my personal experience, I see many cases in practice. A localized, intense itching and burning are the first symptoms, followed in a few days with papules which fill with serum. With no treatment or the ordinary treatment of washes and ointments, it subsides in ten days or two weeks, and there is a desquamation of the parts involved.

Maisch, in 1865, made experiments and attributed the poison to a volatile acid which he named toxicodendric acid, but which Pfaff (*Jour. Experimental Med.*, II, 1897, p. 181) identified with acetic acid. Pfaff found the poisonous principle to be an oil which caused the eruption only in places where it had been applied, if care was taken not to distribute it to other parts of the body.

Many years ago, in desperation to relieve the itching, I would saturate a bit of cotton with chloroform and rub the part—generally fingers—and I soon found that I could abort the attack. The itching would gradually subside and the papules would not form. After reading Pfaff's contribution, it was plain to see that in using the chloroform I had cleansed my hands from the poison. Since then I have substituted benzol for chloroform, as it is a better solvent for oily and resinous substances, and gasoline is about as efficient.

One has only to scrub thoroughly and clean the part as soon as the first symptoms appear to be relieved.—JOHN B. TODD, M. D., *N. Y. Med. Jour.*, 11-11-16.

#### EPILEPSY AND DIPSOMANIA.

In this third study of certain aspects of epilepsy, Bolten discusses its relation to dipsomania. He concludes its eighteen pages with the statements: "Dipsomania is a symptom complex that is caused by periodically recurring dysphoria. All troubles and disturbances on a basis of degeneration may induce it, so that hysteria, neurasthenia, epilepsy, and all de-

generative and psychopathic conditions may bring on dipsomania. Many cases of dipsomania belong to the group of mild manic-depressive psychoses. The depression is the immediate cause. The dipsomaniac does not drink because he enjoys drinking but because he wants to overcome his dysphoria, and hence he may use alcohol, cocain or narcotics. He has no special craving for alcohol, but only for something to drive away the blues."—*N. Y. Med. Jour.*, 10-7-16.

## Surgery

1. An analysis of 5,000 tonsil operations in singers shows that in the hands of skilled operators there need be no special fear of bad results.

2. It is the consensus of opinion that bad results are most often due to cicatricial contractions occurring from careless dissection or from neglected after-treatment.

3. Pain in the tonsillar region, neck and larynx is probably due to section of some of the larger branches of the glosso-pharyngeal nerve (Justus Matthews).

4. Loss of singing voice occurs very rarely after tonsillectomy, if at all. Impaired voice is possible, but most cases show an increased range of from one-half to a full tone.

5. Loss of singing voice after tonsillectomy might be due to a nerve lesion, but is probably due to adhesions and cicatricial formations in the fauces.

6. The singer's problem is a very special one, and no laryngologist should undertake to operate on these patients unless he has some knowledge of the art of singing.

7. At operation the greatest care and skill must be exercised in securing a clean, free dissection. Injury to the tissues surrounding the tonsil may prove disastrous.

8. Post-operative care is of special importance. The patient should be seen daily until full heal ensues.—Abstract from *N. Y. State Jour. of Med.*, March, 1917.

#### TREATMENT OF PERITONEAL ADHESIONS.

The operative removal of peritoneal



adhesions is one of the most thankless tasks in surgery. Recurrences, often worse than before operation, are the rule, so that many surgeons refuse to operate in such cases. A variety of substances have been introduced into the peritoneal cavity with the object of preventing the reformation of such adhesions, but as yet no satisfactory material has been found. After many failures, the author believes he has hit on a mixture that promises well. It consists in a solution of sodium citrate, to prevent the formation of fibrin, in mucilage, which coats the raw peritoneal surfaces until they can be overgrown with endothelium. His formula is:

Sod. chlorid .....	1.8
Sod. citrat.....	0.5
Sol. gummi arab.....ad	200.0

This mixture is sterilized and poured into the peritoneal cavity with a tablespoon after the adhesions have been cut. It is distributed as thoroughly as possible, whereupon the wound is closed.

In the two cases in which the method was tried the author's results were remarkably good. Both cases were grave, with intestinal obstruction due to peritoneal adhesions, and both came to operation three times. The first two operations brought no relief; the third, laparotomy, in which the above-mentioned mixture was used, was completely successful. All discomforts ceased and spontaneous daily bowel evacuations set in.—Abstract *Inter-State Med. Jour.*, Feb., 1917.

#### NEPHROPEXY.

Dr. Samuel Lloyd, New York: Floating kidney is a clinical entity. It often exists without symptoms of any kind. Kidneys are movable in the first, second or third degrees, the latter being a distinctly floating kidney, remaining out of place even when the patient is recumbent. In this class, marked symptoms might be noted. Patients often are treated for years by gastro-enterologists, without knowing that the trouble is nephritic in origin. Symptoms are not distinctly referable to the kidney; such symptoms as nervousness, heart disturbance, dyspnea, emaciation, gastric disturbances and constipation are often

marked. There might be perinephritis and toxemia. Many of these symptoms are due to chronic parenchymatous nephritis, owing to changes in the circulation of the organ. As regards fixation of the kidney, there need be no recurrence, if proper technic is observed. The kidney must be firmly attached to the lumbar fascia, and as the kidney is posterior to the peritoneum, no intra-abdominal pressure is sufficient to keep it in place. The kidney should be anchored to the lumbar fascia, close to the muscles, and with a freshened surface close to the separated muscles themselves.—*Jour. A. M. A.*, 6-9-17.

#### FRAGILITAS OSSIUM.

A description is given by Bronson of two families with hereditary fragility of the bones associated with gray-blue sclerotics, and in one family with otosclerosis also. A summary of the literature of these peculiarities in relation to fragilitas ossium is presented, together with a general discussion of the whole subject, case reports of the congenital type, and a bibliography. In the first family, consisting of fifty-five individuals in four generations, twenty-one had gray-blue sclerotics. Of these twenty-one, only one, a 6 year old boy, who survived infancy, has had no fractures. The number of fractures in any individual is not excessive, and they require a certain amount of force for their production. Sprains and dislocations are also common. The majority of adults are in good general health, and are able to do ordinary work. The mortality among infants with blue sclerotics is in this family greater than among those not affected. The heads of those individuals in this family who have blue sclerotics and bone fragility show an abnormal prominence of the frontal and occipital bones. In two of them there is a history of patency of the fontanel throughout life. Of eight adults with blue sclerotics and fractures, seven had varying degrees of deafness, the eighth died at 23 without deafness. In the second family, consisting of eight individuals in three generations, seven have blue sclerotics, and four of these have had fractures; two others have a tendency to sprains. All are able to

lead an ordinary life, except one child, which is somewhat crippled and incurs fractures too easily to be able to run and play. In this family the head has the characteristic shape frequently seen in osteogenesis imperfecta congenita, namely, increase in the bitemporal diameter, so that the ears are turned outward and downward, slight downward tilting of the axis of the eyes, and an underhung lower jaw. There is no tendency, as in the first family, to deafness, nor any to arterial sclerosis. In both families the stature of those affected is below the average, with the exception of three members of the first family.—*Jour. A. M. A.*, 5-19-17.

#### IMMEDIATE INTERVENTION FOR WAR WOUNDS.

Pisano advocates the definite operation at once, deprecating the old way of first aid, then new examination and dressing by each surgeon through whose hands the wounded man passes in the clearing station, on the train and in the base hospital. He knows of instances where the wound was thus dressed five times within twenty-four hours. In his service now, close to the firing line, 3,171 wounded have been given treatment at once, including 172 extremely severely wounded. The mortality was less than 3 per cent. Thorough surgical treatment was applied in 9 per cent. He comments on the ease with which projectiles can be extracted when this is done at once, before they have had a chance to sink by gravity deep into the tissues. In one case a large clot of dirt had been driven completely into the left thigh. In only 399 cases had the wounds been made by bullets. Among the advantages of the early definite operative treatment are that there is no need then to rush the patients away. The benefits are so great for the wounded that they outweigh the danger of being shelled occasionally.—*Jour. A. M. A.*, 6-9-17.

#### THE DANGERS OF LUMBAR FRACTURE.

It is exasperating to the enthusiastic physician on the trail of a diagnosis to have the patient himself, or his relatives, refuse to allow a lumbar puncture on

the grounds of the danger involved. Perhaps the fluid has been withdrawn once and the patient suffered considerable pain at the time or, being of an neurotic makeup, complained for days afterwards of a headache, dizziness, pains in back, etc. The temptation is great in such instances, especially where the diagnosis is obscure, and one hesitates between a hopeful and a hopeless prognosis, to tell the apprehensive relatives that this procedure is absolutely without danger. We would be going a little too far, however, in doing this. Let us look into some of the dangers which are actually existent.

First of all, there is the danger of infection. Do we see a smile? Perhaps there are some who are so confident of their technic that infections have been relegated to the limbo of the impossible, wherever that is. But of such the real surgeon is not. About a year ago an investigator who modestly styled himself a "laboratory technician" published in the *Modern Hospital* an account of some careful bacteriological studies which he had made in operating rooms, of supposedly perfect technic, but where infection had been occurring with alarming regularity. Platinum loop and test tube in hand, he followed the operations step by step from the time the first package of gauze was put in the sterilizer until the last dressing was put on the wound, taking cultures here, there, and everywhere. And always at some point in the routine he found a flaw. The germ, lilliputian in its contours, brobdignagian in its potentialities, fastened somewhere on a link in the chain and thus the whole chain was rendered weak. So if infection can occur in the operating rooms of surgeons who make it their constant care to prevent them, they may also occur in the practice of the family physician who, down in the bottom of his honest old heart, looks upon all the refinements of sterilization as just a little absurd. Infection then may occur in lumbar puncture and this must be borne in mind when urging the family to consent.

Unpleasant after effects are by no means rare, especially in the class of patients who react badly to everything of this sort. Remembering that "one of

the functions of the cerebrospinal fluid is to maintain an equality in the intracerebral pressure, and any sudden alteration, such as is produced by the withdrawal of five, ten, or fifteen c. c. of the fluid, is apt to disturb such equilibrium," headache, nausea, and vertigo which do not always clear up in a day can sometimes be anticipated. Sudden death has even been known to follow lumbar puncture. This is usually due, of course, to a brain tumor and, if this is suspected, the greatest care should be exercised. Then, too, the patient may be suffering from general paresis, the course of which cannot be predicted with certainty even a day in advance. The withdrawal of fluid may precipitate or be coincident with convulsive seizures. These may terminate in death, and if we are then able to convince all the relatives that death was not due to the lumbar puncture, our place is in front of His Honor, addressing the twelve good men and true rather than rising at two a. m. to increase the amount of cannon fodder.

Leaving out of the question, however, all actual accidents and sequelæ of spinal puncture, we must consider another class of patients, the neurotic and hysterical. To these the introduction of a needle, which their imaginations represent as Gargantuan into their spinal column, about which the laity have all sorts of weird ideas, is a mysterious and terrifying thing. The usual association of ideas is injury to the backbone, broken back, and either death or paralysis. It is quite possible then for such individuals to develop a hysterical paralysis, probably taking the form of paraplegia, following this procedure. Here again it is easy to visualize the task before the physician who would persuade the patient and his relatives that the paralysis was imaginary and not caused directly by the puncture.

Let us then not be betrayed by scientific enthusiasm into stating boldly that lumbar puncture is absolutely without danger. We should rather tell the patient and his friends that it is considered an ordinary diagnostic procedure nowadays, that it is necessary to clear up certain points in his particular case in order that we may treat him more intel-

ligently and that, exercising such caution and skill as will be given to it, the danger is very, very slight.—Ed. *N. Y. Med. Jour.*, 6-9-17.

#### APPENDECTOMY.

J. Weiner, New York (*Journal A. M. A.*, April 8, 1916), says that in the last eleven months he has operated on fifteen cases of appendicitis under local anæsthesia with very satisfactory results to himself and his patients. To anticipate objections he says the first will be the difficulty in dealing with adhesions. Fibrous adhesions are not sensitive and can be easily divided. The omental adhesions can be readily anesthetized by injecting a few drops of the local anæsthetic. A few of his cases have been acute, but he hopes to use the method in more of this class of cases, even in the presence of a peritonitis. In the cases in which he has operated under local anæsthesia, there has been very little or no tympanites and peristalsis, has been little or not at all inhibited. In a recent case, gas began to be passed fifteen hours after operation. Abdominal discomfort, nausea and tympanites were absent. Half an hour before operation he gives a hypodermic of a quarter grain of morphin. He usually uses a 1 per cent. solution of novocain to an ounce of which twenty drops of a 1:1,000 solution of epinephrin are added. As much as 240 minims of this can be safely used for an adult, but as a matter of fact he has never had to use as much for a painless appendectomy. He prefers the muscle splitting McBurney incision, which lends itself well to the local anæsthesia operation. The solution is first injected into the skin along the lines of the cut and followed up by deeper injections along the same lines. The skin and subcutaneous tissues are painlessly incised down to the aponeurosis of the external oblique with a sharp scalpel rather than with scissors. The novocain is then injected under the external oblique aponeurosis, and after two minutes this is divided. It is next injected into the internal oblique and after another wait of a few minutes this is incised. Then a little novocain is

injected under the peritoneum and it is divided in three minutes more. The manipulation should be as gentle as possible. As soon as the cecum with the appendix is exposed some novocain is injected into the mesentriolum to prevent cramplike abdominal pains. After a wait of three minutes the appendix can be pulled out of the abdomen, the mesentery ligated and divided, and the appendix removed with almost no pain. He has kept a record of the statements of the patients concerning their feelings and they have stated that whatever pain they felt was much less than they expected. A few hours after operation there may be a little wound pain readily controlled by codein or morphin. Peristalsis is early and almost all of the patients have been able to take and retain fluids within a few hours. The post-operative depression common after ether is entirely absent. The patients are usually able to get out of bed on the fourth day and to leave the hospital on the seventh or ninth day. An ordinary uncomplicated operation can be performed in from twenty to thirty minutes, much of the time being used in waiting for the anæsthetic to act on each layer. Besides the intermuscular incision, the operation can also be done under local anæsthesia by any other incisions used in appendectomy.

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## Book Reviews

### SANITATION PRACTICALLY APPLIED.

By HAROLD BACON WOOD, M. D., Dr. P. H., Asst. Commissioner, W. Va. Department of Health. Formerly Director Mississippi State Board of Health Laboratory. Wholtime Health Officer of Rochester, Minn., and Topeka, Kan.

New York. John Wiley & Sons, Inc.

This is an entirely new work by an author who has had ten years practical

experience both in municipal and state health work. It is divided into twelve chapters which treat of the need of public health work, statistics, the control of communicable diseases, child welfare, school hygiene, pure foods, sewage disposal, home and factory hygiene, insect destruction, etc. This mere enumeration indicates the wide scope of the work. The discussion of the various subjects shows an intimate knowledge of the various phases of public health work and also of the proper methods to be adopted by the health officer to effect improved conditions in the interest of the public health. The author is an experienced epidemiologist and valuable instruction is given in practical methods of controlling disease. The chapter on milk production is a valuable one, as are those on water supplies, and on sewage disposal. In short, the book is one by the careful study of which health officers may not only learn what their duties are, but also how best to discharge them so as to remove the causes of disease and conserve the public health.

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### PRACTICAL TREATMENT.

Vol. IV. By 76 eminent specialists. Edited by John H. Musser, Jr. M. D., Associate in Medicine, University of Pennsylvania, and Thomas C. Kelly, M. D., Instructor in University of Pennsylvania. Desk Index to the complete set of four volumes sent with this volume. Octavo 1000 pages, illustrated. Philadelphia and London. W. B. Saunders Co., 1917. Cloth, \$7 net; half morocco \$8.50 net.

It is a necessity to all who possess the first three volumes, and should be purchased by all practitioners who desire the very latest word in medical practice, since practically the therapeutics of the entire field of internal medicine is here fully considered, making it a new volume on treatment, complete in itself. Among the distinguished names that appear as contributors may be named Hare, Brunton, Barker, Dock, Bloodgood, Allbutt,

Janeway, Mayo and Deaver, giving assurance of thorough and scientific work. Fifty pages are devoted to vaccines and sera, the use of which now constitutes a considerable part of treatment. Climatotherapy, electro therapy and Roentgen therapy each has a separate chapter. Considerable space is given to the prophylaxis of disease and the sanitary management of epidemics. About thirty pages are given to typhoid fever and the same to pneumonia, these chapters being by Cole and Dochez of the Rockefeller Institute.

On the whole the work can be highly commended as the last word on the therapeutics of internal medicine by authors of first rank.

Little attention is given to theories and moot points; hence there is more space for practical treatment of disease, and to this almost the entire work is devoted. Hence the book is vitally interesting and valuable to the general practitioner.

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Volume II of the Practical Medicine Series, comprising ten volumes on the year's progress in medicine and surgery under the general editorial charge of Charles L. Mix, A. M., M. D., professor of physical diagnosis in the Northwestern University Medical School, is on general surgery and is edited by Albert P. Oschner, M. D., F. R. M. S., LL. D., F. A. C. S., Surgeon in Chief Augustana and St. Mary's of Nazareth Hospitals; Professor of Surgery in the Medical Department of the State University of Illinois. Series of 1917. Price \$2. Chicago Year Book Publishers, 608 S. Dearborn Street. This number is up to the usual degree of excellence and will amply repay the capital invested.

## IMPOTENCY, STERILIZATION AND ARTIFICIAL IMPREGNATION.

By Frank P. Davis, Ph. B., M. D., Fellow of the American Medical Association; ex-Secretary Oklahoma State Board of Medical Examiners; former Superintendent Oklahoma State Institution for Feeble-Minded; Author of "How to Collect a Doctor Bill"; "The Doctor"; "His Book of Poems"; "The Physician's Vest Pocket Reference Book," formerly editor and publisher Davis Magazine of Medicine. St. Louis, The C. B. Mosby Company.

This book is an exposition of the author's ideas on the subject. It is interesting to say the least. The concluding chapter is on the therapeutics of the subject—is full and comprehensive.

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## DIAGNOSIS FROM OCULAR SYMPTOMS.

By Matthias Lanekton Foster, M. D., F. A. C. S., member of the American Ophthalmologic Society. Ophthalmic Surgeon to the New Rochelle Hospital; first lieutenant in the Medical Reserve Corps, U. S. Army. Published by the Rebman Company, 141 W. 36th St., New York. This book, according to the author, aims to supply a means to help in diagnosis of obscure and other conditions of the general system by observation of ocular conditions. How near he has attained his purpose the reader must decide for himself after careful perusal.

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Volume II, International Clinics, 27th series, 1917. A quarterly of illustrated clinical lectures and specially prepared original articles on treatment, medicine, surgery, neurology, paediatrics, obstetrics, gynecology, orthopaedics, pathology, dermatology, ophthalmology, Otolology, rhinology, laryngology, hygiene, and

other topics of interest to students and practitioners, by leading members of the medical profession throughout the world.

Edited by H. R. M. Landis, M. D., Philadelphia, U. S. A., with the collaboration of Chas. H. Mayo, M. D., Rochester, Sir Wm. Osler, Bart., M. D., F. R. S., Oxford. Rupert Blue, M. D. D. P. H., Washington, D. C.; Frank Billings, Chicago; Jno. G. Clark, M. D., Philadelphia; A. McPherson, M. D., Toronto; James J. Walsh, M. D., New York; J. W. Ballentyne, M. D.; Charles Greene Cumston, M. D., Geneva; Arthur F. Biefield, M. D., Chicago; Richard Kretz, M. D., Vienna, with correspondents in Montreal, London, Paris, Berlin, Vienna, Leipsic, Brussels and Geneva. J. B. Lippincott Company, Philadelphia and London.

This volume contains numerous articles of interest to the general practitioner, being in line with the latest trend of professional opinion from authentic sources makes them of great value to the student also. Special attention is directed to the very practical and well illustrated article on gout and infectious arthritis. Price of this volume is \$2.

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#### DISEASES OF THE GENITO-URINARY ORGANS AND THE KIDNEYS.—*Fourth Revised Edition.*

Diseases of the Genito-Urinary Organs and the Kidneys. By Robert H. Greene, M. D., Professor of Genito-Urinary Surgery at the Fordham University, New York; and Harlow Brooks, M. D., Professor of Clinical Medicine, University and Bellevue Hospital Medical College. Fourth Edition. Thoroughly revised. Octavo of 666 pages, 301 illustrations. Philadelphia and London, W.

B. Saunders Company, 1917. Cloth. \$5.50 net; Half Morocco, \$7.00 net. W. B. Saunders Company.

One of the clearest and most useful works dealing with these subjects which has come to our attention. General practitioners will find it a great help in clearing up obscure cases.

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Handbook of Suggestive Therapeutics, Applied Hypnotism, Psychic Science. A manual of practical Psychotherapy, designed especially for the practitioner of Medicine, Surgery and Dentistry. By Henry S. Munro, M. D., Omaha, Nebraska. Fourth Edition, Revised and Enlarged. St. Louis, C. V. Mosby Company, 1917.

A very interesting and useful book for those interested in these branches of the medical profession.

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#### TEXT BOOK OF OPHTHALMOLOGY.

By Hofrat Ernst Fuchs, Professor of Ophthalmology in the University of Vienna. Author's translation from the twelfth German edition; completely reset, with numerous additions specially supplied by the author and otherwise much enlarged by Alexander Duane, M. D., Surgeon Emeritus, Knapp Memorial Hospital, with 462 illustrations, fifth edition. Philadelphia and London. J. B. Lippincott Company. Price \$7.00.

This well known text book on Ophthalmology has, we might say, been Americanized and brought thoroughly up to date in this fifth edition. It is worthy of a place in any physician's library.

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## ADDRESS

By SOUTHGATE LEIGH, M. D., F. A. C. S.  
Norfolk, Va.

*Mr. President and Members of the Mer-  
cer County Medical Society.*

You did me great honor by inviting me to visit and confer with you tonight, an honor which I deeply appreciate. I have been in somewhat of a quandary in seeking for the subject of my talk some matters of interest both to medical men and surgeons alike, and I am afraid you will find my remarks to be more or less rambling in consequence.

If asked what I considered the most important event which has occurred in surgery during the past few years, I would without hesitation say, the formation of the American College of Surgeons, and next and probably leading up to it, the development of the great "free school" of surgery, the Mayo Clinic.

The rapid and substantial strides during the past decade have been largely due to these great men; great in their skill, in their organization, in their teaching, and still greater in their example of simplicity and of constantly striving after knowledge and betterment.

Has the world ever seen such men? Will the world ever realize what is due them?

Our profession can never show them sufficient gratitude for the wonderful changes that have been wrought in surgery. Only those of us who knew surgery as it was, and who have seen the development as it has gone on step by step, can properly appreciate the situation.

Dr. Will Mayo in his early days visited Senn's Clinic in Chicago every Saturday and probably received much of his inspiration there. These trips forced him to spend two nights each week on a sleeping car.

When the Mayo Clinic became known to the profession, the "visiting habit" was started. Every one who went there came back, not only a better surgeon but inspired to do greater things, to study, to visit other clinics and to mingle more and more with his professional brothers, both at home and away.

Now we know that this "visiting habit" is a necessity, that we can't do without it, if we are to keep up with our work, and progress. And this applies just as forcibly to those members of the profession who are working in other lines than surgery. While reading is important, yet seeing and hearing direct from men who are expert in their various lines, is a necessity.

The receptive spirit is also a necessity. The really great men are unassuming, and dissatisfied with the extent of their

knowledge. They are always seeking after more. The man in our profession who "knows it all" is a dangerous animal. His self satisfaction automatically prevents his seeing the good things in others and absorbing them for his own benefit and that of his patients.

The question of higher medical education is probably the most important problem which is today confronting the medical profession.

The old idea of sending a medical man direct from college to learn on his patients is all wrong. In some instances it may be disastrous. It is true that the terms in our medical schools have been increased and many practical facilities added. And still the men who are turned out are not sufficiently trained, practically, to be put on their own resources.

The work of Mr. Flexner, and his colleagues, has produced wonderful results, in elevating the standard of medical education, and yet this great work should not cease until every medical college shall have only *full time teachers*, with proper endowment and properly developed hospital facilities for turning out safe and practical medical men.

Unless further steps are taken along these lines, the various state boards of examiners will be forced, in the light of present knowledge, to add a year's hospital training to the requirements.

What a splendid move would be the proposed consolidation of the Medical College of Virginia with the Medical Department of the University of Virginia. Nothing in the south would do more toward better medical education than this. Though obstacles have been thrown in the way by thoughtless and designing people yet it is to be earnestly hoped that a spirit of broadmindedness and interest in the profession's welfare will prevail, and bring about the combination.

Those of us who are already in harness need educating as well as the students.

Medical and surgical progress is going ahead so rapidly that unless we are on the alert we shall soon be left behind.

This is no longer a day when a man can say that he has no time to read and study, to visit the clinics and medical

meetings. It is now forced upon him. In order to do his work faithfully he must keep up with the times. Otherwise he will be forced to fall out of line and take up some other calling.

He cannot compete with the new men coming from up to date colleges and hospitals and equipped with modern methods and appliances. It is true that he may have a splendid store of practical experience to back him, but that is not enough.

What sadder sight is there than to witness such a man gradually pushed aside? And it is his own fault. With his experience he has a great advantage over the new man, if he will study. And how simple it is. An hour a day would probably suffice.

The county medical society is now a necessity. It is necessary on account of the advantages of organization, legislation and good feeling. But the one great advantage which overshadows all of the others is that it is an educational center, a stimulus to reading and study and development.

In a few short years, each local society will be a post-graduate school. But why wait? Why not now?

It is simply a matter of getting the doctors of the community to understand that *it must be done*.

In many sections splendid work is being accomplished. The "Journal Club" plan is probably the most popular. There each member subscribes to one or more journals, avoiding duplicates, and reports his journal at the meeting of the club.

In Norfolk the county society meets in sections once a week. In addition to this there are five journal clubs meeting weekly; and a committee is now arranging to organize additional clubs sufficient to take care of the entire membership.

Staunton has a post-graduate school with paid instructors. Many other sections of Virginia are conducting active educational societies.

And so the good work of higher medical education is going forward, slowly possibly, but surely.

The spirit of seeking after knowledge is spreading everywhere throughout the



profession.

In the country districts good roads are the greatest possible aid to successful and frequent medical gatherings. Our profession ought to take up and push with vigor, the establishment of smooth highways.

A few words in regard to the American College of Surgeons, an organization founded on the highest ideals and principles and destined to do great work in elevating surgery and educating the public as to what safe surgery is.

Its fellowship pledge is as follows:

*"Recognizing that the American College of Surgeons seeks to develop, exemplify and enforce the highest traditions of our calling, I hereby pledge myself, as a condition of fellowship in the college, to live in strict accordance with all of its principles, declarations and regulations. In particular I pledge myself to pursue the practice of surgery with thorough self-restraint and to place the welfare of my patients above all else; to advance constantly in knowledge by the study of surgical literature, the instruction of eminent teachers, interchange of opinion among associates, and attendance on the important societies and clinics; to regard scrupulously the interests of my professional brothers and seek their counsel when in doubt of my own judgment; to render willing help to my colleagues and to give freely my services to the needy. Moreover, I pledge myself, so far as I am able, to avoid the sins of selfishness; to shun unwarranted publicity, dishonest money-seeking and commercialism as disgraceful to our profession; to refuse all secret money trades with consultants and practitioners; to teach the patient his financial duty to the physician and to urge the practitioner to obtain his reward from the patients openly; to make my fees commensurate with the service rendered and with the patient's rights; and to avoid discrediting my associates by taking unwarranted compensation. Finally, I pledge myself to cooperate in advancing and extending by every lawful means within my power, the influence of the American College of Surgeons."*

There is entirely too much ruthless and reckless surgery being done, I hope

through misunderstanding and ignorance.

Except in emergency, no doctor should do any operation on a patient unless he is willing to have the same operation done on himself, under similar circumstances, with the same facilities and in the same way. Here is where the "Golden Rule" should be put into vigorous practice. If so carried out, how many fewer operations would be done! Now this is not theorizing or idealism, but good, honest sense.

We have no right to endanger the health and lives of our patients. We should *always* ask ourselves the question what would we want done in our own case? We can't preach this doctrine too much. If widely disseminated it will accomplish great good in these times when in some sections *everybody* is doing surgery.

A man looks at such things through very different glasses after he has been working at surgery for many years, and is in a position to view the subject from every standpoint.

The general impression is that after one has practised his profession sufficiently long and has had the opportunity to see the dark as well as the bright side, he becomes more or less pessimistic. I can assure you that I am and always will be an optimist, and yet continued experience does make one view a question from every angle, makes him look for the pitfalls to avoid them, and above all does make him realize the necessity of the constant exercise of thoroughness and watchfulness.

Surgery, today, as seen at the successful clinics, does seem too easy, too alluring. But the visitor sees only a small part of it. Take the Mayos for instance, in witnessing the operative work one fails to think of the prolonged and painstaking pre-operative investigations for diagnosis and safeguarding, the thorough training of the operating room staff, and the careful after handling of the patients.

The American College of Surgeons, actuated by the highest motives, is endeavoring to endorse the safe surgeons, to stimulate other surgeons to bring their work up to standard, to improve surgi-

cal training in hospitals and to educate the public as to what safe surgery means and who are competent to do it.

In selecting its fellows in the past, mistakes have doubtlessly been made, but not intentionally. Substandard men have been admitted and standard ones kept out. These errors are few and will be corrected.

In the future through the examination system, there will be little chance of error.

To become a Fellow, a man must be of high character and ethical, and demonstrate that he is competent to do safe surgery, with all that that implies.

And this separating of surgery from medicine is going to be a great aid to the profession as a whole, as well as to surgeons, and a blessing to the people.

Medicine has gotten to be too broad a science for one man to handle. Specializing is a necessity. A medical man who attempts everything, does nothing well, and kills himself by overwork and disappointment. In some small cities in this country every man does surgery, and in the event of a severe strictly medical condition it is hard to find a man competent to handle the case.

Why this state of affairs, which the American College of Surgeons is doing much to correct, I do not know.

Safe surgery requires so much exact technical knowledge and skill, in diagnosis, operation and treatment, that it is a wonder to me how untrained and unskilled men are willing to risk lives and reputation in attempting the work.

Nor is it proper for the would be surgeon to learn at the expense of his patient. His practical training should be acquired at the side of an older and well qualified man. A good hospital interne training is also essential as the foundation to start on.

If I were today starting in my profession I would choose Internal Medicine. It offers a tremendous field for improvement and development, and a much neglected one.

I realize that some of the problems we have been discussing are easy in the cities but difficult in the country. That is true, but they can be worked out, and through the County Societies where co-

operation is essential and can be had.

Every section containing twenty-five or more medical men should arrange for a good laboratory and a good X-ray equipment to be patronized by all.

If it is desirable to have a hospital, one man should do the surgical work, give his entire time to it and equip himself by training and facilities to be safe.

Surgical hospitals to be successful do not necessarily have to be large. Indeed some of the most successful work is done in small institutions.

It is often easier there to be thorough, exact and clean. Many a good surgeon's work is spoiled by the interference of "red tape."

The first thing is to have a safe surgeon, and around himself he has to develop a system controlling all of his subordinates.

Advanced laboratory work is now so essential, together with the best X-ray equipment, that no hospital however small can do without them.

A trained anesthetist is necessary. Personally I am absolutely opposed to any except a doctor holding this position. The Mayos have nurses, but they are given 12 months vigorous training which is equivalent to five or six years in the average clinic. The drop method has greatly improved the giving of ether, safeguarding and making it less disagreeable. Chloroform has been practically discarded.

It is a great surprise to me that Nitrous Oxide Oxygen has not come more generally into use. This is due no doubt to the fact that it requires an expert with extensive training to administer successfully. It is a tremendous improvement over ether. Crile has used it in 15,000 cases without a death and our own cases run considerably over 3,000. We have not only had no fatality but have had no bad effects whatever, that could in any way be traced to the anesthetic. It is pleasant to taste and smell and causes little or no nausea.

It has been criticized but only by men who have had no proper experience with it.

Another great surprise to me in surgery, and in these modern times, is that clean wounds are still being infected.

This is inexcusable and unforgivable. It is of course due either to ignorance or carelessness on the part of some one connected with the operation.

To do clean work the surgeon must have absolute control of his staff, both doctors and nurses, train them vigorously and watch them constantly.

I might mention a few of the points which have aided us in keeping clean.

The patient's skin is prepared by a combination of the old and new methods. The day before it is shaved, washed with soap and water, and then bichloride, and a sterile dry dressing applied. Two hours before the operation, the dressing is lifted and the skin painted with half strength iodine. On the table it is painted first with benzine and then with half strength iodine. During the operation the skin is kept covered to the edge of the wound by cloths fastened to the edge.

We separate our gloves, and never use in a clean operation a glove which has once been used in a dirty case. Such gloves have a patch of red rubber glued to their wrists. After putting on the gloves, which are sterilized by boiling, we soak the gloved hands in 1-250 bichloride and then in a weaker solution. When the skin of the hands is rough or cracked, we use two pairs of gloves in operating.

All septic discharges are caught and immediately destroyed by heat or chemicals including soiled spots on the floor or table.

The dressing of wounds is done with instruments, and here also discharges are promptly caught and destroyed.

It is only by going to such extremes, that strict surgical cleanliness may be obtained.

Much more attention than formerly is now being paid to the thorough investigation and diagnosis of cases, and if exploratory operations are done, it is only after all means of diagnosis have been exhausted.

The treatment of shock both prophylactic and curative has of late been greatly aided by the use of bicarbonate of soda. In all difficult cases we use it before operation, as well as after, by mouth or by rectum.

Safeguarding in other ways is also most helpful. Much attention has to be paid to the general condition of the patient, and his ability to stand the operation. Delay and preliminary treatment will save many a bad case.

Before closing, I wish to say a few words about obstetrics and gynecology.

Every obstetrical case should be considered surgical, and the practitioner must, if he is dutiful, learn how to be strictly surgically clean, as regards self, patient and instruments.

Gynecology is a much neglected field. Every general practitioner should take a course of personal instruction in vaginal examinations and diagnosis. He should also be equipped at his office with table, female assistant and instruments to examine and treat the diseases peculiar to women. There is no work more profitable both in money and the good accomplished. Cancer could be reduced 25 per cent at least.

Many lesions of the cervix can be cured by simple applications and douches, and an early diagnosis will save many others.

I am afraid I have tired you by this long talk. If I have I ask your forgiveness.

The best that we may expect from such meetings as this is a broadening of our views, and a stimulation for greater effort towards improvement; an incentive to reading and study, to free interchange of ideas and methods; in short the prime object of all medical gatherings is to make better doctors of ourselves and to enable us to do better work for our patients.

If I have helped in even a slight degree I shall be happy.

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## BACK TO THE PHARMACOPOEA

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By TUNIS NUNEMAKER, M. D., William-  
son, W. Va.

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*Read at Annual Meeting, Wheeling,  
May, 1916.*

From the beginning of man's intelligent existence, he has sought out from

his environs agents for the relief of his ailments. By thousands of years' experience, he has come to a knowledge of the remedial value of various organic and inorganic substances. By modern intelligence and modern methods, these remedies were more critically studied, the worthless were eliminated and the efficacious became more thoroughly understood. Pharmacological study and clinical observation established their status. We stand upon the shoulders of all the past. Our opportunity to know the efficacy of the remedies at our command is greater than that of any of our predecessors. Knowledge has been crystallized; and the tremendous labor and experience of the past are summarized in that volume, the pharmacopœa.

In our preparation for our profession, we were all made acquainted with that work and were taught the therapeutic action, indications, dosage and mode of administration of the remedies therein listed. But comparing our practice with our teaching, is it not evident that we have wandered away from approved grounds? Is it not true that half the time we are prescribing or dispensing outside of the pharmacopœa? What has supplanted the "Galenics" in so many cases? Manufacturers' specialties and proprietary remedies. Passing from the presence of our esteemed teachers, who were experienced masters of the healing art, and entering upon our career as practitioners, we at once found our mails filled and our desks littered with literature on all manner of wonderful remedies with which our teachers had not familiarized us. We had a swarm of new teachers in the persons of representatives of drug firms, who sampled us with proprietary remedies, special formula, splendid preparations and new specialties. Why are these pushed to the front and the U. S. P. preparations kept in the background? It need not be said that it is for the financial interest of drug firms. Commercialism shapes the drug business and the movement is given too much assistance, often, perchance, unwittingly, by the doctors. From start to finish it is the proprietors' business to re-educate the members of our profession to the end that they sub-

stitute proprietary for official preparations.

Numerous arguments are advanced by our friends, the drug venders, in favor of the use of their preparations; as meritorious therapeutic efficacy, elegance of appearance, agreeableness of taste, saving of time in dispensing, etc. Valid as their claims at first appear, their genuineness is only apparent. Due trial is not so convincing as to their surpassing efficacy. Reasonable attention in prescribing will enable us to place in our patients' hands preparations as agreeable in appearance and taste as the ready prepared mixtures. As for the time saved in dispensing, it may be said that the knowledge of what we are putting into our preparations is worth the extra time. Besides, the saving in cost of mixtures compounded by druggists or by ourselves further compensates for the time.

What are the objections to proprietaries and specialties? Among them, we mention the following:

Unwarranted therapeutic claims. We are told of their wonderful efficacy, of the splendid results Doctor Up-to-Date and Doctor High-Kite are getting from them; but putting them to the test, we find the results no better than Doctor Hayseed and Doctor Kill'em get from the Galenics.

Some are articles of unknown composition or are described in a hazy, unenlightening manner, so that in prescribing them, we are compelled to violate the rule to which we should uncompromisingly hold, viz; never to use a remedy of which we do not know the essential composition.

A large per cent of specialties contain too many ingredients. To prescribe them is to practice the recognized evil of polypharmacy. The prescription is to be written on the basis of the therapeutic effects of the individual ingredients and not the effect of a complex mixture. That it is desirable that we prescribe a single remedy or a combination of remedies in which we are able to vary the different ingredients at will, is a fact too long and too well recognized to require repetition. By prescribing complex, ready-made mixtures, we are re-

ducing the treatment of all cases to a dead level. The same hat can not fit every man's head, neither can the same combination of ingredients in a "cure-all" suit every patient. What cures a Dutchman may kill an Irishman.

It is the custom of manufacturers of this class of preparations to give to them catchy trade names, with which the public will soon become familiar. They advertise these to the doctors, the doctors prescribe them, the names become familiar to the public, the preparations are then placed in the show cases and sold across the counter to the self-drugging public in such vulgar company as Tan-lac, Swamp Root, S. S. S., Pierce's, Pinkham's and Rexall remedies. The doctors have introduced them to the public, have given them their stamp of approval; the druggists, who prefer to practice pharmacy, rather than to sell proprietaries, are cheated out of their legitimate business; the self-drugging public have added to their already too extensive list of remedies; the proprietary firms have the profits and the fool doctor has driven another nail into his own coffin. Therapeutically suggestive names add to the facilities with which our patients are drawn from our observation and care, to the detriment alike of patient and physician.

Many of the remedies foisted upon us are unessential modifications of official articles. Why prescribe Listerine or Euthymol instead of Antiseptic Solution, U. S. P.; or Liquid Alboline instead of Liquid Petrolatum; or Antikamnia instead of Compound Acetanilid Powder; or one of the many proprietary cresol preparations instead of Compound Solution of Cresol; or any other proprietary, whether advertised to the public or not, when we have in the pharmacopœa an official parallel?

Why not use the tried and approved official remedies? What is wrong with our powdered drugs, extracts, fluid extracts, tinctures, elixirs and adjuvants? What has become of the old-fashioned doctor who prescribed the Galenics? To paraphrase Luke McLuke, the old-fashioned doctor, who prescribed charcoal and soda, calcium iodide and morphine, has a son who prescribes Papayans

(Bell), Calcidin (Abbott) and Papine. It is a wonderful list of remedies they place at the disposal of our modern Esculapian: Alboline, Antiphlogistine, Bovanine, Caetin, Papine, Unguentine, Chologestin and Laxine; Apetol, Palatol, Apergols, Betul-ol, Resinol, Nujol, Cypridol and Diurol; Antikamnia, Bromidia, Celerina, Neurilla, Sal Hepatica, Sanmetto, Damiana and Vin Mariana; Somnos and Utros; Bellans and Succus Alterans; Pinoleum and so on *al infinitum*. Such is the modern doctor's pharmacopœa! Such is the propaganda to which they would have us subscribe.

Is it not time that we turn from the worship of false gods? There is no dearth of official preparations. For tonics, what is the objection to the extensive list of official preparations of iron, arsenic, the bitter tonics and cod liver oil? For hæmatonics, what is wrong with the list of the all-too-numerous official preparations of iron? For expectorant vehicles, why not the syrups of licorices, tar, wild cherry, senega or tolu? For flavoring agents and vehicles in general, why not use Elixir Adjuvans, Aromatic Elixir of Bitter Orange, Syrup of Sarsaparilla, Syrup of Licorices, Syrup of Almond, Syrup of Raspberry, Compound Tincture of Lavender, Tincture of Lemon, Tincture of Vanilla and others?

It is a painful fact that as a result of the persistent efforts of pharmaceutical houses and the gullibility of our profession, both the art of prescribing and the art of pharmacy are so declined as to be almost lost. Our patients are paying higher prices for less potent preparations; and not druggists, but manufacturers, are reaping the financial benefit. The practices of counter-prescribing and self-drugging are encouraged and our profession is hum-bugged.

We would *not* decry progress. It is true new and valuable remedies are worked out. These soon gain recognition by the Council of Pharmacy and Chemistry of the A. M. A., and are added to the list of new and non-official remedies. It would appear that a preparation to command our respect should at least have such recognition. But a glance at this list convinces us that it is

unnecessarily long and repetitious.

A return to the practice of our fathers, who wrote in official terms for official remedies in suitable and sufficient doses, would be to the advantage of our patients, our pharmacists and ourselves.

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## ACUTE ACQUIRED DIVERTICULITIS.

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By WADE H. ST. CLAIR, M. D., F. A. C. S., Bluefield, W. Va.

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*Read before the Surgical Section of the West Virginia Medical Society at Wheeling, W. Va., May, 1916.*

Acute Acquired Diverticulitis was first reported in 1858, but was not brought prominently before the medical profession of this country until 1907, by the report of cases by Drs. Brewer and Mayo, the latter reporting five cases. Since then quite a number of cases have been reported. Dr. Cullen has collected reports of one hundred and five cases of all varieties of this disease reported up to 1910. Of course many have been encountered since then which shows the necessity of recognizing this condition. A few words explanatory of the disease may be permissible.

Acquired or False Diverticula are hernial protrusions of the mucous and sub-mucous layers through the circular muscular coat of the large bowel where this coat is absent or weakened. Leakage of the bowel contents into the diverticulum gives rise to inflammation which, when it is confined to the lining wall of the diverticulum, according to Wilson, should be called diverticulitis and peri-diverticulitis when the surrounding and adjacent tissues are involved. I believe diverticulitis is analogous to an ordinary fistula in ano, differing only in the location. In the latter the inflammation is set up in the peri-rectal tissues and if an abscess forms it points on the skin. In the former it is at some higher point on the bowel and is intra-peritoneal.

The usual site of the diverticula is in

the lower colon and the sigmoid, yet it may occur anywhere in the large bowel; Mayo reporting one case of the cæcum in which class, one of our cases falls. They may occur anywhere on the circumference of the bowel, often extending into the epiploic appendages containing within its lumen an enterolith, as in the specimen I am showing. (See diagram No. 2.)

### ETIOLOGY

Constipation is considered an important etiologic factor by increased pressure within the bowel, but as you will see was not present in one of our cases.

### SYMPTOMS

It usually occurs in patients over forty-five, yet it may occur at any age, more common in the male and except for this illness the patients are usually in robust health, most of them inclining to obesity. The onset is sudden, with acute abdominal pain followed by symptoms of a localized peritonitis, usually a tumor appearing to the left of the midline.

### DIAGNOSIS

A clinical diagnosis of diverticulitis can hardly be made, but left sided pain with mass in a constipated patient over forty-five brings it to mind. Carmen has reported the X-ray finding in four cases, a defective filling of the lumen with one or more extra-mural shadows of the bismuth are strongly suggestive and may prove a great aid. A large majority of the cases cannot be correctly diagnosed even at the time of operation and occurring usually at the cancer age are thought to be malignant until examined by a pathologist.

The cases naturally fall into three clinical groups—(Mayo).

1. Those in which an intra-peritoneal abscess forms with spontaneous rupture into a neighboring viscus as for example, the bladder, several cases of this type being reported, or evacuated externally by a surgical operation.

2. Those giving rise to acute or chronic obstruction necessitating operation.

3. Those which are less severe and

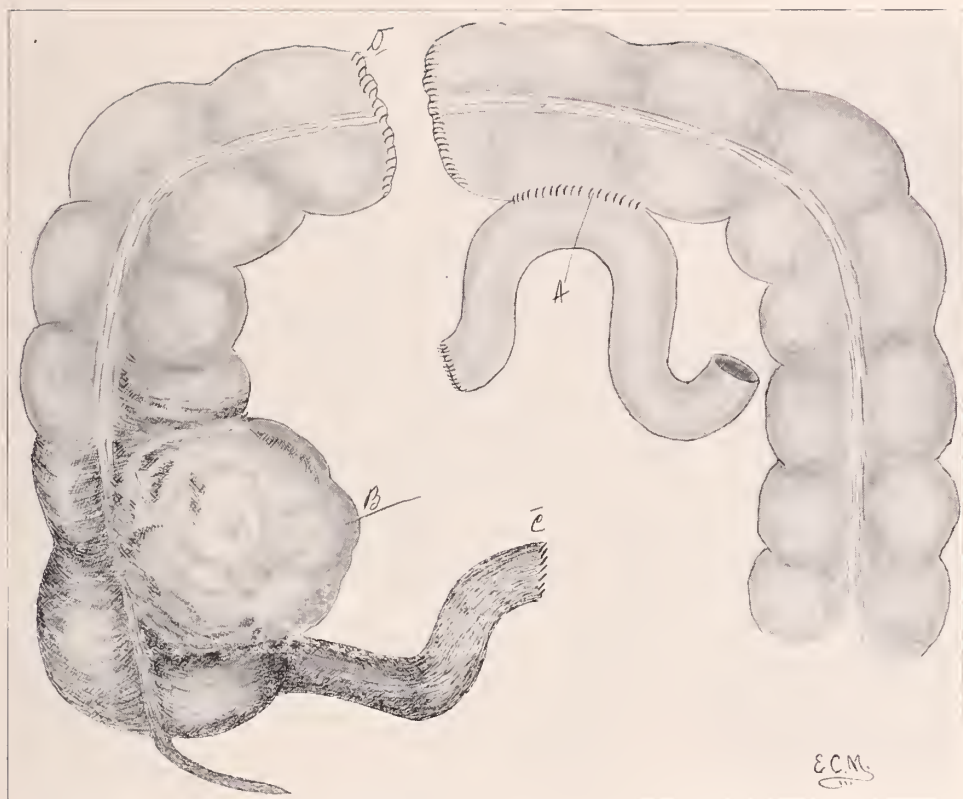
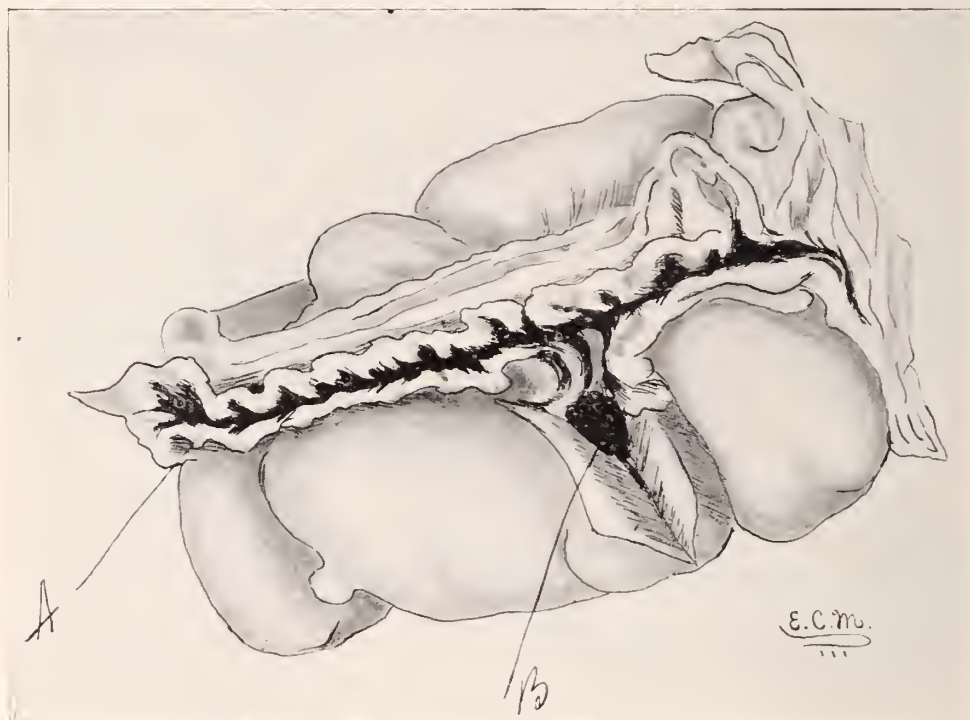


DIAGRAM OF CASE 1.

A.—Point of Anastomosis

B.—Tumor.

From C to D.—The section removed.



DRAWING OF SECTION REMOVED FROM CASE 2.

A.—Greatly constricted lumen which is laid open.

B.—Enterolith in the diverticulum which leads into an epiploa.



recovery occurs spontaneously.

The immediate operative procedure in these cases depends entirely on the findings in the individual case, but the ultimate cure in the more severe cases calls for a resection of the involved gut.

As mentioned above these cases are often considered malignant growths and in some cases operation has been abandoned as inoperable and the patient has fully recovered after simple drainage.

We have had two positive and two strongly probable cases which I wish to report. The first was a case of diverticulitis of the cæcum.

J. W. S., Male. Occupation, locomotive engineer, age forty-five. F. H. negative. P. H. negative, except he had been constipated for several years. He was taken sick while on his engine with very severe general abdominal pains and vomiting. Seen first during early morning of March 19, 1910. Few hours pain allayed, very rigid over entire right side of abdomen, temperature  $103\frac{1}{2}$ , pulse 130, still vomiting with obstructive symptoms. A tentative diagnosis of appendicitis or cholecystitis was made and operation advised. Operation March 19, right rectus incision revealed tumor, size of an orange, of the cæcum to which the adjacent intestines were adherent; appendix normal. We thought this was probably a malignant growth with secondary infection and on account of the inflammatory condition did not attempt resection but made a lateral anastomosis between the ileum and the transverse colon, closed abdomen with a small drain, from this he had some infection of wound. After healing was complete he submitted to the second operation May 10, at which time we found the tumor much smaller, but still thinking it malignant we removed it giving wide berth taking about ten inches of the terminal ileum, the cæcum, colon and part of the transverse within a couple of inches of our former anastomosis, taking that part supplied by the ileo-colic and right colic arteries with the accompanying lymphatic system. (See diagram I.) Specimen was sent to pathologist who reported it non-malignant, being an inflammatory condition due to diverticulitis. This patient has been perfectly well since and

is relieved of his constipation.

Second Case.—C. A. J., physician, age fifty-three. F. H. negative. P. H. had typhoid seven years ago. Always well except had facial neuralgia. Bowels always regular, moving once or twice a day. Present trouble came on suddenly January 28, 1915, with constant desire to go to stool, cramp like pains, unable to pass anything until 3 a. m. January 29, when he had a small stool which gave some relief for a short while, vomited at intervals. Desire to go to stool continued. I saw him first on the afternoon of the 29th. There was board-like rigidity of whole lower abdomen, temperature normal, pulse normal, rectal examination negative. Alum enema was given with no result. Two hours later Dr. Fox, my associate, and I saw him, same condition found. Our probable diagnosis was ruptured appendix and operation advised. The patient was unable to make up his mind for several more hours waiting for rise of temperature. He was admitted to Bluefield Sanatorium at 9:30 p. m. same day. Temperature had gone up to 99.2. Leucocyte count of 19000—operation 10 p. m. January 29, 1915, under ether, no mass palpable. On opening the abdomen found appendix normal. In looking further for the lesion found mass in pelvis which proved to be tumor of the sigmoid low down, covered with inflammatory exudate, with adhesions of the adjacent coils of small intestines. Again we thought we were dealing with a malignant growth. On account of the low position of the tumor we were unable to deal with this according to Mikulitz, which as you know consists in freeing the mesentery and bringing the tumor outside the abdomen, etc. As the operation was performed before pus formation and the obstruction was complete, we did a resection, making an end to end suture anastomosis putting a large tube in the lumen. Patient did fairly well except had too much pain and distension. On February 4, unable to get any results from enema, with vomiting and obstructive symptoms, we naturally thought the trouble was with the anastomosis and decided to do a rapid colostomy above it. On exposing the descending colon

through a McBurney incision the descending colon was found empty showing the obstruction higher up, so we opened through the original incision and found the obstruction in the small intestine. The loops which had been inflamed had matted together with acute angulation causing the obstruction. This straightened out we did an appendicostomy for a safety valve. After this patients bowels moved daily and all abdominal symptoms subsided. There was a local sloughing of fascia and some infection in wounds. Other than this we could find no trouble, urine negative, pulse and temperature practically normal. Refused nourishment, had an aversion to all food. He died of exhaustion February 18, three weeks after operation. No autopsy.

Specimen which I shall pass around shows greatly contracted lumen, with a well marked diverticulum leading into an epiploa, containing an enterolith. The adjacent gut wall was dark and gangrenous looking. (See drawing II).

#### THIRD SUSPECTED CASE

J. W. K.—Occupation, meat market keeper. Age forty-two. F. H. negative. P. H. alcoholic. Has been constipated for several years, inclined to obesity. He was admitted to the Bluefield Sanatorium September 2, 1914. Sent by Dr. O. S. Hare. He had been sick for five days, was taken suddenly with severe abdominal pains and symptoms of partial obstruction. He ran an elevation of temperature 100 to 102, was very sore over abdomen with a large distinct sausage shaped mass in left iliac fossa. Here again malignancy was suspected and diverticulitis thought of. As the obstruction was not complete we treated him expectantly. He was discharged from the sanatorium after two weeks, temperature normal but mass was still palpable. I have seen this patient at intervals since mass has disappeared and he is in his usual health. This we believe was undoubtedly a case of diverticulitis which falls in class three with a spontaneous recovery.

The fourth case very recent, still under observation.

J. C. H., admitted to Bluefield Sanatorium April 17, 1916. F. H. negative. P. H. negative except for constipation. Was taken sick suddenly twenty-four hours before admission with severe pains low down in abdomen. Had looseness of bowels with straining and vomiting. Temperature 102. Board like rigidity over entire lower abdomen. Rectal examination negative except for enlarged prostate. High leucocyte and poly count. Urine greatly diminished in amount loaded with albumen. Microscopic examination showed numerous granular and hyaline casts. Patient's condition was so bad we have treated him expectantly. Temperature has gradually subsided with other symptoms. He now has a well marked mass in left side extending well above the pelvic brim. An X-ray taken after a bismuth enema (a print of which I am passing around) is most interesting, showing a narrowing of the lumen of the colon and a distinct extramural shadow of bismuth. The weight of evidence in this case strongly favors a diagnosis of diverticulitis.

Note: July 27, 1917. I have kept track of both cases. The mass in each case has entirely disappeared and the patients are in usual health, which proves the condition was not malignant but inflammatory, due most likely to diverticulitis.

The following letter and the reports explain the reason for publication.—Ed.

#### THE MENTAL HYGIENE WAR WORK COMMITTEE.

50 Union Square, N. Y. City,  
August 2, 1917.

Ed. W. Va. Med. Jour.,  
Huntington, W. Va.

My Dear Doctor:

I enclose a copy of the report recently submitted to the Surgeon General of the Army by the Committee on Clinical Methods and Standardization of Examinations and Reports, which is a subcommittee of the Mental Hygiene War Work Committee of the National Committee for Mental Hygiene. The latter, as you probably know, has been authorized by the Surgeon General to organize and equip neuro-psychiatric hospital

units to be attached to the base and other military hospitals of the government.

I think you will be interested in the report as it represents the first attempt ever made in organizing an army to take into consideration the neuro-psychiatric qualifications of men. The report has been accepted by the Surgeon General and will be used as the basis of an official circular of the department. You are at liberty to use the report in any way you choose.

Very truly yours,  
FRANKWOOD E. WILLIAMS,  
Vice-Chairman.

*To the Psychiatrists and Neurologists Assigned to Special Duty in the Military Camps of the United States Government.*

In detailing psychiatrists and neurologists to special duty with the armies, the Surgeon General has had in mind (1) the proper care and treatment of soldiers who become incapacitated through mental or nervous disease (2) the special examination of recruits in the training camps in order that those who because of neuropathic or psychopathic conditions are unfit for military duty, may be identified and discharged from service.

Until the troops move abroad the chief and most important responsibility of the military psychiatrists and neurologists will be the special examination of recruits. It is obvious that no man should be eliminated from the service who is fit to render a valuable service in this emergency. On the other hand, it is quite apparent that individuals suffering from certain forms of nervous and mental diseases should not be permitted to enter into service, as experience with the American armies has shown quite conclusively that such individuals are not capable of military service even in time of peace and experience in the European armies has shown beyond question that such individuals are not able to withstand the rigors of modern warfare. At critical times such individuals go to pieces, with the re-

sult that the military force is weakened, is hampered in the free performance of its function, and the government is likely to be burdened after the war with the care of a large number of invalids.

At the request of the Surgeon-General, the question of those who should be excluded from the military services on account of mental and nervous disease has been carefully studied, and with the approval of the Surgeon General we would suggest that the following general outline be followed in determining this matter. It is important that the potential as well as the actual conditions of the recruit be kept in mind. For this reason emphasis has been laid upon the early symptoms of disease. Likewise, attention has been called particularly to those diseases which are most likely to be met and which have not very obvious symptoms but which, nevertheless, can be diagnosed relatively easily and with considerable certainty. It is not to be assumed that other neuropathic and psychopathic conditions when found are not cause for exclusion. Most of these, however, such as multiple neuritis, various forms of paralysis, hemiplegia, cranial nerve palsies and peripheral neuritis, have such striking symptoms that they are likely to be recognized before they come to the attention of the neurologists and psychiatrists.

## RECRUITS TO BE EXCLUDED

### II.—NERVOUS DISEASES.

#### (a) *On the Basis of Disease.*

1. Tabes (Look for Argyll-Robertson pupils, absent knee and ankle jerks, ataxia of station and gait.)

2. Multiple sclerosis (look for absent abdominal reflexes, nystagmus, intention tremor).

3. Progressive muscular atrophy and syringomyelia (look for fibrillary tremors; atrophy in the small muscles of the hand and of the muscles of the shoulder girdle; sears on

forearm and fingers caused by burning; deformities of feet.)

4. Epilepsy (look for deep scars on tongue, face and head; voice. Where diagnosis depends only upon history of epileptic attacks given by the patient, the latter should be asked to give the address of the physician who has treated him. This history must then be verified by a letter from the physician.)

5. Hyperthyroidism (look for persistent tachycardia, exophthalmos, tremor, enlarged thyroid).

(b). *On the Basis of Symptoms or Combination of Symptoms or History.*

1. Unequal pupils plus irregular pupils plus Argyll-Robertson pupils.

2. Nystagmus (in one not in albino) plus absent abdominal reflexes plus intention tremor.

3. Absent knee jerks associated with some one other organic neurologic symptom.

4. Exaggerated tendon jerks plus Babinski.

5. Disorders of station or gait.

6. Disorders of speech (on test phrase) plus facial tremor plus one other organic neurologic symptom. (Stammering and stuttering per se is not significant of an organic neurologic condition. Stammerers and stutterers are rejected by regulations. See form No. 94777).

7. History of Epilepsy (ask the recruit to give the address of the physician who has attended him; this information to be verified by letter).

## II.—MENTAL DISEASES.

(a) *On the Basis of Disease.*

1. General Paralysis (look for Argyll-Robertson pupils, speech defect consisting of distortion of words, writing defect consisting of distortion of words, facial tremor in showing the teeth, euphoria and marked discrepancies in giving facts of life.)

2. Dementia Præcox (look for indifference, ideas of reference, feelings of mind being tampered with

(*c. g.*, ideas of hypnotism), auditory hallucinations, bodily hallucinations such as electrical sensations or sexual sensations, meaningless smiles; in general, inappropriate emotional reactions, lack of connectiveness in conversation.)

3. Manic depressive insanity (look for mild depressions with or without feeling of inadequacy or mild manic states with exhilaration, talkativeness and over-activity).

(b) *On the Basis of Symptoms or Combination of Symptoms or History.*

1. History of previous mental illness (ask the recruit to state when and where he had such illness in what hospital he was observed or treated or by what physician he was attended; this information to be verified by letter).

## III.—PSYCHONEUROSES AND PSYCHOPATHIC CHARACTERS.

(Look for phobias, morbid doubts and fears, anxiety attacks, fatigue-ability, hypochondriasis, compulsions, homosexuality, grotesque lying, vagabondage.)

## IV.—CHRONIC ALCOHOLISM.

(Look for suffused eyes, prominent superficial blood vessels of the nose and cheek, flabby, bloated, reddened face, purplish discoloration of the mucous membrane of the pharynx and of the soft palate; also ashen complexion and clammy skin; muscular tremor in the protruded tongue and extended fingers; (noticeable also in lack of control when the applicant attempts to sign his name); emotionalism, prevarication, suspicion; auditory or visual hallucinations, paranoid ideas.)

## V.—MENTAL DEFICIENCY.

(Look for defect in general information with reference to native environment, ability to learn, to reason, to calculate, to plan, to construct, to compare, weights, sizes,

etc., defect in judgment, foresight, output of effort, suggestibility, stigmata of degeneration, muscular incoordination. (Consult psychometric findings.)

#### VI.—DRUG ADDICTION.

(Look for pallor, dryness of skin; flippancy, mild exhilaration (if under the influence); cowardly, cringing attitude, restlessness, anxiety, (if without drug); distortion of the alæ nasi; contracted pupils (morphine) or dilated pupils (cocaine); dirty deposit at junction of gums and teeth; bluish and whitish needle scars on thighs and arms.)

Maj.-Gen. W. C. Gorgas,  
Surg.-Gen. U. S. Army,  
Washington, D. C.

Sir:—

In view of the fact that it will be necessary for the psychiatrists who are assigned to the various military camps to examine a large number of recruits in a brief space of time, it is felt by the undersigned that this work can be greatly expedited if the assistance of camp surgeons and line officers can be obtained in selecting from those who come under their observation, individuals likely to need neuro-psychiatric examination. This can be easily done if the medical officers, dental surgeons and line officers will keep certain fundamental things in mind. We would suggest, therefore, the following:

1. That in view of the importance of syphilis and hyperthyroidism in neuro-psychiatric conditions that all persons suffering from either of these diseases observed by the surgeons in the ordinary course of their work, be referred to the psychiatrist for further examination; and,

2. That the personality traits named below are of such importance as indicative of possible underlying mental conditions, that line officers be instructed to refer to the psychiatrist recruits under their observa-

tion who exhibit them. These traits are: Irritability, seclusive, sulky, depressed, shy, timid, over boisterous, sleepless, persistent violators of discipline, "queer sticks", cranks, "goats", butts of practical jokes, "boobs", those who have difficulty in comprehending orders—dull, stupid; marked emotional reaction (such as vomiting and fainting) at bayonet drill, peculiarities of attitude, speech or behavior sufficiently marked to attract attention of associates; those resentful of discipline, suspicious, sleep walkers, bed wetters, those persistently slovenly in dress, those who have difficulty in executing muscular movements in setting-up exercises.

Maj.-Gen. W. C. Gorgas,  
Surg.-Gen. U. S. Army,  
Washington, D. C.

Sir:—

It is the belief of the undersigned that the neuro-psychiatric examination of a large number of recruits would be expedited if permission were granted to the psychiatrists in the various camps to train and utilize hospital sergeants or others who might be chosen by the psychiatrist to make group examinations of recruits for the following conditions:

Pupillary changes—unequal, irregular, disorders of reaction.

Absent or increased knee jerks.

Station and gait disorders.

Marked tremors (extended fingers).

Facial tremor on showing teeth.

Recruits found by the examining sergeant to exhibit any one of these symptoms should be referred to the psychiatrist for further and more intensive examination.

Very truly yours,

(SIGNED)

AUGUST HOCH, M. D.,  
*Director Psychiatric Institute*  
*Ward's Island, N. Y. C.*

ADOLF MEYER, M. D.,  
*Director Phipps Psychiatric*  
*Clinic, Johns Hopkins Univ.,*  
*Baltimore, Md.*

THOS. W. SALMON, M. D.,  
*Med. Director Nat. Comm. for  
Mental Hygiene, N. Y.*

PEARCE BAILEY, M. D.,  
*Chief of Clinic, N. Y. Neuro-  
logical Ins., N. Y.*

E. E. SOUTHARD, M. D.,  
*Director Psychopathic Hosp.,  
Boston, Mass.*

ALBERT M. BARRETT, M. D.,  
*Director State Psychopathic  
Hosp., Ann Arbor, Mich.*

WILLIAM A. WHITE, M. D.,  
*Supt. Gov. Hos. Insane,  
Washington, D. C.*

WALTER E. FERNALD, M. D.,  
*Mass. Schl. Feeble-Minded,  
Waverly, Mass.*

JOSEPH COLLINS, M. D.,  
*N. Y. Neurological Ins., N. Y.*

T. H. WEISENBURG, M. D.,  
*Pres. Am. Neurological Asso.,  
Philadelphia.*

ROBERT M. YERKES, Ph. D.,  
*Prof. Comparative Psycholo-  
gy, Harvard Un., Cambridge.*

### Miscellaneous Announcements and Communications

#### APPLICATION FOR APPOINTMENT IN THE MEDICAL RESERVE CORPS U. S. ARMY.

.....  
.....191.....

*To the Surgeon-General U. S. Army,  
Washington, D. C.*

Sir:—

I hereby make application to be examined for appointment in the Medical Reserve Corps U. S. Army and inclose testimonials as to my character and habits.

I certify that to the best of my knowledge and belief I am laboring under no mental or physical infirmity or disability which can interfere with the efficient discharge of any duty which may be required of me if appointed in the Medical Reserve Corps, U. S. Army, and that the

answers given to the interrogations below are true and correct in every respect.

I furthermore state my willingness to proceed to such point for examination as may be designated by the Surgeon-General, with the understanding that the journey entailed thereby must be made at my own expense.

#### INTERROGATORIES

1. What is your name in full (including your full middle name)?
2. What was the date of your birth?
3. Where were you born? (Give state and city or county; if foreign born, give country.)
4. When and where were you naturalized? (For applicants of alien birth only.)
5. Are you married or single?
6. Have you any minor children; if so, how many?
7. What is your height in inches?
8. Your weight in pounds?
9. Give the nature and dates of all serious sickness and injuries which you have suffered.
10. If either parent or brother or sister has died, state cause and age in each case.
11. Do you use intoxicating liquors or narcotics; if so, to what extent?
12. Have you found your health or habits to interfere with your success in civil life?
13. What academy, high school, college, or university have you attended? State periods of attendance from year to year, and whether you were graduated, giving date or dates of graduation.
14. Name any other educational advantages you have had, such as private tuition, foreign travel, etc.
15. Give all literary or scientific degrees you have taken, if any, names of institutions granting them, and dates.
16. With what ancient or modern languages or branches of science are you acquainted?
17. How many courses of lectures have you attended? Names of colleges and dates.
18. When and where were you graduated in medicine?
19. Have you been before a state ex-

aming board? If so, state when, where, and with what results.\*

20. Are you a member of any state medical society? If so, give its name.

21. Have you had service in a hospital? If so, state where and in what capacity, giving inclusive dates of each kind of service.

22. What clinical experience have you had in dispensary or private practice?

23. Have you paid particular attention to any specialty in medicine; if so, what branch?

24. What opportunities for instruction or practice in operative surgery have you had?

24. Have you previously been an applicant for entry into the United States service? If so, state when, where, and with what result (if rejected state why.)

26. Are you a member of the organized militia? If so, state with what organization and in what capacity.

27. Have you been in the military or naval service of the United States as cadet or otherwise? If so, give inclusive dates of service with each organization, designating it.

28. What occupation if any, have you followed other than that of student or practitioner?

29. What is your present post-office address?

30. What is your permanent residence?

31. (Signature of applicant).....

32. The correctness of all the statements made above was subscribed and sworn to by the applicant before me this .....day of....., 191.....

.....  
.....

*\*This application must be accompanied by a certificate from the proper official that the applicant is duly registered to practice medicine in the state in which he resides.*

*\*Testimonials as to character and habits from at least two reputable persons must accompany this application. Political recommendations are not necessary.*

### THE MEDICAL PROFESSION OF AMERICA MUST SUPPLY ITS QUOTA OF DOCTORS FOR THE ARMY.

In round numbers there are about 150,000 physicians listed in our medical directories. Deducting from this number 50,000 names of those who are not in practice or are physically incompetent, there are 100,000 doctors that should be available. Of this number the Surgeon-General's office requires 20,000, or one-fifth of the active practitioners, as officers in the Medical Reserve Corps of the United States Army.

The unfounded and possibly maliciously circulated reports of the casualties among the medical profession in the armies abroad have deterred many from applying for commissions. In reality the number killed on the entire Western front from the beginning of the war to June 27, 1917, a matter of three years, was 195.

The lowest commission offered a doctor is First Lieutenant which draws in pay \$2,000 a year; Captains receive \$2,400 and Majors \$3,000. The cost of equipment is about \$150 to \$175, according to the desires of the individual. As in civil life, some of us are satisfied with a \$25 suit of clothes while others pay \$50 and this applies to a medical officer in purchasing his outfit in the way of uniforms, blankets, etc.

The individual outlay when once in the service is principally your expenditure for food, or mess as it is called in military circles, and this will average about \$25 a month, or about \$300 a year, meaning that a First Lieutenant should have at the end of the year, or to send home to his family or bank, about \$1,700. a Captain about \$2,000 and a Major at least \$2,500.

While this information is of interest to those contemplating applying for commissions in the Medical Reserve Corps, the fact remains that in America we have more than a sufficient number of doctors to adequately supply the demand of the Surgeon-General's office without hardship to the civilian population.

The need of doctors is not alone for the mobile army, but also in concentra-

tion camps, evacuation hospitals, base hospitals and on transports. It is of decided advantage to volunteer your services and receive the benefit of the very necessary training accorded physicians in medical training camps. It is a safe assumption that for those who receive such training and show their aptitude for the service, advancement will be rapid.

Applications for commissions in the Medical Reserve Corps will be found printed in medical journals or will be sent to you by your local examining board. Apply for your commission *now*. *Your country needs you.*

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### A CRITICAL SITUATION

The Government is raising an immense army of volunteers and conscripts to carry on the war to a successful and, we hope, an early termination.

Every army must be supplied with a personnel of medical officers of adequate number and well trained. While provisions have been made to raise the required number of men for the fighting force, it has been left to members of the medical profession of this country to come forward voluntarily, seeking commissions in the Medical Reserve Corps.

Only a few of the total number required have applied for commissions. This means that unless immediate action is taken by the profession voluntarily, the men in the army now being organized will be without sufficient medical care. Such a condition would be more than critical and dangerous for the success of our army and the cause in which we are enlisted. The medical officer plays a most important part not only in keeping the army on its feet and physically fit for fighting, but in returning to the ranks a large percentage of those who have been temporarily put out through casualties.

How soon will the medical profession of the United States as a whole wake up and realize that doctors must come forward and volunteer their services to the Government.

In civil life, when great casualties occur, the doctor readily offers his ser-

vices and usually is the first on the scene to save human life. How much more important is it then, that in this critical situation, he should come forward and offer his valuable aid to preserve not only human lives, but the life of the nation itself?

Application blanks for commissions in the Medical Reserve Corps are being printed in many medical journals or will be sent to you by the Surgeon-General's Office or can be secured from members of the local Board of Examiners.

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### PATRIOTISM WILL TELL.

Much has been said and written unofficially about the possibility of conscripting the medical profession to supply the desired quota of physicians for the immense army that our Government is now raising.

Physicians are as essential to the success of an army as munitions and if our troops are to be the deciding factor in the terrible conflict now raging in foreign lands, the Surgeon-General's office must be supplied with a sufficient number of doctors in the Medical Reserve Corps, to take care of the full complement of troops in the field, on transports, in evacuation hospitals and base hospitals, in concentration camps, etc.

While it is no reflection upon any man's honor to be conscripted, at the same time we feel sure that a sufficient number of doctors will volunteer their services at an early date, which means considerable to the individual so applying.

It is reasonable to suppose that those who volunteer early and receive the benefit of instruction in a Medical Training Camp, will be the ones who will receive advanced commissions.

Whatever may be the pay, the fact remains that the Surgeon-General must have at least 20,000 physicians in the Medical Reserve Corps to supply the present demand, and we feel that the patriotism of the medical profession will be the stimulus that will induce a sufficient number of doctors to offer their services voluntarily.

Blanks for commissions in the Medical



Reserve Corps are now appearing in medical journals or will be supplied you by the board in your own state. If you do not know the location of this board, the editor of this paper will be glad to inform you or send you a blank upon request.

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#### WAR MEETING FOR HEALTH OFFICERS.

A war meeting will be held at Washington, D. C., October 17-20, 1917, by the American Public Health Association. This will replace the annual meeting which was to be held at New Orleans, La., December 4-7, 1917.

The papers and conferences will deal largely with the health problems created by the Great War—the food supply, communicable diseases among soldiers, war and venereal disease, war and the health of the civil population, etc.

President Wilson has said: "It is not an army we must shape and train for war; it is a nation." Go to the Washington meeting; then come back and do your bit!

Washington will be crowded and those interested are urged to reserve hotel accommodations at once. It will be easy to cancel reservations; but it may be impossible to obtain rooms at the last moment. Any hotel or railroad can give a list of Washington hotels.

Preliminary programs will be automatically mailed to all members of the A. P. H. A. about September 15. Non-members may receive them free by writing to The American Public Health Association, 128 Massachusetts Ave., Boston, Mass.

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*To the Faculty of.....Medical College.*  
Gentlemen:—

This is to notify you that a law has been enacted by the legislature of West Virginia requiring that after January, 1921, every applicant for medical licensure "shall furnish, prior to any examination, satisfactory proof that he has had a general education not less than that given by a standard four-year high school course, and not less than one year of college credits in chemistry, biology and physics, all of which shall have been

received before admission to medical study." Our Public Health Council will not, therefore, after January, 1921, admit to examination the graduates of any medical school unless they can comply with this provision of the law to the satisfaction of the State Department of Schools.

Respectfully yours,  
S. L. JEPSON,  
*State Health Commr.*

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July 30, 1917.

To Ed. W. Va. Med. Jour.  
Huntington, W. Va.

My Dear Doctor:—

The National Board of Medical Examiners held its second examination in Washington, D. C., June 13 to 21. There were twenty-four qualified candidates, twelve of whom appeared for examination, the others having been ordered into active duty between the time of their application and the date of the examination. Of the twelve who took the examination nine passed.

The next examination will be held in Chicago, October 10 to 18. The regular corps of the Army and Navy may be entered by successful candidates, without further professional examination, providing they meet the adaptability and physical requirements.

There will also be an examination in New York City in the early part of December. We will appreciate notices of these facts in your journal.

Very truly yours,  
J. S. RODMAN, *Sec.*

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LETTER FROM LT. MENDELOFF,  
TRAINING CAMP, FT. OGLE-  
THORPE, GA.

Dr. J. C. Cannaday,  
Charleston, W. Va.

Dear Doctor:—

Today being a day of rest, I decided to spend the day in the camp. It has been exceedingly hot and if I am to be broiled the camp is much more convenient place than to spend the day in the city. Sunday in the camp is a real holiday, holiday from the fact that we

do not work and also from the food par excellence we receive. This morning we had for breakfast—roasted frog legs, coffee, and biscuits, and for dinner chicken, fresh tomatoes, mashed potatoes, lemonade and dear old watermelon. So you see, we get very good grub and that is the most important thing in this camp. You should have seen the boys when they are lined up against the mess tables, awaiting the order “seats,” their hungry piercing eyes and watering mouths you would be convinced that “grub,” is quite an essential part of our camp life.

This week completed our third week of instructions which comprised various paper work and correspondence dealing with property papers. It sounds somewhat ridiculous as what has the doctor to do with property papers, but when you remember that the whole military machine is made up of men and property or vice versa, its importance becomes apparent. Tomorrow we will enter upon a new phase of our work. The drilling has been completed along with various other things pertaining to elementary principles of soldiery and the new work will deal with gas bombs, asphyxiation and examination of recruits. Equitation will also be taken up, and to be frank the idea of mounting one of those stately stallions is giving me a rather uncomfortable sensation, positively when I recall my previous experience with horses and mules at Blakeley.

Life in camp is becoming more requeor and quite a number of improvements are being inaugurated. For instance, we have electricity installed, ice water being placed in each barrack, etc. Each man has to look after his own bunk, do the sweeping and particularly kill flies till the soldier “develops the inquisitorial fervor which begets true blood lust.” The most effective remedy is 3% formaldehyde mixed with beer or near beer and the flies are killed by the thousands. We pour the mixture on a board and as soon as flies partake it they are doomed. Quite a number of traps are also in operation and all together help us in ridding ourselves of the nuisance. But there are plenty left.

We went to hear the concert given by interned Germans and I watched the men and listened to their music. The music was of a weird melodious type portraying their inner sufferings due to their life of imprisonment and isolation. They are all neatly dressed, wearing their own uniform, looking rather sad and gloomy; they are all well fed and the houses they live in all modern up to date frame houses which are kept scrupulously clean. During the day they till the ground, look after the chickens and raise a good deal of garden truck. From the reports current they are contented, judging from the fact that not one of them has tried to escape. Maybe because they are heavily guarded with a double guard, the houses being surrounded by double barbed wire, they do not try to get away. One the other hand, why should they?

The number of men are getting less owing to the various assignments they receive. A number of our men are being sent away almost daily; some go to Washington, which is equivalent to be sent to France, others are being sent to various regimental units of cavalry, infantry, or officers training camps. As for myself I am perfectly contented to remain where I am and am keeping still, for as soon as a man shows unusual ability and capacity he is sent away. It is a sort of a survival of dumbest and I want to belong to this class, come what it may.

The men are cheerful and take camp life very well. By this time we have forgotten all the comforts of city life and we regard what we have here as excellent. In the evening the crowd sings and “cuts up” but in the morning when we get our mail the expression on the faces change as the men run over the pages of the letter, but someone cracks a joke or the bugle blows and everything is forgotten. “Fall in” and every body runs to get his place. This is followed by “attention, right dress” and the work begins until the next period of relaxation.

Am progressing very well in French and at the dinner table we ask for things in French.

Yours,  
M. MENDELOFF.

Charleston, W. Va.,  
August 8, 1917.

My Dear Doctor:—

We are addressing you as an officer of your County Auxiliary Society for National Defense, Medical Section. Your selection for this important office has been approved by the State Committee for National Defense. The honor was worthily bestowed. At the same time it puts upon you a serious responsibility. Those of us who know you have every confidence in your integrity, patriotism and ability to deliver the goods.

The County Auxiliary Society is the unit of the state organization known as the State Committee for National Defense, Medical Section. Through the state organization the County Auxiliary Society becomes an integral part of the National Organization, known as the Council of National Defense. Without the cooperation of the county units the Council of National Defense, which represents the Government of the United States, would be seriously handicapped.

The Council of National Defense, Medical Section, is again urging that every county in the state be thoroughly organized, and the work allotted to them pushed with all diligence. We are pleased to say that most of the counties of West Virginia are already organized and are at work. The activities of the County Auxiliary Society are varied as well as important.

(1) Every County Auxiliary Society should keep in touch with both the State Committee and the Council of National Defense at Washington. The undersigned are the officers of the State Committee.

"In union there is strength." Therefore, unity of action between county, state and nation will produce the best results.

(2) That every available physician may be commissioned a detailed list of the physicians of your county under 55 years of age should be made. This should include the address, age, work—whether general practice or a specialty—aptitude for service, general character, number of family dependents, and any other information that you may think desirable. Your report should also state

whether or not the physician is commissioned, or has applied for commission. Failure to report to the state committee within the next ten days will be interpreted as indicating that you are not interested in the work.

(3) The most important work for the County Auxiliary Society is that of securing applicants for the Medical Service of the Army and Navy. The need for physicians of every class, surgeons, general practitioners, specialists, dentists and veterinarians was never so great as now.

Major Noble of the Surgeon-General's office states in a recent communication:

"On September 1 the Army will be recruited to its maximum strength by draft. At that time, including the regular Army, the National Guard and the National Army, almost a million and a half men will be under arms, requiring at least fifteen thousand medical officers. The total number at the disposal of the Government today is approximately 6,500. To supply the deficit of 8,500 within the next two months and a half will be a tremendous task, impossible unless the profession realizes the fact that the need for medical men is imperative, and that the sooner applications are received the less will be the unnecessary suffering and loss of life in this war."

"The nation looks to the profession because, forsooth, there is nowhere else to look to furnish these men. Brethren, shall we perform this patriotic duty, and do it now? To fail to respond to our country's call when we are so urgently needed is to confess our lack of patriotism. Shall we send our soldier boys to the blood-soaked fields of France and not go with them to bind up their wounds, to render succor in their hour of distress? Shall we sit supinely by, thinking only of our own personal comfort and safety while our boys are sent into the maelstrom of death? Brethren, we fear that some of us are "asleep at the switch."

We urge you once again to arouse the medical men of your community, get them into your Auxiliary Society and have all suitable ones commissioned, thereby showing the country, the profession, your neighbor, and your posterity—and the Germans—that the profes-

sion of West Virginia is patriotic and will follow the Stars and Stripes across the seas or wherever they may go!

Please let us hear from you, my dear doctor.

Sincerely yours,

J. E. CANNADAY, *Major, Med. Reserve Corps, U. S. A. President.*

S. L. JEPSON, *Secretary, State Comm. Nat. Defense, Medical Section.*

The following communication explains itself. It appears to the Editor to be of sufficient importance to warrant its publication.—J. R. B.

PHYSICIANS' LEASE COMMITTEE  
CHICAGO ROTARY CLUB.

August 18, 1917.

Dear Doctor:—

The Chicago Rotary Club has learned that a great number of physicians, who have enlisted for service during the present war, are embarrassed by unexpired leases. In certain cases, such corporations from whom they rent have refused to cancel leases. It seems to the Chicago Rotary Club that when physicians are so much needed in the United States Army, every effort should be made to relieve them of contracts rightfully binding in times of peace, but which might better be waived in times of national peril.

We all know that the physician giving up an established practice to enlist makes perhaps the biggest sacrifice of us all, because his business depends absolutely on personal contact. The day he leaves, his business ceases. But his lease goes on. Yet our country is calling for more physicians and many patriotic doctors everywhere are trying to arrange their affairs to go.

It is possible to create a strong public opinion favoring the canceling of leases in such cases. If advisable, the matter can be carried for consideration to Congress. But first, the Physicians' Lease Committee wants figures and facts. We are sending this letter to 20,000 physici-

ans scattered all over the United States. May we ask you personally to help us by promptly filling out and mailing back to us the enclosed postal card? Kindly do it today.

Your prompt cooperation will place in the hands of your committee the necessary data for an effective presentation of the facts before proper legislative bodies.

We want to help. We believe in fairness to all, a great work can be done. We know that you will be glad to mail the card today. When we receive it, you will have our earnest thanks for your cooperation.

Yours very sincerely,

CHICAGO ROTARY CLUB,

R. R. DENNY, *Chairman.*

Cars Denny's Food Sales Co., Chicago.

Attached is a form postal card:

R. R. Denny, Chairman:—

I have definite knowledge of..... leases, where doctors have joined the U. S. Service and the landlord has refused to cancel. Remarks:.....

.....  
.....  
.....

Signed.....

Address.....

July 24, 1917.

J. E. Cannaday, M. D., Chairman,  
Aux. Medical Defense Committee,  
Charleston, W. Va.

Dear Doctor:—

I take pleasure in stating that the following physicians of McDowell County Medical Society are now members of the Medical Reserve Corps:

Dr. B. H. Lovely, second assistant, Welch Hospital, has gone and is now a member of a hospital unit organized in Baltimore.

Dr. H. Frank Stiltner, formerly of Pineville, but a member of McDowell County Medical Society, has his commission and is now on duty at military headquarters at Chickamauga, Tenn.

Dr. Hearn Carswell, McDowell County physician to Houston Coal and Coke Company is commissioned and is await-

ing call to service.

Dr. B. B. McClure, Welch, former assistant to Drs. Daniel and Hall is commissioned and awaiting call.

Dr. P. D. Mossman, Welch, member of McDowell County Medical Society and a member of U. S. Public Health Service is commissioned and is awaiting call to service.

This is not a large number and we are trying to procure more, but it is not a bad showing, when you consider—

First. That there are not more than 48 registered white physicians in all of McDowell County and probably only about 43 of these in active practice.

Second. That the civil population of McDowell County is second largest in the state—larger than Ohio County—containing Wheeling; than Cabell County containing Huntington; than Marion County containing Fairmont; than Harrison County containing Clarksburg; and surpassed only by Kanawha County.

Third. That McDowell County possesses only five incorporated towns not one of which can boast of a population of more than 3,000, and that these 43 physicians are so scattered all over the county attending to this large population that if any of them should leave for military service another physician would have to be imported or the civil population of that district would have to do without regular medical attendance.

The claims of the Medical Reserve Corps have been taken up at the meetings of the McDowell County Medical Society and where some of the coal company physicians have more than one assistant we are trying to arrange and so divide the work up that one of the assistants may be relieved for military service, while the others by doing extra duty attend to the civil population.

Very truly,

AUXILIARY MED. DEF. COMM.

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August 10, 1917.

Ed. W. Va. Med. Jour.

The European, or what might more properly be called the world, war, is occupying the center of the stage at this time, and we have but little medical news. We regret that the needs of our

country has taken some of our physicians and others are awaiting orders, but we are glad that our medical men have the true patriotic spirit, and are ready to serve when the country calls.

Dr. Chas. H. Laws, of Elkins, left the last of July for camp in Iowa, where he was ordered by the government.

Dr. H. W. Daniels of Elkins, left August 2 for Georgia for medical training camp.

Drs. H. K. Owens and J. A. Arbuckle have received appointments and are anxiously awaiting orders to report for service.

Dr. Glen Harper of Beverly, also has an appointment and awaits orders.

Dr. B. L. Liggett of Mill Creek, is awaiting his call to service.

We see from Washington dispatches that Dr. Humboldt Yokum of Beverly, has been enthused with the martial spirit and has applied for appointment for *official* service in the Army.

Others are ready to respond when the need is made apparent. The question that is agitating the minds of many is how the country is to spare so many of our physicians from private practice? In many of the centers where the physicians, like the lawyers, are numerous, a few can be spared, and the community may not suffer, but when the only physician in the community is called, the problem is quite serious, and since the young physicians are largely going into Army and Navy service, there are few left to fill vacancies.

Dr. R. W. Dunham of Bemis, was at Washington the first of August, where he was making application for medical service in the Navy. We hope he may be successful in securing the service of his choice, as he is thoroughly competent and will be efficient for such work.

Since the time of meeting of the State Medical Society was changed from the spring to fall, our society overlooked the appointment of delegates at our last meeting and since the October meeting of the state society will be held before our next regular meeting, we will probably have to call a special meeting of the society to elect our delegates.

Two cases of infantile paralysis are reported from Mill Creek. It is to be

hoped that this much-feared disease, so fearfully dangerous to the children, may not be spread throughout the state. So far, we have not heard of a case in Barbour County and we trust we may not in the future.

We note the action of the Public Health Council with reference to the service of Dr. W. W. Golden, the retiring member and president of the Health Council. The commendations of his fellow members was a well merited tribute to his efficient service to the state.

J. C. IRONS.

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## Things of Interest

### HYPODERMIC MEDICATION.

Hypodermic medication usually means emergency medication. When the occasion for it arrives, the physician, if he is to employ a tablet solution, is fortunate if he has tablets upon which he can depend. The failure of the tablet is his failure—he cannot shift the burden of responsibility. And tablets for hypodermic use, to be reliable, must possess a number of important qualifications. They must be true to label; they must be active; they must contain a definite amount of medicament; they must be soluble.

These thoughts were vividly impressed upon the mind of the writer upon the occasion of a recent visit to the hypodermic-tablet department of Parke, Davis & Co. Here we see hypodermic-tablet manufacture reduced to a science. Here we find tablet-making facilities that exist probably nowhere else in the world. The equipment is complete to the last degree. The department is spacious, light, airy, clean. It is supervised by an expert who has specialized

for years in this branch of manufacturing pharmacy and who has selected his assistants with discrimination. Every worker is an adept. Every hand is schooled to its task.

In the manufacture of Parke, Davis & Co.'s hypodermic-tablets the components of the various formulas are weighed and reweighed, checked and rechecked by two experienced pharmacists working independently, one acting as a check upon the other, thus guarding against the possibility of error.

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The Cooperative Medical Advertising Bureau secured a contract for advertising space from the Howard-Holt Company of Cedar Rapids, Iowa, to be used in presenting to the profession in West Virginia the pertinent points of a product approved by the Council of Pharmacy and Chemistry of the A. M. A. This preparation is known as Siomine and contains 78.5 per cent of Iodine.

Siomine has been given in cases of tertiary syphilis, arteriosclerosis with high blood pressure, with chronic nephritis and chronic degeneration of the spinal cord, asthma, chronic articular rheumatism, arthritis deformans, multiple neuritis, fibrous goiter, locomotor ataxia, cerebro-spinal syphilis, general paresis, acne, syphilitic skin eruptions, in fermentative intestinal disturbances, the adenopathy secondary to Vincent's angina, with good results.

Write for literature.

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The laboratory is a hand maiden of modern medicine whose importance grows constantly. Actual tests are such a help in diagnosis, replacing fallible human judgment with the certainty of science, that the increasing use of them is not to be wondered at. The reports

of the clinical laboratories of the Battle Creek Sanitarium for 1916 show not only the number but the variety of the examinations necessary in a great institution of healing. The total was 62,582. As there were about 7,000 patients in the year, the average per patient was about 9.

Bact. Exam. for diphtheria.....	153
Bact. exam. of sputum.....	604
Bact. exam. of gastric fluid.....	149
Bact. exam. of feces.....	7168
Bact. exam. of urine.....	380
Bact. exam. of blood.....	37
Bact. exam. of pus.....	121
Bact. exam. of milk.....	54
Bact. exam. of water.....	77
Bact. exam. of bile.....	94
Bact. exam. of unclassified.....	125
Coagulation of blood.....	11
Exam. of blood for malarial plasmodium .....	98
Exam. of blood for Widal reac- tion .....	86
Exam. of blood for Wasserman reaction .....	690
Exam. of diplococi of neisser.....	335
Spirochaeta pallida.....	4
Autogenous vaccines .....	92
Blood examinations for blood count and hemoglobin .....	11766
Differential leucocyte count .....	6660
Chem. & micro. exam. of feces.....	6140
Chem. exam. of gastric fluid.....	1922
Chem. exam. of foods.....	49
Renal efficiency .....	249
Quan. urinalysis of micro. ex.....	21281
Path. exam. of tissue.....	445
Blood test for sugar.....	624
Unclassified chem. analysis.....	75
Non-protein nitrogen .....	471
Uric acid of blood.....	205
Urea of blood.....	110
Creatinin .....	437
Epsteins test for blood sugar.....	53
Fecal inspection for capsular	

motility test .....	984
Capsult digestives motility test July to December, inclusive..	833
	<hr/>
	62582

August 29, 1917.

From: Dr. Franklin Martin, Member,  
Advisory Commission.

To: Dr. Jos. E. Rader, Huntington, W.  
Va.

Subject: Medical Reserve Officers.

1. In view of the fact that many more Medical Officers will be needed for the army than are now in sight, I am writing to ask if it would be possible to hold during your State Society meeting, October 2-4, a Patriotic Rally. This would be for the purpose of presenting to the physicians the needs of the army for more Medical Officers and of urging physicians to apply for commissions. While the percentage of physicians in West Virginia, who have been commissioned in the service is 6.4% as of August 8, there are probably some others who can be spared and who may be induced to come in.

HENRY D. JUMP,  
Major, M. O. R. C.

Fellow physicians of the West Virginia Medical Association, the above letter explains itself. I have written Dr. Martin, assuring him that we will be glad to arrange for just such a meeting and we hope every member of our society will make a special effort to be present. *Come and bring your neighbor physicians with you*, and let us demonstrate to those in authority that the physicians of West Virginia can be counted on to do their whole duty in this great crisis through which our country is passing.

J. E. R.

# The West Virginia Medical Journal

JAS. R. BLOSS, M. D., EDITOR

C. R. ENSLOW, M. D.

J. E. RADER, M. D. ASSISTANT EDITORS

Huntington, W. Va., September, 1917

THE JOURNAL issued on the first of each month.

Subscription . . . . .	\$1.50 per year
Single Copies . . . . .	20 Cents

All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notices of deaths, removals from the State, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

## CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

## ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

## REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: Miller-Ritter Building, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinions or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

# Editorial

## MEMBERS OF THE STATE ASSOCIATION.

Do not forget the date of this year's meeting at Fairmont, October 2, 3, 4. Remember this is the semi-centennial meeting and we are assured by Dr. C. O. Henry that our friends in Fairmont are turning over every stone in Marion County to make it the best, largest and most profitable meeting the Association has ever held.

Our worthy secretary has been making strenuous efforts to make the program a fine one. To date he has been unable to supply your editor with a preliminary copy of the titles, etc., of this. However, we hope to be in position to have a

## OFFICERS OF THE STATE ASSOCIATION

PRESIDENT—J. E. Rader, Huntington, W. Va.

FIRST VICE-PRESIDENT—W. S. Young, Sistersville, W. Va.

SECOND VICE-PRESIDENT—E. H. Thompson, Bluefield, W. Va.

SECRETARY—J. Howard Anderson, Marytown, W. Va.

TREASURER—H. G. Nicholson, Charleston, W. Va.

DELEGATES TO A. M. A.—Frank LeMoyné Hupp, Wheeling, W. Va.; C. R. Ogden, Clarksburg, Va.

ALTERNATE—B. B. Wheeler, McKendree, W. Va.

CHAIRMAN OF THE COUNCIL—G. D. Jeffers, Parkersburg, W. Va.

## COUNCIL

FIRST DISTRICT—H. R. Johnson, Fairmont, W. Va., one-year term; J. W. McDonald, Fairmont, W. Va., two-year term.

SECOND DISTRICT—T. K. Oates, Martinsburg, W. Va., one-year term; C. H. Maxwell, Morgantown, W. Va., two-year term.

THIRD DISTRICT—C. R. Ogden, Clarksburg, W. Va., one-year term; M. T. Morrison, Sutton, W. Va., two-year term.

FOURTH DISTRICT—G. D. Jeffers, Parkersburg, W. Va., one-year term; R. H. Pepper, Huntington, W. Va., two-year term.

FIFTH DISTRICT—E. F. Peters, Maybeury, W. Va., one-year term; W. H. St. Clair, Bluefield, W. Va., two-year term.

SIXTH DISTRICT—B. B. Wheeler, McKendree, W. Va., one-year term; P. A. Haley, Charleston, W. Va., two-year term.

program in the October issue, which issue we trust will be mailed the first of the month. (October.)

Begin to make your plans at once to attend this meeting.

In the review of the book of Dr. H. B. Wood, Assistant State Health Commissioner, published last month, the price of it was not stated. We wish to correct the omission by stating that the price of Dr. Wood's book is \$3.00.

We have been requested to assume the responsibility for carrying on something in the way of a bureau for physicians seeking positions with coal companies,



etc., as assistants and also to aid men desiring the services of assistants, to secure them. This matter will be taken up by the editor at the meeting of the council in Fairmont next month. He is perfectly willing to assume this, but until after having had the advice of the council he does not feel that he should shoulder this responsibility without charging the regular advertising rates for space in the Journal for so doing. In the meanwhile a list of men of both classes is being kept, and he will be very glad to answer any communications addressed to him concerning these matters.

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We are in receipt of information from Dr. Wade H. St. Clair of Bluefield, secretary and treasurer of the West Virginia Hospital Association that the meeting of this organization will be held at Fairmont on Monday, October 1. The date for the association meeting being made to correspond with the date upon which the State Board of Examiners for graduate nurses will hold its session.

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#### NO NEED FOR DRAFTING THE MEDICAL PROFESSION.

It is to be regretted that there has been so much hysteria in regard to procuring the medical force of the new National Army. It is still more to be regretted that this hysteria—absolutely undeservedly—has reflected unfavorably on the medical profession. As late as August 1 the Associated Press sent out a statement to the effect that a petition was being circulated which *declares that the method of recruiting the Medical Corps of the Army by commissioning reserve officers in that corps who volunteer has proven a failure and asks that in behalf of the welfare of the nation a draft for physicians be made.*

This is merely an echo of what many men with the best motives have advocated. It is based on the assumption that the newspapers have had correct figures regarding the number of men who have accepted commissions in the Medical Reserve Corps, and that the medical profession was not responding to the call.

Even within the last two weeks, statements have appeared in the newspapers, apparently from authoritative sources, to the effect that less than 3,000 physicians have accepted commissions in the Medical Reserve Corps.

What are the facts? On August 4 approximately 16,000 physicians had offered their services and had made application for commissions in the Medical Reserve Corps. Of this number, nearly 14,000 had been recommended for commission. Some of the remaining 2,000 applications were pending; others had been rejected for cause. Of the 14,000 commissions recommended, nearly 9,000 had been accepted. This leaves about 5,000 applications which may be accounted for as follows: 1,300 were pending in the Adjutant-General's office; an uncertain number had been sent out too recently to allow for the acceptance to be returned; some who had received commissions were delaying—for various causes—in sending in the acceptances. What proportion of this group will finally accept their commissions is problematical; but based on information which we believe to be reliable, we confidently assert that there are at the present time at least 13,000—probably 14,000 is nearer the correct number—physicians ready when called for active service. These figures do not include physicians who have entered the regular medical corps during the last few months, or those connected with the National Guard, the latter at least 1,000 in number. Moreover from 100 to 150 new applications are reaching the Surgeon-General's office daily. To advocate a special draft of physicians under these circumstances is an insinuation against the medical profession which should be insistently resented.

We repeat: The physicians of this country have been and are offering their services, at tremendous sacrifices in many instances, and are doing their full duty without compulsion and without a special draft. We are confident that not only the present, but every future need which the country may have for medical men, will be supplied by our profession, without coercion or threats.—*Jour. A. M. A., Aug. 11, 1917.*

## NOT YET TIME TO RELAX.

We can be proud of the fact that there is an ample supply of physicians for the immediate needs of our Army, but we must not cease recruiting. An analysis of the needs of our Army made on June 1 indicated that 20,000 medical officers would be required to complete the program for the raising of the Army outlined by Congress and the President, that is, the regular Army, the National Guard and the full National Army. This is a liberal allowance since the maximum Army in the field as at present defined by law is 1,700,000 men. Adopting the minimum estimate that there are now 13,000 medical officers commissioned in the reserve corps, we should confine our efforts not only until the full 20,000 physicians are provided but also a surplus. It is well to have a big reserve.—*Jour. A. M. A.*, Aug. 11, 1917.

## TO EXEMPT MEDICAL STUDENTS

As a result of an active agitation in the medical profession the Council of National Defense has asked that the medical students be exempted from the draft so that they may be able to continue their studies and enter the service as surgeons. Dr. Victor C. Vaughan, of the Medical Advisory Board of the Council, is carrying on an active agitation to this end and has obtained from the Secretary of War his approval of the movement. Only recently we pointed out editorially the necessity for the exemption of the medical students, and it is gratifying to note that this need has been recognized by the Government authorities. — *Ed. N. Y. Med. Jour.*, 8-18-17.

## INCREASE PERSONNEL AT TRAINING CAMPS FOR MEDICAL RESERVE OFFICERS.

During the past week additional medical reserve officers have been ordered to the various training camps so that there are now 1,000 physicians or more at each of the training camps. In addition some 130 colored physicians are in training with colored troops at Fort Des

Moines, Iowa. Of those physicians who were in the first training camp beginning June 1, some 30 per cent. have been recommended for promotion to higher rank than that held at the time they reported for active duty. The recommendation was based on proficiency and adaptability to the service. Many physicians who reported to the camps June 1, have now been ordered elsewhere for active duty.

## REPORTING FOR DUTY BEFORE RECEIPT OF COMMISSION.

A number of men who made application for appointment to the Medical Reserve Corps have written that while they have not received their commission they have received telegrams asking them to accept, and later ordering them to active duty in spite of the fact that the commission had not yet been received. The explanation is, as we have mentioned previously, that there has been considerable delay in issuing commissions to men who have been recommended, the delay occurring chiefly in the Adjutant-General's office. So as not to prevent ordering medical officers to early training, the Surgeon-General's office has adopted the plan of telegraphing those recommended that they have been recommended and asking them whether or not they will accept. If the reply is satisfactory, the officer may then be ordered to active duty, the commission reaching him in due time. Those who report at the training camps who have not already taken the oath of allegiance are sworn in at the camps.

## MINIMUM EQUIPMENT FOR MEDICAL RESERVE OFFICERS ORDERED TO ACTIVE DUTY.

Inquiries are continually coming as to the minimum equipment which a medical reserve officer should have when reporting for active duty at a training camp. The articles listed below may be considered a minimum requirement. They may be purchased from the Quartermaster's Department; the prices are approximate:

1. Hat, service and cord, \$1.04.
2. Shirts, o. d., 2, each, \$2.38.
3. Breeches, khaki, o. d., 2, ea. \$2.31.
4. Shoes, 2 pair, each, \$2.81.
5. Blankets, 2 pair, each, \$3.08.
6. Cot, gold medal, \$2.06.
7. Mattress.
8. Socks, light wool, 6 pr., each, 13c.
9. Leggings, 1 pair, \$1.81 and up.
10. Insignia for collar.
11. Folding chair.
12. Towel.
13. Toilet articles.
14. Pillow.

Other articles, most of which are not costly, may be purchased piece by piece as needed.—*Jour. A. M. A.*, 8-18-17.

## State News

Dr. Herman Crary of Athalia, Ohio, son of the late Dr. Archibald Crary, of Huntington has gone to the Medical Reserve Corps training camp at Fort Riley, Kas.

First Lieutenant James F. Van Pelt, M. D., Medical Officers' Reserve Corps, and Miss Woodie Breeden of Huntington, were married in Richmond, July 30. Dr. Van Pelt is a native of Virginia but was, until recently, a resident physician at the C. & O. Hospital in Huntington. The doctor is now at Fort Oglethorpe, and will probably be sent to France. His wife will reside in Huntington. Congratulations are extended to Dr. Van Pelt.

Major H. D. Hatfield of Huntington received telegraphic notice on August 11 that he had been assigned to active duty. He was instructed by Adjutant-General McCain of Washington to proceed at once on a state wide tour to examine applicants for appointment in the Medical Reserve Corps of the Army. Lieutenant William Slusher of Bluefield will assist Major Hatfield in conducting the examinations.

Dr. T. Dwight Sloan for the past five years a medical missionary in China is

preparing to return to America with a view to becoming a medical officer in the United States Army. Dr. Sloan was a former resident of Huntington, his father being pastor of the First Presbyterian Church at the time.

Dr. Harold B. Wood, assistant State Health Commissioner of Charleston, was a visitor in Huntington in August.

Dr. J. O. Hicks of Huntington received notice to appear at Fort Benjamin Harrison, Ind., on August 27, to enter the second training camp, as a medical reserve officer with the rank of Lieutenant. Dr. Hicks adds another to the steadily growing list of Huntington physicians who have entered the country's service.

Dr. Roy Kessel of Ripley has applied for a commission in the Medical Reserve Corps of the United States Army.

Dr. I. C. Hicks of Huntington, accompanied by his wife and daughter, spent some time in Baltimore recently, the doctor attending clinics while there. They later went to the Sweet Chalybeate, Va.

Dr. George Fordham of Affinity was a recent visitor in Huntington enroute to Charleston where he took the examination to enter the Medical Reserve Corps.

Dr. H. D. Hatfield of Huntington, and Dr. W. C. Slusher of Bluefield addressed physicians of the northern Panhandle section recently in an effort to stimulate recruiting among physicians. They are making a tour of the state.

Dr. S. L. Jepson, State Commissioner of Health, reports infantile paralysis on the decrease in the state, since the coming of cooler nights.

A serious outbreak of typhoid fever has been reported to the State Department of Health from Princeton, Mercer County. Dr. S. L. Jepson sent two of his assistants, Dr. H. B. Wood and Mayo Talmon to the scene to make an investigation.

Dr. and Mrs. H. E. Solter formerly of Huntington, now of Marlinton, were recent visitors to their old home.

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Dr. J. Lawton of Rochester, N. Y., spent some time in Huntington in August visiting friends.

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Dr. L. T. Vinson of Huntington, made a professional visit to Philadelphia in August.

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Dr. L. V. Guthrie of Huntington, recently made an address before the Rotary Club at one of their meetings. His talk dealt with the recent visit of Dr. Hasting H. Hart and C. L. Stalnaker of the Russell Sage foundation. He told the purpose of their visit and investigation. He also told of the growth of the Huntington State Hospital. This hospital will probably be used for taking care of insane soldiers; the visit of the two experts being in this connection.

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Word was received in Huntington of the death at Rochester, Minn., of Harry Valentine Sanns, fifty-eight years old. Dr. Sanns lived near LeSage and was for many years one of the best known physicians in Cabell County. He was prominent in the affairs of the Democratic party in the county and served several terms as a member of the House of Delegates, his last service being in the sessions of the Legislature of 1915. He was a member of the Cabell County exemption board but was compelled to resign this position because of ill health. He left for Rochester immediately after his resignation. Death was due to an internal cancer.

After graduating in medicine at Cincinnati he located first at Millersport, O., where he remained several years. Twenty years before his death he took up his residence near LeSage on a farm which was his home continuously thereafter.

His wife, who was a daughter of J. M. Baker, of Millersport, died before him. He is survived by two sons, Harry Sanns and J. F. Sanns.

His body was taken from Rochester to Gallipolis, where funeral services took place.

As his record indicates, Dr. Sanns was a man of character and ability and the memory of his kindly and effective ministrations to the people among whom he dwelt will long be cherished. It was said of him that there was no night too dark and stormy, nor road too rough or long for him to travel in answer to the call of the sick and afflicted, even though he knew that his only recompense would be gratitude. He was a Mason and the Masons had charge of his funeral.

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Mrs. J. Howard Anderson, wife of Dr. Anderson, of Marytown, died in Welch Hospital No. 1 after a few days illness. A few days ago Mrs. Anderson was in the best of health and it is understood that the first sign of any trouble was a small pimple on the nose. Infection, or poison, developed and quickly spread over the face, and on Sunday she was brought here to enter the hospital. Realizing that her condition was very serious specialists were called in for consultation, but her trouble baffled the attending physicians and specialists, and after two days of excruciating suffering she succumbed to her illness.

The death of Mrs. Anderson is one of the most deplorable to have occurred in this section. Before marriage she was Miss Margaret Emory, of Kenton, O., daughter of Dr. Emory and was a young lady of many accomplishments. She was one of the leaders in social circles in this county, and her sudden death comes as a distinct shock to friends throughout this section. Dr. Anderson, who is secretary of the State Medical Association, numbers his friends by the hundreds, and his young wife was sharing his popularity on all sides. She was an active worker in the Delphian Literary Club, of Welch, and also attended practically all social affairs at this place.

The remains were shipped to her former home at Kenton, O., where burial took place from her girlhood home. Besides the immediate family the remains were accompanied to Kenton by Dr. and Mrs. C. F. Hicks, Mrs. Bernard O. Swope and C. C. Morfit.

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Dr. and Mrs. C. M. Hawes have re-

turned to Huntington after a visit to points in the east.

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Miss Emily Bauer of Richmond, formerly Superintendent of Nurses at the C. & O. Hospital at Huntington, will go to France as a Red Cross nurse. Miss Bauer at the present time is Superintendent of Nurses at the Clifton Force C. & O. Hospital.

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Dr. William Neill, Jr., of Charlestown, is stationed at the Army Medical School in Washington.

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Dr. M. B. Williams of Wheeling assumed his duties as City Health Commissioner on August 1.

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Dr. Thomas T. McNeer of Dante, Va., has applied for a commission in the Medical Reserve Corps. He came to Huntington to take the examination. He is well qualified for the work, having served as an interne in the University Hospital at Philadelphia prior to his association with his brother who is a surgeon, and has a hospital at Dante.

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A base hospital has been organized by the University of Virginia, to be known as Base Hospital No. 41, with Dr. William H. Goodwin associate professor of surgery, as director. The medical staff includes the following physicians: Dr. Lomas Gwathmey, Norfolk; Dr. Minor Carson Lile, New York; Dr. Kyle B. Steele, Richfield Springs, N. Y.; Dr. Leroy W. Hyde, University; Dr. Joseph S. Hume, Norfolk; Dr. John W. Burke, Washington, D. C.; Dr. Robert E. Pound, New York City; Dr. Gordon L. Todd, Princeton, W. Va.; Dr. Herbert F. Jackson, New York City; Dr. Hugh P. Nelson, Charlottesville; Dr. Dan H. Witt, New York City; Dr. Edward C. Ashby, Greensboro, N. C.; Dr. John D. Barnwell, New York City; Dr. Claude C. Caylor, Washington, D. C.; Dr. Lucius G. Gage, University; Dr. George C. Parry (dentist), Philadelphia; Dr. Edward B. Broocks, Charlottesville; Dr. Walter E. Miller, Norfolk, and Dr. George Y. Gillespie, Bryn Mawr, Pa.

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The engagement has been announced

of Miss Noca Kessler, daughter of Dr. A. K. Kessler of Huntington, and Dr. F. O. Marple, also of Huntington.

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Charleston, W. Va., June 30, 1917.

At the last meeting of the retiring Public Health Council held in Charleston May 10, 1917, the following resolution was adopted in view of the expiration of the term of office of Dr. W. W. Golden.

*Resolved;* That as this is the last meeting of the present Public Health Council for the year, and the last time we will meet under the leadership of its President, Dr. Wm. W. Golden, we wish to express to him our high appreciation of his worth as a man and as a physician. In the years that we have been associated with him, we have learned to love and trust him.

We find that he has measured up to every requirement of the elevated position he has held. We believe that he has done more than any other one man in the state to elevate the standard of medical education and promote the interests of public health, and has ever been ready to do his duty to the profession, and has stood four-square to every wind that blows. Our best wishes go with him everywhere.

F. F. FARNSWORTH, M. D.

J. L. PYLE, M. D.

W. T. HENSHAW, M. D.

W. J. DAVIDSON, M. D.

J. E. ROBINS, M. D.

S. L. JEPSON, A.M., Sc.D., M.D.

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#### WEST VIRGINIA LICENTIATES OF JULY 10, 1917.

Henry Baby, Chatham, Ont., McGill University, 1917.

T. M. Barber, Charleston, W. Va., Virginia Medical College, 1917.

B. V. Blagg, Ft. Pleasant, W. Va., Eclectic Medical College, 1917.

S. L. Bossard, Chicago, Ill., Bennett Medical College, 1916.

R. K. Buford, Princeton, W. Va., Birmingham Medical College, 1915.

J. H. Caldwell, Columbus, O., Ohio University, 1917.

C. C. Coffindaffen, Jane Lew, W. Va.,

Virginia Medical College, 1917.

W. C. Covey, Marshes, W. Va., University of Maryland, 1917.

W. B. Davidson, Baltimore, Md., University of Maryland, 1917.

I. M. Derr, Newport News, Va., Virginia Medical College, 1917.

H. A. Giltner, Parkersburg, W. Va., Kentucky School Medicine, 1917.

E. H. Hedrick, Beekley, W. Va., P. & S. Balto., 1917.

A. S. Lilly, Athens, W. Va., Virginia Medical College, 1917.

W. E. Masters, Columbus, O., Ohio University, 1917.

Foster McDonald, Chicago, Ill., Chicago Col. M. & S., 1917.

E. J. McGovern, Gassaway, W. Va., Georgetown Medical College, 1910.

H. G. Middlekauff, Huntington, W. Va., Virginia Medical College, 1916.

C. C. Nohe, Baltimore, Md., Balto. Col. P. & S., 1917.

M. H. Porterfield, Martinsburg, W. Va., University of Maryland, 1917.

J. A. Sanders, Oceana, W. Va., Virginia Medical College, 1917.

E. B. Thompson, Lore City, Ohio, Virginia Medical College, 1917.

Max W. Vieweg, Wheeling, W. Va., University of Maryland, 1917.

H. E. Whaley, Hansford, W. Va., Medical College of Virginia, 1917.

E. B. Whitehurst, Beaufort, N. C., Medical College of Virginia, 1917.

C. T. Wilfong, Glenville, W. Va., University of Louisville, 1917.

Geo. V. Wood, Chase City, Va., Medical College of Virginia, 1915.

W. C. Williams, Caretta, W. Va., College P. & S. Balto., 1917.

C. A. Boone, Louisville, Ky., University of Louisville, 1913.

G. W. Shriver.

Anna Olive Ailes, Sidney, O., Still College Osteopathy, 1917.

Mabel McDonald, Chicago, Ill., Des Moines College Osteopathy, 1917.

Donna Russell, Sidney, O., Des Moines College Osteopathy, 1917.

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The Owen bill which is now receiving favorable consideration in the United States Senate, provides for increased rank and more favorable consideration

than at present. It is to be hoped that each and every physician reading this item will write to his Congressman and Senator and urge upon them the importance of supporting the Owen bill.

Drs. H. C. Slaughter and E. B. Henson took the preliminary examination for the Army Medical Corps July 6 at Fort Thomas. Dr. Arthur Henson and L. A. Petty of Charleston have recently completed the preliminary Medical Corps examination in Charleston. Dr. H. L. Robertson of Charleston has lost a member of his family in war service. His brother who was Flight Commander, with the rank of captain in the British Aviation Service on the western front, has been missing for several weeks.

Dr. Lawrence Barber, of Charleston, who is at the head of the Charleston Ambulance Corps No. 22, has been instructed to physically examine and swear in all members of the ambulance company. They expect to be ordered to a training camp very soon.

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#### LIST OF DOCTORS WHO HAVE APPLIED FOR COMMISSIONS SINCE AUGUST NUMBER.

Dr. R. H. Dunn, Charleston, W. Va.; Dr. LeRoy C. Goff, Burnt House, W. Va., Dr. Edward Davis, Salem, W. Va., Dr. L. J. Butler, Milburn, W. Va., Dr. R. E. Davis, Junior, W. Va., Dr. R. D. Roller, Jr., Charleston, W. Va., Dr. E. H. Hedrick, Beekley, W. Va., Dr. Geo. L. Pieree, Bower, W. Va., Dr. A. C. Stephens, Chloe, W. Va., Dr. R. W. Sayre, Letart, W. Va., Dr. R. T. Farley, Ivanton, W. Va., Dr. R. M. Musick, Gilbert, W. Va., Dr. T. G. Tickle, Keystone, W. Va., Dr. J. K. Cowherd, Ridgley, W. Va., Dr. R. H. Burford, Princeton, W. Va., Dr. W. O. Hearn, Bluefield, W. Va., Dr. M. E. Jones, Welch, W. Va., Dr. D. P. Scott, Ashland, W. Va., Dr. R. E. Woodall, Bintree, W. Va., Dr. O. A. Howard, Marlinton, W. Va., Dr. Ira Wellman, Louisa, Ky., Dr. J. C. Jett, Winding Gulf, W. Va., Dr. J. M. Musick, Gilbert, W. Va., Dr. H. M. Batson, Handley, W. Va., Dr. Geo. H. Barksdale, Charleston, W. Va., Dr. M. E. Jones, Welch, W. Va., Dr. A. W. Curry, Ronceverte, W. Va.,

Dr. E. A. Bays, Barboursville, W. Va.,  
 Dr. S. W. Barber, Caperton, W. Va.,  
 Dr. F. H. Sisler, Sun, W. Va., Dr. M. E.  
 Caldwell, Clendemin, W. Va., Dr. C. T.  
 Hayden, Charleston, W. Va., Dr. J. W.  
 Ballard, Harding, W. Va., Dr. J. O.  
 Hicks, Huntington, commissioned;  
 Dr. Ray Blankenship, Marion, Va., Dr. Wm.  
 L. Rayl, Huntington, commissioned;  
 Dr. I. R. LeSage, Huntington, commissioned;  
 Dr. J. C. Shultz, Huntington, commis-  
 sioned; Dr. Ray Kessel, Ripley, W. Va.;  
 Dr. Ross Dodson, Spencer, W. Va., Dr.  
 B. J. Hume, Huntington, rejected;  
 Dr. T. P. C. Parsons, Ripley, W. Va., re-  
 jected; Dr. W. S. Keever, Parkersburg,  
 W. Va., rejected.

The following applications are not  
 complete: Dr. W. S. Arnett, Henderson,  
 W. Va.; Dr. Joseph Parr, Marietta, O.;  
 Dr. S. C. Couch, Cleveland, O.; Dr. Al-  
 fred B. Miller, Portsmouth, O.; Dr. J. R.  
 Keese, Wayne, W. Va.; Dr. T. J. Ad-  
 kins, Cove Gap, W. Va.; Dr. Harry R.  
 Parker, Williamson, W. Va.

## Society Proceedings

### MERCER COUNTY SOCIETY.

The Mercer Medical Society met at  
 Mercer Healing Springs on July 26, 1917,  
 at 4 p. m.

Dr. J. R. Vermillion presided as presi-  
 dent. The minutes of the last meeting  
 were read and adopted.

#### Under clinical cases:

Dr. Steel reported the case presented  
 at the previous meeting, in which the  
 X-ray findings were thought to be a  
 Green Stick Fracture.

Next on the program Dr. T. E. Vass  
 read a very interesting paper on the  
 Properties of the Heart Muscles, which  
 was discussed by Dr. Hare. Dr. Vass  
 stated that this was an introduction to a  
 paper that he was preparing.

Dr. C. T. St. Clair, the next on the  
 program being absent, the meeting was  
 then referred to business, at which time  
 the resolutions that had been prepared  
 were brought up for the signature of the  
 physicians, which were signed by all pres-  
 ent, and agreements will be mailed to  
 the physicians who were not present for

proper signature, after which one will  
 be retained by the local secretary and  
 the other by the secretary of the State  
 Society.

There being no further business a  
 motion was made to adjourn. After  
 which we retired to the banquet hall,  
 where a feast was waiting for us. Dr.  
 H. G. Steel presided at the banquet.  
 Those responding to a toast were Drs.  
 O. S. Hare, Zed Bee and S. R. Holroyd.  
 The musical program was rendered by  
 Miss Emma Phelps, Mrs. W. S. Paterson,  
 Mrs. C. P. Howell.

Recitation by Miss Emma Phelps was  
 enjoyed by everyone. After the banquet  
 we retired to the dance hall. The Old  
 Virginia Reel was especially enjoyed by  
 everyone. Most every one took part in  
 the dance.

Everyone expressed themselves as hav-  
 ing a very pleasant evening.

E. H. THOMPSON, *Secy.*

### AGREEMENT.

I agree to abide by resolutions adopted  
 in relation to fees for attendance on pa-  
 tients of doctors ordered into active ser-  
 vice for the Government, and to keep  
 such books as will readily show collec-  
 tion of such fees. I further agree to ask  
 every patient whom I have not previous-  
 ly treated, the name of his usual or last  
 medical attendant and if such doctor is  
 in the active service of his Government,  
 to turn over monthly or quarterly to such  
 physician, or his family if he so directs,  
 one-third of the fees collected by me from  
 this patient.

I further agree that when patients are  
 referred to me by a physician or person  
 who has not heretofore referred patients  
 to me, to find out to whom, in the im-  
 mediate past, they have usually referred  
 their patients requiring the special ser-  
 vices I can render, and if such physician  
 is in the active service of his country, to  
 turn over to him one-third of the fee  
 collected from such patient. This para-  
 graph shall likewise apply to consulta-  
 tions.

I further agree not to attend any pa-  
 tients referred to above for a period of  
 one year following the resumption of ac-  
 tive practice by the physician who has

been in active service.

In the remote chance of misunderstandings or disagreements arising under this resolution, I agree to submit the facts to the Board of Censors of the County Society and abide by their decision.

(Signed)

Date.....

After signing, please mail this to secretary of county society.

E. H. THOMPSON,  
Bluefield, W. Va.

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The Mercer County Medical Society met in the offices of Drs. Bird and Vermillion at Princeton, W. Va., on August 23. The president presiding. The minutes of last meeting were read and adopted. Under clinical cases:

Dr. J. F. Fox reported three cases, two of which he exhibited. The following histories were given:

Case 1: Father died at 35 years of age, pneumonia. Mother negative. Brothers and sisters, one brother killed in a coal mine. Personal history—Diseases since childhood, pneumonia in his fourth year; measles in his seventh year. Present trouble—took his bed on the 6th day of April, complaining of headache and general weakness. Temperature and pulse indicating typhoid. Complained from the beginning of his illness with pain in his bowels, but no rigidity detected until April 12. There was at no time any acute pain; the perforation and peritonitis apparently coming on gradually. Character: Kammerer incision along the outer border of right rectus. General peritonitis found. A hole in the Ileum about four inches from the illeo coecal valve. Several other ulcers noticed which were not quite ruptured but appeared to be about to do so. Nothing was done to these however except to bring this portion of the gut into the field of drainage. The hole was sutured with a purse string of silk and over this one of catgut. The wound was partially closed leaving room for free drainage, which was of soft rubber tube and a couple of wicks of gauze well covered with rubber tissue. It was noticed about

the fifth day that feces were appearing in the wound. He remained in the hospital only two weeks, when he was taken home and treatment was continued by Dr. Phlegar. The wound showed no tendency whatever to heal until convalescence was established.

Case No. 2: Present trouble—Had been sick with sore throat two or three weeks before and has not been well since. Did not complain particularly with abdomen, but it was quite rigid, especially on right side. Leucocyte count 17,000. As no definite history could be obtained thought perhaps he had perforated appendix.

Character: Kammerer incision, peritonitis found at once and in hooking up small intestine found perforation in ileum and several other ulcers showed signs of breaking through. Hole closed by purse string silk and over this catgut and wick drain placed. Five days later stitches had to be removed, obstruction came on intestines rolled out on abdomen. Gut was then opened and catheter stitched in with purse string suture of silk and over this catgut and left two days, wound resutured but in five days more all sutures had to be removed again, and bowel began to leak, fascia sloughed along right side so opening had to be made in right flank drawn to fascia and drainage tube inserted.

Case No. 3: Family history: Father died at 67 years of age, paralysis; mother died at 66 years of age, chronic nephritis. Personal history: Diseases since childhood, always well up to five or six years ago. Attacks of pain first time in right shoulder. Present trouble: Began with pain under shoulder blade (right) very severe. Later (a month or two) had severe pain in side, low down but soreness extended upward. Last attack two weeks ago, began with vomiting. Vomited with other attacks too but does not remember the time. Tumor found on palpation in right side also one in left iliac region. Temperature 103 last attack. Diagnosis not certain. Exploration advised.

Character: Kammerer incision directly along inner side of tumor. The first thing that came into view after opening peritoneum was the cecum and appendix lying on tumor near lower end, the tu-



mor being covered by a Jackson membrane. The membrane was split and tumor turned out completely, had no pedicle but was a closed sack of fluid oval shaped, right ovary fibrous, two-thirds of it trimmed off. The right ovary was enormously enlarged, while the left ovary was twice the size of the right, fibrous and cystic, large thick walled cyst attached to it, all removed. Appendix removed and stump inverted. Rubber tissue drain placed in space from which tumor came behind the cecum.

Dr. T. E. Peery reported a very interesting case in which he had operated for submerge tonsils in which he had diagnosed as a case of hysterical aphonia, but owing to the persistences of the patient and the family physician he consented to operate, thinking the mental effect will be of some value. To his surprise he found two very bad diseased tonsils containing pus. The patient since operation symptoms have all cleared up. She had not had any nervous trouble, no more rheumatic pains. The doctor stated that it had opened his eyes relative to submerged tonsils being removed, as he had removed a number of them since with very gratifying results.

Dr. Bird reported a case of diphtheria. Dr. Vass made a motion that the secretary be instructed to write the Pharmaceutical Department of the American Medical Association to investigate the various laboratories in the United States to get the strength of the anti-toxin represented.

There being no further business the society made a motion to adjourn, and to meet at Bluefield the third Thursday in September. We adjourned to the adjoining room where we were served with luncheon.

E. H. THOMPSON, *Secy.*

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## Medicine

### THE BIBLE AND THE DOCTORS

The book of Chronicles is rather severe on the doctors. It says:

“And Asa, in the thirty and ninth year of his reign, was diseased in his feet, until his disease was ex-

ceeding great; yet in his disease he sought not to the Lord, but to the physicians. And Asa slept with his fathers.”

In Ecclesiastes, on the contrary, is a more encouraging opinion:

“Honor the physician for the need thou hast of him; for the Most High hath created him. The skill of the physician shall lift up his head and in the sight of great men he shall be praised. The Most High hath created medicines out of the earth and a wise man shall not abhor them.”

Then, however, comes another blow:

“He that sinneth before his maker shall fall into the hands of his physician.”—*Harper's Weekly.*

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### THE TREATMENT OF GOITER.\*

By J. C. MOORE, M. D., Seattle, Wash.

In presenting this paper I lay no claim to originality, but wish to relate my experience with a method that has proven satisfactory and to present in concise form this treatment, its advantages and disadvantages, stating in a practical way the classifications of thyroid diseases that respond to it and suggesting a rational method of treatment for those that are not benefited by it.

It is to be hoped that in the near future some one of the many research workers will isolate the actual cause of endemic goiter. That the disease is becoming more prevalent no one can doubt and, until the actual cause is known, treatment must of necessity be emphatical. Whether the disease is caused by some infective organism or by some specific bacteria we do not know, but that drinking water carries the active agent is the consensus of opinion of investigators. Assuming that the disease is caused by an infection, the method of treatment as outlined later is taken from the realm of empiricism and may be classed as a specific.

Whatever the nature of the active organism, we know that boiling or distilling the drinking water renders the same innocuous. This, then, is the first step in the medical treatment, and in simple non-toxic goiters of adolescence this alone is usually sufficient to cure.

Should the enlargement not disappear under this treatment, the Gunn method should then be used. This consists of the use of iodine externally and internally for a period of not more than four weeks. The iodine is then stopped and a 5 per cent phenol solution is injected into the gland substance, one or two injections of 60 to 100 minims being usually sufficient to affect a permanent cure.

One should keep close watch of the patient while she is taking the iodine, as a non-toxic goiter may become toxic from the use of the iodine. I had one develop an exophthalmus with marked nervous and cardiac symptoms, which was relieved only by rest in bed, quinine hydrobromate and ergotin internally until the toxic wave had subsided, when about five-sixths of the thyroid was removed.

Simple hyperplastic non-toxic goiters yield readily to treatment. This is the class that is very common in young women from eighteen to thirty years of age, who are very grateful for the non-disfiguring removal of an annoying blemish.

In hyperplastic toxic goiters use iodine very carefully and for a short time only. Depend on rest, diet, and injections of phenol. If improvement is not marked early in the treatment, discontinue and advise operation.

On cystic goiter the treatment has little or no effect. Many of these cases respond to X-ray exposures, but as a rule operation will be necessary.

As already indicated, one must select the cases suitable for the Gunn treatment. To waste time with a markedly toxic goiter would be criminal. In such cases nothing but the early removal of a large portion of the gland is going to save the patient or prevent serious degenerative changes in myocardia and kidneys.

If the patient is seen during the toxic wave put her in bed, give no drinking water except that which has been boiled

or distilled, clean out the intestinal tract, put on meat-free diet and give quinine hydrobromate gr. 5 and ergotin gr. 1 four times a day. Inject boiling water into the gland if no improvement follows or if toxemia is increasing and the heart action so bad that operation is not advisable. Tying one or both superior thyroids under local anesthesia will tide the patient over the toxic wave, when she can be operated upon with comparative safety, while she would surely have died if operation had been performed during the height of toxemia.

For these cases Dr. R. T. Morris, of New York, has devised his "safety first" operation, which method has been used in a large number of cases in the Post Graduate Hospital at New York where they call it "stealing the goiter" and is of particular value in nervous patients, whose heart conditions are such that the excitement due to the taking of the ordinary anesthetic would be dangerous. The patient is given a simple enema every morning for three or four days. The morning on which they expect to operate the ether is given following the usual enema, without the patient's knowledge. The mixture given is one part olive oil to three parts ether, one ounce of the mixture to every twenty pounds body weight of the patient. If narcosis is too profound, aspirate the ether and wash out the bowel with a simple enema. An incision or dissection is made down to the thyroid, the incision being packed with gauze and the wound drained for several days or until sufficient poison has been eliminated to render the removal of the gland less hazardous. With all due respect to Dr. Morris, I do not believe this method will appeal to the majority of surgeons.

I have treated a series of forty cases which include simple, hyperplastic atoxic, hyperplastic toxic, cystic, non-hyperplastic atoxic and non-hyperplastic toxic. Eliminating the cases that were so toxic that they were operated on as early as consistent with safety, my percentage of permanent cures is a fraction over 90. I realize that the number is too small to be of much value, yet the results were so encouraging that I shall continue the treatment until I am con-

vinced that there is a better method.

The technic of injection. Use a Record or a Luer syringe of not less than 5 cc. capacity, to which is attached a needle two inches long of small caliber. After boiling needle and syringe, the site of the injection, usually over the isthmus, is touched with iodine. The skin is picked up with the fingers and brought well up on the shaft of the needle before inserting into the gland substance. The mass of the gland is then located by palpation and frequently may be grasped and held while the needle is introduced into the substance of the gland. The patient is asked to swallow. If the needle is properly inserted, it will move with the tumor mass during the act of deglutition. Then slowly inject from 60 to 100 minims of the 5 per cent. phenol solution into the gland substance. The patient will have a feeling of faintness lasting about one to two minutes. The only pain is that of the ordinary hypodermic injection. There is a slight reaction to the injection, noticed by a feeling of soreness and a slight swelling of the gland. This completely subsides in a few days and it is advisable to wait a week or ten days before repeating the injection. By measuring the neck you will notice a continual decrease in size until all enlargement has disappeared.

From my experience with the series of cases I have drawn the following conclusions:

(1) Hyperplastic, non-toxic goiters respond most readily to this treatment.

2. Where toxemia is present use iodine guardedly and for a short time only. If improvement is not marked early in the treatment, discontinue and advise operation.

3. On cystic goiters the treatment has little or no effect.

(4) Exophthalmic cases are best treated by rest in bed, quinine hydrobromate and ergotin internally, with operation as soon as toxic wave has subsided.

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#### MEDICAL TREATMENT OF PEP- TIC ULCER.

DR. LUDWIG KAST, New York.

It is necessary to be clear as to which

patients should be treated medically and which should not. "Surgical with delay" are (1) cases of perforated ulcers, and (2) repeated serious hemorrhages. "Surgical as soon as feasible" are (1) chronic ulcers, needing preparatory, rigid medical treatment; (2) indurated ulcers; (3) penetrating ulcers and hour-glass contractions, and (4) cases offering suspicion of malignancy. "Borderline cases" (1) with no facilities for medical treatment; (2) neurasthenic cases, particularly those dependent on anodynes. The condition in all surgical cases is improved by previous medical preparation. Medical treatment is directed chiefly toward reducing gastric secretion and neutralizing hydrochloric acid as much as possible. Some points in the treatment are: covering and protecting the ulcerated surface by use of bismuth; giving of acid-binding foods; giving of alkalis; checking of gastric secretion; by proper arrangement of diet, avoidance of foods that stimulate gastric secretion. If after several weeks of medical treatment the patient is still dependent on a restricted diet, surgical treatment should be resorted to.

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#### MISTAKES IN DIAGNOSIS OF EPI- DEMIC MENINGITIS.

In the first of the three cases related the symptoms at first indicated merely a traumatic purulent ophthalmia suggesting danger of involvement of the meninges. In the second case, malarial fever, probably of the pernicious type, was diagnosed, and in the third, left purulent otitis media, threatening likewise involvement of the meninges. All these patients complained of intense headache, but at different points in the head; dermatographism was pronounced and the temperature high. Pisano exclaims that these three symptoms alone should have suggested the proper diagnosis or at least have called for lumbar puncture to aid in differentiation. The first and third patients recovered but the second died. His disease had run along for four days without suspicion of meningitis, and hence without specific serotherapy. Baccarani has recently

published some cases of what he calls *meningite ritardate*, in which the symptoms at first led to the diagnosis of typhoid or rheumatic sepsis. There was intense headache in all his cases, but as it was not restricted to the back of the head, it was not ascribed to meningitis. In Pisano's cases the meningitis was not suspected until the sixth, fourth or fifth day of the disease.—*Jour. A. M. A.*, 6-9-17.

### DIABETES IN CHILDHOOD.

H. Kleinschmidt (*Medizinische Klinik*, December 3, 1916) calls attention to the fact that this form of diabetes may be mild or moderate as well as severe, the latter being the type usually met with on account of the failure to recognize the condition early in its course. In juvenile diabetes there is also a marked tendency toward the development of acidosis, which must be combated by the free administration of alkalis to the point of keeping the urine constantly alkaline. The greatest difficulty is encountered in the proper regulation of the diet in cases of diabetes in early life on account of the high caloric requirements of the growing child. One should begin by prescribing a diet containing two grams of protein for older children or three grams for younger ones for each kilogram of body weight, given in the form of meat, eggs, and cheese; an abundance of vegetables and fruit; 100 grams of bread, potato, or oatmeal; and fat, mainly in the form of butter, to make up the caloric requirement. With this as the basic diet one can then easily determine the carbohydrate tolerance by gradual reduction in that portion of the ration. If it is necessary to exclude bread or potato entirely one should give some form of diabetic bread as a substitute. The fulfillment of these restrictions will depend largely upon the obedience of the child and in refractory children it will not infrequently be almost impossible outside of a hospital. After getting the patient sugar free the carbohydrates may be restored gradually until the point of acquired tolerance is reached. In young children it is often possible to restore almost normal toler-

ance by proper dieting, but even under such conditions the child remains a latent diabetic and can easily be thrown back into his original condition by intercurrent diseases of almost any form and must, therefore, be sedulously protected from such an accident, since the subsequent restoration of tolerance is increasingly difficult with each setback. In the severe types it is often impossible to gain complete freedom from glycosuria through simple gradual reduction in the carbohydrate intake, and in such cases absolute rest in bed must be combined with the strictest dietetic regulation possible with the further introduction of frequent "green days" and the most rigid limitation of the protein intake to that in the yolks of eggs. The "oatmeal cure" can often be used in combination with these restrictions to advantage. All drug therapy, except the administration of alkalis for the control of acidosis, is wholly unavailing in diabetes in children.—*N. Y. Med. Jour.*, 3-24-17.

### PYORRHOEA ALVEOLARIS.

ETIOLOGY, PATHOLOGY AND TREATMENT.

By ARTHUR H. MERRITT, D. D. S., N. Y.

The statement that pyorrhœa alveolaris was caused by *Endameba buccalis* has been shown by recent investigations to be unfounded. It is true that amebæ are found in pyorrhœal lesions, but they are also found in healthy mouths, even in the mouths of children who are not subject to the disease. As might be expected under these circumstances, emetine has not proved to be the cure all it was heralded, not because it is not an efficient amebicide, but because the ameba against which it was directed sustained no causal relation to pyorrhœa.

The role played by pyorrhœa in metastatic infections has led to a more careful study of its etiology, pathology, and treatment. A review of the best present day literature on the subject shows that pyorrhœa is a disease affecting primarily the investing tissues of the teeth,

the gums, gingivæ, alveolar process, cementum and pericementum. It may be defined as a progressive resorption of the alveolar process and pericementum with a coincident recession of the gums and the formation of pockets. It always begins at the gingival margins, progressing slowly toward the apex of the root, resulting in the final exfoliation of the teeth, unless arrested by treatment. With the formation of pockets, infection takes place, giving rise to its classic symptom, pus discharge. This symptom is not always present, at least not microscopically, due possibly to shallow or wide open pockets, as a result of which the discharge is washed away by the saliva as fast as formed, or to an inactive phagocytosis, or both.

Careful comparative examinations have shown that the bacteriology of pyorrhœa is qualitatively not unlike that of the normal mouth, though there is, as might be expected, a great quantitative difference. Spirochetes, cocci of every known strain, and Vincent's fusiform bacilli are among those always present in large numbers. There is no evidence that any of these sustain a causal relation to the disease.

The etiology of pyorrhœa has been obscured by the fact that in every case there are always several causes. Certain diseases such as diabetes, tuberculosis, syphilis, etc., may act as predisposing causes. Heredity may also act in this way. Of these, in their possible relationship, relatively little is known. It is possible that they are not large factors in the absence of local exciting causes. Their most probable influence is that of prejudicing prognosis. The local causes are more obvious. Of these perhaps the most potent as a predisposing factor is malnutrition of the investing tissues of the teeth. The modern habit of eating prepared foods entailing little or no exercise of these tissues, together with the fact that they are endorgans, make them peculiarly susceptible to trophic disturbances. Another important factor is occlusion. Teeth may be in normal occlusion in the sense of being straight, and at the same time the stress to which they are subjected in mastication be of such a nature as to

produce an actual trauma of their investing tissues. This factor is practically always present in pyorrhœa. A very potent exciting cause is gingival irritation. This may be produced by tartar, food debris, uncleanness, ill fitting crowns, fillings, etc.; in a word, failure in intelligent care of the mouth. It is not by any one of these but by a combination of them that pyorrhœa is caused.

Treatment consists in a careful examination of each case to ascertain its individual causes. This involves a consideration of possible systemic complications, the correction of occlusion, the removal of gingival irritation, and the establishment and maintenance of a high standard of mouth hygiene, including vigorous brushing of the gums. While the omission of any link in this chain would spell failure, the most important and the most difficult to achieve is the removal of irritants upon the affected roots. This means not only the removal of all calcareous deposits by instrumentation, but the complete removal of the necrotic pericementum thereby permitting the living cells of the cementum to lie in physiological contact with those of the surrounding soft tissues. When this is properly done, reattachment takes place, pockets are obliterated, new bone is deposited about the roots as shown by roentgenograms, the teeth become firm and health is reestablished in these tissues. Only such results can be regarded as a cure.—*N. Y. Med. Jour.*, 3-24-17.

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#### IMPROVED TEST FOR INDICAN IN URINE.

The qualitative test for indican described by Askenstedt is a simplified procedure of his quantitative test published in 1912, and is offered to those practitioners who can not afford the twelve minutes necessary for a quantitative determination. Dilute the urine until it has a specific gravity of 1.005. For example, if urine shows a specific gravity of 1.017, dilute five parts of urine with twelve parts of water; if its specific gravity is 1.021, dilute five parts of the urine with sixteen parts of water, etc., corrections being made for temperature.

An exception is made for diabetic urine, which is diluted until its urea content is 0.5 per cent. Place 10 c.c. of the diluted urine in a test tube and warm over a flame until the lower end of the tube begins to feel hot to the hand. Then add 8 c.c. chloroform and mix by shaking a few times. Ten cubic centimeters of a solution of 0.4 per cent perchlorid of iron in concentrated hydrochloric acid (Obermeyer's reagent) is now added and, with the tube duly stoppered, quickly extract the indigo by shaking the tube two minutes, holding it in a horizontal position. By releasing the stopper once or twice during the procedure, squirting will be prevented. After this, let the chloroform fall to the bottom of the tube, then pour off most of the supernatant fluid, fill the tube nearly full with water, invert it a few times to wash the chloroform, and let it again precipitate in the tube. If indican is normal in amount, the chloroform will remain white or show a mere trace of blue. Any increase in blue exhibits a proportionate excess of indican. The reading should be made as soon as the chloroform is precipitated, for on standing the chloroform slowly becomes transparent, with an increase in the shade of blue when present.—*Jour. A. M. A.*, 6-9-17.

#### PREVENTION OF PEDICULOSIS.

Gunn's plan is to dip the undervests, which are made of buttermuslin, in a solution of naphthalene and sulphur, 1 per cent of each in benzol. The benzol evaporates in a few minutes and leaves the garments impregnated with sulphur and naphthalene in minute particles. Undervests so treated do not cause any irritation when worn next the skin, and they retained the naphthalene and sulphur sufficiently long for practical purposes. By this method those substances not merely are deposited on the surface of the garment, but actually penetrate the fiber. When benzol became unobtainable, the second grade of petrol was used instead. The latter does not seem to be quite such a good solvent, especially for sulphur; but in either case it is well to allow at least twenty-four

hours for solution, the substances being used in fine powder. The solution can be made with sufficient accuracy by using an ounce and a half each of naphthalene and sulphur to 1 gallon of benzol or petrol.—*Jour. A. M. A.*, 6-9-17.

## Surgery

### CARREL METHOD OF WOUND STERILIZATION.

William O'Neill Sherman (*Pennsylvania Medical Journal*, June, 1917), after a study of this subject abroad, reaches the following conclusions: That solution should never be heated; it should never be applied to or used in the eye or intravenously because of its hemolytic action; it should be kept in a cool place away from exposure to light; it should never come in contact with alcohol. Infection can be aborted if the treatment is begun within the first twenty-four hours. If suppuration is established, it can be controlled if the focus is reached. The success of the treatment depends upon the perfection of the Carrel technic and the acceptance of all the details. The effect of Dakin's solution is entirely local. There is no danger of toxemia from absorption, no matter how large a quantity is used. Carrel's technic, using Dakin's solution may be regarded as a specific against infection.—*N. Y. Med. Jour.*, 8-18-17.

### AMPUTATIONS AS CONSIDERED FROM THE ARTIFICIAL LIMB POINT OF VIEW.

Thomas Openshaw (*Lancet*, June 16, 1917) says that an artificial member can be fitted to any portion of the upper extremity, but that if even a single finger or the thumb can be preserved on the hand this is vastly preferable to its loss. No amputation through the wrist joint should be done if it is possible to leave any portion of the hand. The most satisfactory site for amputation through the forearm is at the junction of the lower and middle thirds. At least two inches of the ulna, below the tip of the

olecranon, must be left or the amputation should be done above the humeral condyles. Amputation through the elbow joint is never one of election, but if it must be done the condyles should be removed from the humerus to permit the fitting of a proper socket. The site of choice for amputation through the arm lies in the zone between one and one-half inches above the elbow and three below the fold of the axilla. In the shoulder it is better to remove the head of the humerus than to leave it, but an artificial limb can be fitted to the shoulder under any circumstances by means of a moulded leather cap. Such a member can be moved fairly freely by means of attachments which are pulled upon by movements of the opposite arm. In amputations of the toes specially made boots give good function. The most satisfactory amputation about the ankle point is the Syme and it is ultimately required in almost every case where other forms of amputation have been done previously. The best amputation through the leg is one four or five inches below the upper border of the tibia, the fibula being cut about half an inch shorter. In such amputations it is absolutely necessary to keep the knee joint straight or a further amputation may be required. If as little as one inch of the tibia can be saved it gives a better result than amputations through or above the knee joint. Transcondylar amputation gives a good result if the bone is well covered and its edges rounded off. At least two inches of the femur should be left below the small trochanter or it is almost impossible to fit any form of artificial extremity. If as much as this cannot be left the amputation should be made through one or the other trochanter, or the bone should be exarticulated, the latter being the preferable procedure.—*N. Y. Med. Jour.*, 18-18-17.

#### DECALCIFICATION OF BONES IN WAR TRAUMATISMS.

E. Delorme (*Bulletin de l'Academie de médecine*, May 8, 1917) in examining 1,350 bone radiograms accumulated at the Grand Palais, Paris, found more or

less extensive osseous decalcification in one-half of all injuries of the metacarpus, radius, humerus, tibia, and both bones of the leg, in a little over one-third of the injuries of the femur, and in one-fourth of the injuries of the ulna. These do not, of course, comprise recent cases in which the bone disturbance has not as yet had time to become established. The importance of nerve injury as a factor in the decalcification is illustrated in that among fifty-four cases of old nerve injuries in the upper extremity, forty-one showed bone decalcification. Again, among thirty-seven cases of injury of the sciatic nerve or its branches, twenty-three showed decalcification. While injuries of large nerve trunks seemed especially potent as a factor in this condition, several plates showed marked trophic bone disturbance where very small nerves could alone have been injured. Of seven cases of ligation of a large arterial trunk, only one showed a slight decalcification. As a rule, the decalcification is of such a type as to render the affected bone more transparent to the X-rays, the outer layer of the bone, however, standing out more prominently—though narrower—than usual. In some instances, however, especially in the short bones, the changes consists merely in the assumption of a dark, soiled appearance throughout the bone, with the cortex less clearly defined and the bone as a whole streaked with linear, longitudinal dark spots, alternating with paler intervals or blotches. Careful comparison of plates seemed to show that this condition represents a preliminary stage of the bone disorder, passing later into the more definite decalcification already referred to. In the treatment of bone decalcification, to which as yet little attention has been paid, electrical procedures seem to have proven inefficient. Administration of phosphates, lime, magnesia, iron, silica in the form of mineral waters, and appropriate foods, together with arsenic in small doses, as recommended by Robin, is expected to give better results.

## DEVELOPMENT OF PARAFFIN TREATMENT OF BURNS AND OPEN WOUNDS.

Torald Sollman (*Journal A. M. A.*, June 16, 1917) expresses the belief that simple paraffin will accomplish all that the various paraffin mixtures will and that the most promising field for further improvement lies in the direction of the selection of the paraffin itself. The most suitable form for use should be more ductile and pliable than the official preparation, and there are on the market several commercial paraffins which are superior to the official substance in these respects. The paraffin should be liquid at a temperature of 50° C. or below and a thin film should be pliable at 28° C. and ductile at 31° C. Antiseptics and epithelial stimulants such as resorein, betanaphthol, volatile oils, and sudan, red, are of no value as additions to the paraffin since they are so firmly bound up in it when it cools as not to dissolve out and come into contact with the denuded surface. The application of the molten solid paraffin to raw surfaces is often somewhat painful, but this can be entirely overcome and equally good results secured by applying liquid paraffin as the first coat, over which cotton is spread and the solid paraffin painted on in the usual manner. This use of liquid petrolatum for the layer in immediate contact with the raw surface also opens up the possibility of applying local anesthetics, antiseptics, or epithelial stimulants. Where these are not soluble in the petrolatum, they may be dissolved in some olive oil. For this purpose such substances should be tested as the following: chloretone, 1:200 to 1:1,000; orthoform-new, one per cent; camphor, from one to five per cent; menthol, ten per cent; oil of eucalyptus, resorcin, betanaphthol, gentian violet, and scarlet red. It may be advantageous in some cases to color the paraffin a flesh tint for cosmetic reasons. This can be readily accomplished by the addition of a trace of either scarlet red or sudan. J. R. Beiter in the same issue reports his extensive experience with the paraffin treatment, according to the usual method as well as with Sollmann's

liquid petrolatum paraffin sequence. He finds that the latter method is far preferable to the direct application to the wound surface of molten paraffin, and that both paraffin methods are far superior to any other method of treatment. It is inexpensive, comfortable, and clean; it splints the wound and is easily changed and the dressing does not adhere to the granulations so that its removal does not interfere with healing and epithelization. The paraffin treatment does not, however, yield softer scars than other methods where there has been extensive destruction of the deeper skin layers. The technic for the application of the paraffin dressing is to clean carefully the burned area, open all blebs, cut away loose skin, thoroughly dry the burned surface with ether or by exposure to the air, and then to apply a thin film of the laid and painted with petrolatum, the melted paraffin or of the liquid petrolatum. Over this a thin sheet of cotton is edges being sealed to the skin.—*N. Y. Med. Jour.*, 8-18-17.

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The unfortunate results of late operations in cancer were due to the fact that a diagnosis of cancer was not made, until a demonstrable and palpable tumor had developed and the disease spread all through the system. The present day horror of cancer that exists in the lay mind is based on the distressing results of surgical operations—and for that matter of every other known method of treatment—in such late and advanced cases.

In early cases surgery offers the greatest chance for cure to the patient. Early operation however postulates early diagnosis by an expert surgical pathologist. About sixty years ago the first laboratory was erected in connection with internal medicine. It is to be hoped in the future no hospital will be found without a laboratory of biopathology adjoining the operating room.



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## THE CARE OF INJURIES WITH PARTICULAR ATTENTION TO THE REPAIR OF TENDONS.

By J. A. GUTHRIE, M. D., Huntington,  
W. Va.

*Read Before Meigs County Medical Association at Pomeroy, O., April, 1917.*

Every physician, and particularly the general practitioner, during the year's work, comes in contact with a great many injuries. The mine and the factory physician are now equipped with some hospital facilities and have become expert in handling injuries of this kind. There is a large number of physicians who do not have access to hospitals and who are located remotely from their fellow practitioners, who must cope with these injuries unassisted. Upon the proper treatment of these injuries depends the use of the patient's limb and his ability to be self-supporting and to be a support to those depending upon him.

In the past a badly injured foot or arm was promptly amputated. If the bones were badly fractured and the tendons severed the limb was usually sacrificed. Even in a finger where some of the tendons were cut, loss of function resulted and the finger was usually taken off to get it out of the way.

What can the doctor do to increase the efficiency in the treatment of injuries?

First and foremost, he must have sterile dressings and sterile ligatures. He may obtain gauze, sterilized and put up in jars or he may buy it put up in sterile wrappers. He may have a small steam sterilizer and purchase gauze in bolts of 100 yards and during his leisure time cut and fold the gauze in the desired sizes, pack in folders of heavy muslin two layers thick, sterilize them and carry them with him in his ordinary grip. I have found this to be the most satisfactory in my own practice. He may obtain his ligature material sterilized in glass tubes with the needle threaded. Silk worm gut and horse hair should be used for the skin and tissues where the ligatures can be removed. For the buried ligatures kangaroo tendon, chromicized cat gut and silk are the best.

Instruments are sterilized, preferably by boiling in water. If this way is not convenient they can be immersed in alcohol or lysol solution. The site of the injury, if covered with grease, oil and dirt, is washed off with gasoline and as much foreign matter as possible is removed. We must remember that dirt and grease and the ordinary foreign matter found in injuries is not really infectious. The source of infection in nearly all injuries is usually from the

doctor or from unclean instruments and dressings.

Unless the vitality of the tissue has been destroyed pus should not result in accident cases. The parts are now thoroughly painted with tincture of iodine over the entire injury and for quite an area around the injury. In badly torn and bruised tissue, tincture of iodine is poured into the tissues. Do not use water upon injured tissues either at the time of the injury or later. It has been proved that injuries do not heal as well when water is used and that more cases are followed with infection. Injured tendons and muscles are then repaired if possible.

A brief review of the structure of the tendon may be of benefit here. Tendons are made up of white fibrous tissue. They consist of long silvery white, glistening cells, covered by a loose cellular tissue called the peritendineum, which carries the nerves and blood supply. The peritendineum dips down between the fibers and is the only blood supply the tendons receive. The entire bundle of tendon fibers is enclosed in a sheath.

At the time of the injury these tendons can usually be brought together and are best sutured with kangaroo tendon. The sutures are placed as far from the seat of injury as possible as a tendon fiber easily splits.

Sutures are passed transversely through the tendon and back parallel to the first stitch about the same distance from the end but a little to the side of the first stitch. A half knot is tied, not too tight. The suture is now passed through the other end of the cut tendon in a similar manner. The assistant holds the ends of the tendons together and the ends of the ligatures are tied together. It will be seen the pull of this suture is obliquely across the fiber of the tendon. Through and through sutures may be necessary to approximate the ends. The number of stitches placed depends upon the size of the tendon and the amount of strain placed upon it. The sheath is carefully sutured together over the seat of the injury. The sheath aids in the regeneration of the tendon fibers as does the periosteum of the bone. It also pre-

vents adhesions and allows the tendons to move freely, giving better functional results. The limb is placed in a position that will relax and remove all strain from the tendon and a splint is placed to hold it in position and to immobilize the limb. The important things to be borne in mind in tendon suture, stated in the order of their importance are: (1) asepsis, (2) preservation of the peritendineum, (3) approximation of the ends, (4) restoration of the tendon sheath, and (5) dryness of wound.

All torn muscles are repaired and the skin closed with some non-absorbable material such as silk worm gut or horse hair. A dry dressing is placed and it is not changed for several days unless we have indications of infection as temperature or the discharge of pus.

It requires usually about six weeks for a tendon to become thoroughly healed and ready for use. After two weeks the limb is removed from the dressing and manipulated carefully and the dressing is replaced. This is done every three or four days and finally the dressing is left off at the end of about the fourth week. The secondary repair of tendons is the repair of those that were not united at the time of the accident or failed to unite as a result of pus or for some other reason. When tendons are not repaired at the time of injury the muscles drag the tendons away from the seat of the injury and they become permanently shortened. Connective tissue fills in around the tendon sheath and adheres to all the surrounding tissue and sometimes unites the tendons, usually without functional results. The secondary repair of tendons is much more complicated than the primary repair. If the case comes to you some days after the injury and is infected, with pus, it is useless to attempt to make repair at that time. Tendons and bones will not unite in the presence of pus.

To do a secondary repair of tendons the parts are prepared by shaving, cleansing the parts thoroughly, painting with tincture of iodine and placing a sterile dressing on the parts for twenty-four hours.

At the time of the operation the sterile dressing is removed and the parts

are again painted with iodine. Ample incision is made, giving plenty of room. The connective tissue is dissected from between the ends of the tendons. Considerable shortening of the tendon is found and some plan must be decided upon for lengthening and uniting the tendon.

Quite a few experiments have been tried. For instance, two heavy silk ligatures have been passed through the end of each torn tendon and the young tissue has grown along this bridge. This way has proven quite a success. Another method is by lengthening the tendon. The shortening as ascertained by measurement. The same distance is then measured off on one end of the tendon or enough off the two ends to correspond to this distance. The tendon is then cut a third or half way through at this point and the fibers split almost to the end. The flap thus made is sutured to the other end of the tendon. This forms a bridge along which the tendon grows and it eventually becomes its original size.

Another method of repairing tendons is by removing an autogenous graft from some other tendon of the patient's body and suturing it into the space to be repaired. The same principle is carried out in regenerating bone and is found very satisfactory.

In repairing a tendon in this condition we have no sheath left. To replace this lost sheath we suture the loose fatty tissue around the injured tendon and it forms a very satisfactory sheath allowing freedom of motion. The after care is the same in this case as in the primary repair of the tendon.

#### TUBAL PREGNANCY.

By DR. J. R. LITTLEFIELD, of Cumberland, Md.

Read Before the Eastern Panhandle Medical Society.

We are more interested in Tubal Pregnancy and the chain of events that follow in its wake than any of the other forms of Extra Uterine gestation—more especially since all begin as Tubal Preg-

nancies.

The cause of the condition is the arrest of the impregnated ovum in its passage to the uterus. This may occur at any point in the tube, due to a mild salpingitis, which has destroyed the tubal cilia or a swelling of the mucosa, to kinks within the lumen of the tube as a result of adhesions or the persistence of some of the spiral twists which are normal in the embryo, tumors within the tubal wall or adjacent structures.

When the fertilized ovum becomes attached to the tube wall certain changes are inevitable, marked primarily by a hyperemia of the tube, which leads to some swelling and an increased growth of the structures of the tube wall. The stromal cells of the mucosa enlarge and become the deciduae cells; and the muscular elements of the tube near the attachment of the ovum hypertrophies. In addition to the thinning of the tubal wall caused by the constantly growing ovum the wandering trophoblastic cells are penetrating the tissues of the tube causing a weakening of its structures at this point, and inviting an early rupture. This condition may continue uninterrupted for a period of from three to ten weeks.

During the latter half of this period one of two surgical accidents occur. Either a tubal abortion or a rupture of the tube. It has been shown that 50 per cent of the cases abort and that it usually occurs about the sixth week, and if it goes over this period a rupture will occur.

From a pathological standpoint—and in a measure—clinically, we may have the following classes:

1. Tubal pregnancy without rupture.
2. Ruptured tubal pregnancy.
3. Tubal abortion.
4. Interstitial pregnancy—that is within the body of the uterus but outside of the uterine cavity.
5. Abdominal pregnancy.

If we could always recognize a tubal pregnancy before rupture or abortion it would be unnecessary to consider the surgical calamities that follow these accidents; but unfortunately we are rarely consulted by our patients before the accident has occurred.

I am sure that there is no class of cases with which the general practitioner has to deal which calls for greater tact, better judgment, and a higher degree of diagnostic skill than these cases.

The symptoms before rupture are so vague and indefinite as to make a positive diagnosis the exception and not the rule. At best they are only the uncertain early signs of pregnancy—suppressed menstruation, morning sickness, soreness and slight enlargement of the breasts and softening of the cervix.

There may be some soreness in the pelvis—either general or localized upon one side, but it is not severe enough to arouse suspicion of anything abnormal as it is very common to have the same condition during a normal pregnancy. A vaginal examination will reveal some tenderness upon one side and possibly a small mass due to the enlargement of the tube—this is the only positive evidence we may find to justify our suspicion of tubal pregnancy should we have any at the time. But even this may be due to a salpingitis which is aggravated by congestion.

Personally I believe but very few cases are positively diagnosed before a slight hemorrhage has occurred. This may be very slight and cause but little disturbance, but is sufficient to give a few sharp pains—persistent soreness and the markedly tender mass without apparent cause—the three symptoms that are of such diagnostic importance after rupture has occurred or abortion.

After rupture of the tube the clinical picture will depend upon the degree of hemorrhage. The symptoms may be characteristic and obvious or the reverse.

The symptoms that point to the condition are missed menstruation in a patient usually regular. Sudden onset of pain usually severe enough to confine her to her bed and occasionally of a degree sufficient to cause collapse. A bloody discharge from the cervix—as a rule this comes on a few days after the onset of pain and may cause the suspicion of a miscarriage.

Evidences of internal hemorrhage and if this is profuse she may go into collapse within a short time after the onset of pain. A vaginal examination at this

time may reveal nothing of importance except tenderness as the blood has not yet clotted and is not palpable until it does clot, and indeed the examination should be made with the greatest gentleness lest we start the bleeding anew or aggravate it if it has not yet ceased. If the patient is seen a few hours after rupture I have found a sign brought to my attention by Dr. Claybrook to be of the greatest value, *i. e.*, the heart and respiratory sounds are distinctly audible over the lower abdomen. Later we find upon vaginal examination a mass in the pelvis—distinct tenderness, rigidity of the lower abdominal muscles, but slight temperatures rarely above 102 and upon investigation an empty uterus, although we should remember that a uterine decidea forms in these cases. After some days of rest in bed and an apparent improvement there is a return of the hemorrhage with its train of symptoms.

In the case of abortion the acute symptoms are of lesser degree, the pain is not so acute and the hemorrhage not so profuse but the picture is practically identical.

None of us who have seen a case with a sudden and profuse hemorrhage in to the abdominal cavity are likely to forget the urgent and striking appearance of the patient.

When we are confronted with the treatment of cases before rupture or the cases that have ruptured and suffered a moderate hemorrhage but are in good condition at the time we see them the treatment is very simple—abdominal section in a well conducted hospital.

In those cases of profuse intro-abdominal hemorrhage immediate abdominal section is advisable as a general rule provided they are within easy reach of suitable surroundings and facilities—but if these are not present the operation had best be deferred, and the patient closely watched.

While the teachers and writers of text books have placed marked emphasis upon the necessity of immediate operation in this class of cases I do not believe that we are justified in indiscriminate operating. As a matter of fact—while the condition confronting us is a grave

one, and one that will prove fatal if left to itself, there is but a small percentage of fatalities from the immediate loss of blood if we are to accept the mortuary records.

It is the peritoneal irritation and inflammation as the result of the repeated hemorrhages that constitutes the greatest menace to these women.

If the condition of the patient is such that an immediate laparotomy is justified I believe that she can be safely transported to a hospital provided she can be carried upon a cot with no more disturbance than if she were lying flat in bed.

While we are waiting for the rebound the danger of a recurrence of the hemorrhage is great and the patient is better off in the hospital. In those cases so situated as to forbid immediate operation—keep them in bed, absolutely quiet, not permitting any movements of arm or legs, no straining, avoiding enemas and purgatives and for the first 48 hours do not permit a bowel movement if possible to prevent. Give but very little food—thirst may be relieved by small quantities of water repeated often and tap water per rectum thirty drops per minute through a small rubber catheter. Avoid over stimulation and saline infusions.

Morphine and small doses of Atropine Sulph hypo. are probably the best drugs.

Within from forty-eight hours to ten days the patient's condition should permit removal to the hospital where proper treatment may be instituted. Her chances for life will certainly be equal and in all likelihood better if her case is handled in this way instead of an immediate operation at her home with poor preparation and surroundings for abdominal work.

I think that there are many cases of ruptured tubes that are not recognized. Cases in which there is but slight hemorrhage following rupture or abortion in which the foetus dies and the resulting hemorrhage is absorbed with the train of adhesions and slight pelvic symptoms being tolerated by the patient for a time.

I have felt on numerous occasions that I was dealing with the result of an ancient tubal rupture and not with a frank

case of salpingitis. The thickened and indurated broad ligament in which the tube is hopelessly buried and the ovary on the same side is buried in the adhesions but at the same time the tube and ovary on the opposite side are apparently normal.

Conditions such as this leads me to believe that there are a fair percentage of these cases that do not reach the operating room, but after a period of illness following the rupture of the tube and then months of complaint of pains and discomfort on one side of the pelvis she will eventually recover and assume her usual duties.

This is the class of cases in which we are unable to make an accurate diagnosis and the expectant plan of treatment is instituted and tolerated by the patient.

#### NEOPLASM OF THE INSULA ILLUSTRATING FOCAL DIAGNOSIS.\*

By TOM A. WILLIAMS, M. B., C. M.,  
Edin. Washington, D. C. Lecturer on  
Mental and Nervous Diseases Howard  
University; Neurologist to Freedmen's  
Hospital and Epiphany Dispensary;  
Corresp. Mem. Soc. Neurol. et Psychol.  
de Paris; Corresp. Nat. Acad. Med.  
Med., Rio de Janeiro.

A preacher and farmer, aged 46, of peculiar family was seen near Winchester, Va., in consultation with Dr. Stuart of that town. Two years before, he had a prepatellar bursitis, the infection of which spread and laid him up for six weeks. Sixteen months after this his wife conceived, after a lapse of twenty-three years. She became emaciated and very ill, which caused great anxiety to him and which culminated in a labour of forty-eight hours, during which he stayed up in agony. After this he collapsed, and a state of confusion persisted until I saw him. There was a history of dysarthria, with drawing of the mouth and a clumsy feeling of the tongue. Constipation, nausea and occasional vomiting, and soreness of the head had led to a suspicion of auto-toxemia. Torpidity and slow response had increased this suspicion. But the failure to find his words clearly during the preceding few

weeks, inequality of the pupils, and increased knee jerks led Dr. Stuart to suspect a lesion of the brain, and I was sent for.

Further interrogation led to the admission by his wife that the quality of his voice had become different for the past six months. That drowsiness had been noticed for a year, that his power of thought had seemed diminished and that peculiar sensations had been complained of in the right hand for six months. The urine was normal; blood pressure 109.

Examination. Motility—mouth deviated to the left when opened, the right side did not open fully. Tongue pointed to the right. The right arm could scarcely be moved, the grasp very weak, the right leg could hardly move, and the left could not be raised from the bed. The contralateral pressure of the right heel was feeble. The muscles of the right leg were firmer than those of the left; otherwise topus seemed normal. The patient veered to the right in walking. He spoke only with great difficulty and rarely, and volitional phonation was not accomplished at all.

Reflexes—The right abdominal reflex was absent, the cremasters equal, the plantar reflex was flexor to stroking, but extensor to sural pressure. The left plantar was slightly flexor. The patellars were slightly increased, especially the right. The right radial and triceps were increased, the iliac and inauxiliary could not be elicited.

Sensibility—No defect could be found, even the sense of attitudes appearing intact. The pupils were unequal, reacted to light. The optic papilla was normal.

Psychologically, the understanding seemed complete. There had been no abnormal emotional reactions except worry about his wife's condition.

Summary—The grounds for diagnosis were the history of the right arm, paraesthesia, the history of dysphonia, the history of torpor, headache, nausea, and vomiting, the presence of aphemia and right sided spastic hemiplegia, poroplegia, and unequal pupils, the absence of kidney disease, and arteriosclerosis; the normality of sensibility and the understanding of the spoken and written word,

with conservation of intelligence.

The factors not germane to the diagnosis were the family history of peculiarity, the infectious bursitis, the long anxiety and lack of sleep during his wife's illness.

Diagnosis—The diagnosis of neoplasm of the Island of Rei was made with great confidence in spite of the absence of paploedema, very violent headache or severe vomiting. The reasoning was based upon the very clear history of sudden lapses in motor speech during preaching, months before worry or general ill-health had occurred; the paraesthesias and clumsiness of the right hand, while he was otherwise well, and the signs elicited at the examination, which indicated impairment of the motor projection fibres and the motor speech fibres. The fact that the arm fibres had been implicated so long before the leg was affected showed that the lesion was not in the capsule, but was either cortical or subcortical. A cortical lesion would not have led to impairment of speech until it reached the left inferior frontal region, long before which it would have caused a severe brachial paralysis, which had not occurred. Therefore with regard to the arm fibres the lesion must be between the capsule and the cortex in a position where it could implicate fibres going to the speech apparatus. Such a position must impinge upon the Island of Reil and it was therefore to that region that the lesion was attributed.

In case the neoplasm were upon the surface of the Island and therefore accessible, osteoplastic craniotomy was advised rather than a mere decompression which would not permanently improve the function of speech and arm.

The next day this operation was performed by Dr. Stuart and assistants.

In making his report Dr. Stuart wrote me the following letter:

"My compliments in which Dr. McGuire joins me. The tumor, a part of which I have mailed to you today was situated just above and internal to the Island of Reil and shaped like a flattened egg (and about the size of a duck egg) evi-

dently originated just outside of left lateral ventricle in white substance and pushed forward into the frontal area. The part I sent you was the anterior end and the only part showing any separation from brain substance at all. The balance, was infiltrating and showing no lines of demarkation except in color which was a pinkish gray, with small areas of brown stains (hemorrhages).

"Yesterday morning at ten o'clock I did a Hartley-Krause osteoplastic flap operation, exposing a large area from the Rolandic tissue forward two inches. Everything looked perfectly normal, except when the dura was turned down, and the brain pushed into the opening. Everywhere the brain was soft and pulsating. After the operation he never regained consciousness and died this morning at 11:30, twenty-four hours after the operation. He simply became more and more comatose and so died. He had several attacks of tremor in left arm and leg, but never moved the right side. Peculiarly about half an hour before he died the left pupil became widely dilated and the right one contracted down to a small point.

"Post mortem showed that the tumor was half an inch from cortex and before sectioning the brain we could feel absolutely no difference in density between the two sides and different parts of the same side."

It proved to be a glio-sarcoma, in the opinion of Major E. R. Whitmore, U. S. A., who made the histological examination. No discussion.

*\*Reported to the Medical Society January 10, 1917.*

#### APPENDICITIS AS A COMPLICATION OF PREGNANCY.

By AIME PAUL HEINECK, M. D., Chicago, Illinois.

Having had some personal cases in

which appendicitis complicated pregnancy, I was led to investigate the subject. I consulted the French, English and German literature of the last twenty years, pertaining to this condition. As a result of this study, I feel that the following conclusions are warranted:

1. Appendicitis occurs at all ages and in both sexes. It presents to all medical men important diagnostic, prognostic and therapeutic features.

2. Appendicitis acute, or chronic, initial, relapsing or recurrent, primary or secondary, complicates pregnancy with greater frequency than is believed. It is the most important complication of pregnancy.

3. It occurs in single and thin gestations; in first, early and late pregnancies; in primiparae, deutiparae and multiparae.

4. It occurs at all periods of the child bearing age and at all periods of gestation. It complicates both intro- and extra-uterine pregnancies and can coexist with other disease processes to which it may be primary, secondary or co-incident.

5. Gestation exerts no untoward influence upon the normal appendix. It can and frequently does aggravate existing, or determine new inflammatory disturbances in appendices deviating from the normal in form, length, mobility, location, etc., in appendices bound down by adhesions or the seat of the inflammatory or other degenerative changes. Pregnancy does not lessen the dangers of appendicitis; it aggravates them.

6. Appendicitis and uni or bilateral tubal pregnancy are frequently mistaken for each other. They may occur simultaneously or consecutively, may be either primary or secondary to, or independent of each other.

7. In appendicitis, in ectopic pregnancy and in combined appendicitis and ectopic pregnancy, of obscure symptomatology, it matters not whether you are certain or in doubt as to the real diagnosis, early and timely operative treatment is imperatively indicated.

8. During gestation, every type of appendicitis may occur; adhesive, gangrenous, ulcerative, obliterative, catarrhal, perforative and suppurative.

9. Appendicitis with adhesion formation is of great significance because adhesions of inflammatory origin can (a) incarcerate the pregnant uterus in the pelvis and mechanically hinder the enlargement of the uterus, (b) impair the contractibility of the uterus, (c) interfere with uterine labor contractions, (d) entail subinvolution, (e) induce sterility, (f) disturb tubal and ovarian integrity of function and of structure, (g) determine ileus, (h) produce abortion, and, (i) lead to extra-uterine pregnancy.

10. Chief among the coexisting pathological conditions noted in appendicitis are simultaneous or consecutive inflammation of the uterus, tubes or other pelvic organs. The close anatomical relations existing between the appendix and the pelvic organs explain their frequent association in disease processes.

11. Appendicitis had a greater morbidity and a higher mortality in the pregnant than in the non-pregnant, operated or non-operated. It may terminate pregnancy.

12. The symptomatology of appendicitis in the pregnant is the same as in the non-pregnant. The clinical picture however, is blurred by the coexisting symptoms of pregnancy. Diagnostic mistakes may be lessened by keeping in mind that appendicitis occurs in pregnant women; that a history of previous attacks during the same or previous pregnancies can frequently be elicited by thorough and deliberate physical examination. With care, one can in these cases almost always arrive at a correct diagnosis.

13. To establish with certainty the diagnosis of appendicitis during pregnancy, it is necessary to exclude the presence of myalgia due to stretching of abdominal muscles, typhoid fever, ruptured or non-ruptured tubal pregnancy, cholecystitis, salpingitis, ovaritis, adnexitis, ovarian cyst with or without a twisted pedicle rightsided pyelitis and ureteritis, fecal impaction, hepatic and nephritic colic. At times, any of the forementioned conditions so closely resemble appendicitis as to cause diagnostic errors and operative mistakes.

14. The morbidity and mortality of appendicitis complicating pregnancy

and the puerperium are the morbidity and mortality of delay in applying efficient surgical treatment. The initial symptoms of the attack do not enable the clinician to foretell accurately how a given case will terminate. What is going to happen in ten, twenty or forty hours following the onset of appendicitis cannot be foreseen. When the condition is diagnosed and remedied early, the mortality is practically nil. Abscess formation may be forestalled by early diagnosis and early operation. The high mortality is due to late diagnosis and late operation. The pregnant woman whose metabolism is good is a good subject for operative measures.

15. Prognosis is better for the mother if there be no interruption of pregnancy spontaneous or otherwise. The bad attacks cause abortions and abortion aggravates the illness. In the great majority of surgically treated cases there is no interruption of pregnancy and when it does occur it is not due directly to the operation. The interruption of pregnancy is not indicated. It aggravates the prognosis. The fetal prognosis is good in early operated cases.

16. The following prophylactic measures are sound and safe and are recommended for general adoption: (a) During the child bearing age, recurrent attacks of pelvic pain, dysmenorrhœa, menstrual and other pelvic disturbances unassociated with objective pelvic findings are not infrequently due to unrecognized appendicitis or sequela thereof. In the presence of this etiological factor, the ablation of the appendix is indicated. (b) In laparotomies for conditions other than appendicitis, the appendix should be examined. Should it present any deviation from the normal, its removal is indicated. (c) During the child bearing age, any woman who has had one or more attacks of appendicitis treated non-operatively should have her appendix removed so as to correct existing pathological conditions and prevent future attacks of appendicitis and complications incident thereto. True prophylaxis in a woman of child bearing age who has had one or more well marked attacks of appendicitis is an interval operation. It goes without saying that



constipation is to be avoided and that other hygienic precautions are to be observed.

17. A definite and accurate diagnosis of acute, chronic or recurrent appendicitis, irrespective of the stage of pregnancy, invariably calls for operation. The disease during pregnancy runs such a rapid destructive course that delay is hazardous. Operation should be early and immediate. A case may be rendered hopeless by hesitation and inaction. Temporizing methods are extremely dangerous.

18. Treat appendicitis in the pregnant female as you treat it in the non-pregnant. Every pregnant woman who is a subject of appendicitis should be operated on just as soon as the diagnosis is made, whether the attack is the first, second or third.

The unusual risks of leaving a diseased appendix in the abdominal cavity are much increased by the pregnant state and the evil consequences of another attack, *i. e.*, gangrene or perforation will be correspondingly greater. The danger of recurrence in the later months of pregnancy and in the child-bed period calls for operation preferably during the attack. If the patient is not seen in time, one will do the next best thing, an interval operation during the pregnancy. Pregnancy is an additional indication for operation in cases of appendicitis.

19. An inflammatory diseases of the appendix, the ideal operation is an appendectomy. In some cases, however, one has to be content with incision, evacuation and drainage of an appendiceal abscess. Exceptionally drainage of abscesses in Douglas' pouch may be affected through the vagina or rectum. Pus should be evacuated irrespective of the uterine contents, and irrespective of its location.

20. It is well to keep in mind that for an appendectomy the median incision is contradicted in the later months of pregnancy, that it is best to avoid or to reduce to a minimum the manipulation of the uterus; opiates are indicated in the after treatment. Labor when it occurs after a laparotomy is not to be unduly prolonged; it may have to be assisted.

## Miscellaneous Announcements and Communications

Bluefield, W. Va., Sept. 13, 1917.

Dr. J. R. Bloss,

Huntington, W. Va.

Dear Doctor:—

In reply to your letter just received, I am sorry to say that I have been unable to get together very little data for the program which I hope to have out in a few days. The following papers are the only ones I have had promised so far:

"*The Purchase of Hospital Supplies,*" by Maria H. Chappelle, Superintendent of Sheltering Arms Hospital.

"*The Duties of the Dietitian in the Small Hospital,*" by Miss Edna Brown, Superintendent McMillan Hospital, Charleston, W. Va.

"*Our State Institutions, Their Capacity, Purpose and Needs,*" by Dr. E. B. Stephenson, President of the State Board of Control.

"*Hospitalism, Causes and Treatment,*" by P. O. Clark, Ohio Valley General Hospital, Wheeling, W. Va.

With very best wishes, and hoping to see you at the hospital meeting, I am,

Yours very truly,

W. H. ST. CLAIR.

Camp Greenleaf, M. O. T. C.,  
Ft. Oglethorpe, Ga., Aug. 18.

Dear Doctor:—

Since my last letter things have assumed a somewhat brighter aspect as far as the state of West Virginia is concerned, and the state slowly but surely is foreing recognition among the other states which have contributed their quota of medical men to the service of our country. The state is gradually opening up its bosom to show the stuff of which our men are made from and it pleases me to say that we have at present about 35 men from West Virginia here. The men from West Virginia are:

Eugene Davis, Charleston; Atlee Mairs, Charleston; M. Mendeloff, Charleston, Dr. C. F. Grissinger, Gauley, W. Va.; Dr. Robertson, Hurricane; W. B. Robertson, Quincy; H. C. Sarver, Charleston; A. C. Lambert, Charleston; Dr. A. W. DeBell, Malden; Dr. J. S. Shaf-

fer, Cannelton; Ray M. Bobbitt, Huntington; D. B. Jarrell, Beckley; D. J. Cronin, Huntington; W. G. Harper, Beverly; Dr. W. H. McLain, Wheeling; E. C. Clay, Marlinton; H. W. Daniels, Elkins; C. F. Mahood, Alderson; G. L. Pence, Pence; M. Sutphin, Seth; M. Bittner, Martinsburg; R. L. Eltinge, Sterling; C. F. Sayre, Mason City; J. L. Vermillion, Princeton; W. H. Greene, Cameron; H. C. Hays, Princeton; C. E. Park, Parkersburg; H. L. Crary, Huntington.

So you see this is quite a bunch and we hope to make quite a creditable showing. I am informed that there are some more men here or expect to come in the next few days. The West Virginia doctors have taken up the work with the zeal and enthusiasm befitting true mountaineers and I have no doubt that when the time comes they will give a good account of themselves.

The work here has been rushed with increased momentum and quite often I am unable to see the crowd owing to lack of time.

My status is still undetermined and the next shake-up which will occur next week will perhaps get me out of this camp. About a month ago I renewed my application for service in Russia and I am inclined to think this to be the cause of my detention as the majority of the men who came with me have been assigned with various organizations.

Nothing new has transpired here, except for horse back exercise during which I was constantly on the lookout for a soft spot to land upon. However, I got along very well barring a sore back and parts lower down.

The other evening Maj. Richard Derby (Theo. Roosevelt's son-in-law), gave us a talk on his medical and surgical experience in France after the battle of the Marne and in Flanders. He said that the number of wounds from artillery has increased tremendously in this war and during the August of 1914, they constituted 72 per cent of all wounds, the same during Russo-Japanese war occurred in only eight and thirteen per cent respectively. During the battle of the Marne the sick and wounded were left to their fate. When the

fate of the country is at stake and existence is in the balance, there is no time to look after the wounded; it was later when the battle extended to Compiègne that the wounded began to drift into Paris, eight and ten days after the battle. At the time when he was there Paris had about 200 hospitals for the treatment of sick and wounded. He classifies wounds into two groups; primary non-infected, and primary infected. The first group comprises wounds from long range rifles fired at a distance of 2,000 yards, the small sharp bullet makes a clean wound, and if the bullet has not struck a vital organ, the wound healed *per prima* and the patient returned to the front in about four weeks. All the attention such a wound required was external dressing, as the chance for infection was from the outside, otherwise the wound required "masterly inactivity." In these cases the wounds of entrance and exit were alike. If the bullet struck the bone as in long shaft bones it would occasionally tunnel through, producing fissures in the bones. The bone did not suffer any extensive damage owing to the fact that at the range of 2,000 yards the bullet has lost its explosive power. In case of primary infected wounds caused by shrapnel shell shrapnel bullets and balls, bombs, and grenades or in cases of rifle bullets fired at a close range you had extensive laceration and horniation of soft parts, wounds of exit larger than wound of entrance.

When the bone was struck it caused extensive splintering and shattering with fissurization into the medullary canal, thus enabling infection to travel to a nearby joint. The infection in all these cases was due invariably to the colon bacillus owing to the infected terrain and the trench method of warfare where a man spends weeks or months in contact with dirt and mud. The infection travels quickly through fissures into the medullary canal and from there into the joint. He treats these cases by removing all bruised and necrosed soft parts, removes all fragments of bone stripped from periosteum and explores all fissures until healthy structures are encountered. This is assisted greatly by Carrel-Dakin

Solution for the prevention and removal of infection.

It was a very good address and he wound it up with a passionate appeal for patriotism. The history of the United States will be written in blood for the next three years and we ought to contribute toward spilling it to make the world safe for democracy. It savoured very strongly of T. R. oratory.

Yours,  
MENDELOFF.

#### WAR MEETING FOR HEALTH OFFICERS.

A war meeting will be held at Washington, D. C., October 17-20, 1917, by the American Public Health Association. This will replace the annual meeting which was to be held at New Orleans, La., December 4-7, 1917.

The papers and conferences will deal largely with the health problems created by the great war—the food supply, communicable diseases among soldiers, war and venereal diseases, war and the health of the civil population, etc.

President Wilson has said, "It is not an army we must shape and train for war; it is a nation." Go to the Washington meeting; then come back and do your bit!

Washington will be crowded and those interested are urged to reserve hotel accommodations at once. It will be easy to cancel reservations; but it may be impossible to obtain rooms at the last moment. Any hotel or railroad can give a list of Washington hotels.

Preliminary program will be automatically mailed to all members of the A. P. H. A. about September 15. Non-members may receive them free by writing to The American Public Health Association, 126 Massachusetts Ave., Boston, Mass.

#### THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION.

Sept. 4, 1917.

Dear Dr. Bloss:—

Under separate cover, a copy of the third edition of the pamphlet "Medical Institutes" is being sent you. This has been recently issued by the Propaganda Department as part of its work in giv-

ing the public the facts regarding the nostrum evil. Possibly it may seem of sufficient interest to call to the attention of the readers of the *West Virginia Medical Journal*.

Yours very truly,  
PROPAGANDA DEPARTMENT.

#### SECTIONAL CONFERENCE OF NATIONAL TUBERCULOSIS ASSOCIATION TO MEET AT BALTIMORE, ON OCTOBER 18.

Baltimore, Md., Aug. 27.—Preparation for an intensive campaign to prevent the spread of tuberculosis in the American Army and among those rejected by the draft will be the theme of the North Atlantic Sectional Conference of the National Association for the Study and Prevention of Tuberculosis, to be held here on October 18 and 19. Final details will also be discussed for carrying on the Red Cross Christmas Seal campaign, from which it is hoped to raise the \$3,000,000 necessary for this war work.

The topics considered during the two days' sessions will constitute throughout a unified war program. How to provide adequate care for the thousands of men who will be rejected from the army because of tuberculosis or suspected tuberculosis, or who will be discharged because of this disease before the new army is sent overseas or after it is in France, will form the burden of the conference discussion. Prominent authorities on tuberculosis from this section of the country will be among the speakers.

The first meeting will be a general medical session devoted to the method of discovering tuberculosis in war times, including a discussion of just what constitutes a diagnosis of tuberculosis sufficient for rejection from the army. At the general meeting following this session, the facts and figures in reference to tuberculosis as a war problem will be brought out, together with the machinery available and needed to meet it. This will be followed by round table discussions by nurses, health officers and state and local secretaries.

The mass meeting in the evening of the first day will be of a popular nature intended to give the general public a more definite comprehension of the urg-

ent need of emphasizing the fight on tuberculosis in a nation at war. The experience of France will be related and moving pictures will be used for illustration.

The second day will be given over to meetings and round table conferences in which will be taken up in detail national, state and local programs for dealing with tuberculous soldiers or rejected men and their families.

The North Atlantic District includes Maryland, New York, Pennsylvania, Delaware, Virginia, West Virginia, New Jersey and the District of Columbia.

The officers of the conference are: President, Dr. Henry Barton Jacobs, Baltimore, Md.; Vice-Presidents, Frederick B. Pratt, Brooklyn, N. Y.; Dr. Charles H. Miner, Wilkes-Barre, Pa.; Dr. Albert Robin, Wilmington, Del.; Dr. Wm. H. Welch, Baltimore, Md.; Wm. H. Baldwin, Washington, D. C.; Dr. Charles R. Gandy, Norfolk, Va.; Dr. E. E. Clovis, Terra Alta, W. Va.; Dr. Thomas N. Gray, Newark, N. J.; Secretary, H. Wirt Steele, Baltimore, Md.

This conference is one of six that will be held this fall, the others being as follows: The New England Conference, Rutland, Vt., October 4 and 5; the Southern Conference, Chattanooga, Tenn., November 9 and 10; the Mississippi Valley Conference, St. Paul and Minneapolis, Minn., October 8, 9 and 10; the Northwestern Conference, Portland, Ore., October 15 and 16 and the Southwestern Conference, at the Grand Canyon of Arizona, October 22 and 23.

## Things of Interest

WHICH YOU SHOULD KNOW ABOUT PRODUCTS ADVERTISED IN YOUR JOURNAL.

### DICHLORAMINE-T.

A new antiseptic which is attracting much attention and which has recently been introduced by Dr. H. D. Dakin of the Herter Laboratory, New York, is Toloune-para-sulphondichloramine, or, as it is commonly known, Dichloramine-T. This antiseptic is used in oil solution, either as a spray or as a direct application.

The Dichloramine-T is dissolved in a Chlorinated Eucalyptol solution, then diluted to proper strength (from 2 to 7½ per cent) with Chlorinated Paraffin Oil.

In a paper published in the July 7 number of *The Journal of the American Medical Association*, Dakin, Lee, Sweet, Hendrix, and LeConte tell of the use of this substance in 160 cases of infected wounds. They found that when sprayed upon these wounds or poured into them the length of time required for healing, compared to the usual methods of treatment, was reduced to one-third. The wounds were cured in one-sixth less time than by the celebrated Carrel irrigation method; also, the expense of dressings and nursing, and the technical skill required in the application, was much less than by the irrigation method. It has also been found that Dichloramine-T when sprayed into the nose and throat, is an effective method of treating diphtheria and meningococcus carriers.

Dichloramine-T contains about 29 per cent of chlorine, and, as already indicated, can be used in very high concentration. It is also possible to apply to infected tissue solutions from 20 to 40 times as great as is possible with the Dakin-Carrel hypochlorite solution.

This substance has been placed upon the market by The Abbott Laboratories, who also supply the Chlorinated Eucalyptol and Chlorinated Paraffin Oil prepared ready for use, according to the method described by Dr. Dakin. Dichloramine-T promises to be a worthy partner of Chlorazene, the water-soluble antiseptic also devised by Dakin, which was placed upon the market by The Abbott Laboratories and which is proving such a phenomenal success.

Physicians are advised to familiarize themselves with these two antiseptics. Literature and prices will be sent on request to The Abbott Laboratories, Chicago.

### WORK WITH HOOVER AND SERVE OAT FOODS.

To sustain our allies and our own army abroad it is necessary for this country to ship to Europe 200,000,000 bushels of wheat the coming year, in

place of a normal shipment of 80,000,000 bushels. That is why Herbert Hoover says we must eliminate waste of bread and must have one "Wheatless meal" each day. It is impossible to view this matter as other than a patriotic duty.

Yet the domestic housewife must look to the matter of serving nourishing meals.

An excellent food to consider as a flavory, nutritious, and easily prepared substitute for bread is oats, either in the form of oatmeal or oatmeal biscuits. As a food that imparts vim, energy, and endurance, oats have long been recognized as supreme. And in the form in which they can in these days be procured for table use, they excel nearly every other grain food in flavor and ease of preparation.

Again, oats have advanced little in price, whereas nearly all other foods have soared. Prices on Quaker Oats—the product of the Quaker Oats Company of Chicago—for example, have advanced on the smaller package only from 10 cents to 12 cents, and on the large, only from 25 cents to 30 cents. Most other foods, for the same nutrition cost from twice to ten times as much. Even so simple a diet as bread and milk, for the same nutrition, today costs twice as much as oatmeal. The average mixed diet costs four times as much.

It has been estimated by food experts that oats, to the extent that they are used in place of other foods, on the table, represent a lower cost by 75 per cent on the average, than what they take the place of.

A few specific comparisons may be interesting to the reader:

Per unit of nutrition, bacon and eggs cost five times as much as oatmeal; steak and potatoes cost five times as much; chicken costs six times as much, the average mixed diet four times as much.

In view of the critical food situation and the comparatively low cost of this superior food, the housewife, it appears, would do well to serve oats more often.

## Book Reviews

THE PRACTICAL MEDICINE SERIES, comprising ten volumes on the year's progress in medicine and surgery, under

the general editorial charge of Charles L. Mix, A. M., M. D., professor of Physical Diagnosis in the Northwestern University Medical School. Volume 1, General Medicine. Edited by Frank Billings, M. S., M. D., head of the Medical Department and Dean of the Faculty of Rush Medical College, Chicago, assisted by Bunell A. Raulston, A. B., M. D., Resident Pathologist, Presbyterian Hospital. Series 1917. Chicago Year Book Publishers, 327 La Salle St.

One of a series of ten issued at about monthly intervals, and covering the entire field of medicine and surgery. Each volume is complete on the subject of which it treats for the year prior to its publication. Price of this volume is \$1.50. Price of the series of ten volumes, \$10.00. The series is published primarily for the general practitioner, at the same time the arrangement in several volumes enables those interested in special subjects to buy only the parts they desire.

THE INTERNAL SECRETIONS; THEIR PHYSIOLOGY AND APPLICATION TO PATHOLOGY. By E. Grey, M. D., member of the Academy of Medicine of Paris; Professor of Physiology in the College of France, etc. Translated from the French and edited by Maurice Fishburg, M. D., Clinical Professor of Medicine, New York University and Bellevue Hospital Medical College; Attending Physician Montefiore Home and Hospital for Children's Diseases. An authorized translation. New York, Paul B. Hoeber, 1917. Price \$2.00.

A free translation has been made, but care taken to express the spirit of the author in clear and simple English. The subject is treated in three chapters and an introduction treating on the differences between the two kinds of secretions.

What we know in this very promising field is pointed out in a scientific, critical way and the very much more we do not know is acknowledged and plans are suggested for proper methods to be pursued if we are to learn enough of the subject to make these plain, and their products available in national therapeutics.

# The West Virginia Medical Journal

JAS. R. BLOSS, M. D., EDITOR  
 C. R. ENSLOW, M. D. ASSISTANT EDITORS  
 J. E. RADER, M. D.

Huntington, W. Va., October, 1917

THE JOURNAL issued on the first of each month.

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Single Copies . . . . .	20 Cents

All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notices of deaths, removals from the State, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

## CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

## ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

## REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: Miller-Ritter Building, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinions or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

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## THE NATIONAL SERVICE HANDBOOK.

“It is not an army we must shape and train for war; it is a nation.” This statement by the President is the keynote of a document which represents the democratization of war, the National Service Handbook, issued by the Committee on Public Information. Nothing is to affect the outcome of the great struggle so directly as the unity of thought, purpose, and action of the whole people. The assumption by each individual of the nation of a definite responsibility in service for the whole is the goal and the means to this end is offered in the most widespread publicity which this organ gives to all forms of service. An encyclopedia of a fighting nation—

information, facts, instruction on every phase of activity connected with the prosecution of the war are here gathered together for universal consumption and individual application. It is the duty of every citizen and patriot to acquaint himself with the whole. He may be familiar with much of it but it crystallizes, defines, and correlates the great purpose and brings home the reality of the struggle, still so far away. The section which is of especial interest to our readers, Medical and Nursing Service, gives general and specific information on the plan, organization, and operation of medical military service and of the Red Cross. Its definiteness and conciseness preclude the plea of misinformation and ignorance as to one's duty and responsibility

and satisfy the doctor's desire for authoritative direction. This desire the *Journal* is constantly endeavoring to meet and this channel of cooperation with the government is of utmost importance to the public and the press which serves it.—Ed. *N. Y. Med. Jour.*, 8-18-17.

#### MEDICAL STUDENTS, INTERNS AND THE DRAFT.

Elsewhere in this issue appears the official announcement of the regulations prescribed by the President as a solution of the serious question of drafting medical students and hospital interns. This announcement comes as a logical and welcome conclusion to *The Journal's* campaign on this vital question. The facts obtained from *The Journal's* questionnaire relative to the number of medical students that would be drafted left no doubt that the medical situation of the future would have been threatened as regards both military and civil life. All will rejoice, therefore, that a practical solution of the problem has been discovered. As has been repeatedly stated, the Provost Marshal decided that there is no provision in the selective service law of 1917—the conscription law—under which medical students can be exempted or discharged. The solution discovered, however, utilizes a section of the National Defense Act, which was passed in 1915, and which became effective in June, 1916. It is under this same law that the Medical Officers' Reserve Corps is organized. This law, it will be remembered, in addition to providing for an Officers' Reserve Corps also provided for an Enlisted Reserve Corps. Medical students and interns who have been drafted therefore will be in the same relative position to the army as physicians who are members of the Medical Officers' Reserve Corps, not on active duty. At the same time, and in like manner, they will be subject to assignment to active duty when any emergency may require. This means, of course, that if a young man should decide not to continue his medical education he would be subject to order to active duty.—*Jour. A. M. A.*, Sept. 8, 1917.

#### FIFTIETH ANNUAL SESSION OF WEST VIRGINIA STATE MEDICAL ASSOCIATION.

FAIRMONT, W. VA., OCT. 2, 3, 4, 1917.

Register now! The registration bureau is on mezzanine floor, Hotel Fairmont.

The general meetings will be held in Assembly Room of Hotel Fairmont.

The medical section will be held in the Assembly Room of Hotel Fairmont.

The Surgical section will be held in the parlor of Hotel Fairmont.

The commercial exhibits will be on the mezzanine floor and in the sample rooms of Hotel Fairmont.

Rules for papers: "No address or paper before the association except those of the President and orators, shall occupy more than twenty minutes in its delivery, and no member shall speak longer than five minutes, or more than once on any subject except by unanimous consent.

"All papers read before the association shall be its property. Each paper shall be deposited with the Secretary at the close of its reading.

"On arising to discuss a paper, the speaker will please announce his name plainly for the benefit of the Secretary and members of the association."

#### OFFICERS OF WEST VIRGINIA STATE MEDICAL ASSOCIATION. 1916-17.

President, J. E. Rader, Huntington.  
First Vice-President, W. S. Young, Sistersville.

Second Vice-President, E. H. Thompson, Bluefield.

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#### DELEGATES TO A. M. A.

Frank LeMoyné Hupp, Wheeling, 1916-17; C. R. Ogden, Clarksburg, 1917-18.

#### EDITOR OF THE JOURNAL.

J. R. Bloss, Huntington.

#### COMMITTEES.

##### PUBLIC POLICY AND LEGISLATION.

C. A. McQueen, F. LeMoyné Hupp, A. P. Butt.

##### MEDICAL ECONOMICS.

Robert E. Venning, E. H. Thompson, Charles O'Grady.

##### MEDICAL DEFENSE.

J. W. McDonald, G. C. Jeffers, H. R. Johnson.

##### CONSTITUTION AND BY-LAWS REVISION.

L. D. Wilson, R. J. Reed, G. C. Rogers.

##### RECEPTION.

C. O. Henry, C. L. Holland, A. L. Peters.

##### SCIENTIFIC WORK.

J. E. Rader, J. Howard Anderson.

##### LOCAL EXECUTIVE.

C. W. Waddell, chairman; G. H. Brownfield, W. H. Sands, H. R. Johnson, Treas.

#### PROGRAM.

##### PRELUDE TO GENERAL ASSEMBLAGE.

Monday, October 1.

#### COUNCIL AND HOUSE OF DELEGATES.

The Council convenes in apartments of President and Secretary on mezzanine floor, Hotel Fairmont, Monday evening at 8 o'clock. Thereafter at call of chairman.

The House of Delegates will meet in Assembly Room, Hotel Fairmont, Monday evening at 8:30 o'clock. Thereafter at the time and the place designated by the President.

#### ORDER OF BUSINESS.

Called to order by the President.

Receiving credentials.

Report of Committee on Arrangements.

Report of Committee on Scientific Work.

Report of Committee on Publication.

Report of Committee on Public Policy and Legislation.

Report of Secretary.

Report of Treasurer.

Report of Council.

Reporting of Auditing Committee.

New business.

Election of officers. First thing Thursday morning.

Next place of meeting.

Unfinished business.

#### GENERAL ASSEMBLAGE.

Tuesday, October 2, 9 a. m.

Assembly Room.

Call to order, President J. E. Rader, M. D., Huntington.

Invocation, Rev. H. G. Stotzer, D. D., Fairmont.

Address of welcome, Mayor Antony Bowen, Fairmont.

Address of welcome, C. O. Henry, M. D., Fairmont.

Response, C. R. Ogden, M. D., Clarksburg.

#### SCIENTIFIC PROGRAM.

1. Acute Anterior Poliomyelitis, A. S. Bosworth, M. D., Elkins.

2. Anterior Poliomyelitis, Wm. G.



Etzler, M. D., Wheeling.

3. Poliomyelitis, H. L. Amoss, M. D., New York.

Tuesday, October 2, 1:30 p. m.  
Assembly Room.

4. A Physician's Duty to His Community, H. B. Wood, M. D., Charleston.

5. "The Carrier" Problem, Arthur Lederer, M. D., Morgantown.

6. Clinical and Public Aspects of Trachoma, Paul D. Mossman, M. D., Welch.

7. Medical Economics, Ira J. Haynes, M. D., Richmond, Va.

8. The Evolution of Medical Legislation in West Virginia, Wm. W. Golden, M. D., Elkins.

9. Neurology, C. H. Maxwell, M. D., Morgantown.

Tuesday, October 2, 8 p. m.  
Assembly Room.

10. President's Address, J. E. Rader, M. D., Huntington.

GRAND PATRIOTIC RALLY.

Address, Henry D. Jump, Major M. R. C.

Moving Pictures on War Conditions.

GENERAL SESSION.

Wednesday, October 3, 9 a. m.  
Assembly Room.

11. Oration on Medicine: Recent Advances in Our Knowledge of Syphilis and Its Treatment, C. W. Waldwell, M. D., Fairmont.

12. Diagnosis and Treatment of Cerebro-spinal Syphilis, J. D. Willis, M. D., Roanoke, Va.

13. Nephritis, Variety, Classification, and Treatment, S. D. Hatfield, M. D., Iaeger.

14. Infectious Diarrhoea of Infancy, C. L. Holland, M. D., Fairmont.

15. Pellagra; Report of Three Cases, H. G. Steele, M. D., Bluefield.

16. Practical Points in Etherization, T. Henry Becker, M. D., Bluefield.

Wednesday, October 3, 1:30 p. m.

Assembly Room.

17. Intra-gastric Diagnosis, Martin E. Rehfuess, M. D., Philadelphia.

18. A Plea for Closer Cooperation of the General Practitioner, Sanatorium, and Patient in Campaign Against Tuberculosis, S. A. Slater, M. D., Oil City, Pa.

19. Dementia Præcox, L. V. Guthrie, M. D., Huntington.

20. Mental Defectives, J. R. Bloss, M. D., Huntington.

21. X-ray Diagnosis, R. H. Pepper, M. D., Huntington.

22. Maternal Impressions, Robert L. Brown, M. D., Parkersburg.

SURGICAL SECTION.

Wednesday, October 3, 9 a. m.  
Parlors, Hotel Fairmont.

23. Oration on Surgery: The Rational Treatment of Goitre, J. Ross Hunter, M. D., Huntington.

24. The Treatment of Fractures: Illustrated by Lantern Slides, S. S. Gale, M. D., Roanoke, Va.

25. Lane's Plate Versus Bone Transplant in the Treatment of Fractures, C. F. Hicks, M. D., Welch.

26. The Pelvic Appendix, Robert J. Reed, M. D., Wheeling.

27. X-ray Examination of the Duodenum, Gall Bladder and Pancreas; with Lantern Slides, W. A. Quimby, M. D., Wheeling.

28. Gastro-Jejunostomy in Ulcerative Perforation of the Duodenum, Wm. W. Golden, M. D., Elkins.

Wednesday, October 3, 1:30 p. m.  
Parlors, Hotel Fairmont.

29. The Management of Head Injuries Accompanied by Intracranial Pressure, C. C. Coleman, M. D., Richmond, Va.

30. Accidental Injuries to the Brain, J. W. McDonald, M. D., Fairmont.

31. The Symptoms and Diagnosis of Brain Abscesses of Otitic Origin, H. R. Johnson, M. D., Fairmont.

32. The Present Status of the Carrel System in the Treatment of Wounds of War, F. LeMoyne Hupp, M. D., Wheel-

ing.

33. Surgical Treatment of Pyloric Obstruction, G. A. MacQueen, M. D., Charleston.

HOUSE OF DELEGATES.

Thursday, October 4, 8:30 . m.  
Parlors, Hotel Fairmont.

Election of officers.

Act on Amendment of Constitution.

GENERAL ASSEMBLAGE.

Thursday, October 4, 9:30 a. m.  
Assembly Room.

34. Variations in the Lateral Processes of the Fifth Lumbar Vertebra in the Etiology of Backache and Abdominal Pain, H. Augustus Wilson, M. D., Philadelphia, Pa.

35. Diagnosis and Treatment of Urinary Lithiasis, J. E. Burns, M. D., Baltimore, Md.

36. Typhoid Perforation, with Report of Cases, J. Francke Fox, M. D., Bluefield.

37. The Cause of Extra-Uterine Pregnancy, Wm. S. Gardner, M. D., Baltimore, Md.

38. Five Year's Experience with Sæsarean Section, Geo. W. Dobbins, M. D., Baltimore, Md.

HOTELS.

The Fairmont, European, 112 rooms. With bath, \$1 and \$1.25; with toilet, single, \$1.50, double, \$2.50, with shower, bath, single, \$1.75, double, \$2.75; with tub bath, single, \$2.50, double, \$3.50.

The Manley, European, \$1 to \$3.

The Watson, European, \$1 to \$1.50.

RAILROAD CONNECTIONS.

The Monongahela Railway Company has its terminus at Fairmont. Over this line the Pennsylvania and the Pittsburg and Lake Erie both operate trains between Fairmont and Pittsburg.

The Baltimore and Ohio and its connections reach practically every part of the state, making good connections for Fairmont.

The Monongahela Valley Traction

Company operates hourly trains between Fairmont and Clarksburg.

ENTERTAINMENT.

Visiting ladies. Tuesday, October 2, 4 p. m. Tea at Cook Hospital. The Executive Committee, Women's Auxiliary Board of Cook Hospital as hostesses.

Tuesday, October 2, 8 p. m., theatre party.

Wednesday, October 3, 4 p. m. Automobile ride terminating with dinner at the Fairmont Country Club, 6 p. m.

Thursday, October 4, 3 to 5 p. m. Informal reception, demonstrations, and short talks at the headquarters of the local Red Cross Society.

COMMITTEE ON ENTERTAINMENT OF LADIES

Mrs. LeRoy D. Howard, Chairman; Mrs. Thomas I. Brett, Mrs. Henry D. Causey, Mrs. George DeBolt.

Visiting Members. Wednesday, October 3, 8p. m. Banquet to the visiting members of the association by the Marion County Medical Society. Hotel Fairmont.

## State News

Dr. R. M. Bobbitt, of Huntington, now a first lieutenant in the Medical Reserve Corps, has been assigned to duty as surgeon to an aeroplane squadron. It is said that the assignment to an airplane service carries with it the probability of almost immediate service in France.

—o—

The Woman's Hospital, a new institution now being erected in Huntington by a woman, is to have a room on the ground floor equipped for clinical purposes and the purpose is to maintain a free clinic. Dr. J. H. Steenbergen is to be the chief surgeon and Dr. W. D. Hereford specialist in children's diseases, will be head of the children's department.

—o—

Dr. J. H. Steenbergen and wife of Huntington were visitors in Morgantown in September, having made the trip by motor.

A recent visitor in Huntington was Dr. Will Farley of Holden.

—o—

Dr. and Mrs. George Eager of Louisville, Ky., spent some time in Huntington in September visiting friends.

—o—

Miss Noca Kessler and Dr. F. O. Marple both of Huntington, were married September 5, 1917, at the home of the bride's parents, Dr. and Mrs. A. K. Kessler. They will reside in Huntington.

—o—

Maj. J. E. Cannaday of Charleston, head of the military enlistment of physicians in the medical corps of the U. S. Army from West Virginia, has announced that the state has contributed about 150 medical officers, the quota, however, being 242. He announced that former Governor H. D. Hatfield now a major in the Medical Officers' Reserve Corps, will make a second tour of the state to secure additional enlistments. The first tour was very successful.

—o—

Dr. A. J. Pickering of Huntington, and Miss Ula Stump of the same city, were married September 5, 1917, in Iron-ton. Congratulations are extended.

A cablegram received in Huntington on September 8 announced the safe arrival of Dr. C. M. Buckner of that city in England. He is one of the several physicians who enlisted in the Medical Corps, and the first to go to the front.

—o—

Dr. H. C. Skaggs, formerly located at Kaymoor, W. Va., is now in practice at Montgomery.

—o—

Dr. I. G. Shirkey has changed his location from Monaville to Marting, W. Va.

—o—

First Lieutenant H. W. Keatley of the Medical Corps, formerly of Huntington, was in that city enroute to Hattiesburg, Miss., with the Second West Virginia infantry regiment.

—o—

Born, to Dr. and Mrs. C. E. Grimm of St. Marys, a son, September 12. Congratulations are extended to the parents.

## WEST VIRGINIA PHYSICIANS WHO HAVE ACCEPTED COMMISSIONS IN THE MEDICAL OFFICERS' RESERVE CORPS.

David Abshire, Madison; Ulysses Grant Arnett, Henderson; Timothy Lawrence Barber, Charleston; Quintus Harper Barney, Wardensville; Ernest Heald Bitner, Martinsburg; Harry Cokerille Blair, Harrisville; Ray Maxwell Bobbitt, Huntington; Frank Joseph Brochart, Marting; Charles McVea Buckner, Huntington; Stephen Wilbur Bull, Spencer; John Egerton Cannaday, Charleston; Noland Mackenzie Canter, Martinsburg; Calvin E. Clay, Martinsburg; Lewis Clyde Covington, Charleston; Charles Stuart Cowie, Martinsburg; Dennis Joseph Cronin, Huntington; Hoddie Wilbur Daniels, Elkins; Edward Davis, Salem; Norman Robert Davis, Henry; Arthur Wise Debell, Malden; Richard Henry Eanes, Widen; Richard Lounsbury Eltinge, Sterling; Rush Floyd Farley, Ivaton; James Morris Fontain, Charleston; Rae Hazem Gather, Flemington; Lowell Sidney Goin, Wheeling; John James Goodwill, Cooper; William Henry Greene, Camden; George Floyd Grisinger, Gamoca; Martin Jay Hanna, Moundsville; Irvin Hardy, Morgantown; Wm. Glen Harper, Beverly; James Wm. Hartigan, Morgantown; Henry Drury Hatfield, Huntington; Henry Clay Hays, Princeton; James Oscar Hicks, Huntington; Louis Archibald Hilton, Wilcoe; Rae Ellsworth Houke, Parkersburg; Lewis Hoagland Howard, Wheeling; Willie Herbert Howell, Murraysville; Jones Ross Hunter, Huntington; Leo Huth, Follansbee; Dennis Bliss Jarrell, Woodville; Esley Taylor Lake, Nuss; Asahel Clarence Lambert, South Charleston; Chas. Henry Laws, Elkins; Isaac Richard LeSage, Huntington; Bayard Lee Liggett, Mill Creek; Thos. Judson McBee, Morgantown; Barton Bates McCluer, Welch; Thaddeus C. McClung, Ronceverte; Wm. Hay McClain, Wheeling; Charles Francis Mahood, Alderson; Atlee Mairs, Charleston; Emerson Megrail, Wheeling; Morris Isidore Mendeloff, Charleston; Harry Knight Owens, Elkins; George Lewis Pence, Pence Springs; Benjamin Louis Pettry, Dorothy; Rawley Holland Powell, Fairmont;

Norman Randolph Price, Marlinton; Wm. Lawrence Rayl, Huntington; Grover Cleveland Roberson, Hurricane; Henry West Rolling, Lost City; Howard Cecil Sarver, Charleston; Conrad Fisher Sayre, Mason; John Samuel Shaffer, Montgomery; George W. Shriver, Clendenin; John Nathan Simpson, Morgantown; Wm. Clary Slusher, Bluefield; Horace Frank Stiltner, Pineville; Mark Sutphin, Seth; John Ernest Toye, Charleston; James Fred Van Pelt, Huntington; James Reason Vermillion, Princeton; Colin Reed Weirich, Wellsburg; Jas. Malachi Whittico, Williamson; Robert Johnson Wilkinson, Huntington; Charles Gordon Willis, Kingston.

—o—

Major J. E. Cannaday of Charleston has been notified by the Surgeon General's office that in the future applicants for the Medical Corps of the National Guard will be referred to him for examination.

—o—

Drs. John W. Moore and G. C. Schoolfield of Charleston have returned from a week's motor trip in Virginia.

—o—

Dr. J. E. Cannaday of Charleston, was offered the position of Chief Surgeon of the Surgical Division of the Army base hospital now at the cantonment at Alexandria, La., but as Surgeon General Gorgas was anxious that Dr. Cannaday continue in charge of the medical recruiting for the present the proffered position was not accepted.

## Society Proceedings

Matewan, W. Va., Aug. 21, 1917.

Dr. Jas. R. Bloss,

Huntington, W. Va.

Dear Doctor:—

The Mingo County Medical Society met this afternoon in the city of Williamson. There were present Drs. Nunemaker, Slayden, Conley, Salton and Irvine of Williamson; Dr. Price of Chatto-roy, Dr. Tabor of Glen Alum, Dr. Heatherman of War Eagle, Dr. Triplett of Matewan and visiting were Dr. Jennings of Naugatuck and Dr. Conley of Orinoca, Ky.

In the absence of Dr. Richardson, the President, Dr. Nunemaker was on motion made chairman pro tempore. The regular order of business was disposed of and Dr. Salton read a very instructive paper on "The Etiology of Abdominal Ascites." This paper was discussed by Dr. Triplett.

Dr. Olin H. Jennings of Naugatuck, was elected to membership, his application having had a favorable report from the Board of Censors.

A committee was appointed to draft resolutions expressing the sympathy of the society toward Dr. J. Howard Anderson, he having recently lost his wife.

Adjournment at 4:30 p. m.

Yours very truly,

W. H. TRIPLETT, Secy.

### CABELL COUNTY SOCIETY.

Huntington, W. Va.,

Sept. 21, 1917.

Dr. J. R. Bloss, City.

Dear Doctor:—

I am sending you the reports for the last two meetings of the Cabell County Medical Society.

The Cabell County Medical Society met September 6, 1917, in room 210, in the Frederick Hotel. The members present were: Drs. Vinson, Hicks, H. P. and E. B. Gerlach, Reynolds, Yost, J. A. Guthrie, Hawes and Pepper.

The president, J. H. Rowsey, being absent the vice-president, C. M. Hawes, presided. He was later called away and Dr. Fitch was called to the chair.

The minutes of the last meeting were read and approved.

Dr. E. B. Gerlach reported that the case he had reported at the last meeting, of a boy with a compound comminuted fracture of the tibia, with a sloughing wound, and which he had treated with Abbott's Paracine wax, was much improved and the boy is now walking some on the limb.

Dr. I. C. Hicks reported a case, post-operative hæmatoma two weeks following an appendectomy. It was opened and removed and the patient made an uneventful recovery.

Dr. Vinson reported a case of a man 50 years of age who gave the history of a blow on the inner side of the thigh

with no abdominal symptoms. Later an abscess developed, opened. Thirty hours later the infection pointed below the scrotum with tenderness about Poupard's ligament. The diagnosis was made of a post-operative infection with blood poisoning. After a saline infusion, an incision was made and it was found that the infection had followed the veins and a pus pocket was found in the region of the bladder. The patient died later. The discussion of the case, followed by Drs. I. C. Hicks, Fitch and Yost. Cases were also reported by Drs. Yost and H. P. Gerlach.

The Secretary reported that the state corporation tax of the society for \$25 had been paid and that he had learned after talking the matter over with Mr. Marcum that a mistake had been made, and that the society should have been incorporated as a scientific body and not as a business organization. It was moved, seconded and carried that a committee of one to confer with Mr. Marcum in regard to the matter. Dr. Pepper was appointed as this committee. On motion the society adjourned.

R. H. PEPPER, *Secy.*

The Cabell County Medical Society met in the Assembly Room at the Hotel Frederick on September 20, 1917.

The members present were: Drs. Bloss, Hawes, Rowsey, Hatfield, A. K. Kessler, Watts, Fitch, Pepper and Norman, visiting.

Dr. Rowsey presided. The minutes of the last meeting were read and approved.

After the informal reports and discussions of cases the society proceeded to the election of delegates to the State Association. It was moved by Dr. Hawes and seconded by Dr. Fitch that the chair appoint two members to act as delegates. Carried.

It was moved by Dr. Bloss and seconded by Dr. Watts that Dr. H. D. Hatfield's transfer from McDowell County Medical Society be accepted and the Doctor be made a member of the Cabell County Medical Society. Carried.

The Secretary, after giving his report as the committee to confer with Mr. Marcum in regard to changing the incorporation of the society, offered a reso-

lution, seconded by Dr. Watts, that Mr. Marcum be instructed to incorporate the Cabell County Medical Society as a scientific instead of at present a business organization and that Mr. Marcum be paid for this work by the society. Carried.

It was moved by Dr. Fitch and seconded by Dr. Bloss that a committee of one to three, at the discretion of the chair, be appointed to correspond with the proper authorities to ascertain what arrangements can be made in showing medical moving pictures to the society. Carried. Drs. Pepper and Fitch were appointed as this committee. The committee to present or report clinical cases at the next meeting were: Drs. Bloss, Hawes, A. K. Kessler and Rowsey.

On motion the society adjourned.

R. H. PEPPER, *Secy.*

## Medicine

### ETHYLHYDROCUPREIN.

The only drug whose value in the treatment of pneumonia rests on an experimental basis is ethylhydrocuprein (optochin). Ethylhydrocuprein itself is insoluble in water, and is injected intramuscularly suspended in oil. Its sale, ethylhydrocuprein hydrochloride, on the other hand, is very soluble, and may be injected hypodermically or given by mouth in capsule. Morgenroth, in 1911, was the first to study its inhibitory effect on pneumococci. Wright, a year later, found that the serum of animals who had received injections of the drug had a marked bactericidal action on pneumococci and only on pneumococci. Since then it has been studied by many bacteriologists, but most exhaustively by Morgenroth and by Moore. They found that in a dilution of 1:1,000,000 ethylhydrocuprein often kills the pneumococci, and in a dilution of 1:500,000 always does so. Much weaker dilutions suffice to inhibit its growth. According to Morgenroth, 90 to 100 per cent of mice who received the drug soon after the injection of a lethal dose of pneumococci were saved. Indeed, they often survived if the ethylhydrocuprein was given twenty hours after a dose which would other-

wise have been inevitably fatal within forty-eight hours. Moore was unable to obtain quite such striking results. He found, however, that of 85 mice treated by ethylhydrocuprein, after receiving 100 times the lethal dose of pneumococcus culture, only 17.6 per cent died of pneumococcus sepsis. Of these animals, however, 15.2 per cent died from the toxic effects of the drug, while the rest survived.

The protective dose in animals has thus often overstepped the toxic dose. Such a dose for human beings would correspond to 30 grams for a man weighing 140 pounds, and is obviously not permissible. Much smaller doses have produced constriction of the retinal vessels, with complete and sometimes permanent blindness. The latter is, however, only temporary if the daily dose does not exceed 2 or 3 grams. Moore has shown that, after the administration of 0.5 grams by mouth, the serum of human beings has a marked inhibitory and bactericidal effect on pneumococcus cultures, but to a less degree than when corresponding doses are given to rabbits hypodermically. No considerable statistical reports of the influence of ethylhydrocuprein are as yet available, but the results are, to say the least, encouraging. Miller states that by general agreement, the best method of administering the drug is to give 0.25 grams in capsule every hour up to a daily dose of 1.5 grams.

#### ANTIPNEUMOCOCCUS SERUM.

The serum treatment of pneumonia has been extensively studied both in Germany and at the Rockefeller Institute in this country. The relative failure abroad, as contrasted with the successful results here, is due to the fact that in Germany the experimenters have used sera derived from single strains of pneumococcus in all cases of pneumonia, whereas at the Rockefeller a sharp distinction has been drawn between infections with the four different types of pneumococcus. Animal experiment shows that serum treatment with group 4 of the pneumococcus is eminently successful. But as this group consists of a vast number of different strains, each of which responds only to its own antise-

rum, the treatment is not practicable in man. Group 3, apparently on account of its mucous envelope, is entirely resistant to serum treatment. This leaves only groups 1 and 2 as amenable to this therapeutic measure, but fortunately these groups are responsible for the majority of human cases.

The report of the "Committee appointed by the Mayor of the City of New York to cooperate with the Department of Health, for the Special investigation of Poliomyelitis," fulfills these requirements and on account of its wide appeal we think the summary of its findings are well worth reprinting here:

"The investigation carried out by the field force of your committee under my direction, has supplied information of two kinds:

"First, information of practical daily import was obtained by the physicians and nurses who visited premises harboring poliomyelitis patients and the relatives and friends of the affected families, which was turned over immediately to the Department of Health for its use and guidance.

"Second, the data thus collected and recorded were subsequently collated and analyzed in the hope that light might be thrown on the important questions of source of infection, period of incubation, types of disease, significance of food, of diseases among domestic animals, insects, and some other subsidiary topics.

"This second line of inquiry yielded information which led us to regard the disease as one (a) communicated by personal contact, (b) in which the slight and non-paralytic (abortive) cases are the most frequent sources of the infection, and (c) in which the incubation period varies between three and ten days. We were not able to make a conclusive study of the question of the healthy carrier, but the review of the data leaves us with the impression that he plays a less conspicuous part in disseminating the infection than does the mild and often unrecognized case of the disease.

"We gave especial attention to the working out of the incubation period on the basis of the data collected. Recog-

nizing the difficulties and fallacies of the undertaking in a large, miscellaneous population, such as exists in Greater New York, we cannot assert that our conclusion is absolute. We think it probable, however, that taken together with the conclusions of previous investigators, it is virtually correct.

"We could, finally, find no substantial evidence to support the notion of food, lower animal or insect carriage of the infection or carriage by clothing and other extraneous objects, although in regard to those subjects our investigations were incidental rather than essential."—Ed. from *Cleveland Med. Jour.*, Aug., 1917.

#### WAR ON HAY FEVER.

New Orleans has taken actively in hand the prevention of hay fever, and the mayor has issued the following proclamation:

Scientific investigations having demonstrated that hay fever is due to pollen of plants, the majority of which are worthless weeds, the cutting of these weeds at this time will greatly reduce the amount of pollen in the air, and prevent, or at least relieve, the sufferings of hundreds of persons in New Orleans subject to hay fever. New Orleans is already prominent for its activities and achievements in matters pertaining to health and sanitation, and our citizens, I am sure, will cheerfully and promptly cooperate with the local authorities—the Department of Public Property and the City Board of Health—as well as the American Hay Fever Prevention Association, in a proper enforcement of the ordinances providing for the extermination of weeds which cause hay fever.

Now, in order to be of material assistance in the proposed weed-cutting campaign, and as an endorsement of the admirable efforts being made by the American Hay Fever Prevention Association in this direction, I, Martin Behrman, Mayor of New Orleans, do hereby proclaim Friday, August 10, as "Public Weed-Cutting Day," and urge all

citizens to assist in the success of a work the results of which must obviously prove so beneficial to a large percentage of our population.

Given under my hand and the seal of the city of New Orleans this 3rd day of August, 1917.

MARTIN BEHRMAN,

A true copy: Mayor.

JOHN P. COLEMAN, Sec. to Mayor.

Six special inspectors have been placed on duty to cover the entire city and to take action against all owners of property who have failed to cut weeds and high grass. The department now has about 250 employes and prisoners at work cutting weeds.—*Jour. A. M. A.*, 8-18-17.

#### CLASSIFICATION OF GOITERS.

Lanz has had experience with goiters both in Switzerland and Holland, and emphasizes that classification based on the pathologic anatomy is the guide to treatment. In Holland they seem to be of two main types, the atoxic and the toxic. The atoxic group includes the diffuse parenchymatous, diffuse colloid and the circumscribed, nodular, colloid or cystic forms. The toxic type includes the diffuse thyreotoxic, and primary Basedow, and the circumscribed thyreotoxic and secondary Basedow. He describes each type in its clinical manifestations to aid in diagnosis, and warns against abuse of iodine in treatment. It seems strange, he remarks, that nodular goiter has such a toxic action. Possibly the circumscribed nodule serves as a constant irritant for the thyroid. In course of time it may induce a secondary hyperthyroidism. The toxic symptoms do not come from the nodule itself, but from its irritated environment. This may set up a vicious circle, but there is no exophthalmos, as a rule, although the cardio-toxic and neurotoxic symptoms are pronounced. The only effectual treatment is the operative, and it need not be extensive; amputation of one side is enough. Bleeding inside the goiter is rare in Holland, but not rare in Switzerland where he had several times to do an emergency thyroidectomy on account of the rapid enlargement of the thyroid from hemorrhage.

He says of the diffuse toxic goiter that it is practically a rudimentary exophthalmic goiter, usually of a vascular type. This is the form observed in telephone girls and teachers, and he has noticed it particularly frequent in doctor's wives, especially country doctors. The country doctor's wife, he remarks, helps in his work, shares his cares and his irregular; hurried mode of life. The thyroid in men is much less sensitive to psychic trauma than in women and girls. In treatment of this form, rest is the first and last word. Worry and emotional stress must be warded off. Sometimes a change of environment is necessary. Proosphorus preparations and arsenic, with bromides are the drugs called for.

Iodin in the cardiotoxic form may have a favorable action in minute doses, but it must not be forgotten that it is a two-edged sword. The dangers from it with all toxic goiters are greater than any eventual benefit. By operative treatment, usually amputation of the most vascular lobe, much time will be gained. Actual pronounced exophthalmic goiter occurs almost exclusively in women, but when it does affect a man the prognosis is much graver. Iodin, thyroid and roentgenotherapy have done more harm than good in true exophthalmic goiter, but resection of the thyroid gives brilliant results. To be safe, we must not let ourselves be tempted to resect too much. Only the lobe most intensely vascularized should be resected or the superior thyroid arteries ligated, as the first step. Iodin triumphs in the cases of diffuse parenchymatous atoxic goiter, either by the mouth or rubbed into the gland in a salve with one part iodine to ten parts potassium iodine and 100 parts petrolatum, but always very cautiously, and under medical supervision. The goiter may increase a little under the influence of the iodine, and it should be suspended then. But these are the cases that respond favorably to iodine. Iodin may help also in the atoxic, knobby, diffuse colloid form, but if no benefit is apparent in four or six weeks it had better be dropped. The operation for this type is unilateral resection, leaving a good amputation stump to be sure to spare the recurrent nerve and parathyroids. The

atoxic nodular colloid goiter is the endemic type, and to give iodine with this form, he declares, is malpractice. It does not act on the diseased tissue but only on the still sound tissues. The only treatment here is operative, enucleation or resection or a combination of both.—*Jour. A. M. A.*, 5-19-17.

#### THE AUTOLYSIN TREATMENT OF CANCER.

Richard Weil, New York (*Jour. A. M. A.*, Nov. 6, 1915), reviews the results of the Horowitz treatment of cancer, as carried out by Dr. Beebe in the General Memorial Hospital in New York City. In accordance with a well-defined policy of the hospital which approved the test of proposed therapeutic measures in cancer, Dr. Beebe was permitted to make a trial, he stating that he was in possession of complete knowledge of the composition and formula. Dr. Beebe was given the privilege of applying the treatment in a considerable number of cases, under the general clinical supervision of Dr. Weil. Only such cases were taken as could not be helped materially by other means available. In nearly all the cases the patients were given the benefit of radium or Roentgen-ray treatment in addition to the autolysin method. That all the patients were moribund or in a very serious condition was not the case. Some of the patients put in Dr. Beebe's hands were in apparently good physical condition, though the nature of their ailment, as often happens in cancer, made successful treatment by other methods impossible. If the treatment had any real value it should have been shown in such cases. Since January 1, 1915, twenty-three cases have been treated in the wards of the hospital with autolysin by Dr. Beebe. Of these, fourteen patients died in the hospital and eight were discharged unimproved. Only one is at the present, to the best of Weil's knowledge, in a condition that could be considered an improvement over that at the time of his admission. Although the general outcome of the cases was not affected by Beebe's treatment, the clinical course was somewhat altered. The method caused, when infections were made into the tumors, suppuration and sloughing



as is characteristic of irritant or destructive substances in such cases and did not in this constitute any advance over former methods. Subcutaneous injections given distant parts of the body were followed sometimes by improvement in the appearance of ulcerated tumors but no greater than that seen to follow the ordinary surgical dressings usually employed in such cases, and to these Weil attributes the temporary change for the better. The more general good effects claimed by Beebe from autolysin, such as relief of pain and insomnia, and increase of appetite, were what might be looked for. Weil claims by the hopefulness aroused by a lauded new remedy. Contrasted with such occasional effects is another set of results very inadequately mentioned by Beebe in his articles. Half the patients at least were most unfavorably affected by the local injections. The pain was often so severe that the patients refused to accept the treatment. The swelling often gave distress and in two instances the treatment appeared to be responsible for an almost fatal hemorrhage, and these unquestionably outweighed the very questionable advantages claimed. Weil discusses particularly two of the cases published by Beebe in which all the improvement observed is, he suspects, due to the simultaneous Roentgen-ray treatment, which often gives brilliant, if temporary, results. He deplors the publicity used as leading to hopes that cannot be realized causing useless expenses and long and painful journeys to receive treatment. His own personal belief, based on observation, is that autolysin treatment is useless and liable to do damage rather than good. The article is illustrated.

#### AFTER-CARE OF INFANTILE PARALYSIS.

While our treatment of the acute stage of poliomyelitis has made great strides of late and, in a later stage, an adequate and rational plan of treatment has been developed, says R. W. Lovett, Boston (*Jour. A. M. A.*, April 7, 1917), in the convalescent stage, which may be assumed as lasting for about two years from the time when tenderness disappears, little change has been made in

methods since the time when those of us now in middle life were medical students. The treatment most in vogue today is to employ massage and electricity from an early stage, to use braces and allow walking when possible. It will be well to inquire if we cannot adopt a more modern treatment. This is important because during this period the treatment determines the degree of recovery of the affected muscles. The existence of tenderness may be assumed as evidence of the persistence of the acute process in the cord. Massage and manipulation will aggravate this, as a rule, and active treatment should not be begun until it has practically disappeared. This may be taken to mark the beginning of the convalescent stage. Muscular weakening is much more common than total paralysis. If it were total and hopeless, we should resort to braces and not restrict activity but with weakening, only, we should strive to strengthen the weakened muscles. Spontaneous improvement does not cease at the end of six months, as was formerly believed but continues at least two years or longer. Fatigue is a detrimental factor of the highest importance, and in weakened muscles is caused by surprisingly little activity, not only in walking but in the overuse of therapeutic exercises and, especially, massage, if heavy and prolonged. Braces and apparatus are not favorable to muscular development, but if heavy cause unnatural use of the leg, prevent free activity, and constrict the muscle. On the whole, they favor muscular atrophy, but the acquirement of deformity in the stretching of muscles and loosening of joints is still more undesirable. They should not be used unnecessarily, but only when needed. They are not in any way therapeutic, but protective and conservative. The first requisite for adequate and scientific treatment is accurate diagnosis and this demands an examination of every available muscle or muscle group in the body. It must be determined which of these are normal, which are only weakened, and which are paralyzed. The patient should be made to walk if he can. Children should be stripped naked, and adults only wear a T bandage. Certain movements should

be directed, the stronger tests first and the easier ones next, in which the weight of the member tested is partly eliminated by position. In the case of babies, the voluntary activities of the child must be watched, the reflex stimulation used to provoke various movements. An adequate examination will take considerable time. A quantitative test in older children by the twin balance method is desirable, but not easily available in those cases. Warm saline baths, probably begun toward the close of the acute period should be continued daily, the limbs always warmly protected. Outdoor air and mild physical exercise is desirable, and attempts to prevent deformity should continue. Prolonged recumbency is not desirable on general grounds. The upright position is the normal one for human beings and simple braces may be sometimes used intelligently in acquiring balance and a few steps of walking allowed each day. The braces should only be worn at this time. Children of ignorant parents should not be allowed braces as soon as this and young children should necessarily be kept recumbent. More detailed directions are given in regard to weakening of special muscles and deformities. Properly given massage is of use but if it is unskillfully given, it is dangerous. Electrical treatment depends for its vogue largely on tradition. In mild cases it is undoubtedly harmless and perhaps beneficial, but in other cases Lovett discourages it. Muscle training is the keynote, he says, of the modern treatment of infantile paralysis, and he briefly details how it should be done. It requires precise knowledge and special training. He summarizes as follows: "An acute muscular diagnosis is an essential prerequisite to treatment. No active treatment should be begun until tenderness has disappeared. The upright position with restricted walking has certain advantages over prolonged inactivity in suitable cases. Braces are conservative and protective, and not therapeutic. Massage, electricity and muscle training are the measures in general use to bring about improvement in the muscles. Of these, the last named rests on the best physiologic and pathologic basis, and must be carried out with great

accuracy to be effective."

#### ALVEOLAR OSTEOMYELITIS (PYORRHOEA ALVEOLARIS): ITS CAUSES AND TREATMENT WITH VACCINES.

Leon S. Medalia (*Boston Medical and Surgical Journal*, September 14, 1916) concludes that pyorrhœa alveolaris should be known and treated as a chronic alveolar osteomyelitis. The sockets are enlarged medullary spaces of the maxillary bones, while the periodontal membrane is in reality a ligament which keeps the tooth suspended in the alveolar cavity. Mechanical causes are responsible for starting the disease, while pyogenic bacteria, pneumococcus, staphylococcus, and *M. catarrhalis*, are responsible for keeping this up. It is a specific disease, though not in the sense that it is always due to one and the same organism. Systematic diseases play only a secondary part in starting the disease, but may be caused by it, and in turn become responsible for keeping up the local condition. Many rheumatic diseases, so-called, and many fastintestinal diseases are directly related to Riggs's disease, as this affection is often known. Vaccine treatment, together with proper attention to diet, cures or relieves the systemic diseases, especially the rheumatic affections. Local mechanical treatment and proper attention to the general systemic condition of the patient yield by far the best results in this intractable disease.—*N. Y. Med. Jour.*, 9-30-16.

#### THE PREDISPOSING CAUSES OF PYORRHOEA.

M. L. Rein (*Journal A. M. A.*, February 10, 1917) emphasizes the fact that infection does not occur in an individual otherwise in physical health. Pyorrhœa is the result of some constitutional disturbance leading to local malnutrition in the mouth plus infection. Since the dental structures are endorgans they are the first to show the results of malnutrition. The local appearance of the dental and periodontal tissues varies widely with the underlying cause and often the appearance is quite characteristic of a given constitutional disease. Often

the pyorrhœal changes will appear long before the signs of the underlying disease are sufficiently developed to permit a diagnosis. There are cases, however, in which a decrease in the functional power of the teeth themselves is the chief cause. This decrease in function and resistance is usually due to such conditions as loss of one or more teeth, irritation from unpolished fillings, etc. Often when the underlying constitutional cause is found it will not be recognized as such, but will be regarded as secondary to the pyorrhœa. In the treatment of a case of pyorrhœa good results cannot generally be expected unless the constitutional factor is capable of modification and is adequately treated.

#### PERIPHERAL NEURITIS FOLLOWING EMETINE TREATMENT OF AMEBIC DYSENTERY.

A. R. Kilgore (*Boston Medical and Surgical Journal*, September 14, 1916) reports several cases of this nature, and goes on to say that peripheral neuritis after emetine is not uncommon. The common symptoms are generally muscular pain and weakness, usually most pronounced in the legs, going on sometimes to paresis. They often appear after the emetine injections have been stopped, and may grow progressively worse for some time, even with no more administration of the drug. The amount of emetine necessary to produce neuritis varies greatly. The prognosis is good. The symptoms clear up gradually, usually over several weeks, and apparently no traces are left.

Morphine and Pituitrin seem to be physiologically antagonistic. Pituitrin is useful in the adjunct treatment of drug addicts, and morphine will overcome the undue contractility of the uterus following the injection of Pituitrin. — *Am. Med.*, April, 1916.

#### BLOOD PRESSURE AND INSURANCE.

An epitome of the consensus of opinion of the risk of accepting persons for insurance as modified by the blood pressure is presented by Quackenbos. Some companies have ruled that at the age of

20 they will take a person with a systolic pressure up to 137; at the age of 30 up to 140; at the age of 40 up to 144; at 50 up to 148, and at 60 up to 153, although some companies will not accept a person who shows a persistent systolic pressure of 150. Quackenbos says that when persons with higher blood pressures than the foregoing have been kept under observation for some time, they sooner or later show albumen and casts in the urine. In other words, this stage of higher blood pressure is too frequently followed by cardiovascularrenal disease for insurance companies to accept the risk.

On the other hand, too low a systolic pressure in an adult, 105 mm. or below, should cause suspicion of some serious condition, the most frequent being a latent or quiescent tuberculosis. Such low pressure certainly shows decreased power of resistance to any acute disease.

Statistics prove that there are more deaths between the ages of 40 and 50 from cardiovascularrenal disease, that is, from heart, arterial and kidney degenerations, than formerly. Whether this is due to the high tension at which we all live, or to the fact that more children are saved and live to middle life, or whether the prevention of many infectious diseases saves deficient individuals for this middle life period, has not been determined. Probably all are factors in bringing about these statistics.

While the continued use of alcohol may not cause arteriosclerosis directly, it can cause such impaired digestion of foods in the stomach and intestine, and such impaired activity of the glands, especially the liver, that toxins from imperfect digestion and from waste products are more readily produced and absorbed, and these are believed by some directly or indirectly to cause cardiovascularrenal disease. Hence alcohol is an important factor in causing the death of persons from 40 to 50 years of age.

The question of whether or not a person smokes too much, and what constitutes oversmoking, will soon be asked on all insurance blanks. As tobacco almost invariably raises the blood pressure, and when the blood pressure again falls there is again a craving in the man for the

narcotic, it must be a factor in producing, later in life, cardiovascular-renal disease. Hence an increased systolic blood pressure must be in part interpreted by the amount of tobacco that the person uses.—*Jour. A. M. A.*, 7-27-16.

### FOCAL INFECTIONS.

For many years it was thought that we were well acquainted with bacteria and their vagaries, but recently we have discovered that there remains much to be learned. Of the various activities of bacteria the most interesting at present is that of the so-called focal infection. By this is meant a small, more or less quiescent point of disease, which although it causes no local disturbance, gives rise to symptoms elsewhere in the body.

Probably the most important of these manifestations is the involvement of the various joints of the body. If we pick up our textbooks to read about arthritis, the chances are that we shall be much discouraged, not only by the unfavorable prognosis, but also by our inability to determine the cause. Since the work of Rosenow and others, however, we are fast realizing that a small collection of bacteria may be responsible for the joint condition, and we also are discovering the fact that the only way to accomplish much good is to attack the primary focus.

At present the capable physician is no longer content to give antipyretics, in expectation of a miraculous cure. If a patient now gives a history of chronic and painful joints, the first thought of his physician would be focal infection. To determine the presence or absence of such a condition is not always an easy task, and outside aid, particularly the Roentgen ray, may have to be called upon. There may be a chronic gonorrhœa the tonsils may be diseased or, what is very common, there may be infection at the roots of the teeth. This last is a frequent condition and may be present without local indications. It is also interesting to note that many inflammatory lesions of the eye are directly referable to dental infections. This has long been recognized by the laity, but the idea was considered to be mere superstition by the medical high priests.

After removal of the focal infection

the patient's rapid recovery, in many instances, is little short of marvellous. In most cases no farther treatment seems to be necessary, the joints cease to be painful, and the convalescent goes on his way rejoicing.

That bacteria in the foci cause the distant lesions has been proved so many times that there can now be no doubt as to the causal relation. The isolated organisms, when injected into experimental animals, show a special affinity for tissues similar to those involved in the original instance. A joint will be attacked, an eye become involved, even the appendix will succumb, according to the affinity shown in the first case.

The more thoroughly the matter is investigated, the clearer it becomes that local infection seems to explain satisfactorily certain of the hitherto unsolved problems of medicine.—*N. Y. Med. Jour.* 9-30-17.

## Surgery

### DIAGNOSTIC AND THERAPEUTIC LUMBAR PUNCTURE IN SPINAL INJURIES.

Harold Neuhoef (*Archives of Diagnosis*, April, 1917) asserts that in the Bellevue Hospital lumbar puncture has proved of signal aid in cases of suspected or evident spinal injury and is now performed as a routine measure. The finding of a large quantity of blood and evidence, on repeated puncture, of continuation of the bleeding constitutes one of the exceedingly few indications for operation in recent spinal traumatism. In some instances, the blood found in the spinal canal afforded the only evidence that vaguely suspected spinal injuries were actually vertebral traumas with compression of the cord. The finding of blood is of unusually great value in the presence of acute or subacute alcoholism, of coma or mental confusion, or of hysteria. In cases of skull injury blood in the spinal canal is of less value in the diagnosis of associated spinal injury, unless large amounts of fresh blood are noted. To eliminate the needle as the cause of bleeding the spinal fluid should always be collected in two or

three test tubes. That lumbar puncture may obviate operative intervention in suspected cord injury was illustrated in the case of a woman in whom, after a street car accident, complete motor and sensory paralysis in the legs developed progressively. Puncture revealing clear fluid, operation was withheld, and soon after the reflexes began to reappear. As a therapeutic measure, lumbar puncture is of value to relieve compression or irritation of the cord by fresh blood, and to minimize the after-effects.

S. S. Goldwater, in *The Modern Hospital*, has the following to say regarding the training of the young surgeon:

#### TRAINING THE YOUNG SURGEON.

So much time is necessarily spent by the surgical staff in performing operations and treating wounds, that the more refined methods of diagnosis and observation which are more easily and more generally practiced in the medical wards are often neglected. The surgeon is frequently called on to treat a localized physical condition which is perfectly patent and which demands prompt operative relief; hence his characteristic habit of making a snap diagnosis, a method which, for surgical purposes, is often singularly effective. An abscess may advantageously be opened, or a hemorrhage successfully controlled, without an exhaustive inquiry into the patient's family history, and without the performance of searching clinical tests. The habit of rapid diagnosis may, however, be carried too far. Certainly it tends to preclude the more careful, deliberate, and thorough investigation which is often essential to the correct diagnosis of obscure or complicated pathological conditions, and which is more likely to be practised by the visiting staff, and therefore learned by the intern, in the medical wards. \* \* \* \* \*

The beginner should not be plunged too quickly into the alluring atmosphere of the operating room, where all the conditions favor quick decision and action, but should first be trained thoroughly in diagnostic investigation, an art which attains its highest development in the

medical wards.

Paul Pileher, in the *Boston Medical and Surgical Journal*, has the following timely remarks to make in regard to Prostatectomy:

#### PROSTATECTOMY.

The occasional surgeon, or the surgeon unacquainted with the science of urology other than as it crosses his path in the operating room, does not need to discuss the disputed questions concerning obstruction at the neck of the bladder due to prostatic hypertrophy or distortion. To this sort of man a complete examination of the patient is not necessary. All that he needs to know is that there is an obstruction at the neck of the bladder, that it is probably due to an enlarged prostate, and that it can be removed surgically.

If he is lucky his patient will survive his operation, with the chances of more or less permanent disability. This is sufficient for some men. To others of us who have passed through the development stage of prostatic surgery, who can look back upon an uncontrolled hemorrhage, the unexplained death of some patients whose good general appearance lured us into a state of false security, we feel that we need a great deal more information in order that we may know beforehand what to expect in a given case and to choose, if may be, the safest course to pursue under the circumstances.

#### GASTRIC AND DUODENAL ULCER IN NEWBORN.

Nuzum cites two cases of such ulcers occurring in infants. A strong healthy girl, 24 hours old, suddenly vomiting some two or more ounces of blood after which she was very pale and weak and showed very marked symptoms of loss of blood. This occurred on two other occasions and she lay at the point of death for sometime. She finally rallied, made a slow recovery and up to the time she was 10 years old was a healthy fine girl. Nuzum is convinced that this was a case of gastric ulcer, which was present before birth and which started to

bleed on account of the distention of the stomach by the mother's milk and consequent peristalsis, or by both. A fine baby girl cried lustily following a natural delivery, nursed well, and seemed well in every way until about 14 hours old, when the nurse noticed a spot of blood on the diaper. Nuzum made a diagnosis of hemorrhage from a duodenal ulcer and instituted active treatment for the same, but to no avail. She continued to pass clotted blood during the night, went into collapse and died when 24 hours old. A post-mortem was permitted. There was a firm band or organic adhesions about one-half inch wide extending from the ulcer site on the duodenum to the gallbladder, also some friable adhesions and a plastic exudate. A small quantity of blood had oozed through the perforation into the peritoneal cavity. The mucosa around the tiny ulcer was smooth and soft, not noticeably different from that in the normal parts.—*Jour. A. M. A.*, 10-7-16.

The following are abstracts of articles in the issue of *The Journal*, April 1, 1916:

#### GASTRIC ULCER.

Many theories have been advanced as to the cause of gastric ulcer, and the main feature of most of these theories is stated by W. E. and E. L. Burge, Urbana, Ill. (*Jour. A. M. A.*, April 1, 1916), to be a diminished resistance of limited areas of the gastric wall followed by the digestion of these areas by the unrestricted action of the pepsin. The cause of this diminished resistance is the object to be determined by the authors, who are inclined to attribute it to a lack of the normal balance between the oxidative processes of the tissue cells of the mucosa and the digestive action of the pepsin in the stomach. If this is destroyed in a limited area, ulcer is liable to be produced. They report experiments made on dogs which seem to support this view and also others carried out on unicellular organisms (paramecium) which show that while living cells are digested with more or less ease. Their conclusions are stated as follows: "The decreased resistance of a circumscribed

area of the stomach to the digestive action of gastric juice is due to a decrease in the oxidative processes of the cells of the area. Gastric ulcer is due to the subsequent digestion of the area by pepsin. The resistance of unicellular organisms (parameciums) to the digestive action of the proteolytic enzymes can be increased or decreased by increasing or decreasing the intensity of the oxidative processes of the organisms, the greater the intensity of the oxidative processes the greater the resistance, and vice versa."

## Health News

### BETTER SANITATION NEEDED IN RURAL SCHOOLS.

In the interests of efficiency and health there is increasing necessity for the application of scientific medical and sanitary knowledge to the administration of the public schools, in the opinion of the Public Health Service.

In general, the faults observed in rural schools, the annual report of the service declares, are due to a lack of skilled advice, especially in regard to the location, construction and equipment of school buildings and disregard of sanitary principles governing water supplies, the disposal of sewage, ventilation, temperature, illumination, and the arrangement of school desks and blackboards. During the past fiscal year surveys have been made in rural districts of several states and many thousands of school children have been examined. These examinations have included thorough testing of the eyes by competent oculists, tests of mental capacity, and the effect of sanitary environment on school progress, as well as inspections for the customary physical defects.

The conclusion is reached that there is great need for improvement in rural schools and that communities themselves will benefit if conditions are bettered, the schools serving as object lessons for surrounding sections. Conditions in country districts have been found below those in the cities and it is apparent that organized health work has largely been confined to the latter. Con-

sidered from a sanitary standpoint alone the Public Health service is in favor of the consolidation of rural schools, since it must eventually result in the providing of better buildings and the organization of systems of efficient sanitary inspections.

#### DO YOU KNOW THAT—

Civilian health is the rock upon which military efficiency rests

The little house fly is a dangerous thing. The time to "swat 'em" is in the spring?

The ingestion of wood alcohol may produce blindness?

Swimming is a healthful exercise?

Human beings are the great agencies in the spread of human diseases?

No community can be really successful without safe waste disposal?

Keeping healthy is a part of doing "your bit"?

Universal public health service is the duty of the nation?

Much valuable food material is diverted in the manufacture of alcoholic beverages?

The only good fly is the dead one?

Good health is the foundation of personal usefulness either in peace or in war?

He who is too busy to care for his health may have to take time to cure disease?

#### CHILD LABOR IN WARRING COUNTRIES.

"The experience of war time has only demonstrated the necessity—technical, economic, and even physiological—of the labor laws enacted before the war. In our legislation secured in time of peace we shall find the conditions for a better and more intense production during the war."

These words of M. Albert Thomas, the French Minister of Munitions, illustrate perfectly the official attitude of both France and England after two years of emergency exemptions for war industries, according to the Children's Bureau of the United States Department of Labor which has just completed a brief review of all available reports on child labor in the warring countries.

In France and England, earlier standards of hours are being restored, not only to protect the health of the workers, but for the sheer sake of industrial efficiency, present and future. In Italy, the Central Committee on Industrial Mobilization has taken steps in the same direction. In Russia, a year before the revolution, a movement was under way to raise the age limit for children in industry.

Canada, Australia and New Zealand, in spite of the great armies of men they have sent to the front, have maintained their labor standards with little or no variation. Victoria has slightly increased the amount of overtime which may be permitted to women and children in special cases. On the other hand, Manitoba has reduced its legal overtime. No change whatever in restrictions on woman and child labor is reported from New Zealand.

The Children's Bureau sums up as follows the child-labor situation in France and England:

France, after almost two years of war exemptions by which children under 18 were allowed to work at night in special cases, restored the night-work prohibition for girls under 18 and provided that other night workers should be subject to medical supervision. The reason for this is indicated not only in the statement by M. Thomas, quoted above, but again in the following extract from the French official Bulletin des Usines de Guerre for July 31, 1916:

With the continuance of the war it becomes necessary not only to find the best possible disposition of the forces available for our war industries but also to avoid every cause for exhaustion or weakening of the labor employed in our factories. There is a close relation between the conditions in which we place our workers and the improvement or the increase of our war products. For the very sake of the national defense we must conserve all their physical strength for the workers who are responsible for the manufacture of arms and for the output of our factories.

France has now under consideration an education bill which would in effect raise the standard of labor protection in war time. It was introduced in the Chamber of Deputies in March by M. Viviani and closely resembles a bill passed by the French Senate in June, 1916. This proposal to establish a system of continuation schools and to require part-time school attendance during working hours by all working children under 17 years of age has the endorsement of the Minister of Commerce and of business interests in all parts of the country.

A similar advance has been recommended in England by the Departmental Committee on Education for Juvenile Employment after the war. This committee also advises an effective 15-year age limit for required school attendance without the exemptions permitted by the present law. Supplementary estimates for educational purposes have been presented to Parliament by the government which look toward a strengthening of adolescent education along the lines suggested by the committee.

In England as early as 1915 some employers returned to regular labor standards. The British Chief Inspector of Factories and Workshops writes in May, 1916:

The tendency grew as the year passed to substitute a system of shifts for the long day followed by overtime, and this is particularly reported of munition factories in the Midlands and in Sheffield. \* \* The number of days on which overtime was actually worked tended in many factories to decrease as experience grew of accumulating fatigue and lessening output. Probably for similar reasons Sunday labor also has tended latterly to decrease.

The reports of the British official Committee on the Health of Munition Workers on the waste involved in the long hours worked during the war are well known. They urge the restoring of restrictions and are full of such statements as the following:

Even during the urgent claims of

a war the problem must always be to obtain the maximum output from the individual worker which is compatible with the maintenance of his health. In war time the workmen will be willing, as they are showing in so many directions, to forego comfort and to work nearer to the margin of accumulating fatigue than in times of peace, but the country can not afford the extravagance of paying for work done during incapacity from fatigue just because so many hours are spent upon it, or the further extravagance of urging armies of workers towards relative incapacity by neglect of physiological law.

Conditions of work are accepted without question and without complaint which, immediately detrimental to output, would if continued be ultimately disastrous to health. It is for the nation to safeguard the devotion of its workers by its foresight and watchfulness lest irreparable harm be done to body and mind both in this generation and the next.

Very young girls show almost immediate symptoms of lassitude, exhaustion and impaired vitality under the influence of employment at night. A very similar impression was made by the appearance of large numbers of young boys who had been working at munition for a long time on alternate night and day shifts.

In England the war exemptions to the factory laws have not included a lowering of the age limits for factory work. And the exemptions to the school attendance laws permitted for agriculture and "light employment" are now bitterly regretted by the general education authority which has sanctioned them.

A fuller memorandum on child labor in warring countries will be supplied by the Children's Bureau, Washington, D. C., upon request.

#### HOW CANADA TAKES CARE OF SOLDIERS' CHILDREN.

How Canada provides for the wives



and children of her enlisted men is described in a report by Mr. S. Herbert Wolfe of New York, prepared at the request of the Secretary of Labor and just published by the Children's Bureau of the United States Department of Labor.

In presenting the report, Miss Lathrop, Chief of the Children's Bureau, says:

In the 50 years since the Civil War, legislation affecting the family and its economic status has shown marked growth. Mothers' pension laws and minimum-wage laws are recognized examples, and it is acknowledged that their result has not been to pauperize but distinctly to improve the power of the family to protect itself. In view of this tendency it is to be expected that a system of compensation for soldiers and sailors can be developed whereby the government will make possible for their children the home life and parental care which are the common need of every child.

The report points out that in Canada two notable elements have been added to the government provision for soldiers and their families: First, insurance on the lives of soldiers is carried by various municipalities, and, second, the Dominion has undertaken as a part of its military system the re-education, in a suitable occupation, of the disabled soldier so that he can assume again, in whole or in part, the care of his family.

The Canadian compensation for the soldier and his family includes not only \$33 of monthly pay for the private in active service, but a separation allowance to his dependents of \$20 a month from the Dominion Government and further assistance in special cases from the Canadian Patriotic Fund.

For example, the wife of a private soldier with three children between the ages of 10 and 15 may either receive \$15 or \$20 from the assigned pay of her husband, \$20 separation allowance, and \$25 from the Canadian Patriotic Fund, or in all \$60 or \$65 a month.

If her husband is killed, she will re-

ceive \$40 a month for herself, and an additional \$6 a month for each of her children until her boys are 16 years of age and her girls are 17 years of age. In addition, if she lives in Toronto or one of a number of other cities, she will receive life insurance. This will be paid to her in monthly installments unless she shows that she needs the entire amount at once to pay off a mortgage or to make a start in business.

If her husband is disabled, she will receive a special maintenance allowance while he is having medical treatment and learning a new occupation, and when he is finally discharged, if his physical disability continues, a pension will be paid according to the extent of his disability and the number of his children under 16 or 17 years of age.

Mr. Wolfe is an actuary of recognized authority and he has analyzed especially the municipal provision of life insurance by which certain Canadian cities have supplemented the pensions provided by the Dominion for dependents of deceased soldiers. In Toronto, the municipality has not only purchased \$10,000,000 worth of insurance from private companies, but it is itself carrying more than \$32,000,000 worth of insurance. A municipal insurance bureau has been organized and \$2,000,000 worth of bonds have been issued, of which the principal and interest are a charge upon the general taxpayers of the city. Every officer and enlisted man residing within the city limits of Toronto who volunteers for overseas service has from the date of his enlistment been protected by a life insurance policy of \$1,000, the protection running from the time of his enlistment to his death or six months after his discharge or resignation.

The report refers also to the fact that each of the European countries makes government provision for the families of private soldiers and sailors. In Great Britain, France and Germany the amount of the governmental separation allowance depends upon the size of the family which must be supported.

#### OPPOSES ENLISTING THE TUBERCULOUS.

Aroused by reports that a history of

tuberculosis or even the existence of the disease in some form will not be considered by some medical examiners as a bar to enlistment in the United States Army and Navy, the National Association for the Study and Prevention of Tuberculosis is urging upon federal authorities the importance of taking every possible precaution to prevent the spread of tuberculosis among enlisted men through the breaking down of afflicted persons or persons with a history of tuberculosis. Such cases, developing rapidly under the rigors of army life, constitute a serious menace to those who enter the ranks without infection.

Resolutions to this effect have been sent to President Wilson, the Council of National Defense, and to the secretaries of War and the Navy.

It is pointed out in the resolution that it has been the experience of the warring nations of Europe that cases of incipient and even moderately advanced tuberculosis are frequently unrecognized in the routine examination of recruits; and that inactive tuberculosis is frequently rendered active by the physical and mental strain and exposure of modern warfare.

"The appalling prevalence of tuberculosis in the armies both in the field and in the concentration camps with the inevitable and widespread extension of the infection from these to the civilian population is the greatest of all health problems presented by the present war," it continues, "and the extreme gravity of the situation demands that the services of all the most highly trained men available be utilized most effectively for protection against the occurrence of conditions now prevailing in France and other countries."

The Association recommends the enlistment by the Council of National Defense of the best available tuberculosis experts and agencies in the country for the following specific purposes:

"(a) To make under the command of a ranking medical officer of the army corps repeated routine examinations and observation of recruits while in training and mobilization camps for the purpose of

detecting any obscure tuberculosis lesions;

"(b) To utilize and enlarge the existing sanatoria and hospitals of our country so that all cases of tuberculosis arising in our forces may be adequately cared for as near as possible to their own homes;

"(c) To work out in cooperation with existing health authorities a definite, comprehensive and constructive program for adequate prevention and control of tuberculosis among the whole population."

#### NATIONAL TUBERCULOSIS ASSOCIATION AND ITS SUBSIDIARIES READY FOR WAR RELIEF WORK.

The National Association for the Study and Prevention of Tuberculosis, which is already cooperating with the Council of National Defense in an effort to suppress tuberculosis in the army, has offered its services to the American Red Cross, to aid in any possible way in carrying on its work.

The Red Cross, in organizing its war relief is confronted with the task of coordinating the health and philanthropic activities throughout the country. The National Tuberculosis Association has the machinery already organized for this purpose in every state in the Union in the form of bodies of trained workers thoroughly conversant with the conditions with which the Red Cross must deal. This machinery is freely offered for the organizing and promoting of local Red Cross campaigns or in promoting Red Cross work in any other form that may be determined.

There are now anti-tuberculosis organizations in every state in the country. These, with county, city and other local associations, now number 1,500 organizations affiliated in the National Association. The organization of state associations was completed this last year. During that time, state associations were formed in South Carolina, Tennessee, New Hampshire, Vermont, Utah, Nevada, Montana, Wyoming, Florida, Oklahoma, New Mexico, Arizona and Kentucky. The machinery of all these organizations is now made available for

Red Cross use.

This is a particularly valuable asset, it is pointed out, in view of the fact that these associations are well organized and run on a thoroughly business basis. Nearly 300 city and county associations employ paid secretaries and staffs.

The National Association has for nearly ten years been cooperating with the American Red Cross in the sale of Red Cross Christmas seals for the support of anti-tuberculosis work. Over 104,000,000 of these seals was sold in 1916.

#### A STATE FORESTER NEEDED.

"The State of West Virginia needs a trained state forester to take direct charge of the work of forest fire protection," says the American Forestry Association of Washington, D. C., in a letter just received by Gov. Cornwell. With 60 per cent of the state in forest, and over four million acres of non-agricultural forest land capable of growing 500 million feet of lumber per year, three-fourths of which area is already cut over, the future prosperity of the state will be influenced profoundly by the treatment which these lands receive. If fires are allowed to burn, not only will the second growth of timber be prevented but the soil itself will be burned and wasted away, leaving a permanent desert. If fire protection is successful, the lumber industry of the state can be maintained permanently, and the poorest and roughest lands will remain productive.

The state recognized this need in 1909 when the law required the Game and Fish Commissioner to assume the duties of Forestry Warden as well, a post which the present state warden has filled with marked efficiency and success.

But in requiring the state Game Warden to act as Forestry Warden, the state is asking too much of its officer. Forest fire protection in itself is a special field, requiring the undivided attention of a chief warden or forester. To prevent forest fires from occurring when every acre of the state's wild and inaccessible forest lands often become a tinder box, ready to burst into flame at the first careless or overt act, requires an organization keyed up to the highest

pitch of efficiency. In its way, a State Forest Fire Service is of the same character as the organization of a city's fire protective branch. But its task is even more difficult—for actual fire prevention must be preceded by education to secure solid public backing for the enforcement of the fire laws.

What would our country do today for timbers for ships with which to combat the submarine menace, were it not for our forest industries? Yet it is certain that unless fire protection becomes effective, cut-over lands will never produce anything more valuable than brambles. The fire warden, state or local, is the basic factor in all successful reforestation. He must be a persuasive and convincing educator, a good organizer of men, thoroughly familiar with the difficult art of successful forest fire fighting, and fearless in the enforcement of law against offenders.

The State of West Virginia has already learned by experience that forest fire wardens of this type must be free from the additional responsibility of acting as game wardens, if they are expected to do their full duty in fire protection. In 1915 the state warden was empowered to appoint fire wardens in every county to serve solely for the enforcement of the fire laws. This system was practically demanded by the land owners in Central West Virginia, who since 1914 have undertaken through a voluntary association to protect their lands from fire at their own expense.

The present law provides that the State Fish and Game Warden shall appoint as state forester some suitable person of sufficient education, training, and practical experience in forestry, to assist him in enforcing the fire law and to look after other phases of state forestry. But under this law, the state Game Warden has remained the head of the system, responsible both for forest fire protection and for the fish and game law and for administration.

Not only is the chief warden handicapped by this double duty, but a still worse feature exists. This office is political in its nature, and the present efficient incumbent may readily be replaced by party politics. There is no

permanent guarantee to the state that fire protection has been placed as yet on permanent foundations.

West Virginia can no longer afford to experiment with any but the best possible plan to secure the future of her forest resources from annihilation by fire. The forestry department should be separated from that of fish and game protection not only in the field, as at present—but at Wheeling as well.

A State Board of Forestry should be created following the plan pursued in other states. This board should appoint the state forester, who should have direct charge of fire protection and of the force of fire wardens. The forester must be a trained man, of sufficient experience to command the respect of this force, and able to carry out the difficult role which he is called on to perform, in a thorough, creditable manner.

It may be argued that this separation of forestry from fish and game will cost the state more than the present system. This is not the case. Forestry boards of similar character in adjoining states serve without any compensation, hence are not an expense. The fire wardens are already separate appointees, and are paid \$2.00 per day by the counties for actual service. The patron men, when employed by the private fire protection association, are paid by them. The government contributes \$5,000 per year for lookout men and will continue to do so, but only in case the state work is efficient. The only expense of a separate organization is the salary of the state forester. Is the state of West Virginia so unmindful of the future that the expense of one man's salary is too great a price to pay for safeguarding the millions of acres of forest lands?

The state legislature should act at once to create this separate department and place forest fire protection on a firm and stable foundation.

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#### RAPID GROWTH OF THE BIRTH REGISTRATION AREA.

Congratulations to Maryland, Virginia, and Kentucky, the latest states to be

admitted to the Registration Area for Births by the Director of the Census, Sam L. Rogers.

The Registration Area for Births was established in 1915 and was then composed of ten states and the District of Columbia, representing 10 per cent of the territorial extent of the United States but containing 31 per cent of the country's population. For this area the Bureau of the Census has recently issued its first annual report, entitled, "Birth Statistics." As the area grows the annual reports will deal with the births in a constantly increasing portion of the country and will, therefore, become of constantly increasing interest and value.

The outlook for a very rapid growth of this registration area for births is so good that a word of cheer to the states outside should be given. The need of complete birth registration is recognized now as never before. The age of the soldier must be known, and so a new argument for birth registration comes to the United States. Since war was declared tests of the completeness of birth registration have been made by special agents of the Census Bureau in Virginia and Kentucky, and both these states secured a rating of over 90 per cent, which represents the degree of completeness required for admission to the area.

Similar tests are now being made in Indiana and New Jersey, and before the year is over will be conducted in North Carolina, Ohio, Utah, and Wisconsin. Several other states are nearly ready to seek admission, and it is by no means a wild prediction that the Birth Registration Area within the next two years will be more than trebled in size and will contain over two-thirds of the population of the United States.

One physician recently became so thoroughly aroused to the desirability of recording births that he reported to the local registrar 450 births which had occurred in his practice since 1900.

Parents and physicians everywhere are awakening to the importance of this matter and the fashion now is to register baby's birth.

## Abstracts

### TREATMENT OF EPITHELIOMA BY RADIUM.

By RUSSELL H. BOGGS.

The writer emphasizes the fact in the *International Clinics* with many photographic illustrations that in each case the proper form of radiation and dosage for each case must be carefully determined.

Four classes of epithelioma are to be considered:

First, the lesion which can be cured by one application of radium with the proper dosage.

Second, the lesion which is so situated that glandular involvement is likely to take place or has already occurred and the Roentgen ray should be employed as an adjunct to treat adjacent glands.

Third, those cases in which the local application of radium supplemented by the Roentgen ray will only act as a palliative measure.

Fourth, those cases in which excision is justified to be followed by radio-therapy.

Prof. Boggs believes that radium and the x-ray should always be considered first in the treatment of Epithelioma, because, when properly applied, practically all Epitheliomatous tissue can be made to disappear and there are fewer recurrences than by any other method. In order to apply the method, however, the operator must have the requisite clinical experience with these growths as well as a knowledge of the use of the agents employed.

Inoperable cases in which the tonsil is involved are often markedly improved so far as symptoms are considered.

### SYPHILIS AS AN ETIOLOGICAL FACTOR IN LAENNEC'S ATROPHIC CIRRHOSIS OF THE LIVER.

By DOUGLAS SYMMERS.

Symmers in a study of Atrophic Cirrhosis of the Liver in the *International Clinics* concludes that alcohol plays a secondary role in the Etiology of Atroph-

ic Cirrhosis of the Liver. A certain percentage of the cases conform to the type described by Laennec. In this group syphilis is the primary etiological factor and alcohol, if it enters into the process at all, is contributory, and not essential.

### ANEURISMAL OBSTRUCTION OF VENA CAVA SUPERIOR WITH SPECIAL REFERENCE TO THE CAVAL SYNDROME.

By P. G. SKILLERN, JR.

Skillern reports in the *International Clinics* an example of this condition and also gives a brief review of the literature. The Caval Syndrome is described as follows:

This consists of enormous oedematous swelling of the head, neck, trunk, upper extremities, and marked obstruction of the veins. These clinical manifestations depend upon the formation of a collateral circulation, the extent of narrowing of the vena, and the size and extent of the pathologic process which causes the compression.

The first result of compression is obstruction of the venous blood in the entire territory of the vena cava superior. Through dilatation of all veins and capillaries in the territory of the upper half of the body an enormous cyanosis is often caused. The result of the obstructed outflow of venous blood while more blood is continually being brought to the part is the appearance of œdema. From the distribution of the œdema and its further advance one may draw diagnostic conclusions as to the site of compression. The lower half of the body is almost always free from œdema, but the latter appears here as well, when through overdistention of the inferior vena cava obstruction in the tributaries of this vein results, or when through cardiac weakness œdema appears in the lower extremities and serotum. Usually, however, even in this case the swelling of the upper half of the body remains in characteristic contrast to the very much slighter œdema of the lower. Not only the subcutaneous cellular tissue, but also the deeper parts are involved by the œdema, especially the mediastinum. Of import-

ance also is œdematous infiltration of the mucous membranes, for thus œdema of the glottis may give ground for suddenly appearing death.

In the diagnosis of compression of the superior vena cava but little difficulty is encountered. The diagnosis is based upon the obstructive signs appearing in the territory of the vena cava superior, *i. e.*, upon the direction of a collateral circulation and the prominence and characteristic course of the veins belonging to it. In favor of aneurism as the cause are the appearance of a dull, pulsating area and the Oliver-Cardarelli symptom.

#### STUDIES ON THE GROWTH OF CELLS; CULTIVATION OF BLADDER AND PROSTATIC TUMORS OUTSIDE THE BODY.

By MONTROSE T. BURROWS, J. EDWARD BURNS AND YOSHIO SUZUKI.

The authors have cultivated tissue from benign and malignant tumors of the human bladder and prostate obtained by operative procedures, in media consisting of agar, or ascitic fluid, and plasma, either of the individual having the tumor or of a normal individual. Seven of the tumors were malignant, and all of these showed growth except two, one of which had received on application of strong cocaine solution, and the other of which had been treated with radium for months. None of the benign tumors or specimens of normal bladder mucosa used as controls showed any growth.

The growth was preceded by a membrane on the surface of the medium, and the plasma was liquefied.

The observations have shown several facts of interest; first, that the diffusion of a substance or certain substances from the tissue fragments over the surface of the medium to form a membrane was essential for the activity of the cells; second, that the cells move in contact with the surface of this membrane; third, that such a diffusion and cellular activity is observed only about the fragments of the definitely malignant tumors; fourth, that there was no diffusion of such substances nor cellu-

lar activity demonstrable about the fragments of one of the malignant tumors which had been treated for four months previously with radium. These latter facts indicate that this method may be important in determining the malignancy, following the course of treatment and studying the biological properties of these tumors.

#### LOCAL ANAESTHESIA IN SURGERY OF THE COLON AND RECTUM.

By WM. M. BEACH.

Beach's conclusions fully detailed in the *International Clinics* for March on the subject are as follows:

First, eliminating terrorism associated with operations under general anaesthesia.

Second, absence of post-operative distress and complications.

Third, the anaesthesia is complete, thoroughly blocking the field, thus preventing shock.

Fourth, it persuades the patient to undergo an operation because the detention from business is shorter and post-operative pain is less.

Fifth, skill in technic is achieved by virtue of the surgeon's care in gentle handling of a conscious patient.

Sixth, it will teach him to handle tissues more deftly in general anaesthesia realizing that much pain and tendency to infection follows tearing and mutilating of soft parts.

Seventh, local anaesthesia conserves the patient's peace of mind, as there are many who will testify to its efficiency and complete relief with so little inconvenience.

#### DOUBLE URETER AND KIDNEY WITH CALCULOUS PYONECHROSIS OF ONE-HALF.

By HUGH HAMPTON YOUNG AND E. G. DAVIS.

The upper calculous pyonephrotic portion of a left double kidney with bifid ureter in a man of 57, was diagnosed by means of pyelography, and the diseased portion successfully resected, leaving in

situ the lower normal portion with undisturbed blood supply and ureter. The patient's symptoms, pain in the back and frequency of urination, were entirely relieved, and it was later demonstrated that the half kidney secreted normal urine.

A complete survey of the literature shows that bifid ureter and double kidney is surprisingly common, especially in autopsy records, and occurs in about three per cent of all individuals. In the surgical literature, however, only 26 case reports of this anomaly could be found, and, of these, in only two (Albarran) was the diseased portion resected and the normal portion undisturbed. Since Albarran's report is very brief (only a few lines) and incomplete, the above case is apparently unique in that it is the only one fully reported.

As to the embryology of bifid ureter, there can be little doubt that this anomaly occurs as a result of a premature or exaggerated bifurcation of the tip of the ureteral bud, which bifurcation normally takes place to form the primitive renal pelvis shortly after the ureter buds off from the Wolffian duct. The ureteral bud appears, at about the 5 mm. stage, as an evagination from the caudal portion of the Wolffian duct, close to the union of the latter with the colaea. Complete double ureter is probably formed, either as the result of two separate evaginations from the Wolffian duct, or as the result of the process of dilatation of the lower end of the Wolffian duct (and of the un-cleft lower end of the ureter) by which the former comes to form a part of the bladder wall.

#### THE BACTERIOLOGY AND MICROSCOPY OF THE CONTENTS OF THE SEMINAL VESICLES POST-MORTEM. A STUDY OF FIFTY-TWO CASES.

By B. A. THOMAS AND F. G. HARRISON.

This paper is the forerunner of a second one dealing with the bacteriology of the seminal vesicles during life, as revealed at seminal vesiculotomy.

The authors have made hanging drops, stained smears, and cultures from

52 cases at autopsy. *B. coli* was obtained in 16 cases, *M. aureus* in 2, *M. albus* in 1. No gonococci were obtained. Pus cells were seen in the secretion in a considerable portion of the cases, while in 27, or over forty per cent spermatozoa occurred in the presence of pus cells or bacteria. In 14 cases, 27 per cent pus or bacteria were present without spermatozoa.

The conclusion, then is drawn that the seminal vesicles harbor spermatozoa after death, and therefore probably during life, and that this function is exercised in the presence of inflammation (spermatocystitis) although in a large per centage of inflammatory cases no spermatozoa can be found.

An extensive bibliography is appended.

#### THE RELATION OF THE NON-PROTEIN NITROGEN TO THE UREA NITROGEN OF THE BLOOD.

By HERMAN O. MOSENTHAL AND ALMA MILLER.

This study attempts to interpret the significance of the percentage of the urea nitrogen to the total non-protein nitrogen in the blood in a series of 165 cases. It was found that the percentage of urea nitrogen exhibited a tendency to increase, whether the total non-protein nitrogen were high or low, in all the diseases considered. Cases with acute renal conditions show a high percentage of the total non-protein nitrogen as urea nitrogen of the blood, which returns to normal as convalescence occurs. Individual patients, whose clinical condition does not vary appreciably, exhibit a constant percentage of urea nitrogen, whether the total non-protein nitrogen persists regardless of whether nitrogen is being retained or lost by the body.

The conclusion is drawn that the body usually metabolizes protein in such a manner that approximately 80 per cent of the nitrogen set free in the blood is in the form of urea. The selective action of the kidney maintains the urea nitrogen at a level of 50 per cent or less of the total non-protein nitrogen of the

blood. An impairment of renal function, even of very slight degree, may result in an increase of the percentage of urea nitrogen.

From the clinical point of view, figures for urea nitrogen are preferable to those for total non-protein nitrogen because:

a. The method for urea nitrogen of the blood is simpler.

b. The methods for urea nitrogen are perfected so that they yield constant results, which are comparable to those of other observers, while this is not true of the various means of determining the total non-protein nitrogen of the blood.

*\*From the Medical Clinic of the John Hopkins Hospital.*

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#### A CONTRIBUTION TO THE PHYSIOLOGY OF THE URETER AND VAS DEFERENS.

*By D. I. MACHT.*

Studies were made on the isolated ureter and vas deferens of animals and from the surgical operating room, and were confirmed by observations of those organs in situ in various animals. The isolated ureter is best studied by means of ureteral rings. These contract rhythmically so that the rate and force of peristaltic movements and the tonus of the ureter can be studied. The optimum medium is a Locke solution plus a small quantity of fresh urine. Urea stimulates the contractions of the ureter; a slightly acid medium is also necessary for the furtherance of the contractions. The vas deferens, on the contrary, survives best in a slightly alkaline medium. These conditions of acidity and alkalinity correspond to those in nature. Oxygen is necessary for the proper maintenance of the contractions of both ureter and vas deferens. Heat first stimulates and subsequently paralyzes the contractions. Cold slowly inhibits them.

Both ureter and vas react to epinephrin which fact proves that they are innervated by the true sympathetic. The response to ergotoxin still further corroborates this fact.

Both ureter and vas react to the so-called parasympathetic drugs: pilocarpin, physostigmin, cholin, muscarin and atropin, which fact proves that they are also innervated by the parasympathetic fibres.

Both ureter and vas react to nicotin, which fact points to the presence of ganglion cells in their walls.

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#### ADVANTAGE OF PYELOTOMY DRAINAGE FOR NEPHROTOMY WOUNDS.

*By E. L. KEYES, JR.*

Pyelotomy and Nephrotomy wounds heal promptly as a rule providing there is no obstruction in the ureter below or in the lower urinary tract. Occasionally, however, operative wounds of the renal parenchyma close with extreme slowness although there may be no demonstrable obstruction to the outflow of urine. It has been the author's experience, however, that incisions made into the renal pelvis are followed uniformly by prompt closure. He believes that the tardy closure of nephrotomy wounds may often be due to the blocking of the upper ureter by blood and pus. The prompt healing of pyelotomy wounds has led the author to adopt this procedure wherever possible; but where a nephrotomy is necessary, he recommends suture of the incision in the parenchyma and drainage through a counter-incision made in the renal pelvis. He has carried out this plan in three cases with satisfactory results.

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#### A MODIFIED WOODYATT PUMP.

*By D. M. DAVIS AND G. S. GORTON.*

The authors describe a simplified and less expensive form of an electric pump devised by Woodyatt. The mechanism actuates a record syringe, and serves to make intravenous injections over long periods of time at predetermined, and constant rates.



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*Gentlemen of the West Virginia State  
Medical Association.*

I am profoundly grateful to you for the great honor you conferred upon me when, last year, at our meeting in Wheeling you saw fit to select me as your President for the ensuing year of 1917. It is an honor which I shall always cherish as the greatest in my professional career. To be called upon to fill the highest position within the gift of the members of the West Virginia State Medical Association is an honor of which the most distinguished member might well feel proud, and doubly so when we look back over the list of the eminent physicians of our state who have filled this position with credit to themselves and honor to the society.

In assuming the duties I am conscious not only of the dignity and responsibilities of the office, but of my own limitations, and must confess to you a certain degree of timidity, in addressing this magnificent body of physicians representing, as they do, the very cream of the profession of our state. I ask your help and cooperation in no limited measure, that I may be able to conduct the deliberations of this body in such a way as to advance the interests of this association, scientific medicine and humanity at large, and in the end hand over to my successor our great and worthy cause a little nearer its full fruition.

Important as any meeting of the West Virginia Medical Association should be, and is, we are reminded at this time that this is an extraordinary meeting, from the fact that we celebrate our golden jubilee; the semi-centennial meeting of our association, which fifty years ago twenty-two physicians representing ten counties of our state met in this busy mountain city, nestling here among the beautiful hills of our Little Mountain State overlooking the placid waters of the Monongalia, and organized what is now known as the West Virginia State Medical Association. That little craft which was hewn out at Fairmont, and cut loose from that quiet mooring on the tenth day of April, 1867, with less than twenty-five passengers on board has increased her number of passengers until today she carries over nine hundred and there is room for many more. She has again been borne to this hospitable port by pleasant breezes, where she completes her fiftieth annual voyage, and east anchor for a few days in the city of her birth in order to give an account of her stewardship and obtain a renewal of supplies.

The history of our State Association during the fifty years of its existence may not have shown the progress desired and hoped for by its organizers, yet in a very large measure the results would seem satisfactory when the con-

ditions under which they were working seemed at the time, and no doubt were, very discouraging, which fact should increase our admiration for the founders. Dr. James E. Reeves, of Fairmont, chairman of their committee on arrangements in his address of welcome to the convention (stating some of their aims and hopes) said, "You come to lay the foundation of a State Medical Edifice, whose grand superstructure, though not to be made of granite and marble, will be none the less enduring, and none the less honorable to the profession and to West Virginia." And in his closing remarks when asking the question regarding the part that the profession in West Virginia should take in moving forward the car of medical progress, in enlarging the boundaries of American medical literature, said: "We have before us, truly, a rich and abundant harvest that as yet, has scarcely been touched by the sickle. Gentlemen, I beseech you, suffer it no longer to be said that the laborers are few! But, provided with the implements of our toil, let us, individually and collectively, go manfully forward in the discharge of the duties which we owe to humanity, to ourselves, and to West Virginia."

"What constitutes a state?

Not high rais'd battlements, nor labor'd mound,

Thick wall, nor moated gate;

Not cities proud, with spires and turrets crown'd;

Not bays and broad arm'd ports,

Where, laughing at the storm, rich navies ride,

No: men, high minded men."

Be it the pride of our profession to give such a contribution to our promising young state, in the hope that, in addition to the common blessing always returned for patriotism, we may rescue and save from the perils of charlatanism this beautiful region of "Fair hills, sweet dales and ever-laughing streams."

These remarks, though uttered fifty years ago seem to me especially appropriate today, and we will heartily agree with one of my worthy predecessors who in his annual address said:

"The founders of our society had (comparatively speaking) scant opportunity to prepare themselves for the practice of medicine. They were men of courage, dexterity, industry and resourcefulness. Their object in organizing was to advance science, to separate the true from the false, to protect and produce professional character. Their immediate successors, many of whom are still active members, and some of them now with us, can point with pride to a personal acquaintance, as well as to the achievements of the fathers.

A tribute indeed is due those who have brought our society to its present status as the state's representative medical body, and that tribute is a remembrance of, and a devotion to their principles, so that the heritage may be transmitted untarnished to those who come after us.

Since that little band of physicians met here on the tenth day of April, 1867, for the purpose of organizing a State Medical Association, many changes have taken place, both within and without the ranks of our profession. Death has not been unmindful of the members of the medical profession, and has carried with it a goodly number of our members, some that achieved enviable reputations and had endeared themselves to us by their skill, goodness, exemplary lives and devotion to our society, the profession and humanity at large. By reference to the transactions of our association we are reminded of the fact, that of the twenty-two physicians who were present at the organization only Dr. J. H. Brownfield, of your city, one of our distinguished and honored ex-presidents, has been spared to see, and have a part in the celebration of our fiftieth anniversary. Not only have all, but one of our organization members been called from labor to rest, but in looking over the catalogue of presidents we find that out of fifty who have occupied that exalted position, there appears opposite the names of thirty the word *deceased*.

At a special meeting of the Council held in the City of Charleston, on the 14th day of May, 1917, it was suggested that in as much as this is our fiftieth anniversary the address of your president this year should deal principally

with a history of our association, hence the departure from the usual custom. So in conformity to that suggestion I have done the best I could under the conditions, and with the material at hand from which to gain the desired information. On February the 28th, 1867, sixteen physicians, eight of them from Ohio County, met at the McClure Hotel in the City of Wheeling, then the young capitol of our young state, and after discussing the question of the formation of a State Medical Society issued the following circular:

*To the Medical Profession of West Virginia.*

Gentlemen: As a means of elevating the standard of practical medicine and surgery in West Virginia, and to render quackery odious, as it deserves, the want of state medical organization is severely felt by all true cultivators of our noble science within the limits of the state.

In West Virginia the profession is, at many points, adorned by one or more active, intelligent members, who, by their industry and devotion to science, have made for themselves a name outside of their fields of labor; and there are others too, of modest talent, scattered here and there, who but require the contact and association which proper organization would so surely effect, and to develop latent powers and capabilities of great credit to themselves, individually, and beneficial, in the highest degree, to their patients and the commonwealth of medicine.

There is much labor to be performed by the profession in West Virginia before it can reach the standard of respectability, which is its legitimate inheritance in some of the sister states. Disease and death do not relax their hold in favor of our mountains and valleys. On the contrary, some of these are the very strongholds of the enemy; and before his ravages can be stayed, the inhabitants must be taught the laws of hygiene, and be able to mark

the difference existing between the true and false—the intelligent physician and the murderous pretender, who is everywhere present with the offer of his ignoble service.

These important lessons none but competent medical men can teach; and it is high time they should begin the noble work of giving life and health to the people, and respectability to themselves.

Organization would necessitate interchange of opinion on subjects connected with the different branches of the profession, and besides the profit and pleasure of regular communications, habits of closer study and more patient investigation would be encouraged; the demand for classic and periodical literature largely increased and these would be the signs of our improved status.

To accomplish all these excellent ends, it is proposed to organize a State Medical Society; and in order to formally initiate the movement, the undersigned have, upon consultation, agreed to issue this call for a convention to assemble in Fairmont on the 10th day of April next. The call is urged upon all members of the regular profession, and their presence in the proposed convention is earnestly solicited. A full attendance is desired, not only on account of the interest connected with the organization of the state society, but also because the American Medical Association will meet in Cincinnati early in May, and the profession of this state should be represented in it, in accordance with the expressed desire of the association.

THOMAS KENNEDY, *Grafton.*

H. W. BROCK, *Morgantown.*

J. C. HUPP, *Wheeling.*

E. A. HILDRETH, *Wheeling.*

R. H. CUMMINS, *Wheeling.*

W. J. BATES, *Wheeling.*

A. S. TODD, *Wheeling.*

JAMES CUMMINS, *Wheeling.*

J. W. RAMSEY, *Clarksburg.*

J. M. BLACKFORD, *Clarksburg.*

J. M. BOWCOCK, *Clarksburg.*

JAS. E. REEVES, *Fairmont.*

D. S. PINNELL, *Buckhannon.*

G. A. CRACRAFT, *Triadelphia.*

JOHN H. STORER, *Triadelphia.*

February 28, 1867.

Ohio circular was very widely distributed throughout the state, and pursuant to the above call, and at the appointed time, twenty-two of the physicians representing ten counties of the state met in the Methodist Church at Fairmont, and organized what is now the "West Virginia State Medical Association," and sketched out a constitution and by-laws which should govern them until they should have more time to perfect them.

Dr. H. W. Brock, of Morgantown, called the meeting to order, and, on his motion, Dr. W. J. Bates, of Wheeling, was selected as temporary president, and Dr. J. W. Ramsey of Clarksburg, as secretary. On call of counties, the following named physicians responded, all of whom were duly accredited:

Doddridge: Dr. L. S. Charter.

Harrison: Dr. J. W. Ramsey.

Lewis: Dr. S. W. Hall.

Marion: Drs. James E. Reeves, Jas. H. Brownfield, Jas. M. Lazzell, and Jesse Flowers.

Monongalia: Drs. H. W. Brock, H. N. Mackey, and George W. Dent.

Ohio: Drs. W. J. Bates, John Frissell, John C. Hupp, and Henry J. Weisel.

Preston: Drs. Jas. H. Manown, Wm. M. Dent, and F. C. Shepherd.

Taylor: Drs. A. H. Thayer, A. S. Warder, and W. H. Sharp.

Wood: Dr. M. Campbell.

Wirt: Dr. J. E. Kendall.

After calling a roll of the committees Dr. Jas. E. Reeves, of Fairmont, chairman of their committee on arrangements, in a most excellent address (a portion of which we have already quoted) extended the hand of welcome to the convention. At the close of his address Dr. J. C. Hupp, of Wheeling, moved that they proceed to establish and organize a permanent medical society for the State of West Virginia.

On motion of Dr. Brock, of Morgantown, a committee of seven consisting of Drs. Brock, Reeves, Hupp, Frissell, Dent, Lazzell, and Campbell, were appointed by the president to draft a constitution

and by-laws for the government of the society. The committee after several hours labor reported a constitution and by-laws, which were unanimously adopted, after which the convention adjourned to meet again in evening session which was called to order by Dr. Bates, the president.

The committee on nominations reported as follows, and their action was ratified by the society: For president, Dr. John Frissell, of Wheeling; vice-presidents, Drs. Jesse Flowers, U. N. Mackey, and James M. Lazzell; secretary, Dr. James E. Reeves, of Fairmont; treasurer, Dr. J. C. Hupp, of Wheeling; committee on publication, the secretary and treasurer, with Drs. Jas. H. Brownfield, of Fairmont, Henry J. Weisel of Wheeling, and F. C. Shepherd of Bruceton; essayists, Drs. H. W. Brock of Morgantown, and James M. Lazzell of Fairmont. The next place of meeting, Wheeling, the first Wednesday in October, 1867. The secretary, Dr. Reeves, was requested to enter at once upon the labors of his office, and at his earliest convenience, prepare the proceedings of this meeting for publication.

The committee on arrangements for the Wheeling meeting was filled by the appointment of Drs. J. C. Hupp, R. H. Cummins, A. S. Todd, Jas. Cummins, Richard Blum, H. J. Weisel, E. A. Hildreth, and B. W. Allen.

On motion Drs. H. W. Brock, M. Campbell, and J. W. Ramsey were elected delegates from this society to the eighteenth annual meeting of the American Medical Association, to be held in Cincinnati on Tuesday, May 7, 1867.

Pursuant to adjournment the Medical Society of West Virginia began its first semi-annual session in the City of Wheeling, October 2, 1867. Dr. John Frissell, of Wheeling, president in the chair. The roll was then called by the secretary and thirty-two physicians (representing sixteen counties) responded present. The membership of the society at the close of this meeting numbered sixty-two. After another busy session of the society lasting two days they adjourned to meet at Grafton in April, 1868.

Dr. Frissell in his presidential address at Grafton in speaking of the Fairmont

and Wheeling meetings, said: "After spending at the church, a very pleasant afternoon and evening, in making up and arranging our little army of professional brothers, we 'broke camp' in good order, with warm feelings of friendship and newly formed attachments, and scattered to the broad-spread mountains and valleys of our new state, with the understanding that we would all work for the interest of our new society, and hunt out as many competent and serviceable recruits as we were able, and again to gather our forces in Wheeling to hold another council, take new observations, make new reckonings, and see how far, in this age of progress, six months had carried us along.

On the second day of last October, this little company, and those who had been gathered into its ranks in the six months interval, assembled, by the permission of our excellent governor, at the capitol, in the hall of the House of Delegates, to hold their first semi-annual meeting.

The first thing that surprised us, after we had taken a look around, and listened to the calling of the roll by our secretary, was that our little army had increased in numbers from a little over twenty to near sixty, and before the close of the session it numbered sixty-two members. We were all joyful together at our prosperous increase, and at the general harmony and good feeling that prevailed in the society. Pursuant to adjournment the society began its first annual session in Grafton April 1, 1868. Dr. John Frissell, of Wheeling, president in the chair. The roll was called by the secretary, and twenty-five members answered present. At the close of this meeting the membership numbered sixty-eight.

At the sixth annual meeting of the membership was very much saddened by the death of their president, Dr. R. H. Cummins, which occurred a little less than two months before the meeting.

While the membership increased rather slowly for a few years, yet, at the beginning of the seventh session the secretary reported 97 members, which was increased at each succeeding annual meeting until the close of the ninth ses-

sion, when they reported one hundred and thirty-seven active members with an increase during the year of eight, which gave them a grand total of one hundred and forty-five members. At the convention of the tenth session however, they had dropped back to one hundred and two, a loss during the year from various causes of forty-three members.

It appears from the minutes of the meeting, that there occurred about this time some internal troubles and dissensions which rather retarded the growth of the society for a few years in which time the membership decreased. Finally after ironing out the wrinkles, the society took on a new lease of life, evidenced by the fact that at the twenty-first annual meeting the secretary reported one hundred and thirty-one members. It was at this meeting that our worthy friend Dr. S. L. Jepson, of Wheeling, had the honor of presiding, having been elected to this position the previous year. I am confident that I voice the sentiment of each and every member of our association when I say that we appreciate the presence of Dr. Jepson at this meeting. I think we will all agree that to his untiring efforts, is due, in no limited measure the success achieved, and the position that our society occupies today, next to Dr. Brownfield, he is by far the oldest (in point of membership but not in years) member of the association now living. While not a charter member he only lacks four years, having joined the society June 7, 1871. If it were not for giving my own age away I would tell you that Dr. Jepson joined the West Virginia State Medical Association just one year before I was born. Not old in point of years as we stated above, as evidenced by the fact that he today occupies one of the most important positions in our state, that of State Health Commissioner not merely "sitting on the lid," but is "making good and getting results."

From 1887 the growth while not alarmingly fast, was nevertheless steady and healthy until 1902. When medical associations from the American Medical Association down the line to the county societies underwent a thorough and much needed re-organization. In this new or-

ganization membership in the county society became a pre-requisite to membership in the other organizations, the county organization thus became a unit of the state association, and the state of the national body.

In closing that magnificent address Dr. Ashman, then president, said: "I would urge upon all my professional brethren to make it their special duty to do all in their power for the cultivation of 'the medical society spirit,' here and in their respective localities. Let us influence every eligible physician on the outside to join us in our work for the elevation of our beloved profession. I see our society just entering upon an era of unprecedented growth, prosperity and usefulness. May it continue during this new century, untrammelled by factional strife or dissension, a powerful aid to its members, as well as to those outside its ranks; steadfastly pursuing the high aims that have guided it in the past. As a profession, as a society, as physicians, may we ever —

*"To our own selves be true,  
And it must follow, as the night the  
day  
That we cannot be false to others."*

While Dr. Ashman, in all probability would neither claim to be a prophet nor the son of a prophet, yet his prophesies although spoken fifteen years ago, have been in a great measure fulfilled. At the close of the thirty-fifth session the secretary, Dr. Golden, reported eight county and town societies, in affiliation with the state society and a total membership of three hundred and eighty-one. At the beginning of this meeting which is the fiftieth annual session, Dr. Anderson, our very efficient secretary, reported county societies in affiliation with a total membership of nearly one thousand, a growth during a period of fifteen years of which we should feel proud, yet with seventeen hundred eligible physicians in our state we should have a membership of at least fifteen hundred.

I have prepared a tabulated list of presidents and secretaries from the organization down to the present time, together with the date of their administration, place of meeting, and in the case of

those who have been called to their reward, I have written the word deceased opposite their names. I shall not occupy your valuable time by reading the list, as you will all get a copy from the Journal.

The association has been entertained as follows: Wheeling nine times, Parkersburg six, Clarksburg five, Charleston four, Martinsburg four, Fairmont, including this meeting, five, Grafton three, Weston three, Morgantown two, White Sulphur Springs three, Huntington three, Davis one, Berkeley Springs one, Point Pleasant one, Webster Springs two, and Elkins one.

Gentlemen: I have already consumed much more of your time than I had intended. I hope you will pardon my trial of your patience, and may I not again ask your council and assistance and may all-wise Providence guide and direct our actions, may true friendship and professional devotion assist us in making this one of our happiest and most profitable meetings.

Dr. Frissell, in closing his address as president, at the first annual meeting, said:

"I hope we shall all feel a pride in so conducting the affairs of this society, and after a half century has passed by, and the profession of a new generation occupy our places, as they look over the books and musty pamphlets of olden time, and read the records and early history of this society, they will all be constrained to say that the founders of the Medical Society of West Virginia were wise and good men; that they inculcated sound doctrines in medicine and morals, and deserve to be remembered among the benefactors of the human family."

I am confident that I voice the sentiment of each and every member of this association today when I say that his estimate of its founders were correct and true.

Finally and in conclusion, gentlemen of the association, let us not forget that in this terrible war into which our country has been forced, the medical profession will play a very important part. Physicians are as essential to the success of an army as munitions, and if our boys are to be the deciding factor in this aw-

ful conflict now raging in Europe the government must be supplied with enough doctors in the Medical Reserve Corps not only to take care of our own army, but a goodly number must be supplied for our allies. The war situation has demonstrated the fact, very forcibly the necessity of organization.

The State Medical Committee on National Defense has been greatly aided in the well organized counties, and very much hindered in their work in the counties not organized, or in those with weak organizations. Physicians are needed now, more will be needed later, and it may come to the point that in order to supply the demand for the army, much individual sacrifice will be necessary. I believe the physicians of West Virginia to be as patriotic as you will find any where on "God's green earth," and can be depended upon to do their duty. The success in carrying out our part in this war will depend in a good measure, on organization. We must at once complete, and strengthen our state and county organizations and in order that this may be accomplished, may I not urge the counsellors in each and every district in the state to at once, see that each county is organized, and see that every reputable physician in the county has an opportunity to become a member.

#### CATALOG OF PRESIDENTS.

<i>Date</i>	<i>Place of Meeting</i>	<i>Name.</i>
1867.	Fairmont (convention to organize)	W. J. Bates, M. D.*
1867.	Wheeling (autumn)	John Frissell, A.M., M.D.*
1868.	Grafton,	John Frissell, A.M., M. D.*
1869.	Clarksburg,	H. W. Brock, M. D.*
1870.	Parkersburg,	J. W. Ramsey, M.D.*
1871.	Martinsburg,	W. J. Bland, M.D.*
1872.	Wheeling,	J. M. Lazzell, M.D.*
1873.	Parkersburg,	R. H. Cummins, M. D.*
1874.	Morgantown,	M. S. Hall, M.D.*
1875.	Pt. Pleasant,	M. Campbell, M.D.*
1876.	Wheeling,	A. R. Barbee, M.D.*
1877.	Clarksburg,	E. A. Hildreth, Sr., M.D.*
1878.	Weston,	J. W. McSherry, M.D.*
1879.	Martinsburg,	W. H. Sharp, M.D.*

<i>Date</i>	<i>Place of Meeting</i>	<i>Name.</i>
1880.	Parkersburg,	W. M. Dent, M.D.*
1881.	Wheeling,	W. F. Vankirk, M.D.*
1882.	Wheeling,	J. E. Reeves, M.D.*
1883.	Grafton,	B. W. Allen, A.M., M.D.*
1884.	Clarksburg,	A. Gerstell, M.D.*
1885.	Weston,	Geo. Baird, M.D.*
1886.	Charleston,	T. A. Harris, M.D.*
1887.	White Sulphur Springs,	S. L. Jepson, A.M., M.D.
1888.	Huntington,	L. S. Brock, M.D.*
1889.	White Sulphur Springs,	L. D. Wilson, M.D.
1890.	Wheeling,	S. H. Austin, M.D.*
1891.	Fairmont,	S. H. Brownfield, M.D.
1892.	Clarksburg,	C. Shriver, M.D.*
1893.	Parkersburg,	D. P. Morgan, M.D.*
1894.	Berkeley Springs,	R. W. Hazlett, A.M., M.D.*
1895.	Davis,	D. Mayer, M.D.*
1896.	Wheeling,	J. A. Campbell, M.D.*
1897.	Charleston,	N. D. Baker, M.D.*
1898.	Martinsburg,	C. F. Ulrich, A.M., M.D.*
1899.	Weston,	J. L. Dickey, A.M., M.D.
1900.	Morgantown,	C. S. Hoffman, M.D.
1901.	Grafton,	A. H. Thayer, M.D.
1902.	Parkersburg,	G. A. Aschman, M.D.
1903.	Charleston,	H. B. Stout, M.D.
1904.	Fairmont,	T. L. Barber, M.D.*
1905.	Wheeling,	T. M. Hood, M.D.
1906.	Webster Springs,	S. S. Wade, M.D.
1907.	Huntington,	W. W. Golden, M.D.
1908.	Clarksburg,	F. Howell, M.D.
1909.	Elkins,	V. T. Churchman, M.D.
1910.	Parkersburg,	T. W. Moore, M.D.
1911.	White Sulphur Springs,	C. A. Wingerter, M.D.
1912.	Webster Springs,	C. O. Henry, M.D.
1913.	Charleston,	F. LeMoyné Hupp, A.M., M.D.
1914.	Bluefield,	R. E. Venning, M.D.
1915.	Huntington,	H. P. Linsz, M.D.
1916.	Wheeling,	A. P. Butt, M.D.
1917.	Fairmont,	J. E. Rader, M.D.

#### CATALOG OF SECRETARIES.

<i>Dates of Administration</i>	<i>Name—Residence.</i>
1867-68.	J. E. Reeves, M.D., Fairmont.*
1869.	A. H. Thayer, M.D., Grafton.*
1870-71.	J. M. Lazzell, M.D., Fairmont.*
1872-77.	W. M. Dent, M.D., Newburg.*

- 1878-82. M. F. Hullihen, M.D., Wheeling.\*  
 1883-86. S. L. Jepson, A. M., M. D., Wheeling.  
 1887-91. J. L. Fullerton, M.D., Charleston.\*  
 1892-94. D. Mayer, M.D., Charleston.\*  
 1895-01. G. A. Aschman, M.D., Wheeling.  
 1902-06. W. W. Golden, M.D., Elkins.  
 1907-09. T. W. Moore, M.D., Huntington.  
 1910-14. A. P. Butt, M.D., Davis.  
 1915. J. Howard Anderson, M.D., Marytown.

\**Deceased.*

#### TRANSACTION OF HOUSE OF DELEGATES.

The House of Delegates of the Fiftieth Annual Session of the West Virginia State Medical Association was called to order by President J. E. Rader, in the parlors of Hotel Fairmont, Fairmont, W. Va., at 9 p. m., October 1, 1917.

After credentials of delegates were approved the house proceeded to business.

The report of the Committee on Arrangements was rendered by Dr. C. W. Waddell, chairman. In a very concise and modest way, he unfolded the list of good things in store for the association while the guests of Marion County Medical Society.

The report of the Committee on Scientific work was then called, and Secretary Anderson gave a brief outline of the program provided.

The report of Committee on Publication not being ready, it was deferred until later.

As not a single member of the Committee on Public Policy and Legislature was present, this report was deferred until another time. However, a general discussion of matters of public policy was made the order of business and Drs. McDonald and Henry of Fairmont, Keesor, Hall and Hildreth III of Wheeling, Ogden of Clarksburg, Oates of Martinsburg, and Anderson of Marytown, participated. The gist of their remarks being that every local society and each member of the association should take a greater interest in the welfare of the association, should keep in closer touch with the legislators of their respective

sections of the state, and, before the rush of legislative session, discuss freely with them, legislation affecting the interests of the profession.

The next order of business was the report of the secretary. Dr. Anderson then read the following report:

#### REPORT OF SECRETARY.

On April 10, 1867, when this great mountain commonwealth of ours was but an infant of less than four years, the sturdy pioneers of our noble profession, with phenomenal wisdom and fore thought, founded the West Virginia State Medical Association, in the village of Fairmont.

After fifty years, we, upon whom their mantles have fallen, are assembled in the fair city of our birth, to celebrate our semi-centennial.

Would that your secretary could review the fortunes of our organization during this half century of her existence, but time forbids, and we must confine ourselves in this report to a brief statement of our work during the year 1916, although because of the fact that we are so far advanced in the year 1917, some data will be given with reference to this year also.

At our 1916 annual meeting, Wheeling, I reported a paid membership for 1915 of 902; while for the year 1916, membership certificates have been issued to 909 physicians, and thus far 852 members have paid their 1917 dues. These figures indicate that the tide is still with us, but moving so slowly that it is almost imperceptible. On further analysis, we find that during 1916 we acquired 61 new members, while during the first three-fourths of 1917, we enrolled 67 Neophites. During 1916, we lost, by removals from the state, at least 17 members, while since 1915 the arch enemy of our profession (death) has claimed as his victims:

Dr. J. J. Durrett, Fairmont, Marion County, January 19, 1916; Dr. Paul Rider, Wardensville, G.-H.-H.-M Society, February 1, 1916; Dr. R. M. Hall, Moundsville, Marshall Society, April 10, 1917; Dr. D. P. Morgan, Clarksburg, Harrison Society, March 10, 1917; Dr.



H. J. Campbell, Huntington, Cabell Society; Dr. H. V. Sanns, LeSage, Cabell Society.

The secretary would like to be advised if anyone knows of the demise of others.

During the year 1916, the following component societies gained in memberships over their 1915 records: Barber-Randolph-Tucker, Brooke, Cabell, Doddridge, Grant-Hardy-Hampshire-Mineral, Lewis, Marion, Marshall, Mingo, Monongalia, Raleigh, Summers. The societies remaining the same were Little Kanawha and Ohio Valley and Upshur, while the following societies lost in membership: Braxton, Eastern Panhandle, Fayette, Greenbrier Valley, Hancock, Harrison, Kanawha, Logan, Mercer, McDowell, Nicholas-Webster, Ohio, Preston, Ritchie, Taylor, and Tyler.

The largest gain in membership was 73 men, made by Cabell, a gain of 22%. Barber-Randolph-Tucker and Raleigh made a gain of 18% each, and Marshall, a gain of 15%.

The largest loss in membership, 13 men, stands at the door of Kanawha. In percent of loss, however, Taylor is the greatest offender, with a 46% loss to her discredit; Greenbrier Valley next, with 28%; then Tyler, with 18%; Kanawha and Ritchie with 16% each, and Fayette with 15%.

During this year I am sorry to say, Boone, Nicholas-Webster, and Pleasant societies dropped out of existence.

It is gratifying, however, to note that, although only three-fourths of the year 1917 has passed, six of the component societies have already outstripped their 1916 record. Ohio leads, with an increase of 14 members; Monongalia next, with 8; Marion with 6 and Upshur, McDowell and Marshall following in the order mentioned.

According to districts the memberships stand:

	1915	1916	1917*
First District	166	184	201
Second District	164	163	160
Third District	130	129	116
Fourth District	127	134	112
Fifth District	141	139	115
Sixth District	174	160	148

\*Three-fourths of year.

Your secretary would urge the delegates and the secretary of each component society to note the significance of this analysis, and if your society is losing ground, redouble your efforts to build up its membership.

To the councillors of each district, the secretary would suggest that you note carefully the summary, and see if next year your district cannot make a better showing. For it is a deplorable fact that the component society, to which one of our councillors belongs, has thus far, this year only two members who have paid their 1917 dues.

Since our Wheeling meeting, the 1917 dues have been coming straggling in, through the whole year, although they should all have been in the hands of the secretary by April 1. This probably has been due to the fact that everyone knew our 1917 annual meeting would be in October, instead of May.

The following is a summary of these dues, as they have been received and turned over to Treasurer Nicholson:

1916		
January 27	115 names	\$327.00
February 29	228 names	668.00
March 31	232 names	679.00
May 9	208 names	609.00
June 3	66 names	192.00
June 26	34 names	98.00
1917		
March 8 ('16)	19 names	\$50.00
March 8	279 names	828.00
April 10	233 names	678.00
June 8 (May)	77 names	226.00
June 8	162 names	476.00
July 31	54 names	153.00
Sept. 3 (Aug.)	22 names	62.00
Sept. 3	108 names	307.10
Sept. 27	28 names	82.00
(Belated dues).		

From the above, we see our association is still growing. Renewed interest and growth is especially noticeable in Ohio, Monongalia, Marshall and Marion County Societies.

However, it behooves every officer and every member of our organization to redouble their efforts to increase the memberships during the coming year, for unless we do, the inroads upon our ranks,

made by the European war, will materially decimate our numbers. Furthermore, your secretary would suggest that each component society be patriotic enough to see that the State Association dues of any of their members who are giving their services to their country, be paid for 1918, if need be, out of the common treasury of said society, that the boys at the front, though absent, may still be members of our association.

One of the difficulties met with by your secretary during the past year has been obtaining information of the doings of the component societies. To the present date, a list of the officers elected for 1917, of some of the component societies, has not yet reached his desk.

Will the secretaries and delegates not see that, during the coming months, prompt reports are made to your state secretary, of officers elected, new members admitted, deaths, removals, and all happenings to the personnel of your individual societies.

Furthermore, as soon as the year 1918 is ushered in, will you not see that the dues are collected early, and that they be forwarded to the secretary before April 1, as prescribed by the by-laws.

Gentlemen, as a state organization, do we interest ourselves enough in our State Legislature? This last spring, a number of bills were introduced which were of vital importance to us, collectively and as individuals. Some which were defeated we should have been behind to a man, urging their passage. Others, we should have opposed equally as vigorously. A few of the faithful were on hand and fought valiently, but the legislators looked upon them more as individuals than as representatives of a viril organization, and treated them accordingly. We should formulate our policy on various subjects, such as public health and vital statistics, and then put some power and kick in our demands, and make ourselves felt as an organization. Know what we want, and then go after it. Know what we don't want, and see that it is treated accordingly.

We have never taken any concerted action with reference to the fees granted us by the Workmen's Compensation Commission. Are we satisfied with them?

Such matters, we should act upon as a body.

The Committee on Scientific Work, the report of which being delegated to your secretary, presents the program of which you have just received a copy. This year owing to the facts that the war is claiming so much attention, and that our annual meeting is late in the year, when medical colleges are just opening, we have experienced some difficulty in getting just what we wanted, but we feel amply repaid for our hard work, and hope you will consider it in keeping with our semi-centennial celebration.

In procuring our badges for the year, we strove to have something that could be retained as a souvenir, and hope you will like them.

Expressing my sincere appreciation of the earnest and zealous cooperation the officers and counsellors, the secretaries and the component societies have given me in my work as secretary, I submit the above report.

J. HOWARD ANDERSON, *Sec.*  
W. Va. State Med. Assn.

President Rader then appointed Drs. S. S. Wade, J. W. McDonald and E. A. Heldreth III, as a committee on secretary's report.

The report of treasurer was next called and Dr. Nicholson submitted the following:

Charleston, W. Va.,  
Sept. 30, 1917.

Hugh G. Nicholson, Treas.

In account with the West Virginia State Medical Association.

1916—By Check.

June 30—Am. Med. Assn.....	\$ 8.00
June 30—Dr. A. P. Butt, Postage, etc.	23.87
July 15—Daily News, Printing.....	11.75
July 16—Am. Med. Assn., Labor Legis.	9.00
July 17—Dr. J. R. Bloss, salary.....	450.00
Oct. 14—Johnson Printing Co.....	9.00
Dec. 20—Dr. J. R. Bloss, Salary.....	450.00

1917.	
April 10—Lohmeyer, Goldsmith, Pat- terson Co. ....	10.00
June 6—Dr. J. E. Rader, Stationery....	22.75
June 13—Johnson Printing Co.....	20.55
July 2—Dr. J. H. Anderson, Salary....	250.00
July 2—Dr. Jas. R. Bloss, Salary.....	500.00
Sept. 26—Johnson Ptg. Co., Programs..	55.11
Sept. 26—Whitehead, Hoag Co., Badges	60.82
Sept. 26—J. H. Anderson, Salary.....	250.00
Sept. 26—H. G. Nicholson. Salary.....	100.00
Sept. 26—J. H. Anderson, Postage, etc.	36.00

June 3-16 to Sept. 29-17, Med. Def. Fd.	1009.00
Sept. 29—By Loan at 6% interest.....	1150.93
Sept. 29—By Cash Bal. in Bank.....	525.98

1916

May 13—To Cash Bal. in Bank.....	1355.84
June 30—Dr. J. H. Anderson, Sec.....	290.00
Dec. 20—Dr. J. H. Anderson, Sec.....	445.50

1917.

March 14—Dr. J. H. Anderson, Sec.....	878.00
April 12—Dr. J. H. Anderson, Sec.....	678.00
June 11—Dr. J. H. Anderson, Sec.....	702.00
Sept. 2—Dr. J. H. Anderson, Sec.....	522.10
Sept. 29—Dr. J. H. Anderson, Sec.....	82.00

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 \$4953.44

## MEDICAL DEFENSE FUND.

1916—By Check.

May 18—Glasscock & Glasscock.....	\$100.00
June 3—J. W. McDonald, expense.....	31.23
Oct. 21—J. W. McDonald, expense.....	17.30

1917—By Check.

March 14—Harold A. Ritz.....	257.00
June 5—B. McLaugherty.....	153.50
Sept. 28—Balance in Bank.....	7.90
Sept. 29—Loan at 6% Interest.....	549.07

1916.

May 13—To Cash Bal. in Bank.....	107.90
June 3 to Sept. 29-17— From Gen. Fd.	1009.00

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 \$1116.90

Previously Reported .....	3840.00
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Total Amount in Fund.....	\$4956.90
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H. G. NICHOLSON.

O. K.

H. R. JOHNSON.  
C. H. MAXWELL.

The treasurer's report was duly referred to the financial committee of the council, and later approved by them.

The House then adjourned to the call of the president.

On Wednesday evening at 6:30, President Rader called the House of Delegates to order, in the parlors of Hotel Fairmont.

The secretary was then asked to read a letter from Mrs. Lind, wife of Dr. G. D. Lind, an invalid member of the association, asking for financial aid.

Dr. Judy, seconded by Dr. Steel, made the following motion:

"Be it moved that a committee be appointed by the president to solicit a contribution from each member of the association, present or ab-

sent, for the relief of this afflicted family."

After much discussion as to the best means of rendering immediate relief, Dr. Nicholson, seconded by Dr. Bloss, offered the following substitutory amendment:

"Be It Amended to read: That the sum of \$100 be appropriated from the general funds of the association to relieve the immediate necessity of this afflicted household."

The amendment was then passed, and the motion, as amended, carried, and the secretary drew on the treasurer, in favor of Mrs. G. D. Lind for \$100.

Dr. McQueen then offered the following resolution:

"Be It Resolved, that Chapter XI of the by-laws be amended by the addition of Sec. 9: The treasurer may pay out of the Medical Defense Fund of the West Virginia Medical Association such sums of money as may be appropriated by the House of Delegates for aged and dependent physicians and their families, so long as the fund is not reduced below \$2,000."

The report of committee on publication was then called, and Dr. Bloss, Editor of the *West Virginia State Medical Journal*, responded.

*Members of the House of Delegates of West Virginia Medical Association, Fiftieth Annual Session.*

Gentlemen: At the time the present Editor was elected he knew nothing of the vicissitudes through which it was possible for a medical editor to pass and still live to report.

There are a few things to which it is desired to call attention before giving you a financial statement.

The first of these is that it is greatly to be desired that each member of our association shall develop a healthy, individual interest in the welfare of this Journal, of which each of us is a part

owner; an enterprise in which each stockholder fails to add his share of interest, or fails to "boost," is never the dividend-paying proposition it should be. Dividends in this one are paid in increased worth to each in his daily work; not in per cents in money directly, but as its efficiency increases, in many hundreds of per cent per annum for the invested per price per share, in increased professional advancement, efficiency, and earning power.

There are several ways for you to help make it so; by lending assistance. Make it the medium for reporting interesting, puzzling or unusual cases. You will help some other brother meet such an emergency; if puzzling to you someone can lend you help; if unusual or rare then you have your report in print and recorded so the medical world can give you credit. Next use it as a medium through which to bring to your State Association of abuses to be corrected, of good work deserving of mention and commendation. Then send the Editor news notes.

Another way you may help is to write letters of inquiry to the advertisers when in need of supplies or equipment, they are in position to furnish. It may be that they cannot meet your requirements, but it will show them that their advertisement in your Journal attracted your attention, when in the market for their products. Always mention *The Journal*." The Editor and his business partner buy nothing from non-advertisers which can be secured from firms helping to support our Journal. It is the advertising that really supports the publication and not the dollar assessed each member.

Remember this point too. The price of paper, printing and everything connected with getting the publication into your hands has increased fearfully in price and will go on up, from all indications, so you must try to help secure more advertising to help meet this continued advance.

Now a word as to the local secretaries. A few of them are prompt in sending in reports to us of the society meetings, and news items. However, we have to write letters to most of them each month,

before we receive anything. Then they do not send papers read before their organizations to us for publication. Most of our members prefer to read these papers rather than abstracts, etc. Let me insist that you give this matter your attention, Mr. Secretaries.

Another thing is the prompt collection of the dues and after collection be prompt to report to the state secretary. It is only through him the mailing list can be kept corrected. A postal law requires dropping from the mailing list of all whose dues are not paid by April first. This year more than four hundred names were cut off. In a few days to a week or more complaints began to come in that no Journal had been received. Dues have been paid, but no reports made to state secretary. As a consequence in two months the postage bill was increased some \$6 to \$8 for separate cover mailings. This could have been saved by a little prompt attention.

I will give you a summary of the financial statement of the Journal. Complete and detailed receipts and disbursements will be furnished the council for auditing and published in the Journal.

The first six months of 1916 were the six months completing the fiscal year, July, 1915, to June 30, 1916. January 1 the present Editor had no funds to meet expenses. The treasurer advanced \$625.00; of this \$50 was a donation from Dr. A. P. Butt. During these six months \$703.80 was received from advertising, and \$21.60 from the sale of Journals and subscriptions from non-members. A total of \$1350.40. The total cost of printing, postage, and supplies amounted to \$816.22, leaving a balance of \$534.18. You will note that the advertising receipts and sale of Journals and subscriptions only amounted to \$725.40, being a deficit of \$90.82, which was paid from the \$625.00 received from Treasurer Nicholson. These expenditures did not cover the salary of the Editor.

For the year July 1, 1916, to June 30, 1917, the sum of \$1636.25 was received for advertising; \$20.45 for subscriptions and Journals sold; these amounts together with the balance of \$534.18 brought forward gives a total of \$2190.88. The total cost for printing, postage and sup-

plies was \$1657.36, leaving a balance of \$533.52.

These disbursements likewise do not include the Editor's salary which was paid by the treasurer.

It is the Editor's hope that the coming year may be one in which with your co-operation, the Journal will make several hundred dollars for the association from advertising.

JAS. R. BLOSS, *Editor.*

EDITOR'S FINANCIAL REPORT.

JANUARY, 1916 TO JULY, 1916.

Received from G. H. Nicholson, Treas.—	
January 16, 1916.....	\$300.00
January 25, 1916.....	50.00
April 11, 1916.....	275.00
Received from Advertisers first six (6)	
months of 1916.....	703.80
Sale of Journals and Subscriptions.....	21.60
<b>Total.....</b>	<b>\$1350.40</b>

Expenses—

Publishing Journal first six months 1916—	
January \$130.00	
February 125.00	
March 125.00	
April 130.50	
May 130.50	
June 130.50	771.50
500 Bill Heads.....	2.50
1500 Letter Heads.....	5.25
2000 Envelopes.....	9.25
500 Rate Contracts.....	4.50
2 Cuts (\$1.56 each).....	3.12
2 Rubber Stamps.....	1.34
Postage.....	15.00
Telegrams.....	1.80
Express.....	1.96
<b>Total.....</b>	<b>\$816.22</b>
<b>Balance.....</b>	<b>\$534.18</b>

O. K.

H. R. JOHNSON.  
C. H. MAXWELL.

JULY, 1916, TO JULY, 1917.

Balance on hand.....	\$534.18
Received from Advertisers July, 1916,	
to July, 1917.....	1636.25
Subscriptions to Journal.....	18.30
Sale of Journals.....	2.15
<b>Total.....</b>	<b>\$2190.88</b>

Expenses—

Publishing Journal, July, 1916 to July, 1917.	
July \$130.50	
August, 147.00	
September 130.50	
October 129.05	

November	125.00	
December	115.00	
January	130.20	
February	132.25	
March	136.00	
April	136.00	
May	151.60	
June	153.38	
		\$1616.48
Postage.....		19.10
1500 Letterheads.....		6.50
Office Supplies.....		2.95
Adams Express Co.....		.83
Commissions.....		11.50
<b>Total.....</b>	<b>\$1657.36</b>	
<b>Balance.....</b>	<b>\$533.52</b>	

O. K.

H. R. JOHNSON.  
C. H. MAXWELL.

Editors Salary Jan., 1916, to July, 1916	\$450.00
Editors Salary July, 1916, to Dec., 1916	450.00
Editors Salary Jan., 1917, to July, 1917	500.00

The report of the committee on public safety and legislature was then called. Chairman MacQueen then made a full verbal report of the activities of the committees during the past year. In closing, he urged the members of the association to be awake to the needs and welfare of the association, and bring matters requesting the action of this committee to their attention, before the rush of legislative activities of the assembly and senate.

Dr. Ogden then presented the following resolution, which was adopted as read, and ordered spread on the minutes of the association, published in the journals, and copies sent to President Wilson and Governor Cornwell:

Whereas, The Imperial German government consisting of a few Prussian militarists, met in conference in the Potsdam palace in the year 1892 and prepared a map for the future German Empire, which was to include France, England, Scotland, the United States and Canada, and the numerous American possessions; and,

Whereas, after years of steady secret preparation for the accomplishment of this aim, it struck suddenly, at its own appointed time, with its murderous power, violating its every treaty and sacred word of honor; murdering innocent and

helpless women and children on the seas; dropping deadly bombs upon hospitals and unprotected cities; debauching and terrorizing civilian populations of conquered territories, seducing by its diplomats neutral and friendly governments and sending its pernicious spies to betray the honor of nations; and,

Whereas, the United States of America has been compelled in behalf of its honor and its sacred rights as a nation to take up arms against this common enemy of civilization;

Be It Therefore Resolved: That the West Virginia State Medical Association, in convention assembled representing the regular organized medical and surgical professions of the state, does hereby affirm and declare that it is in hearty accord with the President and the Congress of the United States in declaring a state of war to exist between this country and the Imperial German government, that its united membership stands squarely behind our commander-in-chief and that it pledges its undivided support to the nation in its great fight for the preservation of democracy and republican government.

Dr. J. E. McDonald, seconded by Dr. Judy, then presented the following resolution, which was adopted:

"Whereas, the State Legislature has, by laws enacted, prohibited the shipping of alcohol to physicians, and whereas many physicians in small towns and rural districts are absolutely deprived of its use, which is almost indispensable in certain surgery and diseases, therefore,

Be It Resolved; That the Governor be requested to ask the next legislature to so amend the laws as to allow reasonable shipments to doctors and hospitals, for such indispensable uses."

Dr. S. D. Hatfield then offered the following resolution:

"Resolved, that the society so

amend its by-laws that it may be empowered to create a pension fund, to be appropriated by the House of Delegates, for the relief of aged and indigent members."

The resolution was placed upon the table for a day, and then carries, by a unanimous vote of the delegates present, thus increasing the annual dues of each member of the association to \$3 per annum, instead of \$2.

The president had the secretary read a letter from Governor J. J. Cornwell, expressing his regret at not being able to be present at the association meeting, and bringing some matters of interest to the medical profession to the attention of the assemblage.

It was moved, seconded and carried that a committee of three be appointed by the president to take appropriate action, with reference to the letter, and that the president be a member *ex-officio*. The president held in abeyance the appointment of the committee until Thursday morning.

House then adjourned until Thursday morning.

House of Delegates called to order by President Rader, at 9:15 a. m., Thursday morning.

President Rader announced as the committee on Governor Cornwell's letter, Drs. C. S. MacQueen, chairman; L. V. Guthrie, and C. O. Henry.

Election of officers was then made the order of business.

Nominations for president being called, Dr. Robert J. Reed, of Wheeling, was nominated by Dr. Jepson; Dr. Chas. O'Grady, of Charleston, by Dr. MacQueen, and Dr. S. R. Holroyd, of Athens, by Dr. Steele.

Upon balloting Dr. Holroyd was found to be elected, and the choice was made unanimous.

Nominations for first vice-president being called, the names of Dr. W. J. Judy, of Belleville, and Dr. Charles O'Grady, Charleston, were presented. Dr. O'Grady was elected.

Dr. W. J. Judy, Belleville, was then made second vice-president.

Dr. C. W. Waddell, Fairmont, was elected third vice-president.

Dr. J. Howard Anderson, Marytown,

was re-elected secretary, and Dr. H. G. Nicholson was re-elected treasurer.

The following councillors were then elected:

First District: H. R. Johnson, Fairmont.

Second District: T. K. Oates, Martinsburg.

Third District: C. R. Ogden, Clarksburg.

Fifth District: J. E. McDonald, Logan.

Sixth District: H. L. Goodman, Charleston.

G. D. Jeffers was retained as councilman from the fourth district.

Dr. F. LeMoyne Hupp, Wheeling, was re-elected delegate to A. M. A.

Dr. Henri P. Linz, Wheeling, was elected alternate.

The place for meeting for 1918 was then made the order of business.

Dr. Venning invited the association to be the guests of the Eastern Panhandle Medical Society, at either Harpers Ferry or Berkeley Springs.

Dr. MacQueen extended an invitation on behalf of Kanawha County Medical Society for Charleston.

Upon a rising vote, the invitation of the Eastern Panhandle Medical Society was accepted, and the committee on arrangements was empowered to designate the exact place of meeting.

The month of September was then fixed for the 1918 meeting.

Action upon the proposed new constitution was then called. The committee upon revision then moved that the matter be tabled, and it was carried by unanimous consent.

The expenses of Dr. Robert L. Dickinson, representative of National Defense Council, and those of the councillors who attended a special session of the council at Charleston were allowed.

The salaries of the secretary and the treasurer for 1918 were made the same as for 1917.

By motion properly seconded and carried, the secretary was instructed to prepare an honor roll of the members of the association who have answered the call of their country in the great war, and have accepted service, and that their dues be suspended and their membership

retained during the period of the great war.

Unanimous votes of thanks were then extended for hospitality and courtesy to The Marion County Medical Society, the Ladies Entertainment Committee, the Ladies Registration Committee, the Hotel Fairmont.

The following resolution was offered by the committee appointed by the council to suggest a universal standard of action on behalf of the members of the association remaining at home towards those who have accepted service with Uncle Sam, and was unanimously adopted:

“Resolved; This committee advises that in reference to those men going into the Medical Reserve Corps, we following the following plan:

When we are called to attend a patient or patients of these men, that we keep a record of the moneys collected from such service, and turn over to his family, or such other party as he may designate, one-third of this amount. It is further agreed that, for one year after his return, we refuse any calls in his practice.

H. G. NICHOLSON.

P. A. HALLER.

R. H. PEPPER.

*Committee.*

The house then adjourned until after the close of the scientific program, when it re-convened, and adopted the following report of the committee on Governor Cornwell's letter:

Resolved; That we, the House of Delegates of the West Virginia State Medical Association, assembled, hereby acknowledge receipt of the communication of our governor; and regret exceedingly that the pressure of official duties prevented him from being present with us at this meeting.

And further, that we, the physicians of West Virginia, pledge our heartiest support to our governor and our government in the matter

of distributing the Liberty Loan Bonds, now being offered by our government, among the small investors in our respective localities; recognizing that, by so doing, we encourage an effort to create a proprietary interest in our government on the part of many, who, heretofore, have not felt such an interest and that, by such means, we may tap untouched resources in the hands of the small saver and help him by placing in his possession the soundest kind of an investment.

And further, that we agree heartily with our governor in his expressed views upon the necessity of a lunacy or hospital commission to have charge of the institutions for the unfortunate insane of West Virginia; and that we hereby instruct our committee on public policy and legislation, the president of the West Virginia State Medical Association, and this committee to confer with our governor, if he so desires it, and aid him in every way possible in the creation of a lunacy commission for the purpose suggested in his communication.

And further, that we recommend, also, the placing of other state hospitals and other allied institutions under the same or similar commissions.

(Signed)

G. A. MACQUEEN.

C. O. HENRY.

L. V. GUTHRIE.

J. E. RADER.

*Resolution Committee.*

Dr. Guthrie was then appointed as special committee of one to aid the committee on public policy and legislation in this matter.

By motion of Dr. MacQueen, which was duly seconded and carried, the president and the treasurer were instructed to advance such money as was in their judgment necessary to properly care for Dr. Lind and family.

The house then adjourned "sine die."

J. HOWARD ANDERSON, *Secy.*

W. Va. State Med. Assn.

#### TRANSACTIONS OF COUNCIL.

The council met in the parlors of the Fairmont Hotel, immediately after the banquet, Wednesday, October 3, 1917. Chairman Jeffers being absent, Dr. Ogden was made temporary chairman.

Drs. Johnson and Maxwell were appointed finance committee to audit books of treasurer, editor and secretary.

Secretary Anderson presented the application of the Jackson-Roane Medical Society, as a component part of the association.

Drs. Pepper and Jeffers were appointed a committee of investigation with power to act.

Chairman McDonald, of the medical defense executive committee, made a full report of its activities.

The bills recommended were ordered paid, providing only one lawyer's fee, in any one case, unless deemed advisable and authorized by executive committee.

The finance or auditing committee reported books of treasurer, editor and secretary o. k., and reports were accepted and approved.

Editor Bloss was re-elected editor of *The Journal* for 1918, and salary was made same as for 1917.

Adjournment.

#### SECRETARY'S REPORT OF ANNUAL MEETING AT FAIRMONT.

The Fiftieth Annual Session of West Virginia State Medical Association convened in the assembly room of Hotel Fairmont, at 9:30 a. m., Tuesday, October 2, thus most appropriately celebrating its semi-centennial in the city of its birth. In 1867, the assembly numbered 23, which represented the entire membership of the association, while, in spite of the demands of the war, upon this occasion, 210 names appeared on the register, representing an association membership of over 900.

After being called to order by President Rader, the convention stood and sang "America."

The association was then bid welcome to Fairmont, by Mayor Bowen, who, in a few well-chosen words, pointed out the fact that Fairmont had grown and developed fully as much in the past fifty years as the association, and was even



now outdoing itself in evidence of new growth.

Dr. O. C. Henry, a past-president of the association, then welcomed the visiting doctors, on behalf of Marion County Medical Society, as follows:

“Mr. President and Members of the West Virginia Medical Association:—

“No pleasanter duty could have been assigned me by the Marion County Medical Society than that of extending to you a welcome on this, the celebration of your fiftieth anniversary.

We deeply appreciate the pleasure of welcoming you to the city “favored by nature, developed by industry,” typical of the growth and progress you have made.

“What a joy it would be, if it were possible to array to your admiring gaze those hardy pioneers in medicine, who met here fifty years ago, to form this organization. Little did they know then that you would grow into such a strong body, that you are capable of wielding a powerful influence in the shaping of legislation for the betterment of this great commonwealth. Great changes have come to our growing state, during these passing years, and it can be said of the medical profession it has kept abreast of every scientific discovery.

With one exception all of the founders have passed from the stage of action, but there is one notable fact that gives me great pleasure to call to your attention, in coming here to celebrate your fiftieth anniversary, the place of its birth, it does seem providential that the Marion County Medical Society has on its roll of membership the only living member in the original organization, in the person of our beloved and venerable practitioner, Dr. J. H. Brownfield, who is here present, and joins us in giving you a hearty welcome.

We feel your coming here will be productive of great good, and you will pardon me for speaking person-

ally. No body of men holds a higher place in my affections than you, for the many years it has been my joy and pleasure to meet with you in these annual gatherings has tended to cement a bond of affection that nothing can efface, and I also speak for my professional brethren of the city and county, as well as our big-hearted citizenship, who rejoice to have the physicians of the state here, for they realize that no body of men are as self-sacrificing and have the welfare of the public at heart as you.

We, and I mean everybody, from the highest to the lowest, bid you welcome, and are yours to serve.”

On behalf of the association, Dr. C. R. Ogden, Councilor from the third district, responded to this hearty welcome, in the following manner:

“I am deeply sensitive to the responsibility devolving upon me, to appropriately reply in behalf of this association to the very cordial words of welcome from Mayor Bowen, representing the City of Fairmont, and Dr. Henry, speaking for the Marion County Medical Society.

“I am much impressed for the reason that having personally known Mayor Bowen for a number of years, and of the lively interest he has always shown in the work of the medical profession, I know that I can personally speak for the sincerity of his welcome to the members of this association. As for Dr. Henry, I will say that a medical man in this state, not to know Dr. Henry, is to be himself unknown.

“We know of Dr. Henry’s devotion to the State Medical Association, and that his words of welcome come from a heart full of sympathy for each and every person who shall attend this meeting.

“It remains for the members of this association in attendance here to show their appreciation to the people of Fairmont, for the courtesies so generously offered, but I feel certain that this association will not abuse the hospitality given them,

and, when leaving, will have fully proven to their hosts that this hospitality has been most truly appreciated. There is much that I might say, and would be pleased to say, in behalf of the State Medical Association, and of the splendid work medical men are doing for the state and the nation, but I will leave that eulogy for others.

"Perhaps it would not be out of place, however, to say to these representative citizens of Fairmont, that in welcoming and entertaining this association, they are doing honors to no mean body of men and women.

"This occasion is no frolic. This is no day of merry making. This association is represented here by serious minded men and women, bent on a serious mission, for the discussion of serious questions—problems not only concerning the welfare of Fairmont, but of the Nation as well. Incidentally, we are celebrating, in our coming to Fairmont, our semi-centennial—the fiftieth anniversary of the founding of this association, which took place in this city, then a little village, fifty years ago. Fifty years is not such a long period, when measured in cycles of time, but, from the standpoint of consequences and events in the fields of Medicine and Surgery, it is amazing when we think of the advances made in our profession during the time that has elapsed from the foundation of this organization to the present.

"During this time, nearly all of the great discoveries in Medicine and Surgery have been made. It is only a little more than fifty years since anæsthesia was discovered. While the microscope was discovered in the last part of the sixteenth century, it was not until 1863 that Divini established a connection between bacteria and disease.

"It is less than fifty years since Pasteur made the first satisfactory study of contagious diseases. Koch discovered the germ of anthrax in 1871, and in 1882, the bacilli of tuberculosis, Neisser discovered the

germ of gonorrhœa in 1879; Eberth, the bacillus of typhoid fever in 1880; the germ of diphtheria was discovered in 1884; Castellani, that of sleeping sickness and Yersin the germ of bubonic plague in 1894-8; the germ of cerebro-spinal meningitis, antiseptic and aseptic surgery late in the last century; the germ of syphilis and the cause of yellow fever were discovered in the early years of the present century.

"In closing, I cannot refrain from adding a word to what has already been said in honor of the only living member of the original organization of fifty years ago, and in memory of the others of that little band of humanity-loving, God-fearing, scientific men who were with him, but now passed to their reward in the Great Beyond, by saying that they builded better than they anticipated or even dreamed.

"It has been said by the Great Dramatist, who was noted for his accurate portrayal of the human heart, and for his philosophic interpretation of the motives of human conduct, 'that the evil men do lives after them, and that the good is often interred with their bones.' But the truth of a higher, a more potential philosophy comes echoing down to us today that 'the memory of the just is blest, the name of the wicked shall rest.' It is not till death has lent its solemn sanction to a completed life, and time has confirmed the value of thoughts and deeds, that men's wisdom and usefulness are rightly appreciated.

"In our hail and farewell message to our distinguished brother, whom God has spared through all these years, has permitted to retain his faculties and strength of mind and body, and is with us here today, that as long as our lofty mountains continue to lift their wooded crests heavenward, and as long as our valleys continue to be green, there will be an association of medical men in this state, and just so long will the names of Dr. Brownfield and his associates, who founded

the West Virginia State Medical Association, be kept bright on the pages of its history."

Dr. J. H. Brownfield, of Fairmont, the only living charter member of the association, who occupied the seat of honor by the side of the President, was then introduced to the audience. He said in part:

"In 1867, because all the departments of state in our infant commonwealth had been thoroughly organized, except the field of medicine, twenty-three men met by invitation to assemble, at Fairmont, for the specific purpose of forming an organization to properly conserve the interests of your noble profession. I wish more of that nucleus of organizers were here today, for they would all join with me in saying, 'We built better than we knew.'

"In those days most of our meetings, for the convenience of the members, were held along the B. & O. railroad, then the only real steel artery of the state, but I have known of one member, Dr. Moss, of Barboursville, to ride on horseback for two days each way, to attend a meeting of the association.

"I want to congratulate you and myself of this splendid organization. I know during the next two days you will hear many valuable papers, and I hope you will return to your homes refreshed and think kindly of our city."

President Rader then expressed the delight of the association over the presence of Dr. Brownfield. He declared that the Lord was truly good to him, yea, even better than to Moses, for Moses saw, but was not permitted to enter the Promised Land, while he not only saw, but was permitted to enter the Land of Promise.

The scientific program was then opened by Dr. A. S. Bosworth, who gave an excellent paper on Acute Poliomyelitis. He touched upon classical symptoms and signs. He stated the productive organism was world wide, and persists externally for long periods. That water supply, in dry seasons, plays some part in

development. That it is disseminated by human contact, and is feebly contagious. That digestive and respiratory tracts are vaults of discharged infective agent. That pet animals have a limited causative association.

The next paper on the program, by Dr. Wm. C. Etzler, on Anterior Poliomyelitis, was omitted, because of the absence of the author.

The paper by Dr. Bosworth, on Poliomyelitis, was discussed as follows:

H. B. Wood, Charleston: The outbreak of poliomyelitis in this state, after its primary development, has spread along the railroad routes, reaching up to the present, down to the center of Braxton County, and along the western border to Huntington. The September cases appeared at a greater distance than the August cases, from the central summer focus of 1917, in Marion County, and the August cases showed a spreading away from the July cases. West Virginia can expect an outbreak in the southern section, being carried along the railroad courses. Physicians should be on the lookout for it, and when children presenting indefinite or suspicious symptoms are seen, they should be immediately isolated, until a definite diagnosis is possible. There is very strong evidence that there are poliomyelitis carriers. When a suspicious case of poliomyelitis appears, efforts should be taken to prevent the unnecessary traveling, or communion between families. There is some suspicion that sick animals, especially dogs with distemper, may have some influence in propagating infection. People should be warned not to permit little children to play with sick animals.

Dr. Weirich insisted direct contact manner of distribution.

Dr. Jepson said he did not like to hear people say we do not know anything about poliomyelitis, for we do know it is a communicable disease, and may be carried by healthy parents to children. It follows lines of travel, and that means it is carried by persons, and that the human carrier is the dangerous carrier, whatever place animals may play in the disease. As to treatment, we know little, but serum gives promise. When indefinite case of illness appears, treat it as sus-

picious, and consider every acutely sick child, who does not respond to treatment, until proven otherwise.

Dr. Cherry advocated diagnostic lumbar punctures in every case of acute illness, which, after a good cleaning out, enters into a stage of malaria, and shows any nervous symptoms.

Dr. Wade emphasized "After Treatment." Don't abandon these helpless little children as hopeless for, at least two years. See that the dropped foot and paralyzed muscle are placed in mechanical device to hold parts in proper position, in hope paralyzed muscle may be regenerated, and if not, the limp or deformed function will be a natural one.

Dr. Vaughan called attention to the fact that the temperature of the affected part or limb was always below par, and therefore, lacks normal heat. He advocated wool wrappings, bandages and splints, for at least one and a half years.

The next paper by Dr. H. L. Amoss, of Rockefeller Institute, on Poliomyelitis was postponed because of the lateness of his train, and Dr. H. B. Wood, of West Virginia Health Department, at Charleston, gave his paper on "A Physician's Duty to His Community." In it he advocated prophylaxis by vaccination and innoculation, isolation, placarding, reporting infectious and contagious diseases to health officers, and proper destruction of excreta. He discussed effective and unreliable methods of doing the last. He advocated filing complete records of deaths and births, and "whole time" health officers. He mentioned counties of state in which epidemics were most prevalent.

In discussion of this paper, Dr. Anderson called attention to the fact that the counties where epidemics were most prevalent were those in which county medical societies either did not exist, or were least active.

Dr. Weirich advocated standardized placards, furnished by state, and sent to local health officers.

Dr. Thompson spoke of the difficulty in getting local health officers to cooperate properly with the practicing physician.

Dr. Henshaw advocated "whole time" health officers, and removal from politi-

cal appointment. Also a vital statistic law and a campaign against "open privy."

Dr. Judy wanted more stringent health legislation.

Dr. Yost advocated educational campaign in school and from pulpit.

Dr. Keesor urged educational campaign and compulsory vaccination.

Dr. Jepson questioned the enforcement of too stringent laws, and put the matter of education largely up to the physieian.

Dr. Wood closed by stating need of "whole time" health officers.

Dr. Amos then arrived, and gave a most excellent discourse on Poliomyelitis, giving its present status from the standpoint of recent scientific investigation under the auspices of Rockefeller Institute. He summarized his remarks by the following:

1. Poliomyelitis must be regarded as selectively highly contagious.

2. The proposition is here presented that all cases of Poliomyelitis result from the transfer of the virus, by the means of nasal secretions from: (a) persons in acute stages of Poliomyelitis; (b) persons who have recovered, and still harbor the virus; (c) persons in the incubation stage; (d) healthy carriers.

Experimental observations are presented which indicate that sporadic causes may be accounted for by:

1. Contact with healthy carriers.

2. The person attacked may have been a carrier for some time, and suddenly become susceptible, by loss of two or more mechanisms of defense, such as: (a) abnormal nasal mucosa, lowered neutralizing properties of nasal secretion; (b) disturbed unity of choroid plexus; (c) lowered normal resistance; (d) absence of certain cellular elements in the blood.

The association then adjourned for lunch, to reconvene at 2:30 p. m., to attend in a body a Poliomyelitic Clinic held at the Emergency Hospital at Monongah, by Dr. Peter Noe, of Rockefeller Institute, who had charge of the recent epidemic of infantile paralysis in the Fairmont coal field. Dr. Noe presented for study about twenty-five con-

valescent patients, giving the history of their attack, their illness and their treatment. This clinic proved most valuable to all, being illustrative of the valuable papers of the morning sessions.

Following the demonstration, Dr. Amoss gave an informal talk, answering all questions which came up in the minds of those less experienced in this malady.

The association then returned to Hotel Fairmont, and resumed its program.

Dr. Arthur Lederer, who is now in charge of the state laboratories of the West Virginia Health Council, at Morgantown, then gave a most excellent paper on "The Carrier Problem." After speaking of the prevalence of carriers of the intestinal type, and of the naso-pharyngeal type, and, after treating of the carriers of cerebro-spinal meningitis, infantile paralysis, and, in fact, every infectious and contagious disease, he declared that isolation, while it should be strictly adhered to as a safeguard, is a disappointment, insofar as the carrier problem is concerned: for it was an impossible task to locate them, and after locating, to cure them.

He asserted that, so soon as we were able to discover for all diseases tests like that of Schick's for Diphtheria, to determine the susceptibility of an individual to any one disease, and, so soon as we are able to immunize an individual against possible attack of a disease as we are in typhoid fever, then, and not till then, would the carrier problem cease to exist.

Dr. Ira J. Haynes, Richmond, Va., then read a most timely and excellent paper on Medical Economics. He pointed out the necessity of the profession paying more attention to such matters, for their own good. He spoke of the building of a practice, and the retaining it, of rendering of service and council, and charging a dignified price for it, of collecting these charges, of the relation of one physician to another, and to their respective patients, and, in fact, of many things of vital importance to the doctor.

His paper was ably discussed by Drs. Steele, McDonald, Butt and MacQueen.

He then closed the discussion by the

epitome—"so practice that you have the conscious feeling that you are giving your patients more than he is paying for."

Dr. Golden not being present, his paper on Evolution of Medical Legislation in West Virginia, was read by title. In this paper he ably reviewed the fortunes of medical legislation in the state, giving the "whys" and "wherefores" that stimulated action along these lines. He spoke of the good accomplished, and the aim at high standards for the profession of the state. He alluded to the relations of legislature, health council and state association, and what should be dealt with by legislation, and what should be left to the wisdom of the council. This paper should be carefully studied when it appears in *The Journal*, for it is full of food for thought.

The association then adjourned until the evening session, which was held in the auditorium of Fairmont High school.

The first feature of the program was the president's address. Owing to the condition of President Rader's health, this was read by Secretary Anderson. This was a most interesting historical disclosure, reviewing the work of the organization since its inception fifty years ago.

Next, Surgeon John McMullen, of Louisville, of the United States Health Service, gave a fine illustrated lecture on Clinical and Public Aspects of Trachoma. He showed slides of the disease as found in the mountain districts of Kentucky and West Virginia. Slides of before and after operations. Some of these slides showed persons who had been blind who were restored to sight and could read.

He was followed by Dr. Robert L. Dickinson, of Brooklyn, executive member of the Medical Section of the National Council of Defense, who brought a message from this organization. He said, in part, that for years, the medical profession has wanted a representative in the cabinet. The present war has given us an advisor around the council board in the person of the chairman of the Medical Defense Board, and has, at last, given us the coveted proud position, and, with it, more power. The relation

of the army and the navy with the public health of our country is close. We are the connecting link. Before the war with the army and the navy we were 400 strong; now, we are 12,000, not mentioning the men in public health service. We have given of our ranks, one in ten; we want to give one in five.

Of the states of the Union, Pennsylvania stands first, having given 15%. West Virginia has given thus far, 8.2%. We are doing our "bit" but shall we not make it a greater, grander "chunk?"

Through the efforts of Major Henry D. Jump, formerly of Philadelphia, and now of Washington, moving pictures of the battle front of Flanders were then exhibited, after which Major Jump, representing the Medical Defense Corps, made a rousing talk. He asserted that the most important element in this war, other than munitions, is medical men. The medical profession are going to take better care of Uncle Sam's soldiers than ever before in the history of wars. He showed what the Medical Defense Corps is doing, the number of men it has provided, and the number of men it still needs to properly carry on its work. It is up to us. You know what we medical men always do when any emergency is to be met. We produce the goods.

The Wednesday morning session was opened by the oration *Medicine*, by Dr. C. W. Waddell, Fairmont. His subject was *Recent Advances in Our Knowledge of Syphilis and Its Treatment.* This was an able paper, worthy of the fiftieth birthday of our association, and should be eagerly read by all when it appears in *The Journal*.

In discussing this paper:

Dr. Guthrie, Huntington, said the Swift-Ellis method of treating Paresis hastened death, and was inferior to the mercury method. In proof, he cited a test made on 26 cases, selected so as to be on a par, one half treated by Swift-Ellis, the other half by mercury. In two years, ten treated by Swift-Ellis were dead, while the thirteen mercury treated patients were getting along as well as possible.

Dr. Hatfield, of Iaeger, spoke of elegant results obtained in syphilitic cases treated by Salvarsan, by the spinal punc-

ture route.

Dr. Waddell closed by answering Dr. McDonald's question in that he used the French preparation of Salvarsan.

The next paper was an able production by Dr. S. D. Hatfield, Iaeger, on *Nephritis, Variety, Classification and Treatment.* He gave an excellent expose of the reason for various classifications. He spoke of a new triple alliance existing amongst renal, vascular and heart diseases. Watch for the paper in *The Journal*. It is worth while.

In discussing this paper:

Dr. Hall, Wheeling, advised more liberal feeding in nephritis, after initial restriction. He heralded variations in S. G. as a favorable sign. He advocated use of diuretin and uritropin.

Dr. Lantz, Alaska, pointed out the relation of good teeth and sound tonsils to the health of the kidney.

Dr. Moore, Charleston, emphasized rest and feeding as of great importance in treatment. Asserted that nephritis was frequently but a symptom of trouble elsewhere in the body, and advised always to look for underlying cause.

The next paper was on *Diagnosis and Treatment of Cerebro-Spinal Syphilis*, by Dr. J. D. Willis, Roanoke, Va. In an able way, he pointed out the importance of proving the lingering dregs of syphilis, by spinal punctures, and the advantage of intraspinal administration of Salvarsan. He says if you can retain patient under observation for long period, intravenous treatment good, but intraspinal quicker. Some cases which do not respond to intravenous treatment do respond to intraspinal route.

Dr. C. L. Holland, Fairmont, then gave an excellent paper on *Infectious Diarrhea of Infancy.* He gave as the best prophylactic measures, watch the water supply and the feeding, both of infant and mother. Treatment depends upon study of stools to detect cause, and then eliminate cause so far as possible, by dietetics, decries drugs, favors castor oil.

This paper was ably discussed by Drs. Maxwell, Steele and Drinkard.

Dr. Steele, Bluefield, restricted castor oil to select cases.

Dr. Drinkard, Wheeling, urged necessity of making positive diagnosis of underlying cause.

Dr. C. H. Maxwell, Morgantown, then presented a paper on Necrology, which was full of wit, humor and viril common sense. It should be read by all.

The Wednesday afternoon session was opened by Dr. Martin E. Rehfus, Philadelphia, who gave a most fascinating address on "Intragastric Diagnosis."

He presented entirely new and original methods of studying gastric mechanisms, by means of a new tube, invented by himself, and demonstrated why it surpassed the older methods. It showed the results of brilliant, original investigation. His method of diagnosis is worth while, because of its simplicity. It should be investigated by every practitioner.

Dr. T. Henry Becker, Bluefield, then presented an able paper on Practical Points in Etherization, which showed close observation and vast experience on his part, and should be carefully read.

Dr. S. A. Slater, formerly a member of our association, but now in charge of a sanatorium in Oil City, Pa., then read a most excellent paper on A Plea for Closer Co-operation of the General Practitioner, Sanatorium and Patient in the Campaign Against Tuberculosis. The gist of the able paper was: 1. Early diagnosis of greatest importance; 2. General practitioner most important factor; 3. Sanitorium, although ideal place for treatment, is not suited for every case; 4. Recovery depends upon doing right thing at right time; 5. Co-operation of all necessary.

In discussion of this paper:

Dr. Clovis, Terra Alta, warned against mistaking tuberculosis for typhoid fever, and urged careful observation of *physical signs* and clinical symptoms. He said that the greatest problem that confronts the state is tubercular infection in childhood.

Dr. Jepson, secretary State Health Council, urged examining naked chest. Dr. Pepper, Huntington, made a plea for value of X-ray diagnosis.

Dr. Grimm, St. Marys, urged encouragement of patient as one of the most essential factors in recovery. Give lit-

erature, and explain it.

Dr. H. G. Steele, Bluefield, then presented an excellent paper on Pellagra, and gave valuable hints gleaned in his experience with a number of cases.

Dr. Venning, Charles Town, in discussing this paper, ventured the assertion that Pellagra was more widely spread than many people thought.

Dr. L. V. Guthrie, Huntington, came next, with an exhaustive treatise on Dementia Praecox.

He was followed by Dr. Jas. R. Bloss, Huntington, on Mental Defectives. He urged that many failed to grasp the fact that an individual could be feeble minded without being an idiot, an imbecile or insane. High grade feeble mindedness appeared when standards were established with which to test the intelligence of an individual. Having recognized this high grade feeble minded, four lines presented themselves along which investigation must proceed: 1. The social problem; 2. The psychological problem; 3. The pedagogical problem; 4. The biological problem.

In discussing these papers:

Dr. Henry, Fairmont, urged action to prevent propagation of such species.

Dr. Laughery, Parkersburg, pointed to importance of inheritance, and advocated education and unsexing.

Dr. Grimm, St. Marys, suggested a resolution to empower institutions to unsex such menaces.

Dr. Guthrie, Huntington, pointed to the tendency of defective mothers to breed multiple births.

Next on the program, Dr. Robert L. Brown, Parkersburg, presented a most interesting and delightful paper on Maternal Impressions, in which he scouted such superstitions.

In discussion, Dr. Laugherty, Parkersburg, demurred by quoting biblical lore, and referred to Jacob and the peeled rushes.

The following resolution was then offered by Dr. Keesor, Wheeling, which was unanimously adopted.

"Whereas, smallpox has existed in many localities in West Virginia during the past many years, and has developed into numerous se-

rious and expensive outbreaks, and,

"Whereas, smallpox may and does infect persons of all walks of life; and nationalities except those who have been successfully vaccinated; and since it is often impossible to entirely prevent by quarantine the spread of the disease, and,

"Whereas, vaccination has been definitely proved to be the only real preventative of smallpox, and is safe cheap and harmless;

"Be It Resolved by the West Virginia State Medical Association, that this organization does herewith endorse a law requiring the compulsory vaccination of school children in West Virginia, and petitions the State Legislature to pass a law to this end, that the health and lives of our people be preserved."

The following telegram was then read:

"Charleston, W. Va.,  
October 1st.

"Dr. J. E. Rader, Pres.,  
Hotel Fairmont,  
Fairmont, W. Va.

"Country faced by most serious economic condition. We must eliminate waste and substitute foods we have of equal nutritive value for wheat, rye, sugar and fats, which our allies must have or leave the trenches. West Virginia has promised two hundred thousand families will sign this pledge. We ask your convention's endorsement of United States Food Administration pledge card campaign to be conducted October 26 to 28.

"CHARLES H. HALL,  
"Field Rep."

In response, the following resolution was passed:

Be It Resolved, That we, the members of the West Virginia State Medical Association, pledge our individual efforts in support of the food pledge campaign, which is now being conducted in this state.

Wednesday evening, at 8 o'clock, a

most sumptuous banquet was tendered the association by the Marion County Medical Society, in the Assembly Room of Hotel Fairmont. Over one hundred and fifty covers were laid, and not a chair remained vacant.

When divine blessing was asked by Rev. H. G. Stotzer, D. D., Fairmont, a voice in sweet song floated out from the balcony of the mezzanine floor. The vocalist was discovered to be Mrs. C. W. Waddell, Fairmont. After being repeatedly recalled, Mrs. Waddell sang the verses of one of our national songs, and the assemblage, standing, joined in the chorus. Tempting viands then claimed the attention of all. Later toasts were responded to by Major Jump, Dr. H. Augustus Wilson, Dr. S. L. Jepson, Dr. C. O. Henry, Dr. A. S. Bosworth, and others, under the skillful direction of Dr. J. W. McDonald, as toastmaster.

Thursday morning, at Princess Theater, the scientific program was concluded. The first speaker was Dr. W. S. Gardner, Baltimore, on The Cause of Extra-Uterine Pregnancy, in which he fixes the guilt upon past infection of the tube, and present normal restoration of mucous membrane lining the tube.

Dr. H. Augustus Wilson, Philadelphia, then presented a most valuable contribution on Variation In the Lateral Process of the Fifth Lumbar Vertebra in the Etiology of Backache and Abdominal Pain. He exhibited a wonderful collection of lantern slides, illustrating the frequency of marked variation, and then, in his paper, clinched his argument in a most masterful manner, shedding new light on the diagnosis of conditions which have baffled repeated surgical attempts at relieving the suffering individual. He states that the lateral processes of fifth lumbar vertebra become etiological factors in backache (a) when they are involved in a pathological process, (b) when associated with bursa, (c) when forced in contact with the sacrum or the ilius, (d) when occupation induces a static condition; that X-ray plates, alone, may be misleading; that unsupported clinical evidence is not conclusive, and that therapeutic measures depend upon the cause.

Dr. J. E. Burns, Baltimore, then gave



a masterful treatise on Diagnosis and Treatment of Urinary Lithiasis, illustrating it with lantern slides and gross specimens of stones. He gave, in such detail, the symptoms and treatment of the condition under varied circumstances that one must needs study his paper to fully appreciate its thoroughness and worth.

The last paper was presented by Dr. George W. Dobbins, of Baltimore, on Five Years Experience with Caesarian Section. He made a plea for the fact that while Caesarian Section is a simple operation, yet the determination of when it should be done demands the highest type of obstetric experience, knowledge and judgment, and therefore, should be referred to the obstetrician and not the general surgeon or gynecologist.

In discussion Dr. Gardner took issue with these conclusions.

The fiftieth annual session then formally closed its scientific program.

J. HOWARD ANDERSON,  
*Secy.*  
W. Va. State Med. Assn.

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## Surgery

### OPERATION FOR SARCOMA OF THE JAW PERFORMED ON PRESIDENT CLEVELAND IN 1893.

The country has been keenly interested in the recent publication in the *Saturday Evening Post* of an article by Dr. W. W. Keen, describing the operations performed on Grover Cleveland at the time of the financial panic of 1893. The story of the grave responsibility resting upon those who undertook these operations is told in detail for the first time after a lapse of nearly a quarter of a century.

To those engaged in the campaign for the control of cancer there is special significance in the report of this case, aside from the prominence of the patient and the society points with satisfaction to the prompt treatment which was instituted upon discovery of the unhealthy

condition in the president's mouth. The trouble was first brought to the attention of Dr. R. M. O'Reilly on June 18. A small portion of the ulcer was removed and sent to the Army Medical Museum for examination. The pathologist, who was of course kept in ignorance of the identity of the patient, reported that the specimen was strongly indicative of malignancy. Dr. Joseph D. Bryant was then called to Washington and after further examination confirmed the diagnosis of sarcoma of the jaw. To Mr. Cleveland's question, "What do you think it is, doctor?" Dr. Bryant replied, "Were it in my mouth I would have it removed at once." This frank answer, made at a time so crucial when the most pressing matters were at stake and there was plenty of excuse for delay had there been a disposition to temporize, settled the matter at once and all necessary preparations for the operation were made for the first possible date thereafter, which was July 1st.

It was later found desirable to perform a second slight operation in order to remove a condition which was not entirely satisfactory to the responsible surgeons and this was done on July 17th.

Mr. Cleveland died fifteen years after these operations, never having suffered the slightest recurrence of the sarcoma.

The details of the operations and a comparison of the technic of that day and the present are of undoubted interest to the profession, but to all those active in the educational campaign which is being conducted to teach the public the importance of the earliest possible diagnosis and treatment of cancer there is abundant reason for satisfaction as to the outcome.

Dr. Keen states in a note at the end of his article that the publication of the account at this late date is consented to by Mrs. Thomas J. Preston, Jr., formerly Mrs. Grover Cleveland, as a contribution to the political and financial history of the country, but it would seem to the society for the Control of Cancer that the incontrovertible evidence of the curability of one form of cancer it affords is a contribution of the greatest importance.—*Am. Soc. C. C.*

# The West Virginia Medical Journal

JAS. R. BLOSS, M. D., EDITOR  
C. R. ENSLOW, M. D.  
J. E. RADER, M. D., ASSISTANT EDITORS

Huntington, W. Va., November, 1917.

THE JOURNAL issued on the first of each month.

Subscription . . . . . \$1.50 per year  
Single Copies . . . . . 20 Cents

All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

## CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

## ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

## REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: United Woolen Mills Building, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

## THE SEMI-CENTENNIAL MEETING

It is to be regretted that every member of the State Association could not be present at this Fairmont meeting. To begin with, there was an air of serious solemnity, at least to me, which seemed to pervade the whole gathering. The realization that, as it were, a man might be coming back to his birthplace.

There was that atmosphere of serious determination to attend carefully to all of the scientific program. An earnest desire to glean every valuable point from each paper. This was shown by the attendance at the section meetings, as well as the general sessions; then the discussions gave evidence that all were deeply interested and determined that

## OFFICERS OF THE STATE ASSOCIATION

PRESIDENT—J. E. Rader, Huntington, W. Va.

FIRST VICE-PRESIDENT—W. S. Young, Sistersville, W. Va.

SECOND VICE-PRESIDENT—E. H. Thompson, Bluefield, W. Va. ff

SECRETARY—J. Howard Anderson, Marytown, W. Va.

TREASURER—H. G. Nicholson, Charleston, W. Va.

DELEGATES TO A. M. A.—Frank LeMoyné Hupp, Wheeling, W. Va.; C. R. Ogden, Clarksburg, W. Va.

ALTERNATE—B. B. WHEELER, McKendree, W. Va.

CHAIRMAN OF THE COUNCIL—G. D. Jeffers, Parkersburg, W. Va.

## COUNCIL

FIRST DISTRICT—H. R. Johnson, Fairmont, W. Va., one-year term; J. W. McDonald, Fairmont, W. Va., two-year term.

SECOND DISTRICT—T. K. Oates, Martinsburg, W. Va., one-year term; C. H. Maxwell, Morgantown, W. Va., two-year term.

THIRD DISTRICT—C. R. Ogden, Clarksburg, W. Va., one-year term; M. T. Morrison, Sutton, W. Va., two-year term.

FOURTH DISTRICT—G. D. Jeffers, Parkersburg, W. Va., one-year term; R. H. Pepper, Huntington, W. Va., two-year term.

FIFTH DISTRICT—E. F. Peters, Maybeury, W. Va., one-year term; W. H. St. Clair, Bluefield, W. Va., two-year term.

SIXTH DISTRICT—B. B. Wheeler, McKendree, W. Va., one-year term; P. A. Haley, Charleston, W. Va., two-year term.

nothing of value escaped.

We would be very remiss did we not express our appreciation to Secretary Anderson, for the high class of addresses and papers which he provided. One of the best things about them was that they were all so practical and dealt with the very matters of most vital interest to us at the present time.

Another thing which made this a kind of "journey to Mecca" for me was that the sole surviving member of that little band of twenty-three disciples of Escalapus, who fifty years before met in the then small town of Fairmont, to found our association, still lived there and attended the meetings. The inspiration I drew from just the sight of this man!

Think of it! Fifty years in this city; dearly beloved and venerated, not only by all of his professional associates, but all of the people as well. Let me tell you it must place a man's soul at peace with all the world to have lived and worked as has Dr. Brownfield, and survive to attend the fiftieth annual meeting of the association he helped to found.

The clinic held at the Monongah Hospital, where all of Marion County's Poliomyelitis patients were treated, was one of the most valuable features of the whole meeting. This was a particularly timely clinic at the present, since this disease has been appearing in other portions of the state.

It is hoped that the transactions of the House of Delegates will be read carefully by all of our members. There are several matters of great importance which were acted upon. One in particular, I will mention. That is the adoption of the resolution to increase the assessment to the State Association one dollar per year, for the purpose of establishing a fund for rendering assistance to aged or infirm members of the profession in need of such.

This is certainly one of the best steps we have ever taken. It is to be hoped that each member will not feel this contribution to be a duty, but a pleasure and a privilege as well.

The commercial exhibits were exceptionally good, above the average really. Many availed themselves of the opportunity to examine them and purchase.

Wednesday night the banquet was held. We could not see a vacant chair. After an elaborate dinner, a number of short toasts were responded to.

Taken all in all, this was a fine meeting. We were all glad to be there and enjoy the hospitality of our Marion County brothers.

#### YOUNG PHYSICIANS. YOUR OPPORTUNITY.

Never again in the history of medicine in this country will such an opportunity be afforded you to serve your country as well as the best interest of yourself.

The experience which you will gain by being commissioned in the Medical Reserve Corps and seeing active service,

will be worth more to you in a professional way than you could acquire in years of practice in civil life.

The pay granted to officers in the Medical Reserve Corps is sufficient not only to cover all needs, but enable you to lay aside a comfortable balance, and while the older men in the profession have come forward, it is to the younger men that the greatest benefits accrue.

The experience will prove broadening both professionally and mentally. With this experience and the thought that you have served your country in time of need, you will return to civil life and receive the further benefits from your patients, friends and acquaintances, always accorded to one who has been so prominently individualized as this opportunity will afford you.

#### THE DOCTOR'S CONTRIBUTION.

In this world's war, your service is absolutely essential.

The medical officer bears the same relative position in war as in peace in that he is a conservator of health and life.

Through his skill, thousands of men receiving slight casualties, are returned to the fighting force, thus conserving the physical strength of the army.

In base, field and evacuation hospitals doctors are as essential as in civil institutions, where the sick and injured are cared for.

As regimental surgeons and on transports and in the Sanitary Corps, must the government have doctors if we are to terminate this war successfully.

Your contribution to your country at this critical time is *your service* which you can give for the period of the war as an officer in the Medical Reserve Corps. That your country needs you, is best answered in that she is calling you *now*.

The fighting forces are constantly expanding and such expansion calls for additional doctors and even with the troops now in training and under mobilization (about two million) the Surgeon General has not enough doctors to fill the requirements.

Secure an application blank at once; fill it out and present it to your nearest examining board. Do not live to regret that you did not have a part in your

country's great struggle for democracy which means *Liberty*.

### Miscellaneous Announcements and Communications

Wheeling, Oct. 18.

Dr. J. R. Bloss.

Dear Doctor: I am enclosing the obituary notice of Dr. Geo. W. Bruce, of Moundsville, clipped from the *Wheeling Register*. Few, indeed, of our profession live to so great an age, and none have ever received a greater degree of homage and affection from the community in which their lives were spent. He was truly the patriarch of his people, and until four or five years ago he maintained his professional relations with them. He was doubtless the oldest medical practitioner in the state, and almost certainly the oldest graduate of the University of Pennsylvania at the time of his death. I notice that the number of births at which he was present is given at three thousand. A few years ago he told me that the number was over four thousand. I thought you would like to have this notice for the *Journal*.

Very truly,

L. D. WILSON.

Dr. George William Bruce, Moundsville's Grand Old Man, died at his home on Seventh Street that city, Saturday, October 6, at 9:45 a. m. He was ninety years old the 17th of last July. The doctor's health had been failing rapidly for several months and although he had been bedfast for several weeks his death was no less a shock to the community.

Funeral services will be held at the residence at 2:30 o'clock Monday afternoon conducted by Rev. J. H. Garner of Trinity Episcopal Church. Interment in Mt. Rose Cemetery.

Dr. Bruce was born in Winchester, Va., July 17, 1827, and spent almost his entire life in Moundsville. No citizen was held in higher esteem by his friends and associates and even those who did not know him, and they are few in Mounds-

ville and vicinity, join in universal tribute to his work as a factor in the development of the city.

Few men had or deserved more friends, and it can be said as truly of him as was ever said of any man, that "none knew him but to love him." He literally "lived in the sunshine"—radiating good humor and inspiring confidence and the love of fellow-man by the warmth of his companionship and his un-failing habit of doing and saying that which had for its object the carrying of pleasure to others.

The career of Dr. Bruce was a long and distinguished one. He came to the Flats of Grave Creek, now Moundsville, in 1849, for nearly 68 years he brought comfort and cheer to the homes of the sick and afflicted of Moundsville and the surrounding country in the practice of his profession. He saw many people come and go, the number of births in which he was called being estimated at not less than four thousand; one of them being Bishop Hughes, of the Methodist Church, who was born in Moundsville.

Dr. Bruce served as mayor of Moundsville and was a member of council for several terms. He was president of the Marshall County Bank, the oldest bank of the county at the time of his death.

His boyhood days were spent at Winchester, Va., and after graduating from a boys' military school, he entered the medical school of the University of Pennsylvania at Philadelphia, from which institution he graduated in 1848, and for many years was the only surviving member of his class.

Dr. Bruce came to Moundsville in a stage coach, it requiring a week to make the journey from Winchester to Wheeling. He crossed the mountains several times in stage coaches and rode through Moundsville on the first train to go over the B. & O. railroad. Several years previous to coming to Moundsville he rode on the B. & O. near Baltimore when the coaches were drawn by horses.

The B. & O. railroad was first projected the year the doctor was born, 1827, but was not begun until 1830 and was finished through to Wheeling in 1852.

In 1849 the Doctor attended cholera cases among the builders of the B. & O. railroad at Moundsville. He always advocated letting especially cholera patients, drink plenty of cold water, and never refused any patient a drink of water.

Dr. Bruce was twice married, his first wife being Miss Mary Burley. To this union five children were born three sons dying in infancy. J. D. Bruce and Mrs. Meta Bowley survive him. His second wife was Miss Ella Burley, who died two years ago last January. A daughter, Miss Mary Bruce, of this union, survives, and a son died in infancy. A brother at Fort Worth, Tex., also survives.

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Charleston, W. Va., Oct. 17.

Dear Doctor: Enclosed find poem copied from the journal of the A. M. A. This was written by Dr. John McRae, of Canada, after spending several months in active service in Flanders. This poem was referred to the *Journal* by Dr. Wm. H. Welch, who considers it the best war poem yet published.

Very truly,

J. E. CANNADAY.

#### IN FLANDERS' FIELDS.

In Flanders' fields the poppies blow  
Between the crosses, row on row,  
That marks our place, and in the sky  
The larks still bravely singing fly,  
Scarce heard amidst the guns below.  
We are the dead. Short days ago  
We lived, felt dawn, saw sunset glow,  
Loved and were loved, and now we lie  
In Flanders' fields.

Take up our quarrel with the foe,  
To you from falling hands we throw  
The torch—be yours to hold it high.  
If ye break faith with us who die,  
We shall not sleep tho' poppies grow  
In Flanders' fields.

October 12, 1917.

Dear Dr. Cannaday:

The little poem of which you spoke yesterday is beautiful, but seems to me to need a finish which I have ventured to add in the following lines.

Sincerely yours,

S. L. JEPSON.

And when at last the victory's won  
By men who strive the world to free  
From tyrant hordes who bear the gun  
With which to crush man's liberty,  
We'll sleep in peace 'neath poppies'  
bloom,  
In Flanders' fields.

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Dartmoor, W. Va., Oct. 11, 1917.

Dr. J. R. Bloss, Editor,

W. Va. Med. Journal.

Dear Doctor: Since the best news is the gathering of things of interest from all parts, that our section may contribute its portion, you will pardon me for sending you the few items from the B.-R.-T. Medical Society.

We have not held our October meeting yet, as the state meeting came the first part of the month, and since that time, the date has been postponed to suit the convenience of the members. Since this is the month to elect officers for the coming year, we are anxious to have a full attendance.

The call to army service has greatly depleted our available medical society force. Dr. H. W. Daniels first was called to Ft. Oglethorpe, Ga., and was soon transferred to Syracuse, N. Y. Dr. Daniels writes that he is kept busy, but likes the work very much. He says the men are well provided for, and are in good condition.

Dr. H. K. Owens, commissioned as captain in the medical service, was called to Ft. Benjamin Harrison on September 10th.

Dr. Glen Harper, commissioned as lieutenant is now at Ft. Oglethorpe, Ga.

Dr. N. R. Davis, of Henry, with a lieutenant's commission, has been called to service.

Dr. J. W. Ballard, of Harding, has been called to serve his country in medical service as lieutenant.

Dr. Than Barnard of Elkins, was com-

missioned a lieutenant in dental department and is now at Petersburg, Va.

Dr. A. S. Bosworth, of Elkins, is now doing mine practice at Vindex, Md.

Dr. H. W. Neel, formerly of Cass, has formed a partnership with Dr. G. C. Rodgers, of Elkins, taking the place of Dr. Daniels, now in the army service.

The absence of so many physicians in employ of Uncle Sam has greatly increased the labor of those remaining. Since we are having so many sudden changes in temperature, colds, coughs, and pneumonias are not uncommon.

We learn that Dr. N. B. Michael, of Hendricks, will take over the mine practice of Dr. Ballard of Harding, while Dr. Ballard is in army service.

I am very sorry that I could not attend the meeting of the State Medical Association at Fairmont, but circumstances rendered my attendance impossible. I shall anxiously await the issues of our Medical Journal to see the things done, the articles read, and the prospects for the future.

Yours very truly,  
J. C. IRONS.

#### ANNOUNCEMENT.

At about the time that the *Medical Review of Reviews* was founded, Prof. Dillon Brown, of New York, established a semi-monthly journal devoted to the diseases of children, called *Pediatrics*. The opening article was by A. Jacobi, and the leading physicians of the city, among them J. Lewis Smith, Reginald H. Sayre, and Wm. H. Park, contributed to its pages. Latterly it has been edited by Wm. Edward Fitch, but Dr. Fitch has recently been appointed a major in the United States army, and we have acquired his blue pencil and subscription list.

*Pediatrics* will no longer appear as a separate publication, but has been incorporated into the *Medical Review of Reviews*. Beginning with January, however, the *Medical Review of Reviews* will contain a special department devoted to pediatrics. This feature is but one of the improvements scheduled for the coming year. Important symposia are now in progress, the editor will contribute a second series of Pathfinders in Medi-

cine, a staff of associate editors is being formed, and thus the *Medical Review of Reviews*, in entering upon its twenty-fourth annual volume, promises to be more serviceable to the profession than ever before.

Birmingham, Ala., Oct. 10, 1917.  
Dr. Jas. R. Bloss, Editor,  
W. Va. Med. Journal,  
Huntington, W. Va.

Dear Dr. Bloss: The eleventh annual meeting of the Southern Medical Association will be held in Memphis, Tenn., November 12-15, 1917. We are hoping to make this meeting a great success, a success similar to that of our previous meetings. Special effort has been made to make the programs most interesting. The section officers have done their work well. This meeting is certainly going to be a scientific treat.

Under separate cover we are sending you a copy of the October issue of the Association's Journal in which is an editorial giving information regarding the meeting. Enclosed you will find a bulletin that is being mailed out today to all of our members and those who are eligible to membership. The officers of the Association and those most interested in making this meeting the success that it should be will appreciate it very much if you will give in the next issue of your journal some publicity to this meeting. In behalf of the officers and those most interested, let me thank you in advance for any publicity that you may give us.

Very truly yours,  
C. P. LORANZ,  
Business Mgr.  
So. Med. Assn.

## State News

The Charleston Ambulance Corps, numbering 119, under the captaincy of Dr. T. L. Barber, who organized the corps, are in training at Camp Meade, Md. They had given them by the Red Cross Chapter of the city two fully equipped ambulances.

—o—  
Dr. C. L. Holland of Fairmont, accompanied by his wife, has gone to Bos-

ton to spend some weeks taking special work in children's diseases, and to enjoy a needed rest.

—o—

Dr. H. D. Hatfield and Dr. A. K. Kessler have taken over the hospital at Logan. Dr. Lawson will be associated with them.

—o—

Dr. and Mrs. Howard of Fairmont, are spending some time in New York City, the doctor attending clinics.

—o—

Dr. and Mrs. R. McCutcheon of Zela, N. C., spent a few days in October in Huntington visiting relatives. He is a member of the M. O. R. C. and expects to see service in France.

—o—

Dr. G. C. Roberson of Hurricane has been given a first lieutenant's commission in the M. O. R. C. and has been sent to Camp Dix, N. J.

—o—

At the recent meeting of the Graduate Nurses' Association held at Fairmont, the prices for graduate nurses services were advanced from \$25 a week to \$28 a week. Miss Susan Cook of Wheeling, was elected state president, and the next meeting will be held at Bluefield.

—o—

Dr. R. L. Focer of Colliers, has been commissioned a first lieutenant in the M. O. R. C.

—o—

Dr. George Conley of Williamson, was a week-end visitor in Huntington when enroute home from the State Medical meeting at Fairmont.

—o—

Dr. W. P. Sammons of Cameron, has been recommended for first lieutenant in the M. O. R. C.

—o—

Dr. A. K. Kessler of Huntington, was a recent visitor in New York City.

—o—

Dr. J. E. Rader of Huntington, attended the meeting of the American Association for the Study and Prevention of Diseases of Infants and Children recently held in Richmond, Va. He also spent some time in Baltimore and Washington following the State Association meeting in Fairmont.

Dr. W. E. Cook, of Northfork, was in Huntington recently and passed a successful examination for a commission in the M. O. R. C.

—o—

Dr. Stanley M. Rinehart, husband of Mary Roberts Rinehart, noted writer, has been assigned as a captain to the medical corps at the selective service cantonment at Camp Sherman, Chillicothe, Ohio. Dr. Rinehart, a specialist in tuberculosis recently returned from the western front. His home is in Colorado.

—o—

Patriotism of the physicians of West Virginia is shown by the fact that ten per cent of them have entered army service. Charleston has contributed seventeen per cent, Huntington thirteen per cent, and Wheeling twelve per cent, and Morgantown twenty per cent.

—o—

Dr. Lindsey Vinson of Huntington, was a recent visitor to Baltimore.

—o—

Dr. and Mrs. H. E. Price have returned to their home in Alta Vista, Va., after visiting relatives in Huntington.

—o—

Miss Laura Bryant of Huntington, who enlisted some months ago as a Red Cross nurse for service with the armies of the United States, has gone to one of the training camps of the National army.

—o—

A number of doctors in West Virginia have received commissions in the dental corps of the army. Among them being Drs. H. C. Powell and David Hott of Morgantown, Rolla Taylor and L. L. Painter of Clarksburg, Frank N. Carroll and John L. Dunn, both of Wheeling; I. J. Kail and H. E. Guthrie of Huntington.

—o—

Roumania is so short of medical supplies that wounds of her soldiers are being dressed with sawdust, says a cablegram received at Washington from the American Red Cross commission.

—o—

After being exonerated of charges of inefficiency, neglect, etc., at an examination held by the State Board of Control we understand Dr. C. A. Barlow has resigned as superintendent of the Spencer

State Hospital for the Insane.

—o—

Dr. John Gibson, formerly of Huntington, has been commissioned a first lieutenant in the M. O. R. C. Dr. Gibson has been located at Logan.

—o—

The C. & O. Hospital Training School for Nurses had its commencement October 30. The exercises were held in the auditorium of the Carnegie Library. There were five graduates to receive diplomas; the first graduating class from this hospital. Miss Susan Knight is the superintendent of nurses at this institution.

—o—

Dr. Arnold Scherr of Eglon, W. Va., has applied for a commission in the M. O. R. C. He has taken the examination and passed all the tests satisfactorily.

—o—

Dr. and Mrs. Yancey of Mayslick, Ky., were recent visitors in Huntington.

—o—

Posted at several points in the lobbies of the main auditorium and Sunday School room of the Johnson Memorial Church of Huntington are attractively printed cards on which are listed the names of the men of the church who have answered their country's call to arms. Beneath the heading "honor roll" are these words: "Greater love hath no man than this: that a man lay down his life for his friends." Among these names may be found that of Lieutenant R. M. Bobbitt, Annapolis Junction, Md., M. O. R. C.

—o—

Dr. E. H. Thompson of Bluefield, was called home from the State Meeting at Fairmont owing to the serious illness of his wife. We are glad to announce that Mrs. Thompson is doing nicely after an operation for appendicitis and an infected gall bladder.

—o—

Dr. J. H. McCulloch, formerly chief medical director of the public service commission, has located in Charleston, where he will devote himself to the practice of medicine.

—o—

Dr. S. H. Phillips, formerly of St. Albans, W. Va., has located at Charles-

ton, and is limiting his practice to the eye, ear, nose, and throat.

## Society Proceedings

Huntington, W. Va.,  
October 20, 1917.

Dr. J. R. Bloss,  
Huntington, W. Va.

Dear Doctor: The Cabell County Medical Society met at the Frederiek Hotel in room 218, October 18, 1917.

The meeting was called to order by the president, J. H. Rowsey. The minutes of the last meeting were read and approved.

The members present were: Drs. E. B. Gerlach, Vest, Pickering, Yost, H. P. Gerlach, Marple, Morrison, Watts, A. K. Kessler, Rowsey, Hatfield, and Pepper.

Dr. J. H. Rowsey reported a case of tubercular infection of the hip joint.

Drs. Vest and Marple both reported cases of similar symptoms of joint disease caused by pyorrhoea.

Drs. Kessler and Hatfield reported some interesting operations done under local anesthesia, by the injection of one quarter of one per cent solution of novocaine.

It was moved and seconded that the secretary be instructed to select some suitable Christmas remembrance for the members of this society who have gone to the front. Carried. At the suggestion of the secretary, Dr. E. B. Gerlach was appointed as an assistant to the secretary in this work.

It was moved and seconded that members of the Cabell County Medical Society who go to the front and while in active service be continued as members of this society without the payment of dues. Carried unanimously.

The following bills were allowed and ordered paid: The Huntington *Advertiser* for the dissolution notice, \$6.87. Postage bill due secretary, \$6.64.

The secretary announced that at the next regular meeting of the society that Dr. Leroy J. McElrath would read a paper, entitled, "The Determination of Sex and the Physiological Laws Which Govern Its Control."

On motion it was ordered that the fol-



lowing resolution be spread upon the minutes of the society:

Resolved; That Cabell County Medical Society, a corporation created, organized and existing under and by virtue of the laws of the state of West Virginia, does hereby discontinue business as a corporation and does hereby surrender its charter of incorporation and its corporate rights and franchises held thereunder; that its board of directors proceed at once to liquidate its affairs, pay its debts if any, and divide any remaining assets among its stockholders.

Resolved, further, that the president of this corporation be and he is hereby authorized and directed to cause notice of the adoption of this resolution to be published in the *Huntington Advertiser*, a newspaper of general circulation in the city of Huntington, Cabell County, West Virginia, once each week for four weeks, and that he certify this resolution, together with the certificate of the publication thereof, as required by law, to the Secretary of State of West Virginia, together with the request of this corporation for the consent of said official to the dissolution of this corporation. On motion the society adjourned.

R. II. PEPPER, *Sec.*

#### MERCER COUNTY SOCIETY.

The Mercer Medical Society met at the Chamber of Commerce, Bluefield, at 8 p. m., September 20. President presiding. Minutes of last meeting were read and adopted.

##### Under clinical cases:

Dr. S. R. Holroyd reported a number of cases of croup, which resembled membranous croup. Lasted for three nights but did not come on particularly at night. Temperature was high and pulse strong and rapid. It seems to have been an epidemic in his community.

Dr. Peters reported a number of similar cases in Princeton. Dr. Slusher addressed the society relative to the false report of the cost of equipment for the Medical Reserve Corps, and urged that

all who can consistently do so to join.

##### Under papers:

Dr. J. W. Preston of Roanoke, Va., read a very interesting paper on "Some Observations Touching Recent Advances in Medicine as Related to Diseases of the Heart." This was a very able paper and showed that Dr. Preston had given his subject considerable thought.

The society as a whole was invited by Dr. Preston to attend the Virginia State Medical meeting to convene October 30. The meeting adjourned to meet at the Busy Bee Restaurant where luncheon was served. There being no further business a motion to adjourn was made and seconded to meet on the third Thursday in October.

E. H. THOMPSON, *Secy.*

The Mercer County Medical Society met in the office of Drs. Bird and Vermillion at Princeton, W. Va., on October 18 at 8 p. m. Meeting called to order by president. Minutes of last meeting read and adopted.

First on program was the report of the state meeting. First day by Dr. E. H. Thompson, part of first and second day by Dr. H. G. Steele, and part of second and entire third day by president-elect of the State Association, Dr. S. R. Holroyd, who gave us a splendid talk in which he stated that he did not take the honor all together himself, but wish the society to share it.

##### Under clinical cases:

Dr. E. W. Horton reported two very interesting cases of diphtheria, and the amount of anti-toxin given in each case. Both cases recovered. He also reported a case of lumbar pneumonia in which the second affection occurred, and the patient died in second attack. The question of anti-toxin was then very freely discussed, at which time the secretary read the communication of the American Medical Association giving the strength of the various anti-toxins. A motion was made and seconded to instruct the secretary to write to the government to secure a man to give us a lecture on the various serums.

A motion was made and seconded that the luncheons at our meetings be dispensed during the period of war, which

was carried.

It was decided to hold a medical clinic at the Chamber of Commerce at Bluefield, W. Va., beginning 2 p. m., the third Thursday in November, and the secretary was instructed to write each member, and if possible to obtain the title case which he will present.

There being no further business a motion was made to adjourn, after which we retired to the Busy Bee Restaurant and were served with a splendid lunch.

E. H. THOMPSON, *Secy.*

## Medicine

### SINGLE MIXED VACCINATION AGAINST TYPHOID AND PARATYPHOID.

Widal and Salimbeni state that they have now a record of 12,000 men inoculated with a single dose of a vaccine consisting of equal numbers of typhoid, paratyphoid A and paratyphoid B bacilli. The dose was 1.55 c.c., containing six thousand million germs, heated, but without antiseptic. This method of vaccination has been in use for over a year, but sufficient time has not yet elapsed for the majority of the men for a decisive judgment as to its efficacy. They made a point of inoculating the men with this single dose, and repeating it in part of the men, hoping to establish thus the relative value of the single and double vaccination. For the present, they counsel the usual double method as being safer, but the outlook for the single, larger dose is growing brighter with every day that passes. It should certainly, they say, be given the preference when there is no time to give the usual two doses, and also in times when these diseases are epidemic. As vaccination is not compulsory for the civilian population this single inoculation is often preferable for them as they do not take readily to this precautionary measure and often refuse a second inoculation.—*Abs. J. A. M. A.*

### WOUNDS OF THE BLADDER

Legueu has encountered 43 cases of gunshot wounds involving the bladder predominantly, and has been surprised at the immediate and remote mildness of

the clinical picture therefrom. In some cases the bladder had been perforated or the projectile had passed entirely through it, and yet there were no serious symptoms from this at any time. In 6 cases of this kind, no operation and no special treatment was given. In 15 of the total 43 cases, an opening into the rectum or colon had been created by the projectile; in two cases the opening could be felt with the finger in the rectum. Even with these fistulas the evolution of the bladder wound was benign in 12 of the 15 cases, the fistula healing spontaneously in the course of a few weeks or months. A vesicorectal fistula consequently does not call for operative treatment as a matter of course. Before the projectile reached the bladder it had fractured the bone in 25 of the total 43 cases; the bone involved was the pubis in 17 cases, the sacrum, ilium and hip joint in 2 each. The fracture being compound and bathed in urine leads inevitably to infection unless the hole bored by the missile is given a prompt surgical clearing out, and the urine diverted by suprapubic cystostomy. In the 11 cases in which this was done at once, the wound healed smoothly, and in the 15 cases in which it was done at a later stage, it materially improved conditions. Even although this may not divert all the urine, it answers the purpose sufficiently. Otherwise there is liable to be a persisting fistula between the bladder and the site of the fracture after the skin wound has healed. Pus and sequestrers from the suppurating process thus kept up in the bone, find their way into the bladder and start the production of calculi. Calculi may also develop from foreign bodies carried into the bladder with the projectiles. He found calculi in 10 of the 43 cases. In some the nucleus was a scrap of shell. Foreign bodies were removed from the bladder in 12 cases, including bullets in 3, scraps of shell in 5 and sequestrers of bone in 4; this group does not include the foreign bodies removed at the first operation. He emphasizes that an extensive bladder wound from which urine escapes at once through the skin should be treated on the same principles as any other war wound, **immediate clearing**

out of the passage made by the projectile, removing all foreign particles even down into the bladder, and sterilizing the whole passage.—Abs. *J. A. M. A.*

#### DIAGNOSIS OF PREGNANCY.

Kaarsberg declares that he has been unable to find on record a single authentic case of actual menstruation during a pregnancy, not even in cases of double uterus. The changes in consistency in certain areas are instructive signs of pregnancy, even in the early stages. He has sought regularly for Lobhardt's "livid stripe," running from the mouth of the urethra past the reliefs of the hymen, but has found it in only three cases. The Abderhalden test seems to exclude pregnancy when the response is negative, but a positive reaction is not conclusive. Hegar's sign is the softer consistency of the uterus, so that it can be pressed in with the fingers above the cervix until the fingers almost meet. But Kaarsberg has never encountered this, but once in his experience. A softer consistency of the uterus in the cornua is comparatively common, and very instructive, even early in the pregnancy. Veterinarians count on this in examining cows to learn if they are gravid. The cornu is easily palpated through the rectum. He regards this as more instructive than changes in the size and shape of the uterus in the first three months. In a case of pregnancy in the cornu with an eccentric growth, he operated for assumed tubal pregnancy but found the three months' ovum normally embedded. Such a mistake can be avoided by finding on palpation both cornua equally well defined. Interstitial pregnancy is often accompanied with attacks of severe pain.

In discussing the complications of pregnancy, he remarks that he has never seen but one instance of incarceration of the gravid, retroflexed uterus. The fear of incarceration therefore need not be great; the patient can be warned to apply for help if there is difficulty in voiding urine. Restoration of the uterus to place is liable to entail abortion. There can be no incarceration of the fully retroflexed gravid uterus without the cervix being drawn up and back of the symphysis. This usually squeezes the

lower walls of the bladder together and impedes its emptying, but this is not always the case. Conditions are often misleading with a double uterus, the palpation findings suggesting a tumor or extra-uterine pregnancy. In conclusion he presents evidence that the condition called "supravaginal hypertrophy of the cervix" of the gravid uterus is in reality torsion of the uterus with an ovum embedded in a cornu.—Abs. *J. A. M. A.*

#### DEATH AFTER ROENTGEN TREATMENT OF EXOPHTHALMIC GOITER.

Verning reports two cases, with only a few weeks' interval, in which the vascular, recently developed goiter was given Roentgen treatment, and fatal thyroidism followed. One patient was a woman of 26; the symptoms of the exophthalmic goiter became manifest two months after delivery of her first child. She had always been nervous, and two years before had had febrile articular rheumatism, with complications on the part of the heart. The thyroid was exposed to the Roentgen ray, the dose 5 H, filtered and the exposure was repeated the next day. The circumference of the neck subsided from 36½ to 34½ in a few days, but the tremor and agitation increased to actual delirium, and the woman died fifteen days after the last exposure, a little over two months after the first signs of the exophthalmic goiter. The other patient was a housemaid of 18 with no pathologic antecedents except one slight attack of gastric catarrh and chlorosis. For the last year she had been easily tired and nervous, with a tendency to occasional palpitations and shortness of breath. She entered the hospital a month after she noticed that her neck had begun to enlarge a little. Two Roentgen exposures were given with the same dose as in the other case, only with a two-day interval. Symptoms of mild thyroidism developed as the circumference of the neck became reduced from 34 to 30.5. Later the thyroid symptoms became aggravated, and the girl died about six weeks after the exposures. A mild intercurrent infectious sore throat may have been a factor in the fatal outcome. The dosage of the rays was not

above the average, but must have been excessive for such recently developed cases. Verring summarizes in conclusion the cases he has found on record in which, under Roentgen treatment, the symptoms became aggravated. As a rule, however, this aggravation was transient and the result on the whole was improvement.—Abs. *J. A. M. A.*

#### MERCURIAL ANURIA.

The mercurial poisoning in the young man was manifested mainly by gastrointestinal uremia, vomiting, diarrhoea and Cheyne-Stokes dyspnea with a sensation of oppression in the chest, and anuria complete for two days and almost absolute during the three following days. While the anuria lasted, the young man complained of incessant chilliness, but there was no edema, headache, myosis nor gallop sound. During the polyuria reaction period, symptoms developed suggesting severe peritonitis except that the pulse was regular and slow and the temperature normal. Milian explains this as the result of the loss of fluids, the man having vomited more or less constantly for nine days, and the polyuria following the anuria having drained the body of too much fluid, causing a condition of dehydration like that of cholera. Milian did not venture to make a saline infusion, fearing to bring on edema, but he gave an intravenous injection of a hypertonic glucose solution, 60 gm. of glucose in 200 c.c. of distilled water. The result, he says, was *verrelement miraculeux*.—Abs. *J. A. M. A.*

#### THE BLOOD PRESSURE REVEALS AORTIC INSUFFICIENCY.

Amblard analyzes the various factors which influence the blood pressure with aortic insufficiency, and declares that with a minimal pressure of 65 mm. mercury and maximal of 165 mm. we can be certain there is aortic insufficiency even when the lesion is not evident to the ear, and the pulse rate is normal. He estimates the normal range in health as from 80 to 140 mm. With aortic and kidney trouble the minimal pressure drops in the same way as with simple aortic insufficiency but it is only a relative drop, the differential pressure keep-

ing about the same in all phases of aortic incompetency. This allows oversight of conditions as the case progresses, and, in connection with the pulse, estimation of the functional capacity of the heart.—Abs. *J. A. M. A.*

#### EXPERIMENTAL SHELL SHOCK.

Mairet and Durante reproduced with rabbits the violent shocks from explosion of a large shell in the close vicinity without direct contact with particles of the shell. Five of the twelve animals died in the course of five minutes, one hour, or one to thirteen days. The others after a brief stunned condition with acceleration of the respiration and transient agitation, rapidly recovered and were slaughtered later. Minute hemorrhages were found numerous in the lungs, spinal cord and nerve roots, and a number of small vessels in the gray substance of the cortex had ruptured into the sheaths of lymphatics. The smallness of these hemorrhages and the fact that they did not diffuse testify that they occurred instantaneously in consequence of the depression which followed the compression. These histologic hemorrhages entail anemia of the small territories beyond them, which explains the areas of softening to which Jumentie and Claude have called attention. These very numerous but very restricted lesions correspond to the symptomatology of men suffering from shell shock, especially the amnesia which may result from the anemia in certain small areas, the neuralgias, and the pains at the emerging points of the nerves. The latter correspond to the intraradicular hemorrhages found in the rabbits. This may also be the explanation of certain cases that have been published in which the clinical picture of tabes came on suddenly after shell shock, with negative Wasserman reaction and a rapid course. It may also explain the galloping course of general paralysis after concussion from an exploding large shell.—Abs. *J. A. M. A.*

#### TUBERCULOSIS FROM THE MILITARY STANDPOINT.

Maragliano remarks that there seems to be a good deal of uncertainty among the army medical officers as to tubercu-

losis in relation to the military service. He declares that the only question should be, has the man any kind of a tuberculous affection? If the answer is affirmative, then there is only one thing to do, the man should be eliminated from the army. Even when the man is well nourished, he is liable to have his precarious balance upset at any moment. Hence, he cannot be utilized in any way in military service which is liable to be or become eventually harmful for him. No gradations are possible, he insists. No physician can authorize that he has sufficient resisting powers to bear the depressing influence of military life either in the active zone or back of the firing line. The state and military authorities demand that no person with tuberculosis detectable by the diagnostic measures at our command shall be admitted to the military service. A circular issued by the minister of war, April 15, 1917, deplors the fact that men have been passed for the service with tuberculous lesions so serious and advanced that ordinary clinical examination should have revealed them. Certain physicians in examining the recruits are misled by their zeal to swell the army ranks, and they pass candidates who, they think, are capable of rendering good service even although they know that the men are tuberculous. But the nation and the government do not want this at all. Physicians should follow the lines laid down for those who are responsible for the make-up of the army. They should not restrict their search for tuberculosis to pulmonary lesions alone, as is too often done, but should seek for tuberculous affections of all kinds, however slight they may appear. This is a service which physicians can render now to the army. The benefit from it will be felt in the near future by the whole country. (Maragliano speaks with authority as he is not only one of the leading experts on tuberculosis, but is also a senator of the realm, in close touch with the government.) He emphasizes that any focus of tubercle bacilli may and does remain circumscribed and occult as long as the resisting forces of the organism are able to oppose to them an adequate defense. But once the resisting powers are weakened

by any cause, the bacilli throw down the barriers, and sally forth to conquer. Among the instructive diagnostic findings in case of a pulmonary lesion, he cites elastic fibres in the sputum and detection of antibodies in the blood and of tubercle bacilli in the urine. Latent tuberculosis of the kidneys is much more common than is generally believed. In dubious cases, Roentgen examination is imperative, and subcutaneous injection of tuberculin, not less than 2 or 3 mg. if there are not broncho-alveolar foci. With an existing focus, 1 mg. or less is enough. The focal reaction should never be overlooked; this may be as marked after taking 1 gm. of potassium iodid at one dose as after the tuberculin test. It should never be forgotten that tuberculosis proceeds in stages, now advancing, now stopping, as the defenses grow stronger. The "clinical cure" means merely that the defense is stronger than the invading host and is holding it in check. If physicians at large appreciated this, they could surround the tuberculous with precautionary measures so that many of them could live on indefinitely. They should never be exposed to the vicissitudes of army life.—Abs. J. A. M. A.

#### CHRONIC ASPIRINISM.

A woman, aged 50, suffering with typical rheumatoid arthritis, was in the habit of taking 10 grains of aspirin twice daily for seven years. During the first six years of the treatment the patient did not exhibit a single untoward sign of aspiring poisoning. There were no signs of gastro-intestinal irritation or of cardiac or mental depression. The first untoward sign of aspirin poisoning ensued in January, 1917, in the form of an intractable simule conjunctivitis, the patient complaining of "sand in the eyes." Examination showed a well marked hyperemia of both the palpebral and ocular conjunctiva; there was a slight degree of chemosis and considerable lachrymation. A week later the patient gradually became troubled with an urticaria which was not relieved by either dietetic or by the usual local or internal remedies. In a few days the patient was entirely covered by a typical urticaria ma-

gor. The rash, which was present both day and night, assumed in parts the characters of an acute circumscribed edema, and elsewhere a severe urticaria bullosa. The symptoms rapidly became somewhat alarming, the patient was weak from insomnia, there were obvious signs of intestinal irritation in the form of diarrhea and vomiting, there was massive edema of the tongue and fauces, so that dysphagia became a marked symptom, and even an urgent tracheotomy was only averted by a prolonged administration of ice and ice water combined with astringent gargles. Vision was entirely obscured by an extreme palpebral edema. The urine gave an intense bluish violet reaction when tested with liquor ferri perchloridi, but the exact percentage of salicyluric acid was not estimated. A diagnosis of chronic aspirinism was made, and the drug rigidly withheld. Medicinal treatment consisted of 5 grains of ichthyol and a mixture containing liquor arsenicalis, tincture of belladonna and calcium lactate, three times a day. Bromids were administered in large doses every night. At the end of the seventh week all trace of the urticaria had vanished and the urine was again normal. An interesting feature of the case is the fact that since the onset of the urticaria, although all aspirin had been discontinued, beyond the bony deformities all traces of the rheumatism have been entirely absent.—Abs. *J. A. M. A.*

#### CANCER DECALOGUE.

The following Cancer Decalogue was recently prepared by the standing committee on the Control of Cancer of the Massachusetts Medical Society for publication in the *Boston Medical and Surgical Journal*:

1. *The Classical Signs of Cancer* are the signs of its incurable stages. Do not wait for the classical signs.

2. *Early Cancer Causes no Pain.* Its symptoms are not distinctive but should arouse suspicion. Confirm or overthrow this suspicion immediately by a thorough examination and, if necessary, by operation. The advice "Do not trouble that lump unless it troubles you" has cost countless lives.

3. *There is no sharp line between the benign and the malignant.* Many benign new growths become malignant and should therefore be removed without delay. All specimens should be examined microscopically to confirm the clinical diagnosis.

4. *Precancerous Stage.* Chronic irritation is a source of cancer. The site and the cause of any chronic irritation should be removed. All erosions, ulcerations, and indurations of a chronic character should be excised. They are likely to become cancer.

5. *Early Cancer* is usually curable by radical operation. The early operation is the effective one. Do not perform less radical operations on favorable cases than you do on unfavorable ones. The chances for a permanent cure are proportionate to the extent of the first operation. Make wide dissections; incision into cancer tissue in the wound defeats the object of the operation and leads to certain local recurrence.

6. *Late Cancer* is incurable though not always unrelievable. Radium, X-rays, ligation, cautery, or palliative operations may change distress to comfort and may even prolong life.

7. *Cancer of the Breast.* All chronic lumps in the breast should be removed without mutilation. Examine all specimens microscopically. An immediate microscopical examination is desirable since, if positive, it permits a radical operation at the same sitting. A radical operation performed ten days after an exploration is almost never successful in curing cancer of the breast.

8. *Cancer of the Uterus.* Any irregular flowing demands thorough investigation. Offensive or even very slight serous flows are especially suspicious. Curette and examine microscopically. Amputate all eroded cervixes which do not yield promptly to treatment. Do not wait for a positive diagnosis.

9. *Cancer of the Digestive System* is difficult of early diagnosis and therefore unfavorable in prognosis. All persistent and recurring indigestions (more especially if attended by change of color and loss of weight) and any bleeding or offensive discharges demand prompt and thorough investigation. Do not wait for

a positive diagnosis.

10. *Cancer of the Skin.* Any warts, moles or birthmarks which enlarge, change color, or become irritated should be removed promptly. They are likely to become cancer. Do not wait for a positive diagnosis.

This Decalogue is an admirable summary of the whole subject and it is recommended by the Cancer Society to all medical journals for publication as often as possible.

## Book Reviews

THE MEDICAL CLINICS OF NORTH AMERICA, September, 1917. W. B. Saunders Company, Philadelphia.

The Clinics of North America is a worthy successor to the Medical Clinics of Chicago. This excellent publication brings the post-graduate course to the practitioner's office. The current number is full of excellent material. One of the best articles is The Diagnostic Value of Examinations of Cerebrospinal Fluid, which is the most satisfactory article on this subject we have yet seen. The article on Gastric Infection is also very good. We congratulate the Messrs. Saunders upon the excellence of this publication.

DISEASES OF THE STOMACH, INTESTINES AND PANCREAS. By Robt. Coleman Kamp, M. D., Professor of Gastro-intestinal Diseases at the Fordham University Medical School.

This is the third revised edition. Octavo of 1096 pages with 438 illustrations. Philadelphia; W. B. Saunders Company, 1917. Cloth \$7 net; half morocco \$8.50 net.

This third edition revised and enlarged following so closely upon the heels of the second indicates the popularity of the work. Special attention is given radiotherapy of gastric ulcer, gastric cancer, duodenal ulcer and gall bladder diseases.

There is also a special chapter devoted to "Diverticulitis." This is a very valuable book properly illustrated and well written. While we may not always agree in toto with the author's views, his sincerity of purpose and the value of his opinion to both student and practitioner cannot be questioned. It should be in

every physician's library.

THE DIAGNOSIS AND TREATMENT OF ABNORMALITIES OF MYOCARDIAL FUNCTION WITH SPECIAL REFERENCE TO THE USE OF GRAPHIC METHODS. By T. Stuart Hart, A.M., M.D., Assistant Professor of Clinical Medicine in the College of Physicians and Surgeons, Columbia University. Visiting Physician to the Presbyterian Hospital in the City of New York.

Illustrated with 248 engravings, 240 of which are original. The Rebman Company, New York, 1917.

This is a book which all practitioners and students should read and study carefully if interested especially in Myocardial affections of abnormal character. It is well illustrated with diagrams, polygrams, electro-cardiograms, sphygmograms, etc. The observations have been carried on by graphic methods which require a considerable expenditure of time and work, much more than the general practitioner may have to spare or care to spend. There are several chapters on perverted functions, embracing Bradycardia, Tachycardia, Auricular, Fibrillations and the relationship of Auricular Flutter, Tachycardia and Fibrillation. Treatment is given under these chapter headings. First, general principles; second, drugs; third, indications afforded by types of rhythm. Valuable and deeply interesting.

THE ELEMENTS OF THE SCIENCE OF NUTRITION. By Graham Lusk, Ph.D., Sc.D., F.R.S. (Edin). Professor of Physiology at the Cornell University Medical College, New York City. Third edition, reset. Philadelphia and London. W. B. Saunders Company, 1917. Price, cloth, \$4.50 net.

The author states in his prefatory that he has endeavored to admit to his introductory chapter only such material as appears to be susceptible of scientific proof, making this the key to the rest of the book.

This work is as complete as our present day knowledge of nutrition both in health and disease seems to justify. Tables are given showing the caloric value of various articles of diet so that the busy practitioner is enabled to quickly and accurately compile a diet list suit-

able to the demands of his case. The chapter on food economics furnishes "good food for thought." The article on metabolism in diabetes and phosphorous poisoning, in nephritis, in cardiac diseases, and other cases involving acidosis and its forms are of the greatest value and furnish information leading to a scientific and successful course of treatment.

**NOSTRUMS FOR KIDNEY DISEASES AND DIABETES.** Prepared and issued by The Propaganda Department of the *Journal* of the American Medical Association. Forty-seven pages. Deals with 34 nostrums; illustrated. American Medical Association, 535 North Dearborn St., Chicago. Paper, 10 cents postpaid.

This is the latest pamphlet issued by the Propaganda Department of the *Journal* of the American Medical Association as part of its work in giving the medical profession and the public the facts regarding different phases of the nostrum evil and quackery. Nostrums for kidney disease and diabetes are grouped together in one pamphlet, not because there is any essential relation between diabetes and kidney disease, but because the average quack makes no distinction between the two conditions and recommends his nostrum indiscriminately for both. It is not necessary to tell physicians that drugs will not cure either kidney disease or diabetes but it is necessary to apprise the public of this fact. Whatever justification there may be for the sale of home remedies for self-treatment, there is no excuse, either moral or economic, for selling preparations recommended for the self-treatment of such serious conditions as diabetes and kidney disease. Every "patent medicine" sold for the cure of these diseases is potentially dangerous and inherently vicious. The pamphlet is an interesting and instructive one to put in the hands of the layman.

**CANCER; ITS CAUSE AND TREATMENT.** By L. Duncan Bulkley, A.M., M.D. Senior physician to the New York Skin and Cancer Hospital, etc. New York, Paul B. Hoeber, 1917. Price \$1.50.

In this book Doctor Bulkley re-affirms and fortifies his statements and opinions

set forth some two or more years ago in a small book which attracted the attention of the profession, with more or less unfavorable opinions from reviewers and others in the profession. Dr. Bulkley has an abiding faith in his opinions as to the cause and treatment of cancer, and backs up his profession of faith with case reports on the same. He describes his treatment and gives prescriptions for guidance of those who may wish to try his method. The book is very readable and highly interesting.

**BULLETIN OF WEST VIRGINIA STATE DEPARTMENT OF HEALTH.** Published under the editorship of Dr. S. L. Jepson, Health Commissioner. Quarterly. Charleston, W. Va.

We have just received the October issue of the *Bulletin* and have carefully read it. West Virginia has just cause to be proud of the work being done by the Health Council of which Dr. Jepson is the very efficient head. No physician in West Virginia should fail to write for a copy of the *Bulletin* at once and read it carefully.

**DISEASE OF THE SKIN.** By Richard L. Sutton, M.D., Professor of Diseases of the Skin, University of Kansas School of Medicine; former chairman of the Dermatological section of the American Medical Association; member of the American Dermatological Association; Assistant Surgeon U. S. Navy, retired; Dermatologist to the Christian Church Hospital. With eight hundred and thirty-three illustrations and eight colored plates. Second edition, revised and enlarged. St. Louis. C. V. Mosby Company, 1917.

The appearance of this second edition revised and enlarged, written within a year of the first, is conclusive evidence of the favor with which the book has been received by the profession at large. Several new topics have been introduced and the treatment in some instances considerably amplified. As in the first edition obsolete methods and those of questionable value or of theoretical interest only are given scant mention or left out altogether, thus contributing to the value and usefulness of the work to the general practitioner.



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## DEMENTIA PRAECOX.

### OBSERVATION AND TREATMENT.

By L. V. GUTHRIE, M. D., Supt. Huntington State Hospital, Medical Examiner for Cabell County Lunacy Commission, etc.

Read at Fiftieth Annual Meeting of W. Va. Medical Association, Fairmont, W. Va., October, 1917.

Mr. President, Ladies and Gentlemen:—

Outside of institutions for mental cases, the medical profession has but little to do with dementia praecox, except in the early stages of this disease. In this state it is usually the general practitioner who sees the case first. He should therefore, be familiar with the diagnosis and prognosis. The medical treatment, for the time being, may be of secondary importance, but much may be added to the family physician's reputation, valuable time saved for the patient, and perhaps, many dollars saved the family, if he is able to make a correct diagnosis at the beginning. This is not to imply that the family physician in every case, can make a diagnosis after one or two examinations; but, if he is able to reach correct conclusions, after observing the obscure cases continually, for three or four weeks, all parties concerned should be satisfied.

It is well that we remember that until a comparatively short time ago, the subject of this paper was not mentioned in medical literature, and it is only within the last few years that the psychiatrist has gained a fairly clear conception of the disease. There is still room for investigation as to the exact causative agency, and the investigator who discovers a satisfactory treatment will be permitted to move to the head of the class and will be lonesome when he arrives.

We have every reason to believe that dementia praecox has existed for many centuries, among all nations, both civilized and uncivilized. In my early study of mental diseases, these patients were classified or grouped under various names; some of these cases were formerly known as stuporous melancholia; quite a few were known as catalepsy, mania and monomania, and confusional insanity. These terms were selected as being most suitable to the group of symptoms presented.

This nomenclature continued until Kraepelin, in 1896, by much patient labor and study, traced out life histories of his cases and formed a classification, which has been acceptable to a majority of students of mental diseases. At that time he divided dementia praecox into hebephrenic, catatonic and paranoides. The cause ascribed was disorders of metabolism. The prognosis was consid-

ered unfavorable, as the patient was always left with more or less mental impairment.

This first variety, the hebephrenic form, occurring at or about puberty, was the youngest group, and it is now sometimes sub-divided into an additional form, known as dementia simplex, but for practical purposes, I think, that this sub-division is unnecessary.

The next form, that of catatonia, occurring a little later in life, is characterized by fixed attitudes, negativism, bizarre positions, etc.

And finally, the third form, known as paranoides, occurring still later in life is characterized by its resemblance to paranoia.

Still another form has been added by some writers, and this is known as the mixed, or atypical states.

Clouston, of Edinburgh, in 1897, in the Fourth Edition of his *Clinical Lectures on Mental Diseases*, described adolescent insanity as occurring between the ages of eighteen and twenty-five. The majority of his cases placed in this group would be classified today as dementia praecox, but I am of the opinion that at least a few of his cases of adolescent insanity, if observed today, would be placed in other groups.

The name, dementia praecox, has not been universally approved by Psychiatrists, and there is a tendency gradually to eliminate this name and to find a suitable substitute. This name does not meet the conditions found in all of the cases, for it is well known that this disease frequently appears among persons thirty or more years of age, and not always during the period of adolescence, or early in life. Or, if dementia praecox was taken to mean a dementia—appearing early in the progress of the disease, (dementia implying an incurable condition), we are again running counter to the facts, for occasional cases of this disease recover. After being affected for years these cases may recover sufficiently to again take their places in society, but this is infrequent. Schizophrenia—splitting of the personality, has been suggested as a substitute and is used to some extent.

Etiologically, we find heredity, as in

nearly all forms of insanity, standing out boldly as the fundamental cause. This is variously estimated by different observers to be from sixty to ninety per cent in all cases, with the latter figures more than probably correct. Stigmata of degeneration, are frequently found and the high-arched, inverted V-shaped palate, abnormally shaped ears and skull, alveolus and other morphological arrests are sufficiently frequent to attract attention. These stigmata are also found in paranoia and other psychoses, and, in my experience, are not as distinctive of dementia praecox as some writers would lead us to believe. I may say the same of luetic infection, for it is seldom that I have found any history, or symptoms of syphilis in this disease. Disturbed metabolism has been charged, as before stated, with being the chief active cause, and with good grounds for argument the internal secretions from the testicles, ovaries and other glands have been assigned. Like all other diseases where the exact cause has not been determined, we find many causes cited by various observers, but how quickly these causes all fade into dreamlike memories when the *one* real cause has been discovered. To illustrate, thirty years ago our teachers of nervous and mental diseases enumerated many causes of paresis, and my teacher, Prof. Arnold, of Baltimore, referred to this disease as the "aristocrat of insanity," because its history did not show heredity, as often as other insanities, as it frequently attacked prominent and successful business men. Today only one cause of paresis is mentioned, and I look forward with confidence to a time when the cause of dementia praecox will be equally well understood and the treatment will be more successful than in paresis. The cause of this disease, with our present knowledge, I would summarize as hereditary pre-disposition, a constitutional inferiority supplying a suitable unstable organism, with a tendency to abnormal physicochemical reactions, the nature of which we know not. We do know quite well that certain families have a hereditary pre-disposition to pulmonary tuberculosis. Is there any good reason why certain families may not have a hereditary pre-dis-

position to disease or abnormal action, of one or more glands furnishing internal secretions? With the above as predisposing causes, we find the victims of dementia praecox usually manifesting symptoms noticeable to the family and relatives, after some mental strain—from study at school, a love affair, or some great grief or disappointment—some stress which breaks the balance between sanity and insanity. The psychic in the individual was sufficiently rugged to carry the usual load to which his nature had become adjusted, but one straw too many had broken the camel's back. This frequently occurs in persons who had been just a little different from other children; they did not play and romp and mingle with children in a normal way. The sensitive, shut-in personality is prone to this disease and faulty raising on the part of parents may be responsible for the development of a serious condition in after years. Males seem to be more frequently affected than females and the vast majority of the cases develop between the ages of eighteen and twenty-five years. Occurring early in life as it does, and after some unusual stress, as before mentioned, perhaps accounts for the predominance of dementia praecox among our young soldiers, as compared with other forms of insanity. Cases may occur at thirty, or even later in life, this being possibly due in part, to delayed development in the individual's physical make-up. The disease has also been known to follow physical shock and strain, as well as mental, in individuals who are pre-disposed.

#### SYMPTOMS AND COURSE.

The pre-insane stage should receive our attention in symptomatology and also in treatment, for this is the period in which most benefit can be given the patient. The sensitive, shut-in personality, or "queer" child, who does not play and romp with other children, especially one whose ancestry is neurotic, should be regarded with suspicion as the age of puberty and adolescence is approached. The development of the disease in the majority of cases is slow and insidious, and usually the family fails

to notice any indications of the seriousness of the condition until pronounced symptoms appear. However, there are cases which develop catatonic and other symptoms very suddenly, after some exciting cause. The youth may first attract attention by his hypochondriacal symptoms, and I have seen cases which pointed strongly to neurasthenia at the beginning. The patient is easily fatigued with accustomed mental exertion and as the disease progresses, constructive mental action and initiative, are far below par. The patients sleep little, as a rule; even if they lie on the bed with eyes closed they may be awake and conscious of their surroundings. Antipathy increases with the progress of the disease and they have little or no interest in the affairs of the household and may leave for parts unknown. I recall a case in Charleston who was not thought insane by his family. He was considered just a little "queer." He put on his Sunday clothes about the middle of the week to go to the post office. The next they heard from him he was in the northern part of the state. He was mentally confused and did not know why he had made the journey. He is now in my care and he has had a fully developed case of dementia praecox. The above symptoms, briefly outlined, seldom stop here, but usually go on from bad to worse. The patient's lack of interest and mental fatigue become more pronounced. Delusions of a disorganized, fragmentary character appear in these subjects, and the symptoms of dementia, or mental enfeeblement predominate in the form known as hebephrenic, or simplex. The delusions may indicate the mental depression of the patient and be, to a small extent, in the form of self-accusation, but are not clearly defined or persistent. They are also transitory and changeable, thereby distinguishing them from the delusions in manic depressive psychosis. (The delusions usually found in the older class of patients will be referred to more particularly in describing the paranoid form.)

Constructive mental action becomes a thing of the past, or, at best, is carried on laboriously and to a limited extent. Suggestibility usually becomes a prom-

inent symptom and the patient has so little independent, or constructive thought, that normal sane integration on the part of the patient is practically impossible. Automatism may predominate. However, the suggestibility and lack of will power may alternate with periods of great obstinacy and outbreaks of anger, when the patient is opposed in carrying out his deranged ideas, and may be the most apparent symptoms, or, mutism or negativism may be the controlling symptoms. As an example of the latter, the patient is asked to present the palm of his right hand for examination and instead of complying with the request, the back of his left hand is presented. The patient's obstinacy becomes so self-controlling that almost any request made of him, if heeded at all, brings forth response of an opposite nature. Sound judgment in normal man depends upon alertness, flexibility and curiosity and it is readily understood that in a disease of this kind the patient's judgment is especially defective. These patients frequently laugh or giggle when there is absolutely nothing apparent to the observer to justify the act. They, at times, manifest mannerisms, grimaces, bizarre attitudes, run, jump, climb the window guards, disrobe and act in a silly, aimless manner, and this constitutes, with other symptoms, *catatonic excitement* and should not be confused with psychomotor hyper-activity of manic depressive insanity. These symptoms may be just the opposite in character from other groups of symptoms in the same disease. In the *catatonic depressed* form, the patient may stand speechless for hours in one position. In fact, their feet may swell and become decidedly "puffy" from this prolonged erect, immovable position; or, they lie in bed, with eyes closed, and assume a fixed position of their extremities. (Plate 1.) The patient here shown in the photograph has a favorite position in bed, eyes closed, fingers and thumbs grasping chin. She remains in this position for hours each day and it was with difficulty that I kept her out of bed in her catatonic stupor, for the photographer. A favorite attitude assumed by some of these cases in the advanced stage is known as

the "Egyptian Mummy Position." The darkest corner that can be found by the patient is taken charge of and the patient then sits on the floor, with knees drawn up, ealves of legs flexed on thighs, thighs flexed on abdomen. The head is buried in dress between the knees and arms and hands folded around flexed legs. (Plate 2.) The patient sits for hours in this position, apparently without moving a muscle. If the patient is taken out of her favorite corner, she promptly returns at the first opportunity and the original posture is resumed. This symptom seems to be more common among women than men. Patients with the above symptoms (catatonia) are usually those in which the disease has appeared at a later period in life than in the first group. (Plate 3.) The majority of these two classes of patients, in both sexes, masturbate and some of them to an unbelievable extent.

Unfortunately, the disease does not always stop with the above description, but with its progress the mental enfeeblement increases and the patient, who was, earlier in the disease, indifferent to dress and appearance, becomes untidy and filthy, voiding both urine and feces in bed, or in his clothing. His table manners are disgusting, and many of these patients refuse food and artificial, or forced feeding, with the tube, becomes a necessity.

In the third group, *paranoides*, we find the disease usually appearing still later in life, probably at thirty years of age, or over, having as distinguishing features delusions of a slightly systematized character. This systematization is, however, not often sufficiently complete to mislead the careful observer with the delusions found in *paranoia*.

At the beginning in this form, there is mental depression and a feeling of somatic illness of an illy defined nature. This is followed by a predominance in mental symptoms and the patient becomes suspicious and partially systematized delusions appear. The delusions, in many instances, are apparently based on auditory hallucinations. The delusions are usually of an unhappy depressed variety with at least a partial mental confusion, in which the patient imagines he is be-



PLATE 1.—Catatonia, with bizarre position. Patient sits in this position for many hours at a time.



PLATE 2.—Egyptian mummy position. A well marked symptom of a grave condition.



PLATE 3.—Dementia Praecox, catatonic form.



PLATE 4.—Hand in lower portion of photograph illustrates the inability of thumb to rotate inward at its terminal phalanx, thereby failing to bring its face in proper apposition with digits. Hand in upper portion of photograph shows thumb in proper apposition.



PLATE 5.—Illustrates hyper-extensibility at the metacarpophalangeal joint. In my opinion, the importance of this symptom is overemphasized by many.





ing persecuted. While in this frame of mind he may become very dangerous to those with whom he comes in contact. I have never seen an attempt at suicide follow this condition, but it is well to remember that with depression and delusions of persecution it is always an element of danger.

Sooner or later, probably several weeks, the case develops symptoms of self-importance. This is the expansive stage of the paranoid form and in this way more closely resembles the true paranoiac, but there is still lacking the well defined systematized delusions, and there is more variation than in paranoia, and consequently, less likelihood that the victim of the delusion will carry out his insane impulse. In this state hallucinations are frequently present, and sometimes, combined with illusions—these cause a misinterpretation of the subject presented to the senses, furnishing the basis of many of the transitory delusions. Delusions of a mystic or fantastic nature are common with the paranoid form of praecox, and these patients may largely live in a world of unreality and fail miserably in normal reaction to outside influences. The mental deterioration and bodily emaciation are less marked and less progressive in this form, as compared with hebephrenic and catatonic forms. There is also less tendency to masturbation and these patients show more interest in their surroundings, dress, etc. But as in the other two forms, there is deficient constructive thought and lack of inductive reasoning capacity and there is usually a tendency to increased suggestibility and more or less well marked mental confusion.

#### PHYSICAL SIGNS

The pupils are usually found to be dilated, but I have not noticed other symptoms, except, as to be expected, there is less expression and response to emotions in a well advanced case than is found in health. The circulation is sluggish and a patient's hands and feet are nearly always cold to the touch. Frequently these patients present a bluish tinge to the skin on hands and forearms. In addition to the loss of flesh, there is a

decided lowered resistance to incurrent diseases, especially tuberculosis.

Some observers have called attention to an enlargement of the thyroid gland as a symptom, but this has not been borne out by my experience. A simple enlargement of this gland is quite commonly found among persons, especially girls, of the praecox age, who are not mentally ill. Sleep is seldom normal, and, as indicated a few moments ago, these patients are not always sleeping because their eyes are closed and they are quiet. Their digestion is usually below par and the action of bowels sluggish and constipated.

The human hand is an adjunct to emotional expression among civilized nations and it is quite natural that in a disease in which the emotional side of life undergoes great deterioration there may be expected some change in the visible adjuncts to emotional expression. This I have found to be true, and I have seen few well developed cases of hebephrenia, or catatonia, who shake hands in a normal manner. Instead of grasping your hand with the usual slight pressure of fingers, he limply, or stiffly, reaches out his hand and lays it in yours, cold, clammy and without response.

To Stoddart, of London, should be given the credit for discovering certain anomalies in the hands of these patients, and while I have not found all of these peculiarities in a majority of the cases that I have examined, yet I have found a sufficient number of patients presenting one or more of these structural features, which brings me to the conclusion that they are at least worthy of further observation and study.

Following will be found a description of the Simian type of hand of Stoddart:

#### THE SIMIAN TYPE OF HAND OF STODDART.

“(1) With the hand open, the fingers and thumb fully extended and the interdigital spaces closed—the palmar surface of the thumb faces forward—on the same plane, or nearly so, as the palmar surfaces of the fingers. (In the normal hand, the palmar aspect of the thumb faces at right angles to that of the fingers or nearly so).

(2) When the thumb is flexed *its normal phalanx does not rotate inward*—or does so in a less degree than usual. (In the normal hand it does rotate inward thus contributing to greater accuracy and power of apposition of thumb and finger tips.) (Plate 4.)

(3) The fingers are markedly *hyper-extensible* at the *metacarpo-phalangeal joint*. (Plate 5.) In some instances they may be 'bent backward' to a right angle with the metacarpus. (This peculiarity is also noted in many grown imbeciles and in young children, as well as in the subject of dementia praecox.)

Since the increasing complexity of structure and function of the hand in man is determined and dominated by a corresponding complexity of the *cortex cerebri*, it is not difficult to correlate a deficiency in hand-structure and function with lack of cortical evolution."

Stoddart comments on these manual stigmata as follows:

"These characteristics, taken in conjunction with the facts that they are sometimes encountered in cases of idiocy, especially those of the Mongol type, that imbeciles are liable to develop at puberty symptoms resembling those of dementia praecox, and that the above peculiarities of the hands are also to be observed in the chimpanzee, all point to the conclusion that dementia praecox should be regarded as a failure in evolution, as an atavism or a reversion to an ancestral type.

"Nevertheless we are bound to admit that atavism does not entirely account for all the features of this disease. The rapidity of the deterioration, the physical ill-health and the possibility of recovery, though rare, all indicate that some active morbid process is at work."

I have attempted to give briefly a description of the more prominent symptoms of dementia praecox, as I have found them in twenty years of constant observation.

#### PROGNOSIS

This should be very guarded and conservative, for while it is an established fact that these cases occasionally recover, yet, with our present methods of

treatment, the majority of them continue to deteriorate, both mentally and physically, and, if the patient "recovers" there is a probability that there will be left some mental defect. Remissions are frequent, or, on the other hand, the disease may become arrested and remain stationary for many months or years.

The treatment of this many-sided disease may for convenience, be divided into First, prophylaxis. This is best met by eugenics—badly tainted stock should not propagate, but if there are children, they should be reared with unusual attention given their general health and proper guidance, to prevent, if possible, the development of eccentricities, "shut-in" personality, etc. They should be taught to play and romp with other children and everything possible should be done to make them like normal children, in their desires and conduct. Excessive study at school is to be avoided and as the child grows older, the class of literature read, should be carefully supervised in order that silly, romantic love affairs do not too deeply impress the reader's mind. Their mental faculties should be directed towards reality and along practical lines. Undue stress of every kind should be avoided, particularly until after the praecox age.

Second, the physical symptoms and conditions, must be met as they arise. The alimentary canal usually demands attention. The mouth is prone to become foul and the teeth of these patients are usually bad. Constipation as a rule exists and in extreme negativism, there may be also a strong tendency to retention of urine. These patients frequently bruise and injure themselves and occasionally we have self mutilation, all of which must be met with surgically, as the condition may require. Special treatment, for the purpose of modifying the internal secretions in this disease, has so far proven unsatisfactory. As an experiment, I have given ovarian substance to female patients and spermine to males, thyroid extract and hormone have also been tried out, and four years ago, at the suggestion of Dr. Carlos McDonald, of New York, we selected twelve of our most promising cases of

praecox and administered nuelein (Lanvall's formula) for several months. The results have been *nil* with all of these remedies and the latter not only failed to give lasting improvement in the mental condition, but it disturbed temporarily the physical health, in the majority of the cases. For the masturbation, the use of bromides has perhaps been of some value, but is usually disappointing, if given in safe doses. Vasectomy or complete castration in selected and aggravated cases, is of decided value in controlling this symptom.

Third, the treatment of the mental symptoms in the periods of excitement, is best met with hydro-therapy. The continuous hot flow bath or hot pack to body, with cold to head, is indicated in this stage and is, in my experience, much to be preferred to the cold pack. However, if the patient is debilitated, careful attention should be given to pulse and in case of threatened collapse, the patient should be removed from water and proper stimulants administered. Physical and chemical restraint is to be avoided as much as possible, but occasionally, both may become necessary. If hydro-therapy fails to secure sufficient sleep, trional or veronal with bromide of sodium will be found useful. Sometimes it may become necessary to administer hyosine or other hypnotics. If the patient is in the stuporous stage, the possibility of bed sores and hypostatic congestion of lungs must be remembered and the patient's position in bed should be frequently changed. The skin must also be bathed often and rinsed off with alcohol. The patient's bed should be located where there will be an abundance of sunshine and fresh air, in order if possible, to lessen the tendency to tubercular complications. In this stage, or, if there is decided negativism, forced or tube feeding may become necessary for many weeks or months.

Psychoanalysis may furnish information that will give a better insight to the case and possibly assist in a more harmonious adaptation to the patient's surroundings.

In selected cases, diversional occupation and re-education is worthy of persistent trial, this may, at least to some

extent, stay the progress of the disease.

Following the suggestions of Noboru Ishida, a leading Japanese psychiatrist, we have recently given normal salt solution, administered intravenously, in fifteen cases. This treatment is based on chemical analysis of the blood of these patients, showing a deficiency in sodium chloride. Sufficient time has not elapsed to warrant final conclusions in these cases, but to date, I find the following condensed synopsis of these cases of interest.

Total cases treated with Saline infusion, fifteen.

Ten cases, very unclean before treatment, were improved in this respect. In eight cases, there was an awakening in interest in work, directly following the treatment, and in seven of these cases, this has continued. Remissions occurred in six of the fifteen cases but these improved again on reinjection of the solution. Seven cases have greatly improved without remission. One apparent cure, without remission since treatment was commenced five and one half months ago. Second apparent cure without remission for three months. This case has put on twenty-five pounds in weight and improved mentally to a surprising degree. All fifteen cases showed increase in appetite for food and all gained flesh. Two of these cases previous to treatment had been tubed, one for three months and the other for more than a year. They both commenced eating after the first injection. All fifteen cases showed more or less improvement in their disposition. No elevation of temperature or bad symptom of any kind developed after the injections. A more detailed account of this treatment will be published at the completion of the course.

At the Huntington State Hospital there is an abundance of clinical material, epilepsy, paranoia, manic depressive, paresis, dementia praecox, etc., and all physicians in good standing are cordially invited to visit the institution and study these cases. It will be my pleasure to cooperate with you.

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#### ACUTE POLIOMYELITIS.

DR. A. S. BOSWORTH, Elkins, W. Va.

*Read at Annual Meeting at Fairmont, October, 1917.*

Acute poliomyelitis is an acute infectious disease, which has two distinct expressions, one of a general systematic nature and another that is marked by a phase of central nervous system disorder. The early stage has an obvious clinical picture. Rigidity of the neck is the most constant and characteristic symptom. Fever is always present. Headache is present in nearly all of the cases, and drowsiness is found in most of them. There may be tremor and muscular twitching, gastro-intestinal symptoms, with nausea and constipation or diarrhoea, difficult urination, reflexes absent or exaggerated. The Kernig is found in about twenty-five per cent of all cases. Involvement of the tonsils, pharynx and nasal tract are very frequent symptoms. Sweatings accompany the severest type of the disease. There is muscular weakness in most cases with inability to assume the upright posture with arms folded across the chest, or to raise the head from the pillow when there is the slightest resistance. In most cases any anterior bending of the spine will cause pain and be resisted by the patient. Paralysis may or may not occur. Statistics are not available, but most observers estimate that paralysis occurs in about twenty-five per cent of the cases. Examination of the spinal fluid may be of invaluable diagnostic value. This is especially true, when we know that immune serum possesses specific power over the virus.

However, these comments are common

place and are the common knowledge of the profession. If I am to plead extenuation in presenting this paper to this body, it must be upon the grounds of an unusual experience or upon the emphasis of known facts overlooked by observers and investigators. A seemingly regard for fact precludes the affirmation of either, still in our sense darkness of the epidemiology of this disease a glimmering spark is not to be despised.

The seasonal incidence, we believe, is the most illuminating expression in the epidemiology of the disease. Epidemics occur with few exceptions in the months of July, August and September. These are the months in which flies and other insects are most prevalent. Most observers, however, have eliminated insects as conveyors, except in very rare instances.

However, very significant circumstances occur on the Pacific Coast of the United States. In that section the difference between winter and summer is more a matter of rainfall than of temperature. Epidemics of poliomyelitis occur there mostly during the dry season. Here we have evidence that the prevalence of the disease is more dependent upon conditions affecting the water supply, than upon temperature or insect conditions. Moreover, epidemic areas on the map show epidemics more prevalent in low and marshy regions and in rural communities.

The first winter epidemic in the United States occurred at Elkins, West Virginia, in 1916-17. The outbreak followed upon the heels of a flood in the basin drained by the Tygarts Valley River. Elkins, Grafton, Fairmont and Morgantown obtain their water supply from this stream. The disease became epidemic at Elkins, December 10, 1916. On the same date the first case was reported from Grafton, West Virginia, below Elkins, and obtaining its water supply from the same source. The first city below Grafton, obtaining its water supply from the Tygarts Valley River is Fairmont. The first case reported from that city was on January 6, 1917. A few days later a case was reported from Morgantown, the next city below Fairmont, obtaining its water supply from the Tygarts Valley River.

Was it a coincidence that the epidemic

corresponded in point of time with the distance from Elkins. Was it a further coincidence that the number of cases reported harmonized with the distance from Elkins? Elkins reported seventy-four cases, Grafton twenty-eight cases, Fairmont eighteen cases, and Morgantown one case. The number of cases decreasing with the increasing distance from Elkins.

Prevention is the great consideration in our search for knowledge concerning this baffling malady, and any evidence that may lead to an understanding of its manner of dissemination must be of the greatest interest and importance. Therefore, your pardon is craved for referring to a case of even doubtful transmission:

M. D., aged three years, August 13, 1917. Child large, healthy and well nourished. Taken sick with well marked clinical symptoms of the disease. Coryza, sore throat, digestive disturbances and stiff neck. There was nothing unusual in the clinical course. However, it was a severe attack of the paralytic type. Careful investigation revealed no contact by the family or child with even a suspicious illness. The only incidence in the probable conveyance was found in a community cat that came to the child's home for food and was fed by the child that developed the illness. The parents related their suspicions. On examination the animal presented the clinical symptoms of subacute poliomyelitis, with paralysis and atrophy of the left hind leg. The animal was sent to the Rockefeller Institute, where the study of the tissues and inoculation tests are now being made.

The disease being more prevalent in rural than in urban communities lends color to the belief that sporadic cases are very common. With an opportunity for observation, one will be impressed with the large number of single cases in isolated communities—far from the usual avenues of contact and conveyance.

In its seasonal incidence, poliomyelitis is dis-similar to all other infectious disease of childhood. Measles, whooping cough, diphtheria and scarlet fever occur as a rule at that season of the year when the respiratory tracts are rendered

vulnerable to the invasion of bacteria by the irritation of cold. Poliomyelitis occurs when temperature conditions would most likely fortify the mucous membrane of the respiratory tracts of the child against the attack.

#### SUMMARY.

The organism producing poliomyelitis is world-wide in its distribution and is able to persist for long periods of time in external nature, under adverse circumstances. There is at least theoretical evidence that sporadic cases develop from water supplies during dry seasons, when the residual virus is least diluted. From these endemic cases epidemics may spread. The available evidence points to human contact as the means of dissemination; and that the digestive and respiratory tracts are the routes through which the infective agent is discharged. As compared to other infectious diseases of childhood, poliomyelitis is feebly contagious. The susceptibility in the non-immune is about two per cent, compared to ninety-five per cent in measles, seventy-five per cent in whooping cough, twenty-five per cent in scarlet fever, and twenty per cent in diphtheria.

While investigations as to the relation of pet animals in the dissemination of the disease have been negative, there is reason to believe that they have a limited causative association in human poliomyelitis.

#### COMMUNICABILITY OF POLIOMYELITIS.

By H. L. AMOSS, New York City.

*Read at Annual Meeting at Fairmont, October, 1917.*

The transfer of poliomyelitis to monkeys has removed all doubt concerning its infectious nature. The observations by Flexner and Lewis that the virus is present in the nasal mucosa of monkeys having the disease, and by Laudsteiner, Levadith and Pastia, who detected the virus in the tonsils and the pharyngeal mucosa of persons dying of poliomyeli-

tis, lead naturally to the conclusion that the nose is the point of exit of infectious material from the body. By inoculation tests with the various secretions of human cases, it has been shown that the only constant route of escape from the central nervous system is through the nose, although in a few instances, the virus has been detected in the washings from the colon. Comparative study of: (1) the amounts required to produce infection of the monkey by the various routes of injection, (2) the incubation period from the same standpoint, and (3) tissue pathology at autopsy in experimental animals, together with the lesions found in human cases leads to the conclusion that the entrance of the virus is through the nose in human infections. As far as can be determined, the virus does not multiply in nature outside of the human body, except under conditions of the laboratory. Moreover, the virus is very susceptible to extraneous physical influences, such as drying and sunlight. Therefore, in order to account for the spread of the disease, direct transfer of the infecting agent from one person to another must be assumed. The transfer is accomplished by means of the nasal secretions, which have been shown to contain the virus.

By such a mechanism many cases may be accounted for, but sometimes even in the most careful epidemiological investigations, no history of contact can be traced. The occurrence also of sporadic cases, apparently isolated, and the failure of the infection to sweep through an institution, have been conducive to doubt in the minds of many concerning the contagiousness of the disease. It will be recalled that abundant evidence has been brought out by Wickman<sup>1</sup> in his study of the Swedish epidemic, by Kling and Levaditi,<sup>5</sup> and by Harowitz<sup>6</sup> in the Norway epidemic, to support the view that poliomyelitis is directly communicable from person to person, and even through the agency of a third person, or a healthy carrier of the disease. These authors are convinced that the spread of the disease is in a great many cases accomplished by these agencies.

Heretofore, however, no claim has been made that this is the only and sole means

of conveyance of the disease. But recent observations and experimental work have led us to present the proposition that all cases of poliomyelitis are due either to direct contact with a person who is either in the acute stage of the disease, or in the incubation period, or a healthy carrier. Our reasons for this belief will be stated presently.

The first conclusive evidence that a carrier or contact may be capable of transfer of the disease was brought forth from the experimental work of Flexner, Clark and Fraser,<sup>7</sup> who rinsed the nasal cavities of the parents of a patient in the hospital of the Rockefeller Institute. The combined washings of the father and the mother, who themselves showed no evidence of the disease, injected into a monkey, produced typical experimental poliomyelitis. That this monkey suffered from poliomyelitis was shown by autopsy and subsequent transference of the virus to other monkeys. Kling, Petterson and Wernstedt,<sup>8</sup> in the report of the Swedish Commission, state that they were able to detect the virus in the nasal washings and also in washings from the colon, but their results are not beyond criticism. Kling and Petterson<sup>8</sup> inoculated the combined washings of the wife, two daughters, and son of a poliomyelitis patient and produced experimental poliomyelitis.

These observations, while few in number, must be taken as evidence of the possibility of the transmission of the disease by healthy persons, even in the face of a large number of negative results. Negative results may be easily explained. In the first place, it is well known that the virus from a human source is relatively non-infectious for monkeys, and therefore a correspondingly large dose is necessary to infect a monkey. The inoculation of the infectious material into a monkey and the production of experimental poliomyelitis is our only means at present of detecting the presence of the virus. It is conceivable, therefore, that many carriers may harbor a sufficient amount of the virus of human origin to infect susceptible human individuals and not a sufficient amount to produce the experimental infection in the monkey. Moreover, the difficulties of

separating small amounts of human virus in the nasal washings from the contaminating organisms and of injecting them into intimate relation with the central nervous system of a monkey increase the complexity of the problem. The washings are passed through a Berkefeld candle, and the mucus necessarily holds back a considerable amount of the virus, as shown by controlled experiments, namely, by placing known amounts of virus in nasal washings, filtering, and injecting into monkeys. By the ordinary procedure, it is possible to detect not less than ten minimum infective doses. Obviously, in thoroughly rinsing the nasal cavities, a large amount of liquid, of which a very small part can be injected cerebrally, and the remainder intraperitoneally, is obtained. A correspondingly larger dose of the virus is necessary to bring about the infection. For it has been shown that the most direct and constant route is the intracerebral, and that much larger doses are necessary when the intraperitoneal route is used.

In order to overcome these difficulties, methods have been improved by taking advantage of the solubility of mucous in sodium bicarbonate and removing the contaminating organisms by Berkefeld filtration, then reducing the total volume *in vacuo* at low temperature, so that the entire concentrate may be injected subdurally into the monkey. By this means it has been found possible to detect in nasal washings two minimum infective doses of the virus. When the improved method was applied to a study of the distribution of the virus in the nasal cavities of contacts, the results were disappointing. However, later developments revealed the fact that the nasal washings of some individuals may at times contain substances capable of neutralizing, or rendering inactive the virus of poliomyelitis. Therefore, in the recent work instead of collecting nasal washings from several members of the family and combining them for inoculation, the washings were treated separately and injected into different monkeys. Using this method in Vermont, Taylor and Amoss<sup>9</sup> have been rewarded by the detection of two carriers in the same family, one of whom, in five days after the

washing, came down with poliomyelitis. A summary of these observations is as follows:

Carey, P., aged 18, living in Waitesfield, Vermont, where no poliomyelitis had appeared, attended a ball game, passing through Montpelier, where it was shown later, poliomyelitis had already appeared. Ten days after his trip, he developed typical symptoms of poliomyelitis and died on the third day of the disease. His brother Everett, aged 14, who did not make the trip, but who lived in close association with Carey, had a slight gastro-intestinal attack with slight stiffness of the neck. Later developments seemed to indicate that he suffered from a very mild attack of the disease.

Six days after the first appearance of symptoms in these two brothers, a third brother, Dwight, aged 7, developed symptoms of poliomyelitis, was treated with serum, and recovered with slight residual paralysis. On the same date of the appearance of symptoms in Dwight, the nasal washings were taken from Everett, who has already been referred to, and from Hazel, sister, aged 13. These washings, injected separately into two different monkeys, produced typical experimental poliomyelitis, which was confirmed by subsequently inoculation and histological study. This showed that Everett, who may or may not have had an attack of poliomyelitis, was a carrier of the virus, as was also Hazel, who had then experienced no symptoms.

Five days after the nasal washings were taken, Hazel exhibited symptoms of poliomyelitis, passed through a typical attack, and recovered with paralysis of the right leg and left arm. The results indicate that Hazel carried the virus, and during the incubation period was capable of communicating the disease to others. The fact that a person may, during the incubation period of the disease, transmit it to other persons has been observed in our epidemiological studies in Vermont and in Westchester County, New York. It has also been brought out in the epidemiological studies of Kling and Levaditi.<sup>5</sup>

In numerous epidemiological studies, the one constant factor to account for the spread of poliomyelitis has been direct

or indirect contact. The observations that epidemics spread peripherally from a focus and along lines of travel—that many cases can be traced to either direct or intermediate contact, without other apparent means of transfer, can now be explained on experimental bases. It is equally true that the source of infection in many instances in epidemics, and particularly in sporadic cases, cannot be traced. The same situation exists in the case of other communicable diseases, as, for example, diphtheria, in which the route is more easily traceable.

In those cases in which contact can be traced, poliomyelitis is apparently highly contagious, yet many persons of the susceptible age live in close contact with acute cases without contracting the disease. Apparently some other agent is necessary to complete the transfer. Intensive studies have thus far failed to reveal the missing link in the chain.

The view is held by some that if poliomyelitis can be transferred in some cases, and if human contact is all that is necessary, the disease must be universally contagious. The fallacy in such logic is on the basis of recent experimental work, easily revealed. The very arguments formerly used to refute the theory of direct communicability can now be used to substantiate it. It has been pointed out that cases brought into the wards of a hospital do not result in the development of an institutional epidemic, and that there are relatively few cases secondary to sporadic cases. Harbitz<sup>6</sup> and Kling and Levaditi<sup>5</sup> cite incidences of nurses having contracted the disease and of the transfer of the virus from one patient to another. During the 1916 epidemic in New York, it is estimated that there were about 1,200,000 persons of the most susceptible age, that is, under 16 years, yet there were only 8,742 cases of poliomyelitis, or about 0.7%. The same thing is observed in the singling out of one member of a family for attack, although, as the ability of physicians to recognize the milder and non-paralytic types of the disease expands, this characteristic of the disease appears less marked.

Attempts to reconcile the low degree of intensity in epidemics with high individual communicability brings up the ques-

tion of susceptibility. If it could be shown that there are factors or conditions which decide infection or non-infection, the apparently contradictory facts of epidemiology might be explained. The following observations upon the mechanisms of defense of the body against poliomyelitis are suggested:

1. Amoss and Taylor<sup>10</sup> have shown that the nasal washings of some adults contain substances capable of neutralizing or rendering non-infectious the virus of poliomyelitis. Not all adults and a smaller proportion of children possess these substances in their nasal secretions, and the power to neutralize is not generally present under conditions of abnormal nasal mucosa. Children who are in the early acute stage of the disease, some of those who have recovered, and 2 carriers of poliomyelitis have not been found to possess this power. Their results do not prove, but suggest that there may be a seasonable distribution of the neutralizing substances. The power of the nasal secretions to neutralize the virus is considered to be the first line of defense against poliomyelitic infection. Since there are healthy carriers of poliomyelitis who never show evidence of actual invasion, and since there are persons who, not possessing the neutralizing substances, have not contracted the disease after repeated exposure, there must exist other means of defense.

2. Flexner and Amoss<sup>11</sup> observed that very large doses of poliomyelitic virus, given intravenously, are required to infect a monkey. For example, instead of .001cc. of a 5% suspension of poliomyelitic tissue required when introduced subdurally, 250cc. intravenously often fail to infect a monkey. If, however, foreign protein, such as normal horse serum, is previously injected into the spinal canal, thereby producing aseptic inflammation, much smaller doses, such as 10cc. introduced into the blood, are necessary. The injection of the horse serum disturbs the delicate balance in the choroid meningeal complex and allows the virus to come into more intimate contact with the central nervous tissues. The disturbance may be brought about by more bland substances: Ringer's solution, or Locke's solution with gelatin, isotonic sodium



chloride solution, and even small amounts of monkey blood or cerebrospinal fluid from other monkeys of the same species are sufficient. Similar results were obtained by the nasal route. A cotton plug saturated with poliomyelitic virus, left for 16 hours in the naris of a monkey, produced the infection. Two hour application rarely infects in normal monkeys, but after a disturbance of the ehoroid meningeal complex, this period is sufficient.

The delicate balance or unity of the ehoroid meningeal complex, then, is considered a mechanism of defense against the infection.

3. Zingher<sup>12</sup> made Shick tests on a series of cases of poliomyelitis and found that 80% of them reacted. Since the average for normal children is about 30% this may be taken as evidence that in those who contract poliomyelitis, there is some change in their normal resistance to general infection revealed by this test for a specific reaction. It must be borne in mind that the tests were made after infection had taken place, and the high percentage showing positive may be an effect of the disease.

4. H. D. Taylor and Amoss, in unpublished experiments, have shown that changes consistent with diminished numbers of certain cellular elements of the blood increase the susceptibility of the monkey to poliomyelitis.

It is not to be assumed that these are all the mechanisms of defense, for there are undoubtedly others still to be discovered. From a mathematical standpoint, granting that mechanisms Nos. 1 and 2 must be absent for infection to take place by the law of chance the number of exposed individuals contracting the disease would be correspondingly small. Moreover, if the other two factors enter into the determination of susceptibility when the mass of infection is variable, the incidence of 1.59 per thousand as occurred in the New York epidemic of 1916 is quite understandable.

The high and enduring immunity produced by even the mild and non-paralytic types plays a small part in determining the incidence of poliomyelitis. This is also true of measles, which is considered uniformly contagious except of

course among those rendered actively immune. Measles may be considered as an example of general contagiousness and in contrast poliomyelitis as specifically contagious. Diphtheria may be placed between the two, but nearer poliomyelitis. Among normal children about 30% are shown by the Shick test to be susceptible, but not one out of three exposed have diphtheria. Small-pox among the unvaccinated is placed with measles, but among the vaccinated the incidence becomes exceedingly small.

#### SUMMARY.

In this family of four children three of them developed frank poliomyelitis after one member had brought the virus from a distant point. One of these children was determined to be a carrier of the virus five days before she developed symptoms or during the incubation period. The fourth child probably had a mild attack six days after he was found to be a carrier of the virus. The occurrence of two to four cases in the same family is no longer regarded as a rare manifestation of poliomyelitis.

1. Poliomyelitis must be regarded as selectively highly contagious.

2. The proposition is here presented that all cases of poliomyelitis result from the transfer of the virus by means of nasal secretions from:

(a) Persons in the acute stage of poliomyelitis.

(b) Persons who have recovered and still harbor the virus.

(c) Persons in the incubation period.

(d) Healthy carriers.

Experimental observations are presented which indicate that sporadic cases may be accounted for by:

(1) Contact with a healthy carrier.

(2) The person attacked may have been a carrier for some time and suddenly become susceptible by the loss of two or more mechanisms of defense.

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**POLIOMYELITIS EPIDEMIC IN MARION COUNTY, W. VA., JULY 26-OCTOBER 7, 1917.**

DR. PETER NOE, JR., New York.

*Read at Annual Meeting, Fairmont, October, 1917.*

EDITOR'S NOTE:—*Dr. Noe prefaced the reading of his paper by a short account of the action of the Consolidation Coal Company in establishing the hospital for caring for these patients. His remarks are not included in the paper.*

During the existence of the hospital cases were furthermore admitted and treated according to Table 1.

TABLE I.

1917	Hospital	Home	Total
July 26 to August 1.....	14	0	14
August 1 to August 8.....	7	0	7
August 8 to August 15.....	3	0	3
August 15 to August 22.....	4	1*	5
August 22 to August 29.....	2	0	2
August 29 to September 5.....	0	0	0
September 5 to September 12	1	0	1
Total.....	31	1	32

\*Isolated at home at Ida May.

TABLE III.

Names, ages, dates of onset of disease, and residences of patients.

Name—Age	Onset	Residence
1. Iona Gattian, 3 yr.....	June 29.....	Monongah
2. Tony Dominick, 1yr. 6mo.....	July 2.....	Monongah
3. John Fabia, 2yr. 6mo.....	July 7.....	Monongah
4. Harold Fortner, 3yr.....	July 9.....	Monongah
5. Lester Davidson, 2yr.....	July 10.....	Monongah
6. Richard Harden, 2yr. 6mo.....	July 12.....	Monongah
7. Mary Marachino, 1yr. 7mo.....	July 13.....	Monongah
8. Thomas Smith, 11mo.....	July 15.....	Monongah
9. Genevieve Sodomir, 4mo.....	July 16.....	Monongah
10. Stefano Bogdin, 2yr. 3mo.....	July 19.....	Monongah
11. Emilio Damio, 1yr. 4mo.....	July 20.....	Monongah
12. Kath. Swanson, 3yr. 6mo.....	July 20.....	Monongah
13. Stanley Debatsky, 3yr.....	July 23.....	Monongah
14. Gypsie Boggess, 3yr. 4mo.....	July 23.....	White Rock
15. Mary Riggi, 3yr.....	July 27.....	Monongah
16. Willard Sutton, 2yr. 1mo.....	July 28.....	Clarksbnrg
17. Dorothy Weeks, 2yr. 7mo.....	July 28.....	Monongah
18. Thos. Talbot, 6yr.....	July 30.....	Middleton
19. Rose Audio, 3yr. 1mo.....	July 30.....	Monongah
20. Irene Oliveri, 8mo.....	Aug. 2.....	Monongah

21. Paul Adamovich, 2yr. 6mo.....Aug. 2.....
22. Bessie Davidson, 15yr. 6mo. Aug. 9.....
23. Helen Davis, 1yr. 6mo.....Aug. 10.....
24. Va. Jones, 1yr.....Aug. 10.....
25. C. Westmoreland, 3yr.....Aug. 10.....
26. Gertrude Vincent, 3yr.....Aug. 12.....
27. Paul Kann, 2yr. 6mo.....Aug. 12.....
28. Louis Perry, 2yr. 1mo.....Aug. 14.....
29. Lena Frazee, 2yr. 11mo.....Aug. 24.....
30. Mary Complate, 2yr. 6mo.....Aug. 26.....
31. Nich. Mitico, 2yr. 6mo.....Sept. 9.....

TABLE IV.

Relation of ages and sexes of the patients admitted to the hospital.

Age	Male	Female
One year of age, under.....	1	3
One year of age.....	2	3
Two years of age.....	9	2
Three years of age.....	3	6
Four years of age.....	0	0
Five years of age.....	0	0
Six years of age.....	1	0
Seven to fifteen.....	0	0
Fifteen to twenty-one.....	0	1
Total.....	16	15
		31

TABLE V.

Nationality of patients admitted to the hospital.

American .....	15
Italian .....	11
Polish .....	4
German .....	1

TABLE VI.

Case—Description.

1. Iona Gattion—Weakness of the right leg and the thigh, paresis of the left thigh, left foot drop. Discharged with left foot drop cured and slight weakness of the right leg and left thigh.
2. Tony Dominick—Weakness of respiratory mns-cles. Discharged normal.
3. John Fabia—Paralysis of the flexors and extensors of the right and left thighs, weakness of the right and left legs (anterior tibials). Discharged with general improved condition. Evidence of return to normal activity.
4. Harold Fortner—Paresis of the left deltoid. Discharged. Entirely normal.
5. Lester Davidson—Paralysis of extensors and flexors of the left thigh. Discharged. Slightly improved.
6. Richard Harden—Slight weakness of the left facial muscles. Discharged entirely normal.
7. Mary Marachino—Right facial weakness. Slight weakness of the respiratory muscles. Discharged normal.
8. Thomas Smith—Paralysis of the lower left leg. Discharged. Weakness of the lower left leg but much improved.
9. Genevieve Sodomir—Slight stiffness of the back. Discharged normal.
10. Stefano Bogdin—Slight left facial paralysis, weakness of the left deltoid, weakness of the right thigh. Discharged. Weakness of the right thigh, otherwise normal.
11. Emilio Damio—Weakness of the right and left legs, right and left shoulders, back and neck, paralysis of chest. Lobar pneumonia. Discharged with weakness of the right and left legs, otherwise normal.
12. Katherine Swanson—Weakness of the back and thighs. Right facial paralysis. Discharged. Facial paralysis much improved. Otherwise normal.
13. Stanley Debatsky—Left facial weakness. Discharged. Entirely normal.
14. Gypsie Boggess—Paresis of the left leg and thigh. Discharged with weakness of left leg, otherwise normal.
15. Mary Riggi—Weakness of the left leg. Weakness of the respiratory muscles. Discharged entirely normal.
16. Willard Sutton—Complete paralysis of both lower extremities and back. Traumatic. Unimproved.
17. Dorothy Weeks—Respiratory weakness, weakness of the left leg, meningeal irritation. Dis-

- charged entirely normal.
18. Thomas Talbot—Died on admission to hospital.
  19. Rose Audio—Weakness of the respiratory muscles. Discharged entirely normal.
  20. Irene Oliveri—Respiratory paralysis, slight left facial paralysis, weakness of the right deltoid, broncho pneumonia. Discharged normal.
  21. Contracture of the flexors of the left leg. Stiffness of the back, meningeal irritation. Discharged entirely normal.
  22. Bessie Davidson—Weakness of both lower extremities. Discharged normal.
  23. Heleu Davis—Severe meningeal irritation. Paralysis of the respiratory muscles. Fatal.
  24. Virginia Jones—Meningeal irritation. Discharged normal.
  25. Chester Westmoreland—Stiffness of the back and neck. Weakness of the lower extremities. Discharged normal.
  26. Gertrude Vincent—Contractures of both hamstrings. Discharged entirely normal.
  27. Paul Kann—Stiffness of the back and the neck, meningeal irritation. Discharged normal.
  28. Louis Peri—Left facial paralysis. Left foot drop. Discharged entirely normal.
  29. Mary Complate—Weakness of the right leg. Discharge normal.
  30. Lena Fraze—Paralysis of the right side of face. Meningeal irritation. Discharged face much improved.
  31. Nicholas Mitico—Weakness of both lower extremities. Slight left facial paralysis. Stiffness of the back. Still in hospital but much improved.

TABLE VII.

Serum treated cases and amounts of serum given. The results of the serum treatments are found in Table 6, in the description of the cases before and after treatment.

Name of Patient—Date Given	—Amount—	
	Intra-Subcutaneous	neous
1. Gypsie Bogness, July 10.....	.....	20cc.
2. Thomas Talbot, Aug. 1.....	.....	20cc.
3. Irene Oliveri, Aug. 5.....	15cc.	10cc.
4. Paul Adamovich, Aug. 5.....	15cc.	20cc.
5. Dorothy Weeks, Aug. 6.....	.....	20cc.
6. Helen Davis, Aug. 11.....	15cc.	20cc.
7. Virginia Jones, Aug. 14.....	.....	20cc.
8. Chester Westmoreland, Aug. 18.....	.....	20cc.
9. Paul Kann, Aug. 22.....	.....	20cc.
10. Lena Fraze, Aug. 28.....	15cc.	10cc.
	60cc.	180cc.
Total, 240cc.		

This completes the statistical tables of the patients. It might be well at this time to tabulize the members of the medical and nursing staff.

Dr. Peter Noe, Jr., physician in charge.  
Maude Lindsay, R. N., chief nurse.

Nurses staff: Ollie May Puryear, R. N.; Sallie Cecil George, R. N.; Eleanor Hopkins, R. N.; Mary Grigg Jackson, R. N.; Florence Bean, R. N.; Loretta Manley, R. N.; Rosie Bogen, R. N.

Stewards Department: Etta N. Suckow.

The West Virginia State Department of Health was represented throughout the epidemic by Dr. C. R. Weirich, who performed the same duties at the epidemic at Elkins a few months ago. Dr. Weirich has worked faithfully and untiringly to bring this epidemic to a favorable conclusion and has assisted me great-

ly both in field work and in the work at the hospital. He has worked hand in hand with the physicians in the afflicted district and much of the success attained is due to him.

On Tuesday, July 31, a conference was held at the hospital with all the physicians employed by the Consolidation Coal Company. This was in the nature of a bedside clinic under my direction. Each case was studied separately and instructions given the physicians as to methods of taking reflexes and diagnosing the disease. Dr. Weirich spoke to the doctors concerning their duty of reporting the cases to the State Health Department and to the county authorities. The following physicians were present:

Dr. B. Cruikshank, Lumberport; Dr. F. W. Hill, Montana Mines; Dr. James A. Reidy, Monongah; Dr. L. S. Smith, Monongah; Dr. J. R. Alkire, Middleton; Dr. Jas. R. Barr, Middleton; Dr. R. B. Nutter, Enterprise; Dr. J. E. Meloy, Shinnston; Dr. H. S. Rosenthal, Gypsie; Dr. L. F. Kornmann, Adamston; Dr. B. F. Shuttleworth, Clarksburg; Dr. R. B. Stout, Berryburg; Dr. J. B. Livestay, Interstate; Dr. C. M. Vaughn, Ida May; Dr. T. H. Chancey, Wyatt; Dr. Cullins, Grantstown.

Other physicians have also visited the hospital at different times for the study of clinical material. Among them are:

Dr. S. L. Jepson, commissioner of health of West Virginia; Dr. H. B. Wood, assistant commissioner; Dr. A. L. Peters, Fairmont; Dr. F. R. Lynch, Meadowbrook; Dr. F. E. Wilson, Clarksburg; Dr. Jenkins, Farmington; Dr. Jarvis, Fairview; Dr. Hildreth, Farmington; Dr. Yost, Rivesville; Dr. L. N. Yost, Fairmont, Marion County health officer; Dr. Richardson, Parkersburg, city health officer; Dr. McDonald, Fairmont, superintendent Miners' Hospital; Dr. Jesse Williams, Clarksburg, Harrison county health officer; Dr. Cecil Post, Clarksburg, city health officer; Dr. Waddell, Fairmont, city bacteriologist.

At the request of the City of Clarksburg I gave an address on poliomyelitis to the physicians assembled at St. Marys Hospital in that city, and at the request of Dr. Richardson, city health officer of

Parkersburg I lectured on the same subject to the local medical society. The meetings were well attended and the physicians attentive. Several cases were diagnosed.

On September 26 I gave an address on poliomyelitis to the nurses assembled at the Hotel Fairmont, the occasion being the annual meeting of the West Virginia Graduate Nurses Association. The nurses were invited to see and inspect the hospital plant and many took advantage of the opportunity.

Complete write-up by description of clinic.

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#### AN IMPROVEMENT UPON THE PAPER SPUTUM CUP NOW IN USE.

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In offering a substitute for the paper sputum cup the writer wishes to say that he has used both and is speaking from personal experience.

The substitute is an ordinary tin cup which may be purchased for not more than five cents. This cup will hold twelve ounces, has a wide base and is not easily upset. By putting a tablespoonful of kerosene oil in each time after emptying flies will not go near it.

The kerosene oil also assists in the destruction of the contents by burning when it is desired to sterilize the cup itself a little kerosene oil poured in the bottom and lighted will do the work. A cup of this sort will last for months, has no springs to get out of order and besides its efficiency it is economical.

The disadvantages of the paper cup are: First, smallness. They only hold about four ounces or one third as much as the tin cup. Second, liability of being upset. As they are light in weight and have a small base they are easily upset, particularly by bed patients. Third, danger from leakage. Since paper soared in price cups are being made of an inferior cardboard, poorly paraffined, become "soggy" and frequently spring leaks. Fourth, expense. The paper cup is far more expensive than kerosene oil. The holder costs more than a tin cup and is easily broken. Fifth, from the standpoint of prophylaxis, sogginess, leakage and liability of being

upset have been mentioned, but most important of all is the danger of flies carrying infection. In spite of the cover flies crawl over and into the paper cups, then light on the food of our neighbors. It is not possible to pour kerosene in a paper cup on account of the paraffine coating, which would be dissolved.

A tin cup made or rather pressed out of one piece of tin to which a little kerosene is added offers the best sputum cup from all standpoints. This cup needs no cover, when kerosene is used.

L. J. SIMONSON,  
Oronoko, W. Va.

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#### NOTES FROM THE CHICAGO MEETING.

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J. E. CANNADAY, Charleston, W. Va.

On October 18 and 19, there was held in Congress Hotel in Chicago, a meeting of the State and National Committees for the purpose of standardizing and classifying the hospitals of the United States. Many interesting addresses were made, and numerous practical points were brought out in the discussions that ensued. The ultimate aim of this organization is to bring the hospitals, as far as possible, up to some definite standard. The scheme of work is essentially, I understand it, to be patterned after the inspection and classification of medical schools which was undertaken by the Rockefeller Foundation a few years ago. In regard to the hospitals, this same work will be done under the auspices of the American College of Surgeons. The idea of carrying out this plan was inspired by Dr. Franklin H. Martin who has proven during the last few years that he is a practical dreamer, as someone put it. Three of his great accomplishments have been very fully realized. They are the annual clinical congress, the American College of Surgeons, and the great monthly magazine of surgery, entitled "Surgery Gynecology, and Obstetrics with the International Abstract of Surgery," these together making easily the most high class surgical publication in the world.

The plans of this hospital organiza-

tion may be hampered somewhat by the present great war. One of the ultimate aims, however, is to have a hospital inspector for each state who will visit all of the hospitals and make a written report on each one, so that each institution can be put in a certain definite classification. The idea of this classification is, as I understand it, not based necessarily on size, as it is felt that a small institution is capable of doing work of as good a quality as many of the larger hospitals. Among the most notable addresses made in this meeting were those by Dr. George W. Crile, who is at present at home on a short leave of absence from duty in France, and by Father Moulinier, of Milwaukee, who is the president of the Catholic Hospital Association, which includes in its organization more than eight hundred hospitals in the United States. These conferences were concluded on the evening of the 19th by the annual dinner at which many more personal problems were discussed.

The annual meeting of the Clinical Congress which was held in Chicago recently, was a very great success, both from a scientific standpoint as well as from a patriotic point of view. At the great meeting in Orchestra Hall the war spirit reached fever heat. Addresses were made by Secretary Daniels, Surgeon-General Gorgas of the Army, Surgeon-General Braisted of the Navy, Surgeon-General Blue of the Public Health and Marine Hospital Service. Major George W. Crile, Sir Berkeley Moynihan, Col. R. H. Goodwin and Col. Derele.

After the meeting was well under way, a messenger brought in a telegram from the White House. In this President Wilson conveyed his deep appreciation and gratitude to the medical profession for the very great help they had rendered in the recent preparations for war. Major Crile discussed briefly the military situation in France, and said that Germany was far from being in the desperate condition that we are sometimes led by the newspapers to believe. He said that those who are not in France certainly felt that Germany was down and out, but the German pris-

oners recently taken all had the appearance of being well nourished, well clothed and well shod. It was generally agreed that the war would be a long one and that we might be half way through. Sir Berkeley Moynihan in discussing this and other features of the war, said: "I believe that the German people can be guilty of any infamy, and that nothing is too low for them to stoop to providing there is some net gain to be made by it." Then dramatically, he said: "I wish to take that back—I know it!" He described the bitter circumstances in which the English troops were placed in the second battle of Ypres, often called Ypers by the English Tommies. He said that the English line was held by so few men that the soldiers in the trenches were unable to touch one another, that for four days and nights they had undergone, without rest or relief, the most terrific bombardment that had ever been known. The men were so worn out with fatigue and loss of sleep that they would lean their heads against the walls of the trenches and go to sleep standing. There were no reserves in the rear. This thin line was all that stood between the German army and the seaports of Calais and Dunkirk. At dawn after this bombardment of four days and nights, the Germans attacked these trenches with dense masses of fresh troops. Added to their other troubles the British soldiers were short of ammunition having only one hundred and fifty rounds apiece, and were entirely without reserves behind their lines, but in spite of all that, they did their work so well that after the Germans had made five or six distinct attacks attempting to take the English trenches with the bayonet, the dead and wounded German soldiers lying in front of the English trenches were piled on one another seven and eight deep in many places. He paid considerable attention to the modern army rifle as a weapon of offense and defense. The initial velocity of the bullet is so great that at the moment of its leaving the muzzle of the gun, it is traveling at the rate of 1,000 meters per second. The bullet is describing three distinct movements going straight ahead, whirling on its longitudinal axis due

to the rifling of the gun barrel. The last and most important movement is due to the fact that the rear end of the bullet is much heavier than the front, and is describing a wobbly sort of spiral in the air, very much like a top as it travels about on the floor. In the first few hundred yards of its course, if this bullet strikes a human body it knocks a hole through it large enough to pass the fist. At the moment of impact against the body, the tip of the projectile being arrested, the heavy part of the projectile tries to overtake the tip, and whirls in a much wider spiral, making the wound of exit much greater than that of entrance. After traveling far seven or eight hundred yards, the bullet slows down to a steady straight flight. If then it strikes a body, the results are not nearly so disastrous. The wound of entrance and of exit is small, and the surrounding tissues are but little torn or lacerated. One of the results of the terrific speed at which the bullet travels is that if the tip of the bullet is suddenly arrested, small fragments of lead are thrown off from the sides and may pass through the body laterally for almost incredible distances. For instance, after gunshot wounds of the head, the bullet passing entirely through the brain, fragments of the bullet have been repeatedly found scattered throughout the chest and imbedded in the lungs. One of the reasons for the present scattered formation of troops in an attack, is due to the fact that a bullet is not at all arrested by striking one human body. There are numerous instances on record where a bullet has passed through five or six different soldiers in succession, and sometimes a portion of the clothing or bone from the body of one soldier has been lodged in the body of the next. For instance, a piece of a metal cigarette case from one soldier's body has been found imbedded in the hip of a soldier who was standing behind him.

Colonel Goodwin was in the retreat from Mons to Charleroi, and described some of the great privations undergone by the British army at that time. How the whole army was essentially without sleep or rest for nearly a week, and yet they succeeded in carrying away with

them all of their wounded.

The presidents of the Medical Reserve Corps Examining Boards and the chairmen of the State Councils of Defense, Medical Section, had several conferences with representatives of the Surgeon-General's office. Each state was represented in these conferences with the exception of Maine and Delaware. The percentage of physicians who have applied for commissions from West Virginia is at present about 10.4%, being a trifle higher than Virginia and Ohio, but still considerably below the average of the entire United States. Pennsylvania leads, 17% of her physicians having applied for commissions. This does not include a number of men who have been rejected for various reasons, physical and professional. It was earnestly requested by the War Department that a concerted drive be made to increase the number of applicants for the Medical Reserve Corps. At the present time, the War Department has about 14,000 medical officers who are available. They want 8,000 more so as to bring the number up to 22,000. If a second draft of soldiers is called out for the National army, the number of medical reserve officers will, of course, have to be greatly increased. Maps and various statistics exhibited, showed that most of the counties in the United States have been organized and have their active medical defense committees.

Sir Berkeley Moynihan in discussing treatment of war wounds, took decided issue with the Carroll-Dakin treatment, also with other forms of antiseptic treatment. He discussed Wright's method of packing the wound with saline tablets, also the treatment instituted by Col. Rutherford Morrison, who uses Bipp, which, as the name might indicate, consists of a paste made out of bismuth, iodoform and petrolatum. The technique of use of this preparation is first to curett away all granulations from the depths of the wound, stop all bleeding, remove all the bits of dead bone, then smear lightly all the raw surfaces with Bipp, about as lightly as butter was spread on the bread of the poor children described in the story of *Oliver Twist*, finally, if possible, to close the wound by

sutures. The wound so treated is usually not dressed for from ten days to two weeks, when it will often be found that a great deal of healing has taken place. Dr. Moynihan in his capacity of consulting surgeon to the English armies requested Dr. Morrison to carry out this technique without the use of Bipp, and found that the results were identical. Dr. Edward Martin and Dr. Harry Sherman both took decided issue with Dr. Moynihan. They both claimed excellent results from the use of Dakin's Solution.

A very convincing presentation of the use of Dichloramine-T was shown. Great things are claimed from this treatment. The solution is applied to wounds with an atomizer, and such is the simplicity of technique, that ninety wounds have been dressed in an hour. The dressings are secured by means of adhesive strips laced together over the dressings, instituting a great saving in bandages. Dr. Moynihan discussed gunshot wounds of the lung quite fully, and made a most clear and convincing argument to the fact that surgery of the lung was identically the same as that of any other part of the body, that the so-called low pressure cabinets were not necessary, that a foreign body could be removed from the lung with the greatest ease, and that the reaction following was no greater than that after the removal of the appendix. He says that the only difficulty that he has with lung surgery is in the closure of the pleura, and that he has never been able to do this satisfactorily to himself. As an aid to the closure of the pleura, he advises stripping this membrane away from the chest wall for a considerable distance prior to incising it.

Dr. Wm. J. Mayo in discussing the subject of cancer of the stomach, called attention to the habit many civilized people have of drinking coffee, tea and other fluids excessively hot, so much so, that they burn or irritate the epithelium of the stomach, it being a well known fact that many people swallow fluids so hot that they could not be borne in the mouth, the epithelium of the stomach being without the same amount of sensation as is present in the mouth, does

not react promptly to such insults. He called attention to the heart of the stem of a pipe along with the constant pressure producing cancer of the lower lip. Also the natives of Kurdistan and other central Asian regions carry suspended from their necks in cold weather an earthen vessel filled with live charcoals. As a consequence, these people often suffer from cancer of the skin of the abdomen. Dr. Mayo attempted to account for the greater frequency of stomach cancer in men from the fact that in many homes the man of the house was served first while the tea or coffee was exceedingly hot. Someone came back at him in opposition, saying that in Bavaria and many other parts of Germany, the tea or coffee is always served by the man of the house who pours his last. These more or less facetious remarks caused considerable merriment.

I was so fortunate as to be able to attend a few of the hospital clinics. Dr. Eisendrath exhibited a number of interesting cases of pyloric obstruction in infants. He advised the use of the bismuth meal and X-ray examination in all of these cases. In a few cases where a clinical diagnosis of obstruction had been made, he found it unnecessary to operate. The bismuth meal test showed that there was no obstruction, that the stomach contents were passing along properly, and that the vomiting was due to some other cause. In operating on these cases he does not proceed with the extreme simplicity advised by Dr. Downes of New York. He covers the raw surfaces with peritonium and operates through a very short incision not much more than an inch in length.

Murphy's old clinic at Mercy Hospital seems like Hamlet with Hamlet left out. However, excellent work is being done at this institution by Dr. E. Willys Andrews and by Neff and Golden, who were former assistants of Murphy. An interesting talk was given on War Surgery by Dr. Neff who has recently returned from France.

Col. Charles Derele of the French army, who has been spending some time in this country convalescing from a shell wound, received a most enthusiastic welcome. Sousa's band played the Mar-

seillaise. This was the signal for a great outburst of enthusiasm, and when Col. Derele rose to speak, the applause was quite deafening and lasted for about five minutes. He was evidently greatly moved. After expressing appreciation of the warm welcome, he said: "I know ladies and gentlemen, this applause was not meant for me in particular, it was meant for La Belle France, but I thank you from the bottom of my heart!" He very quaintly said when speaking of the German onslaught at Verdun: "The French intimidated to the Germans to stop, and they stopped."

The audience was greatly impressed with the artistic leadership of the great March King, John Philip Sousa, and he was called on to make an address. Sousa said when he rose that he could not make a speech as it was not in him, but he would tell a story that might suit the occasion. Once when making a long tour through the southern states he had a particular companion who sat at the table with him, and whenever they went to village hotels and boarding houses invariably the question would be asked at each meal: "Will you have fried chicken or ham and eggs?" His partner always answered, "Ham and eggs." After about twenty-seven days of this life, they returned to New York and put up at the Plaza. When they went into the dining room, he said to his friend, "We have had a rather limited number of items of fare to select from on this southern tour. Now I am going to show you a bill of fare that contains hundreds of different items. Look over it and make your choice." His friend scanned the sheet up one side and down the other. Finally he looked up and said: "It aint here." "What aint here?" asked Sousa. "Ham and eggs," was the reply.

### Miscellaneous Announcements and Communications

Dr. J. R. Bloss, Editor,  
W. Va. Med. Jour.

Dear Doctor:—I have just seen in my report of ex-presidents of the society, my name given as deceased. I think this is a mistake, for as Mark Twain

once said in regard to a similar occurrence, "This is greatly exaggerated," for I am at least a very young old man. Still, thank God, top o' dirt.

I was born September 22, 1830, and am now only 88 years old according to U. S. Government rating. I am alive and fairly well for a boy of that age. I do no practice except a little sham office practice, but my heart is still in sympathy with the *West Virginia Medical Journal*.

Please correct this error to spare the feelings of some of my friends.

Respectfully,

THOMAS A. HARRIS, *Ex-Pres.*  
W. Va. Med. Assn.

Oct. 27, 1917.

Dr. Jas. R. Bloss, Editor,  
W. Va. Med. Jour.,  
Huntington, W. Va.

Dear Doctor:—The State Health Department having tried in vain to secure from practitioners reports of infectious diseases and of births and deaths, has at last been driven to resort to legal means for securing these reports. During the past month one physician in Putnam County and three in Roane have been arrested and brought before a Justice for neglecting to report as the law requires. We hope the other physicians of the state will make a note of this action and change their habits accordingly. The Public Health Council has directed me to enforce the law.

Respectfully yours,

S. L. JEPSON,  
*State Health Commr.*

AMERICAN MEDICAL EDITORS' ASSN.

New York, Oct. 31, 1917.

My Dear Editor:—I have just received a wire from the Surgeon-General, conveying the following information. Will you please insert the same at the earliest possible moment in your journal?

Quite a few physicians have been commissioned and pending the receipt of orders for active duty have given up their practice. This the Surgeon-General does not wish them to do until the time comes for their active service, when



15 days notice will be given them.

Cordially yours,

J. McDONALD, JR.,  
Secy.-Treas.

*To Officers of the Medical Reserve Corps  
U. S. Army Inactive List.*

Word received from the Surgeon-General of the U. S. army, conveys the information to officers of the Medical Reserve Corps of the United States army, inactive list, that assignment to active duty may be delayed and that they are advised to continue their civilian activities, pending receipt of orders. They will be given at least 15 days notice when services are required.

WAR DEPARTMENT  
OFFICE OF THE SURGEON-GENERAL  
Washington

From: The Surgeon-General of the army.

To: Maj. J. E. Cannaday, M. R. C.,  
Capital City Bank,  
Charleston, W. Va.

Subject: Officers of the M. R. C. on the  
Inactive List.

(1) Appeals for active duty accompanied by statements that officers have ceased all civil practice, have sold their homes and otherwise severed local connections, are continually reaching this office, leading us to the conclusion that some misunderstanding must exist as to the conditions under which appointments to the Medical Reserve Corps are accepted.

(2) You are requested to give the widest publicity to the fact that the acceptance of a commission in the Reserve Corps does not necessarily imply immediate assignment to active duty; that the Reserve Corps has been organized to meet the conditions that will arise when our troops are more extensively engaged and that until that time officers should continue their usual duties pending notice that orders are to be issued.

(3) Up to within a short time ago it was possible to assign officers as rapidly as appointments were accepted, but for some time to come very few officers will be called out unless conditions materially change.

(4) We have every reason to expect that the service of every available medical officer will be eventually required, but it is manifestly impossible to utilize the entire corps with the number of troops now serving.

(5) All officers of the Reserve Corps on the inactive list will be given at least fifteen days notice when first assigned to active duty. Until they receive such notice they should continue with their civil practice.

By order of the Surgeon-General.

Lt. Col. Med. Corps, U. S. Army.

WAR DEPARTMENT  
OFFICE OF THE SURGEON-GENERAL  
Washington

From: The Surgeon-General.

To: Boards of Examiners for Medical  
Reserve Corps.

Subject: Expenses connected with commission in Reserve Corps.

1. It has been reported to this office that there is quite a bit of misunderstanding or misinformation on the part of applicants for the Medical Reserve Corps as to the cost of field outfit and other expense connected with accepting commission in the reserve.

2. It is requested that you bring the following information to the attention of all candidates applying for commission in the reserve:

One common error is that the field outfit costs not less than \$300. An officer of the reserve may easily spend this amount of money upon his outfit should be so desire, but it is entirely an unnecessary expenditure and an extravagance. Most officers of the army buy their service uniforms from the quartermaster corps. The prices July 1, 1916, were as follows: Coat, cotton, olive drab, \$1.33; woolen, olive drab, \$3.95. Shoes, russet, \$2.81. Overcoat, olive drab, \$9.04. Trousers, cotton, olive drab, \$1.19; woolen, olive drab, \$2.62. Cot, folding \$2.06. Each officer should also provide himself with a folding chair, or table, the price of which is about the same as that of a cot; also a lantern and a few other articles. Buckets, canvas, for officers, \$0.86. Basins, canvas, \$0.36. Owing to the recent increase in prices, raw material and cost of labor, these articles

will be from two to two and a half times the prices quoted above.

Blankets (each officer should supply himself with three) may be purchased in the open market at approximately \$6.00 apiece. Bedding rolls cannot now be purchased from the quartermaster's department, but should be purchased in open market for about \$10. Puttees, about \$10 per pair.

It is an unnecessary extravagance for officers to purchase field uniforms at a price of \$40, \$50, or more.

Mess expenses: In the field officers as a rule mess with their organizations, the cost of which will be approximately \$15 per month. Additional expenses will depend the personal equation of the officer.

The pay of the various grades is as follows: Lieutenant, \$2,000; captain, \$2,400; major, \$3,000, plus ten per cent for foreign service.

Fifty dollars (\$50) per month for an officer in the field would be a very liberal allowance for all expenses. It is understood that a number of medical men refuse to apply for commission in the reserve corps on the grounds that the mess dues and other necessary expenses require the full salary of a first lieutenant. In cantonments and camps in the United States the expenses would possibly be slightly higher, but in no case should they prevent an officer from saving the major portion of his pay should he so desire.

By direction of the Surgeon-General.

ROBT. E. NOBLE,

*First Lt. M. C. U. S. Army.*

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WAR DEPARTMENT

OFFICE OF THE SURGEON-GENERAL

Washington

Memorandum:

The Surgeon-General directs that the following executive order published in General Orders No. 31, War Department 1913, be brought to the attention of all officers of the Medical Department serving under you:

The White House,

Washington, March 3, 1909.

To the Secretary of War:—

“Supplementing orders heretofore is-

sued, it is directed that hereafter all requests and recommendations, either written or verbal, received at the War Department from or on behalf of army officers, of whatever nature—other than those received through regular military channels—shall be filed with or noted on their records. Officers who do not desire such notations on their records should take such action as may be necessary to prevent such requests or recommendations being made.

THEODORE ROOSEVELT.

and to the following closing paragraphs of the order referred to:

“Notwithstanding those orders, this department is constantly in receipt of numerous requests, written and oral, concerning the promotion, assignment, transfer detail and other special treatment of officers in the service. In some instances of recent occurrence it has been found that the officer in question did not desire the thing requested in his behalf, and in many others it is difficult to believe that the officer was not directly or indirectly responsible for the request, although it came through a third person and bore no direct evidence of his participation therein. If the department heed the importunities of those who, by disobeying those orders in letter or spirit are enabled to reach it, the result is simply to put a premium upon disobedience and to punish those who strictly observe the orders.

“Hereafter any communication made to this department, written or oral, requesting any promotion, assignment, transfer, detail or other special consideration for any officer (excepting when made by the officer himself in the proper way) will at once be referred to the officer in question who will be required to state whether the communication was made directly or indirectly by his procurement, and whether he avows or disavows the request as one on his behalf.

(2030735)

R. B. MILLER,

Lt. Col. M. C., U. S. Army.

Resolution adopted unanimously by the Clinical Congress of Surgeons of North America at Chicago, October 25, 1917.

Whereas: The experiences of the nation convince us of the necessity for Universal Military Training to furnish qualified men for defense, to strengthen manhood and mental poise, and to make for a more efficient citizenship, and,

Whereas: We believe it will democratize youth and furnish discipline, while developing physical force and endurance, and will produce better fathers and workers for the ranks of peace:

Therefore: Be It Resolved that the Clinical Congress of Surgeons at its eighth annual session urges upon Congress at its coming session the passage of a measure along the general lines of the Chamberlain Bill for Universal Military training, and that the cantonments now used by the National army be utilized if possible, for such work.

Action of the State Committees of the Medical Section, Council of National Defense, urging immediate action providing for at least six months of intensive military training of all young men in their nineteenth year, to become operative as soon as the army cantonments are available; also recommending physical training in schools, etc.

The following resolutions were adopted unanimously at a meeting of committees from all states (except Maine and Delaware) held in the Congress Hotel, Chicago, October 23, 1917.

Whereas, The experience through which the United States is now passing should convince every thoughtful person of the necessity for the universal training of young men, not only for the national defense in case of need, but also to develop the nation's greatest asset—its young manhood—in physical strength, in mental alertness, and in respect for the obligations of citizenship essential in a democracy! Therefore, Be It

Resolved by the State Committees of the Medical Section of the Council of National Defense that they strongly urge the adoption by our government at this time of a comprehensive plan of intensive military training of young men for a period of at least six months, upon arriving at the age of nineteen years; and that this body also support the movement to secure the introduction into

public schools of adequate physical training and instruction;

Resolved, That the members of each State Committee immediately take active steps to insure public support for the subject of these resolutions through the newspapers, through public meetings and through the appointment of committees in each county; also that copies of these resolutions be forwarded to the senators and members of Congress in their respective states, with a personal request that favorable action be taken at the coming session of Congress upon a measure following the principle of the Chamberlain Bill and to become operative as soon as the army cantonments are no longer required for the training of the forces in the present war;

Resolved, That each state committee from time to time report to the medical section of the Council of National Defense as to action taken and progress secured in their several states.

Preliminary program of Third Annual State Conference, Charities and Correction of West Virginia, Fairmont, December 3, 4, 5, 1917.

#### MONDAY AFTERNOON, DECEMBER 3.

2 Invocation, Dr. C. E. Goodwin, President Fairmont Ministerial Association. Address of Welcome, Hon. Anthony Bowen, Mayor of Fairmont. Presidential address, Prof. E. H. Vickers, State University.

3. Organization of the conference, appointment of committees. Report of the Russell Sage Foundation to the Executive State Council of Defense, Dr. Hastings H. Hart, New York, Russell Sage Foundation.

4. War and Public Health Service, a surgeon of the U. S. Public Health Service, Washington.

#### MONDAY EVENING.

8. Music. Address—Results of Fifty Years Experience in Administration of Charities in Indiana, Amos W. Butler, Indianapolis, Secretary Board of State Charities. Address—Gov. John J. Cornwell. Reception.

TUESDAY MORNING, DECEMBER 4.  
County Councils of Defense

9:15. Five minute reports from County Councils of Defense.

9:45. The Work of County Councils in Pennsylvania. Edwin D. Solenberger. Philadelphia, State Committee on Public Safety.

10:15. Suggested program for County Councils of Defense in West Virginia. Geo. L. Porter, Washington, chief of section on cooperation with states, National Council of Defense.

10:45. Discussion.

11:15. Inmates of County Institutions as a Potential Labor Force. Amos W. Butler.

11:45. Discussion.

TUESDAY AFTERNOON  
The Soldier and His Family

2. Civilian Relief, J. W. Magruder, Director Civilian Relief, Potomac Division, Red Cross. Discussion led by Jas. F. Jackson, Associated Charities, Cleveland; A. E. Sinks, Associated Charities, Wheeling.

3. After-War Problems: Soldiers and Families Made Dependent. Edwin D. Solenberger, Philadelphia. Americanization of Aliens, Charles C. Cooper, Kingsley Association, Pittsburgh.

4. The War and Child Conservation. Dr. Hastings H. Hart, Director Child Helping, Russell Sage Foundation.

4:30. Discussion.

4:30. Special Conference of Red Cross Workers led by J. W. Magruder.

TUESDAY EVENING  
Mobilization of Social Forces.

8. Mobilization of Social Agencies. Jas. F. Jackson, Associated Charities, Cleveland. Mobilization of Religious Agencies, Dr. Worth M. Tippy, Associate Secretary Federal Council Churches of Christ in America: Rt. Rev. P. J. Donahue, Wheeling, Bishop of the Diocese of West Virginia.

WEDNESDAY, DECEMBER 5.

9. Business Session; Election of Officers; Reports of Committees.

9:30. Reports from State Boards, In-

stitutions and Organizations.

10. Social Legislation in West Virginia: Social Legislation at the Last Sessions of the Legislature, Hon. Win. S. John, Morgantown. Delinquent Children, Hon. Geo. C. Sturgiss, Morgantown, Judge Juvenile Court, Monongalia County. Mothers' Pensions, Miss Alice MeChesney, Charleston. An Advisory State Board of Charities and Correction, Dr. Hastings H. Hart, New York; Hon. Amos W. Butler, Indiana. Discussion.

12. Report of Committee on Working Program.

Announcement to physicians, public health and social workers of the United States and Canada.

The Metropolitan Life Insurance Company invites physicians, public health and social workers to make use of its valuable collection of mortality statistics.

These statistics present the principal causes of death among white and colored wage-earners in the United States and Canada. The material covers over ten million individuals for each of the six years, 1911 to 1916. Death rates are available for each race, by sex and by age period.

The Company hopes in this way to aid in the study of disease and disability among wage-earners. It desires to stimulate medical investigation and research. By offering these statistics to the medical profession and to public health and social workers, the company expresses also its appreciation of the cooperation which it has received from physicians and others who have replied to inquiries and have given detailed information in thousands of cases. This assistance has helped to make the statistics more accurate and valuable.

All inquiries should be addressed to  
Statistical Bureau,  
Metropolitan Life Insurance Company  
One Madison Avenue  
New York City

New York Skin and Cancer Hospital, Second Avenue, corner 19th Street. The governor of the New York Skin and Cancer Hospital announces that Dr. L. Duncan Bulkley, assisted by the attending staff will give the nineteenth series of

Clinical Lectures on Diseases of the Skin in the out-patient hall of the hospital on Wednesday afternoons, beginning November 7, 1917, at 4:15 o'clock. The lectures will be free to the medical professional cards. Fred Haas, chairman of executive committee.

Welch, W. Va., Nov. 20, 1917.

Dr. Jas. R. Bloss, Editor,

W. Va. Med. Jour.,

Huntington, W. Va.

Dear Dr. Bloss:—Enclosed please find copy of resolutions adopted by our society at last meeting, pertaining to the death of Mrs. J. Howard Anderson, wife of one of our devoted members.

Kindly have same published in December issue of Journal, and oblige.

With best wishes to you and the journal, I am,

Yours very truly,

McDOWELL CO. MED. SOC.

CHAS. F. HICKS, Secy.

Whereas: He that doeth all things well and hath appointed the time of the end and hath allotted the period of our pilgrimage on earth, in His Divine Wisdom hath removed from among us, by death, the wife of our devoted member, Dr. J. Howard Anderson.

Be It Resolved, that the McDowell County Medical Society extended to Dr. Anderson its sympathy in the hour of his sorrow and sad bereavement.

And be it further Resolved, as a mark of especial esteem to her memory, and as a tribute of our love and admiration for Dr. Anderson, let this memorial resolution be read in our society at its first communication after the receipt thereof, be adopted and recorded as a part of the records of such meeting and a copy of same forwarded to the editor of the West Virginia State Medical Association's Journal for its publication.

S. S. HATFIELD.

H. G. CAMPER.

G. L. STRAUB.

Committee.

## Book Reviews

HAND BOOK OF GYNECOLOGY FOR STU-

DENT AND PRACTITIONER. By Henry Foster Lewis, A.B., M.D., Professor and head of Department of Obstetrics and Gynecology in Loyola University School of Medicine; Chief of Obstetric Staff of Cook County Hospital; Fellow and ex-President of the Chicago Gynecological Society; late Assistant Professor of Obstetrics and Gynecology in Rush Medical College. (In affiliation with the University of Chicago); and.

Alfred De Roulet, B.Sc., M.S., M.D., Professor of Gynecology in Loyola University School of Medicine, Attending Gynecologist of the Home of the Good Shepherd, and to St. Bernard's Hospital; Obstetrician and Chief of Staff of St. Margaret's Home and Hospital.

The identification is somewhat different from that of the usual text book, but is of no special importance. The opening chapter deals with the Anatomy and Physiology of the female genitali. menstruation ovulation, care of patient before and after operations. There are 435 illustrations. The articles are concise, well written and the mechanical execution is good.

THE PRESCRIPTION—THERAPEUTICALLY. PHARMACEUTICALLY. GRAMMATICALLY. AND HISTOLOGICALLY CONSIDERED. By Otto A. Wall, Ph.G., M.D., Professor of Materia Medica, Pharmacognosy, and Botany in the St. Louis College of Pharmacy; Member of Commission for Revision of the Pharmacopoeia of the United States, 1880-1890, 1890-1900; Presiding Officer of the U. S. Pharmacopoeia Convention of 1910; One of the authors of the "Companion to the U. S. Pharmacopoeia," Author of "Handbook of Pharmacognosy," "Lessons in Latin," etc. Fourth and revised edition. St. Louis. C. V. Mosby Co., 1917.

This is a rewritten and amplified edition of an old and valuable work. It will be found to be of exceptional interest to students of pharmacy and medicine. There is a section on the metric system, giving a simple and easy method of acquiring the ability to write correct prescriptions. It is the result of years of practice, study and observation and is a thoroughly reliable guide for both student and practitioner.

# The West Virginia Medical Journal

JAS. R. BLOSS, M. D., EDITOR  
 C. R. ENSLOW, M. D.  
 J. E. RADER, M. D. ASSISTANT EDITORS

Huntington, W. Va., December, 1917.

THE JOURNAL issued on the first of each month.

Subscription . . . . . \$1.50 per year  
 Single Copies . . . . . 20 Cents

All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

## CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

## ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

## REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: United Woolen Mills Building, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

## A CORRECTION

We wish to make amends for an error in the list of presidents as published last month in President Rader's address. Dr. Thos. A. Sharp of Parkersburg, writes he is not a "dead one" yet. His letter is published in this issue. I am sure the members of the State Association join the Editor in extending congratulations to Dr. Sharp, and to wish him many years yet with us.

## VACCINATION.

From reports smallpox is appearing in localities in the state. Just how widely disseminated it is at this time we cannot say. It is hoped that statistics may be at hand from the State Health Commissioner for the next issue.

## OFFICERS OF THE STATE ASSOCIATION

PRESIDENT—J. E. Rader, Huntington, W. Va.  
 FIRST VICE-PRESIDENT—W. S. Young, Sistersville, W. Va.  
 SECOND VICE-PRESIDENT—E. H. Thompson, Bluefield, W. Va.  
 SECRETARY—J. Howard Anderson, Marytown, W. Va.  
 TREASURER—H. G. Nicholson, Charleston, W. Va.  
 DELEGATES TO A. M. A.—Frank LeMoynes Hupp, Wheeling, W. Va.; C. R. Ogden, Clarksburg, W. Va.  
 ALTERNATE—B. B. WHEELER, McKendree, W. Va.  
 CHAIRMAN OF THE COUNCIL—G. D. Jeffers, Parkersburg, W. Va.

## COUNCIL

FIRST DISTRICT—H. R. Johnson, Fairmont, W. Va., one-year term; J. W. McDonald, Fairmont, W. Va., two-year term.  
 SECOND DISTRICT—T. K. Oates, Martinsburg, W. Va., one-year term; C. H. Maxwell, Morgantown, W. Va., two-year term.  
 THIRD DISTRICT—C. R. Ogden, Clarksburg, W. Va., one-year term; M. T. Morrison, Sutton, W. Va., two-year term.  
 FOURTH DISTRICT—G. D. Jeffers, Parkersburg, W. Va., one-year term; R. H. Pepper, Huntington, W. Va., two-year term.  
 FIFTH DISTRICT—E. F. Peters, Maybeury, W. Va., one-year term; W. H. St. Clair, Bluefield, W. Va., two-year term.  
 SIXTH DISTRICT—B. B. Wheeler, McKendree, W. Va., one-year term; P. A. Haley, Charleston, W. Va., two-year term.

The cases which have appeared in Huntington have all been among school children with the exception, so far as can be ascertained, of an adult negro who was suspected of having this disease when coming to the city and one other thought to have contracted it from association with him. In this connection attention is called to the resolution acted upon at the Fairmont meeting, and passed by the House of Delegates, favoring compulsory vaccination of school children.

This is a very vital thing. For the welfare of the people as a whole, it should be enforced. We have to face much opposition from certain sources, in regard to the right of the state to require it. The American people are very

jealous of their rights of personal privilege, still when the question of what is best for "all of the people" comes up for discussion, the individual is lost sight of in the whole. This is so now in the crisis which America faces in the great war. Does it not equally apply in peace time?

We physicians are told we are making an effort to create business. We know, if the laity does not, or rather will not, that this compulsory vaccination means a loss of business to us. But has it not always been our share to be misunderstood? Regardless, let us bend our efforts toward educating the people to see the advantages of such a measure.

#### COMMENDATION.

It is to be regretted that all of our members were not in attendance at the clinic on Poliomyelitis held by Dr. Peter Noe, Jr., at the hospital established by the Consolidation Coal Company for handling the Marion County epidemic of this disease.

The papers upon this subject by Drs. Amoss and Noe of New York and our own Dr. Bosworth (A. S.) of Elkins, appear in this issue. You should read them, by all means. Yet it was the clinic that made them more valuable. To see the patients; hear their history charts, etc., read and note the results was alone worth the trip to Fairmont.

We feel that an expression of appreciation is due the above named company for the "Big Brother" spirit manifested by its broad policy and generosity in establishing this hospital for the care of poliomyelitis, not only among the families of its employees but of Marion County as well. It is understood that the good work will not end with the control of this epidemic of poliomyelitis, but that the buildings and equipment will be held in readiness to deal with any epidemic of contagious diseases which may arise.

#### ECONOMY

The papers over the state tell us that so many gallons of alcoholic beverages have been poured into the sewers at this point, so many at another and so on. The question arises in our mind as to the advisability of this course. Already

the cost of alcohol has reached an unheard-of price and the limit is not yet.

As physicians, we know of the necessity for its use in hospitals. The Federal government will need great quantities of this in the hospitals and many lines of war endeavors. Manufacture of distilled spirits is forbidden except with very stringent restrictions.

It seems that all this confiscated whiskey, etc., should be turned over to the Federal authorities for re-distillation that the alcohol may not be wasted. In this way much grain may be saved for other purposes, which will have to be used under governmental supervision and restriction to supply the amounts needed to meet the demands necessarily arising in caring for the hospital requirements of our armies.

#### INCREASED RANK AND MORE AUTHORITY FOR MEDICAL OFFICERS.

As most of our readers are aware, an amendment was introduced into Congress at the recent session which, if it had been adopted, would have given the medical officers of the army the same rank that prevails in the Medical Corps of the Navy. Specifically the amendment provided that there should be twenty-five one-hundredths of 1 per cent. of major-generals, the same proportion of brigadier-generals, 4 per cent. of colonels, 8 per cent. of lieutenant-colonels, 23.5 per cent. of majors, 32 per cent. of captains, and 32 per cent. of lieutenants, *this to apply to both the regular and the reserve corps men*. Thus, if there are 10,000 medical officers in active service, there might be 25 major-generals, 25 brigadier-generals, 400 colonels, 800 lieutenant-colonels, 2,350 majors, 3,200 captains and 3,200 first lieutenants. This amendment lapsed without action by the ending of the session. The substance of the amendment, however, will be incorporated in a bill which will be introduced in both the Senate and the House at the coming session of Congress.

Medical officers must be equal in rank and authority with line officers if they are adequately to carry out the duties for which they will be held responsible. This fact has been emphasized by the

experience of our allies in the present war, as well as by our own experience in the past. Our allies admit that in the beginning the medical officer did not have the rank, and consequently the authority, he should have had and that, for this reason, there have been grievous consequences. Among these was the disastrous experience of the British army in the Mesopotamian campaign as a result of the failure of the medical service. The report of this tragedy, made by a board of non-medical men, showed that lack of authority of the medical officers was an important factor. The medical officers were practically ignored. They were not advised as to the character of the expedition that was being undertaken, and as a consequence, they were unprepared for what happened. When later a medical officer made urgent representations in regard to the actual conditions obtaining, which in his opinion needed prompt action, he was threatened with arrest and removal from his post. When the actual results came the blame was thrown on the medical department, of which this medical officer was a member. The medical officers were censured because they had not protested more vigorously. We had a similar experience in 1898 when our medical officers were criticized for insanitary conditions at Chickamauga and elsewhere, although there was plenty of evidence to show that they had protested against these conditions to line officers. The whole sad story is told in detail in the Dodge report. There, also will be found testimony that line officers treated with contempt the recommendations and protests made by medical officers. The medical officer is without influence simply because his shoulder straps indicate lower rank than that of the line officer with whom he is associated. Some may sneer, but the fact remains that it is rank that counts in both the Army and the Navy.

Of course rank brings with it increased pay. This, however, is immaterial. At the same time, it should not be forgotten that most of the physicians now in the Medical Reserve Corps have not only left the comforts of their homes, but also have given up practices which in the majority of instances yielded far more

income than the pay they would receive as medical officers of the army even if they had conferred on them the highest rank that the proposed law would provide. Among these medical reserve officers are many of the most prominent men in our profession, including the leading men in the specialties, as well as our best surgeons and internists.

When the war broke out there were less than 450 medical officers in the regular army medical corps. Today there are commissioned, including officers of the regular army, the National Guard and the Medical Reserve Corps, at least 17,000 physicians. Less than 1,000 are in the regular army medical corps. Under the present law these regular medical corps officers are entitled to the grades of lieutenant-colonel and colonel; and in the case of the surgeon-general, to that of brigadier-general; the highest rank that can be conferred on any one of the other 16,000—that is, on any reserve medical officer—is that of major.

May we remind our readers that the men in active service will be prevented by the regulations from using their influence in this matter, and that the duty of pushing this measure rests on those who stay at home? Every physician has representing him in Congress one man in the House of Representatives and another in the Senate. If every physician will let his representatives know that this proposed measure should become a law, and if in addition he will enlighten his neighbors in regard to the matter, an effective public opinion will be created. The time is opportune; congressmen are at their homes. Write or speak to your representatives now; get your neighbors to do likewise—not for the good of the medical profession, but for the good of the service.—*Jour. A. M. A.*, Nov. 10, 1917.

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## Society Proceedings

Dartmoor, W. Va., Nov. 6, 1917.

Ed. Med. Jour.

The Barbour-Randolph-Tucker County Medical Society met in Y. M. C. A. building, October 23, at 1 p. m. Present: Drs. Butt, Moore, S. G. Golden, Wilson,



Talbott, Irons, Hamilton and Rodgers.

In the absence of the president at the opening Dr. Butt presided. The reading of previous minutes were dispensed with and the report of the resolution committee on removal of Dr. Hoffman was read approved and ordered spread upon the minutes, a copy sent to the *West Virginia Medical Journal*, and a copy sent to Dr. Hoffman.

A communication from the War Department relative to occupational services by disabled, so as to be of use after the results of the present war, was read, with request for information from members of the society.

The following officers were elected for 1918: Pres. Dr. A. P. Butt; Vice-Pres. Drs. L. W. Talbott and A. H. Woodford; Secretary-Treasurer, J. C. Irons; Censor, Dr. S. G. Moore, for Randolph County.

Dr. Butt made a verbal report on the meeting of the State Medical Society, which met at Fairmont, October 2-4. He stated that one of the most exciting incidents was the action taken on the resolution asking that war be declared on Austria (which Dr. Butt personally deemed out of order, or beyond the sphere of the Medical Society) but which was approved amid great excitement.

The Medical Defense Measures of the state were roundly denounced by several of the members, but with no change by action of the State Association.

The State Society recommended that dues be increased one dollar per year.

One hundred dollars was appropriated out of the defense fund to assist the wife of Dr. Lind, who is in needy circumstances, according to reports made.

Dr. Butt stated that according to his understanding, during the year, malpractice suits were instituted for more than \$75,000. This demands the united efforts of the medical profession since most of these suits are instigated through spite, or for legalized blackmail.

The new constitutional amendments were hurriedly discussed and finally, on motion "laid on the table," with no definite action.

Dr. Butt regrets that owing to short sessions, with so much to demand atten-

tion, the legislative department had to pass upon matters so hurriedly that mature action could not be secured. He also regretted the unfortunate changes in the order of the program, in order to suit the convenience of those having papers, to the great discomforture of the greater number.

He said the society adjourned to meet probably either at Harpers Ferry or Berkeley Springs, though some favored meeting at Washington, D. C., to which Dr. Butt does not assent.

Dr. W. W. Golden gave a talk on "Some Thoughts on the Nervous System." He said that since he had studied anatomy, there had been great advance in the minute details of the ramifications and distribution of the nerve filaments, and knowledge of the ultimate nerve functions. These nerve fibers have been traced with painstaking labor to all their functions, thus giving a much more comprehensive knowledge than had ever been taught or understood before.

Dr. S. G. Moore reported a very interesting case of poliomyelitis developing in a young man nineteen years of age, from a lumber camp in Cheat mountain. There were no extraordinary symptoms developed till the third day of his illness, previously having fever and aching pains as if from a cold, or rheumatism. When an arm was partially paralyzed. This seemed to mitigate for a few days, when on attempting to get out of bed, he found he could not use his lower limbs. Upon closer examination his abdominal muscles, right arm, thigh, and one side of face, as well as muscles of eye, were completely or partially paralyzed.

Dr. Moore called especial attention to this, which may be called a prodrominal symptom, not heretofore mentioned in the text books, and which appears to him as conclusive. Any anterior spinal flexion will be strenuously resisted on account of increased pain. Children will cry out when you attempt flexure from feet and head.

In this case, no known exposure could be found, though there had been several cases near Mill Creek, several miles distant, and there is a possibility that the germs may have been communicated

from that section, but nothing definite could be ascertained.

Meeting then adjourned to meet in Elkins in January, 1918.

J. C. IRONS, *Secy.*

Resolutions on removal of Dr. O. H. Hoffman, passed by Barbour-Randolph-Tucker Medical Society October 23, 1917:

REPORT OF COMMITTEE

We feel we but express the sentiment of the members of the Barbour-Randolph-Tucker County Medical Society when we state that it is with *sincere regret* that we note the removal of Dr. O. H. Hoffman from the bounds of our society and state. He was one among the oldest in membership and length of practice, and one who both as a physician and Christian gentleman held a high place in our esteem as well as in the regard of the community in which he resided.

As a physician he was painstaking, careful and observing. He was ever ready to adopt that which he found by actual experience, to best combat diseased conditions or injuries. He was often found advocating well tried remedies, and methods which were not always recommended by the profession at large, but which on trial he found to best meet conditions. Occupying a pioneer position in utilitarian medication.

Dr. Hoffman was ever kind and helpful to the younger members of the society, in giving advice, relating his vast experiences and pointing out the many difficulties to be met and how to best overcome them. Though by reason of a large and exacting practice, he could not often meet with us, yet when he could be present, he always gave us something real from the school of experience, which tended to promote our hopeful expectations and somewhat ease the many burdens which are placed upon us, in our combat with disease, suffering and death.

Not only was Dr. Hoffman useful as a physician, but he was most active in Sunday School and church work, being a leader in these spheres of labor, and his presence and efforts will be greatly missed in the community of his former

activity.

Therefore, it is with real sorrow that we note Dr. Hoffman's removal from us, feeling we have lost one of our ablest physicians, one of our best Christian workers, and one of our most patriotic citizens. We commend him to the profession of medicine and the citizens of his latest choice.

J. C. IRONS.

H. W. DANIELS.

H. K. OWENS.

*Committee.*

CABELL COUNTY SOCIETY.

Huntington, W. Va., Nov. 20.

Dr. J. R. Bloss,

Huntington, W. Va.

Dear Doctor:—I am sending you a report of the last meeting of the Cabell County Medical Society.

The Cabell County Medical Society met on November 8, 1917, in the Assembly Room of the Frederick Hotel.

The members present were: Drs. Fitch, Hereford, Mathews, Yost, Morrison, Marple, H. P. and E. B. Gerlach, Hawes, Watts, Prichard, Bloss, Rowsey, Guthrie and Pepper.

It was moved and carried that the reading of the minutes, and other business of the society be dispensed with and that the society would hear the address of Dr. McElrath on the subject of "Cellular Determination of Sex." After this interesting paper was read it was discussed by Drs. Fitch, Bloss and Yost.

It was moved by Dr. Bloss and seconded by Dr. Prichard that a rising vote of thanks be extended to Dr. McElrath for his excellent paper. Carried.

On motion the society adjourned.

Fraternally yours,

R. H. PEPPER, *Secy.*

## State News

An item in the last number of the State Association journal states that 10 per cent of physicians have gone into the army medical service. This item might be a little misleading to some inasmuch as 10 per cent have applied for commissions. However, quite a few have

failed to accept these commissions when they were issued, with the result that not over 7½% of the doctors of the state have really offered themselves for service. As the Surgeon-General says, a doctor who fails to accept his commission is doing himself a great injustice. —J. E. C.

△△

Dr. G. C. Robertson of Charleston, has recently been appointed superintendent of the State Hospital for the Insane at Spencer.

△△

Dr. L. M. Davis, formerly located at Hensley, W. Va., is now surgeon for the S. J. Patterson, Pocahontas Coal Company at Arista.

△△

Dr. J. R. Bloss of Huntington, made a trip recently to Philadelphia, and Vineland, New Jersey.

△△

Dr. L. S. Henley, who has been at Winding Gulf since leaving the Huntington State Hospital, is now located in Huntington, where he has opened offices.

△△

Drs. J. A. Guthrie and I. C. Hicks of Huntington, attended the sessions of the Clinical Congress of Surgeons at Chicago.

△△

Dr. Samuel R. Hoyroyd of Athens, our newly-elected president, attended the Roanoke meeting of the Medical Society of Virginia.

△△

Lieutenant J. O. Hicks of the M. O. R. C., stationed at Fort Benjamin Harrison, visited his family in Huntington recently.

△△

Dr. H. G. Steele of Bluefield, was in attendance at the meeting of the Medical Society of Virginia held at Roanoke.

△△

Mrs. A. M. Chalmers Watson, who has been appointed to direct the work of the thousands of women who are serving with the British army in France, was the first woman to receive a medical degree from Edinburgh University.

△△

Dr. De Verber of Roneevert was a

recent visitor in Huntington.

△△

Another Huntington nurse has been called into service at one of the camp hospitals. Mrs. Leonora Gardwell Brown. She is a graduate of Kessler Hospital.

△△

Dr. Stuart McGuire of Richmond, Va., will go to France soon with his unit. He depreciates the report that he will remain in Richmond for the purpose of organizing other units for hospital work in France. Dr. McGuire states that he will leave with the Medical College of Virginia Hospital unit when it is ordered to France.

△△

Married at Hattiesburg, Miss., on November 3, Dr. Joseph Lyons, formerly of Huntington and Miss Henrietta Moore of Dunmore, W. Va. Dr. Lyons is a first lieutenant in the M. O. R. C.

△△

A post card received in Huntington recently from Lieutenant Harry W. Keatley, at Camp Shelby, Miss., states he is now permanently assigned to 113th regiment U. S. engineers, and that he is awaiting orders to leave for France. Dr. Keatley was formerly assistant superintendent at the Huntington State Hospital.

△△

Dr. and Mrs. R. V. Shirley of Ceredo, spent some time in Hampshire County, Va., during November.

△△

Dr. and Mrs. Homer Wilson of St. Albans, were visitors in New York recently.

△△

America's first great hospital for the reconstruction of wounded men has been accepted by the government from the Benevolent and Protective Order of Elks. This hospital will be erected on Parker Hill in Boston.

△△

Dr. T. W. Moore, Dr. A. K. Kessler, and Dr. W. E. Vest, of Huntington, attended the annual convention of the Southern Medical Association at Memphis, Tenn., November 12-15. Dr. Moore is chairman of the eye, ear, nose, and throat section. Drs. Moore and Vest

read papers before the association.

△△

Married recently in Huntington, Dr. Philip R. Williams of Branchland, W. Va., and Miss Blanche Seites of the same place.

△△

Dr. Julius C. Schultz of Huntington, first lieutenant in the M. O. R. C., is now at Fort Oglethorpe, Ga.

△△

Dr. Harriet B. Jones, secretary of the West Virginia Anti-Tuberculosis League is urging the importance of cooperation between the Red Cross and the various state and local anti-tuberculosis associations.

△△

Dr. John Gibson, after visiting his mother in Huntington, has returned to Camp Lee at Petersburg, Va., where he is a member of the Medical Reserve.

△△

The membership of the American Red Cross has passed the four million mark, according to announcement made by the Red Cross War Council.

△△

Dr. Chas. E. Holzer of Gallipolis, O., will address the members of the Cabell County Medical Society soon on the subject of "Cancer Control."

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The examination for registered pharmacists will be held in Huntington January 16 and 17, 1918.

△△

Dr. Lawrence H. Fitzgerald, formerly of Huntington has received his commission as first lieutenant in the M. O. R. C. He graduated from the University of Pennsylvania last June and has been an interne in the Western Pennsylvania Hospital of Pittsburgh since that time.

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Means under which army nurses may be commissioned as lieutenants under certain conditions are being sought by Red Cross nurses now with the armies, or rather by army men who feel that such recognition should be accorded them.

△△

Confirmation of reports recently heard of the considerable extension of Sheltering Arms Hospital at Hansford was

given recently by Dr. W. R. Laird, Jr., superintendent of the institution, when visiting in Huntington. Dr. Laird stated that two wings would be added to the hospital. This was necessitated by the rapidly increasing number of patients applying for admission.

△△

Dr. S. L. Jepson, State Health Commissioner, attended the American Public Health association meeting held in Washington.

△△

List of applicants for the Medical Reserve Corps who have applied since September:

Dr. Charles L. Moore, Upper Tract; Dr. A. L. Parsons, Charleston; Dr. H. C. Lynch, Hinton; Dr. J. P. Farson, Century; Dr. R. F. Ellison, Douglas; Dr. H. L. Beard, Lewisburg; Dr. L. S. Hayes, Charley, Ky.; Dr. C. T. White-side, Leon; Dr. C. O. Staats, Spencer; Dr. W. C. Mays, Sharon; Dr. S. D. Hays, Flemington; Dr. Alvin McClung, Pickens; Dr. W. H. Triplett, Matewan; Dr. J. W. Woofter, Curtin, W. Va.

## Medicine

### THE TREATMENT OF EPIDEMIC POLIOMYELITIS WITH SO-CALLED SPECIFIC HORSE SERUM.

The recent reports by Rosenow and by Nuzum and Willy on the treatment of epidemic poliomyelitis with the serum of immunized horses, for which excellent results are claimed, are of considerable interest. The horses were immunized with the coccus recently found by several observers in the central nervous system in epidemic poliomyelitis, and consequently the question of the exact relation of this coccus to poliomyelitis is again raised. In both reports, it is asserted that the serum used has protective and curative powers with respect to the experimental poliomyelitis of the monkey produced by means of poliomyelitis virus, that is, suspensions in physiologic sodium chlorid solution of fresh or glycerinated nervous tissue from human beings that have died with this disease, or from monkeys experimentally infected.

While the coccus with which the horses were injected unquestionably occurs in poliomyelitis, and frequently may be present in the so-called virus, its exact relations to the disease have not been made fully clear because thus far it has not been possible to produce poliomyelitis in the monkey by injections of this coccus in undoubted pure culture. But in spite of the lack of this essential link in the chain of evidence necessary to establish that the coccus is the cause of the disease, it must be acknowledged that if the serum of horses immunized with the coccus protects against and even cures poliomyelitis in the monkey, an adequate experimental basis for a thorough trial of such serum in the treatment of the human disease certainly has been provided. It is clear, however, that the results of further experiments on the action of the serum in monkey poliomyelitis are required before the claims in favor of its protective and curative powers may be regarded as fully established. At this point it may be stated also that the assertion by Nuzum and Willy that a coccus quite like the one found in the central nervous system in poliomyelitis occurs regularly in the cerebrospinal fluid of poliomyelitis patients, not being in accord with the results obtained by other observers, yet be accepted without confirmation from other sources.

Turning now to a brief consideration of the recorded results from the use of serum produced as indicated, we find that Rosenow treated fifty-four patients with nine deaths, but that six of the patients that died were moribund when the serum was injected, "and hence should not be included as treated cases." This would leave a death rate of 8%. Sixteen of these patients were in the pre-paralytic stage, and all recovered. Of twenty-three patients in the same epidemic, nine died (35%). The effects of the serum in the individual case are often striking, at least apparently, because the symptoms soon subside, paralysis, for instance, being arrested and sometimes disappearing completely if in the early stages. As rapid improvement may occur spontaneously in poliomyelitis, as the diagnosis in the pre-paralytic

stage must be difficult (sixteen of the patients treated with recovery are said to have been in this stage), and as it is impossible to form any opinion whether the treated and untreated patients that were the subject of this report are fairly comparable, it evidently is necessary, as Rosenow himself says, that many more patients be treated before conclusions can be drawn as to the exact value of the serum he used.

Nuzum and Willy have treated 159 patients, eighteen of whom died (11.3%). Of 100 untreated patients admitted during the same period of time to the same hospital, forty-five died (45%). We lack (however, a more detailed comparison as to the ages, severity of attack and general condition of the patients composing the treated and untreated groups. We have no information whatever in regard to the principles of selection followed in forming these two groups; consequently it is difficult to determine how much importance may be assigned to the apparently very favorable figures given in this report. These observers also emphasize the rapid general improvement commonly seen after the injection of the serum there being in many cases a critical drop of temperature.

In conclusion, it may be said that the injection of horse serum, in the manner described with detail in these two reports, appears to be quite harmless in poliomyelitis; that the authors of the reports are deeply impressed with the apparent good effects of the serum; that their figures appear to show a great reduction in the death rate, but that the figures are probably not to be accepted without the reservation that they may seem more favorable than is actually warranted. Further observations will be awaited with much interest. We hope it may be found, and quickly, that a patient, specific anti-poliomyelitis serum, protective and curative, has been discovered. The suggestion may be ventured that even if it eventually should be found that serum produced as described in these reports has little or no specific effect on the essential cause of poliomyelitis, its use may be followed by favorable results due on the one hand to gen-

eral nonspecific effects such as follow the intravenous injections of foreign proteins, and on the other hand to its action, specific in nature, on the coccus used in the immunization, which may be a secondary invader of no little importance in poliomyelitis.—*Jour. A. M. A.*, Oct. 20, 1917.

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#### AFTER-TREATMENT OF INFANTILE PARALYSIS.

Lovett believes that if a patient is not paralyzed in all four extremities, as well as back and abdomen, that he can be made to walk in some form or other; that is to say, that if he has one good arm and one leg with some power in it, it does not seem to matter how bad the contractions and deformities may be, so far as walking is concerned, because most of them, except scoliosis, can be remedied so that the patient can get his legs under him. Cases with general involvement of one or both legs, some paralysis perhaps of the abdomen, and perhaps the total loss of one or two muscles, persisting as total paralysis about three months after the attack, belong in the class of possible recovery. The longer tenderness lasts, the more slowly improvement begins, and in these cases the whole scale seems to be set further along. The more erratic and irregular the distribution of the paralysis, the better chance there seems to be for improvement. The most unfavorable cases seem to be those in which there is a pretty complete loss of power on both sides below a definite level. Cases which have a considerable amount of total paralysis persisting after two or three months do not seem, as a rule, to belong in the class of possible complete recovery. Paralysis of the deltoid is a serious proposition, but complete recovery may take place, especially with the use of the platform splint.

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#### POLIOMYELITIS FROM THE STANDPOINT OF THE NEUROLOGIST.

C. R. Ball (*St. Paul Med. Jour.*, Aug. 1917), lays stress on isolation and quar-

antine of the abortive type of acute poliomyelitis, constituting thirty-five to fifty per cent of all the cases if efficiency in combatting epidemics is to be attained. In such cases the onset is marked by respiratory or digestive disturbances, or both, with fever, malaise, headache, vomiting, drowsiness, twitchings, neck rigidity, hypersensitiveness, a pulse rapid out of proportion to the fever, sometimes profuse sweating, tenderness along nerve trunks, and the Brudzinski and Macewen's signs. In doubtful instances, lumbar puncture is of diagnostic assistance. All these abortive cases must be quarantined. As regards atypical cases, Ball points out that, with present knowledge of the pathology of the disease, a spastic paralysis and an active reflex are not incompatible with a diagnosis of infantile paralysis. Errors may follow faulty interpretations of the reflex response; apparent absence of a reflex sometimes results from failure of the patient properly to relax his muscles or from a strained position of the body in the bed. A typical mild case of the spinal type is reported in which absence of the Achilles reflex was an important diagnostic factor. The bulbospinal type is well illustrated in the ascending form of paralysis, while in the bulbopontine type the bulbar centres of the cranial nerves are involved. Temporary complete loss of sensation is to be remembered as a possibility in acute poliomyelitis. Cases of isolated abduens or faeial paralysis, especially in young adults, coming on suddenly during an epidemic should be isolated. In the cerebral and meningeal types, examination of the spinal fluid is often the chief means of diagnosis, the significant features being the small amount of globulin, marked increase in total number of cells, large number of lymphocytes, presence of large mononuclears, and the behavior of the Goldsol test. The author has seen a case of spastic hemiplegia and one of spastic diplegia due to infantile paralysis. Where an epidemic threatens or exists, there should be organized in every community a diagnostic unit consisting of a general clinician, pediatricist, and neurologist, to examine all suspicious cases.

### TREATMENT OF BRONCHIAL ASTHMA.

M. Ford Morris (*Med. Record*, Aug., 4, 1917), has found Dorsey's formula of help in warding off paroxysms. This is as follows:

Iodine crystals.....	gr. 5;
Spirits chloroformi .....	℥1;
Spirits aetheris comp. ....	℥1½;
Alcoholis, q. s. ad.....	℥3.

Sig.—One teaspoonful in cold water every forty-six hours.

For the relief of the actual attack one may use by hypodermic one of the following: 0.01 grain nitroglycerin; ten to fifteen minims adrenalin 1:1,000; 0.01 grain atropine; 0.25 grain morphine; 0.005 grain hyoscyne with 0.01 grain atropine. Morphine is the most efficacious but should be given only when others fail.—*N. Y. Med. Jour.*, 10-20-17.

### DRUGS IN TREATMENT OF HEART DISEASE.

The drugs which have been used in the symptomatic or palliative treatment of heart disease are legion, which proves their inefficiency. The majority are not worth naming, but a few of them have definite and even life-saving value. These few are discussed by Alsever. The digitalis group, consisting of digitalis, strophanthus, squills, apocynum, etc., stimulates directly all forms of muscle tissues, notably the heart and the vasomotors, and also the medullary centers, notably the pneumogastric and vasoconstrictor centers. As a result of these actions, the heart beats more powerfully and more slowly, the vasomotors contract and often diuresis ensues. These effects are of most importance clinically in auricular fibrillation and auricular flutter, and the results obtained in these disorders have been so marked and so valuable as to give digitalis its justly great reputation in heart disease. Other types of irregular hearts and hearts with normal mechanism also respond to digitalis but in less degree. Tincture of strophanthus has sometimes been substituted for digitalis with advantage, but in the average case it is less dependable. Its action is practically the same as digi-

tal. Strophanthin, the active glucoside of strophanthus, is of inestimable value, because by giving 1-100 grain intravenously one may develop digitalis effects in fifteen minutes. It is safer, however, to give 1-250 grain and repeat every two hours for three doses, if needed. If a patient has been taking digitalis the administration of strophanthin intravenously is unsafe, because the combined effect may be overwhelming. Squills and apocynum are usually avoided because of their tendency to upset the digestive tract, but apocynum sometimes relieves cardiac dropsy when digitalis fails.

Strychnin should not be used in the belief or hope that it will stimulate the heart any more than other tissues. The caffein group is of considerable value in heart disease. Caffein, treobromin and theophyllin are the members of interest. Sodiosalicylate of theobromin is a powerful diuretic, and oftentimes of great value in cardiac dropsy. It increases the urine through direct stimulation of the kidneys rather than through action on the heart. In doses of from 10 to 15 grains, three or four times daily, it commonly produces marked diuresis in one or two days. When diuresis is established it is well to omit the drug, administering it again later in case of need. Theophyllin is more powerfully diuretic but it is more nauseating and more expensive, so that theobromin is usually to be preferred. Caffein has been and still is used very largely as a heart stimulant or so-called tonic. Its effect is manifested almost entirely on the central nervous system, particularly on the brain itself. It has a little power to stimulate muscle fibers, but the heart responds no more than all the skeletal muscles. Alcohol is a local stimulant, but after absorption its action is purely depressing, affecting especially the central nervous system and beginning with the highest functions of the mind. Epinephrin is decomposed so quickly in the body that its effect must always be transient, and it is absorbed so slowly from hypodermatic injection that it is difficult to say just what action should be expected. Intravenous injections are followed by slower and stronger heart action and vasoconstriction, but when given by other methods

these effects are very uncertain and fleeting.

The nitrites paralyze the vasoconstrictor mechanism and the vagus center, almost reversing the action of digitalis. Inhalations of amyl nitrite produce this effect in a few seconds, and the effect terminates in two or three minutes. Nitroglycerin and sodium nitrite by mouth produce this effect in two or three minutes, and the effect ends in one half hour to three hours. Erythrol tetranitrate produces the same effect in one hour, and the action may continue for five hours. The nitrites are of great value in relieving the pain of angina pectoris and in obtaining relief from dangerous high blood pressure. It is usually unwise to attempt to beat down high blood pressure, except in an emergency. If a sustained depression of blood pressure is desired it may be obtained by repeating nitroglycerin every two hours or by giving erythrol tetranitrate four to six times a day. Aconite slows the heart by stimulating the vagus center but does not affect the vasomotors, consequently it lowers blood pressure. It may be useful in overacting hearts, as in fevers and in dangerous sustained high pressure.—*N. Y. St. Jour. of Med.*

#### MERCURY ANURIA.

The mercurial poisoning in the young man was manifested mainly by gastrointestinal uremia, vomiting, diarrhea and Cheyne-Stokes dyspnea with a sensation of oppression in the chest, and anuria complete for two days and almost absolute during the three following days. While the anuria lasted, the young man complained of incessant chilliness, but there was no edema, headache, myosis nor gallop sound. During the polyuria reaction period, symptoms developed suggesting severe peritonitis except that the pulse was regular and slow and the temperature normal. Milian explains this as the result of the loss of fluids, the man having vomited more or less constantly for nine days, and the polyuria following the anuria having drained the body of too much fluid, causing a condition of dehydration like that of cholera. Milian did not venture to make a saline infusion, fearing to bring on ede-

ma, but he gave an intravenous injection of a hypertonic glucose solution, 60 gm. of glucose in 200cc. of distilled water. The result, he says, was *reellement miraculeux*.—*Abs. J. A. M. A.*

#### TREATMENT OF BICHLORIDE OF MERCURY POISONING.

H. B. Weiss (*Ohio State Medical Journal*, September, 1917) advises the following treatment, as outlined by Lambert and Patterson. A large amount of fluid should be taken by mouth—eight ounces of milk every second hour, alternating with eight ounces of the following mixture:

Potassium bitartrate .....	4 grams;
Sugar .....	4 grams;
Lactose .....	15 grams;
Water .....	ad 16 ounces.
Lemon juice or orange juice to taste.	

A solution containing a dram of potassium acetate to the pint of water is also given continuously by the rectum. The stomach is washed twice daily and the patient receives two colonic irrigations daily. A hot pack is given once a day. A pleasant alkaline drink consists of the following:

Cream of tartar.....	4 grams;
Sodium citrate .....	2 grams;
Sugar .....	2 grams;
Water .....	ad 8 ounces.
Lemon juice or orange juice to taste.	

The following, Fischer's solution, is given intravenously:

Sodium carbonate (crystallized)	10 grams;
Sodium chloride .....	15 grams;
Water .....	ad 1000 cc.

At the beginning of the treatment the stomach is washed with the whites of three eggs and one quart of milk. Before the stomach tube is removed, three ounces of magnesium sulphate with six ounces of water is introduced and allowed to remain in the stomach. The patient is then given a soapsuds enema. If the patient did not vomit after taking the poison and did not reach medical



aid for at least three hours later, an intravenous injection of Fischer's solution is given at once. One thousand to 2,000 c.c. are introduced into the stomach. The patient receives eight glasses of imperial drink a day and large quantities of water. The urine is analyzed in order to control the treatment. The urine should be kept alkaline. It is tested with a saturated solution of methyl red in alcohol. If it cannot be made alkaline to methylene red the patient is in a dangerous state. Complications following this form of treatment are rare.—*N. Y. Jour.*, 10-20-17.

#### TRICHLORACETIC ACID IN DERMATOLOGY.

W. H. B. Aikins (*Canadian Journal of Medicine and Surgery*, Sept., 1917) recommends trichloroacetic acid as a substitute for carbon dioxide snow in the treatment of conditions affecting comparatively small cutaneous surfaces down to warts the size of a pinhead and isolated pigmentations of the skin. Following the application there is a certain amount of local reaction. Vesicle formation does not occur. The surface becomes dry in a few days, leaving superficial crusts which fall off in the course of seven to ten days, leaving the skin temporarily reddened or pigmented. It has also been used in senile ceratosis, warts, papillomata, warty nevi, hairy nevi, telangiectasis, lupus, vulgaris, and lupus erythematosus.—*N. Y. Med. Jour.*, 10-20-17.

#### VACCINE THERAPY OF TYPHOID.

Massimo Chiadini (*Riforma medica*, June 9, 1917) declares that this is a measure of great value in reducing markedly the mortality and shortening the course and the convalescence; furthermore, it is equally efficacious in the paratyphoids. Three injections are the maximum, given at intervals of one day or more, preferably by the intravenous route, the best time for the administration being in the early hours of the morning. The local reaction requires no treatment and the vaccines are of no avail in cases with grave pulmonary, myocardial, or nervous alterations. The number of bacilli in each injection

should be high—from 300 to 600 million—and the bacilli in the urine of the patient rapidly disappear after injection.—*N. Y. Med. Jour.*, 10-20-17.

#### RADIUM TREATMENT OF CARCINOMA OF BLADDER AND PROSTATE.

Two of twenty-five cases of carcinoma of the bladder treated by Barringer would, he says, have been considered good operative risks; the other twenty-three cases, because of the extent of the tumors, were all impossible operative risks. In four of the twenty-five cases (three confirmed microscopically as carcinoma) radium has locally removed the growth. One of these has been cystoscopically cured for ten and one-half months, one for five months, and one recently. One has what is probably a slight local recurrence, although pathologic examination of a piece removed does not confirm this view. From results in these four cases it appears that radium can do as much as surgery for cases of bladder carcinoma without subjecting the patient to the danger and discomfort of a major operation. From thirty cases of carcinoma of the prostate treated by radium since October, 1915, the following conclusions are drawn: Radium treatment has caused with surprising regularity the reduction or disappearance of carcinomatous nodules of the prostate, in both early and advanced cases. The reduction which occurs in carcinoma lobes is, so far as has been observed, permanent. The symptoms in those cases in which the carcinoma had been reduced show striking improvement. The primary effect of the radium may be to increase the amount of residual urine (if there be any). The ultimate effect of the radium application on residual urine is probably negative, the amount neither increasing nor decreasing. No sloughs have resulted from the radium needles. Radium apparently has a selective action on carcinoma. In one case in which the prostate was removed because of urinary retention, a moderate dose of radium was given five months before the prostatectomy. The prostate had been considerably reduced in size following the radium treatment. At

operation the prostate shelled out like a nonmalignant adenoma. Very large carcinomas with cachexia and loss of weight are beyond radium or any other treatment.—Abs. *J. A. M. A.*

## Surgery

### AMPUTATION FROM THE ARTIFICIAL LIMB POINT OF VIEW.

Openshaw (*Lancet*, June 16, 1917) points out that one finger or the thumb of the natural hand is more useful than any apparatus. If there be left only the thumb or one finger, artificial fingers or an artificial thumb can be fitted, so that the patient has something to which he can oppose the remaining digit.

Amputation of the wrist-joint should not be done if it is at all possible to leave any portion of the hand, for it gives too long a stump for the proper application of an artificial hand. It is necessary to put the artificial wrist-joint at the end of the natural wrist-joint, and this brings the hand too far away from the elbow, and muscle power is lost.

In patients engaged in clerical pursuits, a new wrist-joint should be made by removal of one and a half inches of the radius and ulna, for to this an artificial hand can be fitted, so that the flexion and extension movements are converted into flexion of the interphalangeal joints of the index and middle fingers. The site for amputation of the forearm is one where the bones are divided at the lower end of the middle third of the forearm, for this gives a powerful useful stump, not too long, and capable of full pronation and supination.

A forearm stump where the ulna measures less than three and a half to four inches from tip of the olecranon is often exceedingly difficult to fit with an artificial forearm bucket. The stump repeatedly slips out of the forearm bucket. As the supinator longus, the extensor muscles, and the flexors are useless, these should be removed in order to produce a flat surface upon which the upper and anterior edge of the forearm bucket can rest. If not more than two inches of the ulna (measured from the

tip of the olecranon) can be left, the amputation should be performed above the condyles of the humerus.

Amputation of the elbow-joint should never be performed as an operation of election for it is difficult though not impossible, to fit an artificial limb to an amputation such an amputation be performed the condyles must be removed, for if left it is impossible to accurately fit an arm-socket unless it be laced up the whole length of the front, which considerably weakens it.

The best site for amputation of the arm is one between a point one and a half inches above the elbow-joint on the one hand, and three inches below the fold of the axilla on the other, and an endeavor should always be made to divide the humerus between these two points.

With regard to the shoulder, it is easier to fit an artificial limb to an amputation where the head of the bone has been completely removed than it is to fit one to an amputation through the surgical neck of the humerus. It must be remembered that it is possible to fit an artificial limb to any amputation of the upper extremity.

At the shoulder joint, by means of a molded leather cap, an artificial arm is adjusted to the body. Considerable space should be allowed between the arm and the chest wall by flattening the inner surface of the arm, so as to facilitate dressing. By adjustable straps and wires, the movements of the opposite shoulder can be utilized to bend the elbow of the artificial arm, and by a similar arrangement, passing around the chest and down the artificial arm to the thumb, the latter can be moved by abducting the opposite arm.

In amputations it is essential that the nerve trunks should be cut as short as possible and the ends of the stump should be covered with a loose movable non-adherent skin-flap.

With regard to the lower extremity, if the amputation has been of the digits and the bone is well covered with the scar on the dorsum, a boot can easily be fitted, and the patient walks well.

No skin-grafting of a granulating Chopart gives the least chance of a use-

ful stump. The scar ultimately becomes the lowest part of the foot in consequence of the contraction of the tendo Achillis, and will not bear the weight of the body without ulceration.—*Therapeutic Gaz.*

### INFECTION OF SIMPLE CLOSED FRACTURES.

Blake (*Boston Medical and Surgical Journal*, May 3, 1917) notes that in the past twenty years at the Boston City Hospital there were ten or twelve cases of infection of simple closed fractures; by this is meant an infection which parallels both in intensity and duration the infection which is still too common in compound or open fractures. The etiological factor is the entrance of bacteria through the skin either by a scratch or a hair follicle, or by the gateway of blebs and blisters; rarely through the circulating blood. Treatment is primarily preventive. It means more than the usual care in the cleansing of the skin of blebs and blisters; the latter may at times contraindicate the immediate correction of fractures. When suppuration is evident, incision and drainage and the usual routine of the septic compound fracture treatment is obviously to be followed.

Seudder reported in this relation a case entering the hospital with a T-fracture of the lower end of the femur. It was decided to do an open reduction, but on attempting this pus and blood were evacuated from the swollen tissues about the joint and from the joint itself. The patient subsequently perished.

Blake, referring to cases which were found to be infected at the time of late operation or at autopsy without sinus infection before this time, notes that it is possible that some cases of delayed union are complicated by what might be called a "silent infection."

## Things of Interest

ABOUT PRODUCTS ADVERTISED IN YOUR JOURNAL.

The Official Bulletin of the United States Government, published daily under order of the President by the Committee on Public Information, states in

the issue of October 31, 1917: "Many matters of importance touching upon American cooperative effort and activity along medical and surgical lines were developed during the past week in Chicago, when the general medical board and the states activities committee of the medical section of the Council of National Defense held stated meetings in conjunction with the annual meeting of the Clinical Congress of Surgeons of North America.

"Addresses were made by Dr. Edward Martin, Dr. E. K. Dunham and Dr. W. E. Lee, all of Philadelphia.

"By means of a moving-picture demonstration and the detailing of experimental and clinical data, they showed how much could be done for clean wound healing by the new antiseptic, Dichloramine-T, which is being investigated under instructions from the Surgeon-General's Office."

Dr. W. E. Lee, of the Pennsylvania Hospital, reported 7,288 surgical cases in which "Dichloramine-T" was used with remarkable results. He also reported twelve hundred war wounds treated in France with "Dichloramine-T" with 99.5% recoveries and no secondary hemorrhages.

"Dichloramine-T" is used as an oil spray for nasal and throat work to destroy the microorganisms of diphtheria, meningitis, and other diseases. It is also used as a spray for surface wounds and burns and is poured into deep wounds, thus doing away with intermittent or continuous irrigation and frequent changes in expensive dressings.

Literature on "Dichloramine-T" may be obtained from the manufacturers of this product, The Abbott Laboratories, Chicago.

### THE RESTORATION TO FAVOR OF CREOSOTE.

Creosote has been employed by physicians with varying success for many years in the treatment of bronchitis, especially the bronchitis of pulmonary tuberculosis.

Unfortunately, because of its disagreeable odor and taste, because it caused gastric irritation and distress, nausea and even vomiting, most clinicians were

forced to abandon its use. For these reasons creosote is now rarely prescribed. It has fallen into disuse, even though it is admitted that it is possessed of therapeutic value.

#### A NEW CREOSOTE PRODUCT

Calcreose (a chemical combination of calcium and creosote, containing 50% creosote) very largely overcomes the objections to creosote.

Like creosote, Calcreose will allay cough, lessen expectoration and lower the temperature.

Like creosote, Calcreose improves digestion and nutrition through intestinal antiseptics and stimulation.

Like creosote, Calcreose is a stimulating expectorant.

Calcreose is not a germicide, but it checks bacterial activity, checks putrefaction, lessens the production of toxins—hence reduces the toxemia always associated with intestinal infections.

Like creosote, Calcreose is possessed of all these good qualities but, unlike creosote, Calcreose is practically devoid of all objectionable features.

In other words, Calcreose is an agreeable form of creosote medication, and when given in small doses at first, gradually raised to tolerance, it is free from untoward effects.

As high as 120 grains of Calcreose has been given daily without digestive disturbance.

#### COMPARATIVELY INEXPENSIVE

Unlike many creosote compounds, Calcreose is comparatively inexpensive. A thousand 4-grain tablets costs the physician or druggist \$3.00.

Calcreose is made by The Maltbie Chemical Company, Newark, New Jersey, and is advertised elsewhere in this issue of the *Journal*.

#### CHLORETONE AS A HYPNOTIC AND SEDATIVE.

Administered internally, Chloretone passes unchanged into the circulation and is deposited in considerable quantities in the cerebral tissue, the patient falling into a profound sleep. Its action is like that of natural fatigue. Hypnosis passes off gradually, and no habit is formed. Acting upon the central nerv-

ous system, therapeutic doses have little or no effect upon the heart and respiratory centers.

Chloretone possesses a wide range of therapeutic applicability. It is a valuable sedative in alcoholism, cholera and colic. It is useful in epilepsy, chorea, pertussis, tetanus and other spasmodic affections. It allays, in most cases, the vomiting of pregnancy, gastric ulcer and seasickness. As a sedative and hypnotic it is indicated in acute mania, puerperal mania, periodic mania, senile dementia, agitated melancholia, motor excitement of general paresis, insomnia of pain (as in tabes dorsalis, cancer and trigeminal neuralgia), insomnia of mental strain, insomnia of nervous diseases, etc. In insomnia it is often effective when other drugs have failed.

The therapeutic dose for an adult is ten to fifteen grains. Good results, however, have been had with doses as small as seven and one-half grains. Sleep usually follows in half an hour to one hour. The administration of Chloretone is not attended with digestive disturbances.

“Meatless days” and the oft repeated warnings that economy in food is necessary to win the war, has called attention to a meat substitute invented some years ago by Dr. J. H. Kellogg, superintendent of the Battle Creek Sanitarium. The suggestion came from the department of Agriculture at Washington, in protose, a purely vegetable compound. Dr. Kellogg combined the qualifications which he regarded as essential in a food which could satisfactorily replace meat. It contains none of the parasited or putrefactive germs harbored by meat; it is made to resemble potted meat in its physical aspects; it is palatable and chemically, is a reproduction of meat; furthermore, in large quantities it can be placed on the market at a lower price than the product which it is meant to displace. Each year sees a lessening of the herds, droves and flocks of the country, and the war has greatly accelerated the movement. The housewife will therefore welcome such an article as protose, which will lessen or end her dependence on the butcher.

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## MEDICAL ECONOMICS

*Ira J. Haynes, Richmond, Va.*

Read at Fiftieth Annual meeting of W. Va. Medical Association, Fairmont, W. Va., Oct. 1917.

Within the time allotted it will be possible barely to enumerate some of the fundamental principles in building a successful practice of medicine. It has been said if you do your work better than your fellow the world will beat a path to your door, so the great problem with the young doctor is an opportunity to convince the world of his superior ability.

Since this audience is made up of doctors already in practice, we will try to suggest some ideas about (1) building up a good practice and (2) making money out of it. It seems to me our colleges are remiss in their duties in failing to give any consideration to the subject of Medical Economics. This is the more lamentable when we consider that the average graduate comes out of college not only "dead broke," but usually several hundred dollars in debt. I am safe in saying that many doctors have no definite, well-laid plan that they pur-

sue systematically to build up a large practice. Some men are handicapped by temperament. They are cold and repulsive, they shake hands with two fingers. There are some would-be aristocrats, who are not in any sympathy with those creatures of "common clay."

These defects of temperament can be overcome by cultivating the opposite virtues of socialability, etc. Therefore, the first and most important qualification in securing a good practice depends on the doctor's personality. While I would not advise any self-depreciation, I would urge a doctor to take an inventory of himself occasionally with a view of curing his defects of character as manifested in Personality.

Building a successful practice is based on the same principles as salesmanship. The fundamentals of selling are (1) securing favorable attention, (2) developing interest, (3) cultivating desire, (4) the sale,—and if these steps are followed effectually the ultimate *collection* is easy. A doctor is a salesman in the sense he sells his services—as required by his advice as to treatment, or pre-

vention of disease. I would recommend a course of study in Business Building."

A doctor should be neat and clean in his appearance, have a nice office, the waiting room equipped with comfortable chairs, a table, a well filled book case, a few nice pictures on the wall; also his medicine diploma, and possibly one or two certificates, including his certificate of Fellowship in the A. M. A. His consultation room should have a nice instrument cabinet—well stocked, etc. These things impress the people with the fact a doctor is well qualified; while a general appearance of prosperity goes a long way in inspiring confidence. Any doctor who neglects these means of impressing the people is simply "hiding his light under a bushel."

The office girl should be instructed in tactfulness. People should be induced to come in and be seated before they have a chance to ask when the doctor will be back. The office girl must be truthful, but she should be taught to restrain herself incandor.

I have never known a successful doctor who habitually permitted gaming in his office during the active period of his professional career.

Time forbids even the mention of numerous details that contribute to the attainment of success in building a good practice. By tact, a doctor should soon become acquainted in a community and should readily adjust himself to his environments. While he should not pose as a reformer, he may consistently take a leading part in upbuilding the community. In a Catholic family a doctor will not refuse to baptise an infant that may be born dead. The most successful doctors are those who can longest conceal a statement as to the diagnosis, especially should he avoid talking to out-

siders. A young doctor is often confronted with the question "Doctor have you ever seen a case just like this"? To which he may answer. "No, and probably no one else ever saw one just like this, but I have seen many similar cases."

In this day of efficiency, we realize as never before that the real basis of success is *service*; therefore, our successful doctor must assure himself—and be capable of modestly conveying this assurance to his clientele—that he is perfectly competent to render valuable service. Modest assurance is a rare virtue, but it is worth striving for. A doubting doctor is a misfortune to any community. On the other hand a "four-flusher" is an "abomination unto the Lord," and disgusting to any civilized community. Scientific business says that a transaction to be profitable must profit both parties concerned—hence in collecting an account, if the debtor feels that he has secured his money's worth he is apt to pay cheerfully. In other words an account properly *made* is easily *collected*.

A doctor should make enough money to gratify his legitimate professional, social and personal ambitions.

He must educate his clientele up to the important fact that his advice is more important, in most cases than his drugs; that prevention is **greater than** cure; that while he entered the medical profession primarily for the *good* he can do, a secondary and important factor is that he depends upon his practice for his support. I would regard that man a failure who enters the profession chiefly for the money there is in it. I would regard him a failure who, having entered for the good he can do, fails of a just recompense of reward in a financial way. He should convince himself and the community that the practice of medicine is

a serious and important business and should be attended to in privacy. He should discourage street consultations and curb-stone prescriptions. He does himself an injustice, and likewise his patient, by haphazard examination and diagnosis. By the same token, he will avoid telephone prescriptions. For such indefinite services it is practically impossible to arrive at a fair basis of remuneration. This is the beginning of the demoralization of a doctor's financial career.

Some competent doctors are financial failures, they don't know how to make charges, and are too sympathetic to collect. As a basis of charges in a given case, I venture the suggestion you keep in mind the danger of the disease and the value of relief you might be able to give, also the responsibility in case of damage suits, etc. For a major operation, a prominent surgeon charges one-tenth of a man's annual income, an obstetrician basis his fee on two-thirds of a month's salary. In this connection, obstetric fees should be collected at the time of delivery, because many things may happen during the puerpium to consume the money that has been saved for the doctor. Accounts should be rendered as often as pay day arrives; "short accounts mean long friends." Many doctors make the mistake in supposing that deferring his collections will increase his practice. This is a mistake, for when a man owes a doctor that he don't want to pay he is apt to call another if he gets sick.

There should be no half-heartedness about a doctor's financial conduct. Let him impress the people that he expects compensation for all of his services. In doubtful cases a doctor may fortify himself by asking if he will have to run after the money or shall he expect the debtor to bring it to him. Impress upon

the doubtful man the importance of sticking to one doctor; that the doctor who is familiar with the family idiosyncrasies can do better work than a stranger.

He may say "my time is too valuable to waste as a collector. It is my purpose to put my spare moments into qualifying myself for increased efficiency." The doctor should set an example in his community by promptly paying his own obligations. He should be just as prompt in sending out statements and insisting on prompt responses.

Much more might be said about the details of collecting, etc., but the great essential principle underlying the financial success of a doctor is that both doctor and patient shall understand that the real basis of success is service; therefore, "He profits most who serves best." No less an authority than our President has said: "Prosperity is largely a state of mind." This being true, I want to make some suggestions about the psychology of financial success. Time permits of but a mere mention of some of the definite underlying principles involved.

Many people require a complete mental reconstruction in order to bring themselves into harmony with the law of financial success. Some will ask, "Is there a law which, if once discovered and practiced, will enable me to accomplish that for which this great modern world is so strenuously striving, toiling and desiring?" "Is financial success the result of the operation of law, instead of the operation of mere luck, chance or accident?" The great law is as well defined as any other natural law, and when grasped and understood may be practiced and operated just as may any of its related laws on other planes of universal activity.

As to money, its mere possession, even

in fabulous sums, does not constitute financial success. The man who seeks money as a thing of value in itself, the man who worships money as a very god, such a man is a fool, for he is mistaking the symbol for the reality; and, likewise, the man who decries the pursuit and desire for money as a foul thing, he would make of money a devil, this man is likewise a fool. The wise man is he who seeks money as a symbol of something else behind, and who is not deluded by mistaking the shadow for the substance. The wise man makes neither a god nor a devil of money. He sees it as a symbol of almost everything that man may obtain from the outside world, and respects it as such. He sees that avarice and greed are detestable and hurtful qualities of mind. Still, the lack of proper desire for and striving after money makes man a creature devoid of all that makes life worth the living. When a sane man desires money, he really desires the many things that money will purchase. Money is the symbol of nearly everything that is necessary for man's well-being and happiness. Money is but the concentrated essence of things desired, created and established by society in its present stage of development. There may have been times in which there was no money. There may be times coming in which the race will have passed beyond the need of money as a symbol of exchange and possessions, but there is nothing so necessary for man's well-being and contentment as this much abused money. When I say that man needs money, I mean that he needs the many things that money will purchase for him, and for one to decry the desire for money is for him to decry nearly all the good and desirable things in life. Money means freedom, independence, liberty, and the

ability to do great good, as well as great evil. It means the filling in of those mental pictures that we have sketched out in our minds. There are several factors to be considered in making money, the first of which is "mental attitude". Solomon is credited with the adage, "As a man thinketh in his heart so is he." When we realize a man is the product chiefly of his own thought, then we realize how important it is he should try to regulate his thinking. One's mental attitude is the result of the current of his thoughts, ideas, ideals, feelings and beliefs. You are constantly at work building up a mental attitude, which is not only making your character, but which is also having its influence upon the outside world, both in the direction of your effect upon other people, as well as your quality of attracting towards yourself that which is in harmony with the prevailing mental state held by you. Is it not then most important that this building should be done with the best possible materials according to the best plans and with the best tools. Then, we may say, *a positive mental attitude wins financial success.* In this sense we understand positive to mean confident expectation, self-confidence, courage, initiative, energy, optimism, expectation of good,—not evil,—of wealth,—not poverty; belief in one's self and in the law. Negative means fear, worry, expectation of undesirable things, lack of confidence in one's self and the law. In other words, one must make himself over, to rid himself of all undesirable qualities and supplant them with the positive qualities. Scientific character building is not a mere idle theory, but a live, vital, actual, practical fact, being put into operation by thousands of individuals all over the world, who are making themselves over by this



method, and the prevailing mental attitude is the pattern upon which the brain-cells build. If you can grasp this truth, you have the key to success in your hands. We are constantly giving other people suggestive impressions of ourselves and qualities. If we go about with the mental attitude of discouragement, fear, lack of self confidence and the other negative qualities of mind, other people are sure to catch the impression and govern themselves accordingly. If a man comes into your presence for the purpose of doing business with you, and if he lacks confidence in himself and the things he wishes to sell you, you immediately catch his spirit and feel you have no confidence in him or the things he is offering. But if one comes with the feeling and ideas of enthusiasm, success, confidence in his proposition, etc., he will fairly radiate success towards you, and you will unconsciously take stock in him and an interest in his goods, and the chances are that you will be willing and glad to do business with him.

It can truthfully be said that we attract to us not only people, but actually material things. Fix your mind firmly upon anything, good or bad, in the world, and you attract it to you, for you are attracting it in obedience to the law. You attract to you the things you expect or think about and hold in your mental attitude. This is no superstitious idea but a firmly established scientific psychological fact. Fear and worry, and their coterie of offspring should be banished entirely from our minds, and faith should have its full fruition. Faith, or confidence, is the basis of trade; without it, all commerce would come to a stand-still. Faith in one's self is of primary importance, for, unless one has

it, he can never accomplish anything; can never influence any other person's opinion of himself; can never attract to himself the things, persons, and circumstances for his welfare. The greatest axiom ever enunciated came from Jesus of Nazareth, when he said: "As is thy faith, so be it unto thee," and faith is just as essential in business as in religion. The one word expressive of a culmination of faith based on a knowledge of one's ability is assurance. The man who has it is already a success, and money will come to him as naturally as water flows down hill. There are many other mental qualities to be cultivated—the development of ambition, desire, and last, but not least, the Will. Any of these subjects is well worth special study. Disraeli has said: "I have brought myself by long meditation to the conviction that a human being with a settled purpose must accomplish it, and nothing can resist a will which will stake even existence upon its fulfillment." Sir John Simpson said: "It is wonderful how even the casualties of life seem to bow to a spirit that will not bow to them, and yield to subserve a design which they may, in their first apparent tendency, threaten to frustrate."

To build successfully one must have a plan and make a mental picture of what he wants. The great successful men of the world have used their imaginations instead of despising them. They think ahead and create their mental picture, and then go to work materializing that picture in all its details, filling in here, adding a little there, altering this a bit, but steadily building. So if we want money we must create a mental picture of money and see ourselves using it, handling it, spending it, acquiring more, and, in short going

through all the motions of a man of money.

By concentrating our attention and using all our energy, never losing sight of the great service we are rendering humanity, we should readily acquire that degree of financial success that is commensurate with our several abilities.

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## NITROUS OXIDE AND OXYGEN IN OBSTETRICS

*By Carter S. Fleming, M. D.*

Fairmont, West Virginia.

Since the introduction of chloroform into the obstetrical world by Sir James Simpson in the nineteenth century, the question of finding the safest and most efficient means of relieving the pains of labor has been before the medical profession. In the hands of the majority of general practitioners chloroform still remains the anæsthetic of choice.

Ether has for several years displaced chloroform, particularly in hospital work and in the hands of obstetricians who realize that chloroform is distinctly dangerous owing to its toxicity and its effect upon the parenchymatous organs of both mother and child. Ether is also not without danger and both it and chloroform retard labor.

In 1878, Klikowitch used nitrous-oxide in a series of operative obstetric cases and reported good results. His work, however was not followed up and the method fell into disuse. Subsequent to 1878 the employment of nitrous-oxide and oxygen in obstetrics was apparently forgotten until revived by Webster in 1905, who used nitrous-oxide and oxygen in obstetrics when other anæsthetics were contraindicated. Since then the field of its usefulness has been rapidly extended, until now it is quite

generally employed in all kinds of surgery.

Nitrous-oxide is known to be a most volatile inhalation anæsthetic, acting quickly and dissipating rapidly. Properly administered, by a trained anæsthetist, nitrous-oxide combined with oxygen is perhaps the safest anæsthetic; improperly given it becomes the most dangerous. An expert can prolong its administration indefinitely without danger to mother or child, providing a sufficient quantity of oxygen is allowed. It has been estimated that in the hands of the trained anæsthetist, the mortality from nitrous-oxide anaesthesia should be about one in five million.

It so happens that I am the first, and as far as I know, the only obstetrician and gynecologist in this community using gas-oxygen anaesthesia and analgesia and since I began its use a few months ago I have used it to the exclusion of all other anæsthetic and analgesic agents excepting the use of Panto-pon and scopolamine in the first stage of labor in certain cases.

The technic of administration is as follows. Two machines are used—a Guathemey apparatus, having an ether attachment, is kept in the Maternity department of the hospital and requires a trained assistant for its use. A smaller, portable, automatic machine is used in outside work which I use personally until time to examine or deliver, when I turn it over to a trained obstetrical nurse or even to the patient. The intermittent method is always used, employing a mixture of nitrous-oxide and air, ending if necessary, with nitrous-oxide, oxygen and ether for operative deliveries. The administration is usually begun during the latter part of first stage or during the second, being in this respect by the severity of the pains and

the condition of the patient. The operator requests the patient to tell when she feels that a contraction is beginning, he also watching for this with a hand on the fundus of the uterus. Herein lies the success or failure of the method as it is essential that the gas be given before the contraction is really appreciated as a pain. The mask is quickly applied and the patient told to take deep and rapid breaths. The number of inhalations necessary to produce anaesthesia varies with different individuals. Some will gain relief with from three to seven inhalations, while in others the gas must be given thru out the contraction. Cyanosis is to be avoided and any tendency to blueness or drooping of the eyelids indicates that too much gas is being used and that the patient is passing from anaesthesia into anaesthesia. At the end of a pain, if necessary, a few whiffs of oxygen may be given which rapidly freshens the patient.

As the end of the second stage approaches, a little more gas is given during each contraction until, during the expulsion stage, the patient is carried into obstetrical anaesthesia if necessary with the aid of ether. However, without the aid of ether, I have been able to make several forceps extractions and the gas-oxygen alone is quite sufficient to enable one to perform an episiotomy altho its repair usually requires the addition of ether. I am not sure but that the use of ether during the last few inhalations, before the actual delivery, gives the operator better control of the delivery and gives the patient absolute relief and absence of any memory of the actual birth of her baby. Ether given in this manner does not nauseate the patient and she awakens quickly.

The most pleasing and striking thing in this series of cases has been the man-

ner in which these patients, who had been complaining of pain, and in some cases very excitable, rapidly became quiet when anaesthesia was begun, remaining so throughout their labor. I believe that fear is productive of pronounced shock and exhaustion, and that fear and pain are doubly shocking. In some of these cases, therefore, with a partly dilated cervix and an exhausted patient, the outcome would certainly have been mid or high forceps with the accompanying danger to mother and child.

In one of the cases the child was born markedly cyanosed, with the cord around the neck. In this case the cord was not cut immediately and the mother was allowed to breathe pure oxygen for a few minutes as advised by Danforth which soon revived the youngster.

It is an accepted fact that asphyxia, by whatever cause produced, will cause hemolysis. It must also be accepted that any anaesthetic given the degree of producing loss of consciousness must produce certain changes in cell structure and that hemolysis may be expected after anaesthesia regardless of the agent used, but especially after the use of slowly eliminated anaesthetics improperly administered. With this information I believe that nitrous-oxide with oxygen, properly given, is less likely to produce hemolysis than ether or chloroform. The old belief that "chloroform has no bad effect upon a woman in labor" is so foolish that it is not worthy of consideration.

DeLee believes that the use of nitrous oxide for longer than three hours carries with it the danger of hemolysis, but certainly this is more true of chloroform, and as our technic improves and by carefully following the intermittent method I am sure that the length of administration of gas-oxygen can be ex-

tended. The longest time of administration in my cases was three hours and twenty minutes; the shortest, twenty minutes.

Some obstetricians object to this method of analgesia in obstetrics believing that fatal asphyxia and hemorrhagic disease is more common following its use. I believe that this objection may be met by the following. When the uterus contracts, the circulation on its walls is, for the time being normally lessened so that when the maternal blood contains the most nitrous oxide i. e. during contractions, only a small portion can reach the child and by the time the contraction ceases the blood is being freed from gas and rapidly re-oxygenated by allowing the mother to inhale pure oxygen.

Another objection, which is a poor one, is the increased cost which the patient must bear. Personally I place obstetrics and major surgery on the same plane, for obstetrics is a very special kind of major surgery, worthy of the dignity of major obstetricians. My fees for obstetric attention and surgical attention are the same. I find that it requires more skill for me to give a woman proper attention in confinement than it does to remove her appendix hence, I at least make the fees equal.

In conclusion, I may say that my experience and the experience of my associates has been very satisfactory. The result in these cases which has been of most value is the marked freedom from mental and physical exhaustion which these patients have after the use of nitrons-oxide analgesia. Their gratitude is lasting.

#### SUMMARY

1. Nitrous-oxide with oxygen and occasionally ether is a rather ideal obstetric anæsthetic.

2. Nitrous-oxide analgesia is a well

established procedure to which every woman is entitled.

3. Properly given, the gas is quickly eliminated and is practically devoid of danger to mother or child.

4. Cyanosis can and must be avoided.

5. Analgesia should not be given for longer than three hours.

6. If possible, every case of labor should take place in hospital and should have two trained attendants who are able to administer nitrous-oxide and oxygen.

Professional Building.

#### PTOMAIN POISONING

*By Arthur Lederer*

(Chem. Eng., M. D., C. P. H. Director, State Hygienic Laboratory, Morgantown, W. Va.)

Next to the expressions "cold" and "rheumatism", there is no term which is more loosely used among the laity than the term "ptomain poisoning". The term has come at present to cover a multitude of intestinal disturbances, due to the ingestion of various foods, which disturbances for the most part bear no true relation to ptomains. The following article is written with the purpose of giving the present-day conception of ptomain and food poisoning.

The word "ptomain" is derived from the classic Greek word "ptoma", which means corpse. This word as applied, since the substance classed as 'ptomains' were first discovered in purifying corpses. There are a large number of ptomains, some of which are notorious for being very strong poisons, while others are quite harmless. The ptomains are soluble substances formed by the action of certain bacteria in putrifying material containing nitrogen. Many of these substances resemble certain poisons found in the vegetable kingdom, which

have the scientific name of vegetable alkaloids.

There are but few persons who have not sometime suffered from more or less severe attacks of acute gastro-intestinal disturbances, which could be reasonably ascribed to something eaten shortly before. The most of such attacks, however, are mild and quickly overcome and it is only when the attack is serious, and affects many persons at the same time, that it attracts particular notice. According to Professor Jordan of Chicago, about 657 cases of family and group outbreaks, and 375 individual cases receive publicity in the United States in the period 1913-1915. The actual number of persons affected by food poisoning in the United States is, of course, much larger than indicated by these figures. Probably several thousand outbreaks of food poisoning in families and larger groups, effecting at least fifteen thousand to twenty thousand persons, occur in the United States in the course of a year. Cases of food poisoning occur throughout the entire year. There is no striking seasonable predominance. As ordinarily understood, food poisoning is due to the composition or to contamination of food.

The Mosaic regulations in regard to foods forbidden to the Jew were evidently designed in part to avoid occurrence of food poisoning. One of these old laws says: "Ye shall not eat anything that dieth of itself." This is a good hygienic rule to follow.

In recent times recognized instances of food poisoning have been sufficiently frequent to make the subject one of considerable practical importance, but there are undoubtedly many instances of actual food poisoning in which the casual relation of the food remains unrecognized, or even unsuspected.

Food poisoning is usually suspected at once upon the occurrence of sudden acute illness in a number of people at the same time, after they have partaken in common of some particular food or foods. The causal relation is especially evident when, as sometimes happens, a large number of people are affected in the same way, immediately after eating together at a banquet, not having been associated with each other either before or after the meal. When a smaller number of individuals is involved the connection with food may be more obscure. Acute food poisonings, involving only a few persons, probably occur very frequently in the home, but they receive little public notice unless fatal, and are often discussed as mere "errors in diet", or as "indigestion". Occasionally, an individual will show a particular sensitiveness or idiosyncrasy toward a particular wholesome food. The ingestion of eggs and cows milk may, in such a case, result in a slight rash, and even in very pronounced gastro-intestinal or nervous disturbances.

Meat, particularly imperfectly cooked meat, has been implicated so often that the term "meat poisoning" is used about as commonly as the term "ptomain poisoning". Raw or imperfectly cooked meat is the most prolific source of ptomain poisoning.

Several cases of food poisonings may be recognized according to the source of poisonous substances.

1. The substance of plants or animals may itself be naturally poisonous. A poison of this kind may be constantly present or it may be confined to certain parts, or it may occur only at particular times or seasons. Some instances of poisoning with fish, with mushrooms and potatoes belong to this class.

2. Plants and animals may feed up-

on substances not poisonous in themselves, and these substances may be poisonous to man when the plant or animal in question is consumed by him. Some poisonings with freshly killed game are considered to be in this nature.

3. Any food may contain foreign poison, added to it by intent or accidently. Tin and lead may be dissolved by the juice of canned fruits in sufficient quantities to cause poisoning. Such cases, however, if they ever occur, must be rare.

4. Animals may be infected with harmful germs, or with other parasitic organisms capable of infecting man. Tuberculosis, trichinosis and tapeworm infection may be acquired in this way.

5. Any food may serve as a carrier of disease germs such as typhoid, and in some foods such as milk these germs will multiply quite rapidly.

6. A food may undergo chemical changes due to bacteria, resulting in the production of poisonous substances in the food. This is the form of poisoning which conforms most closely to the term "ptomain poisoning" and is the one discussed in this article. The great majority of instances of food poisoning belong to this class.

It is easy to conceive how typhoid, paratyphoid and scarlet fever and diphtheria may be disseminated through foods, particularly milk, but the underlying cause for so-called ptomain poisoning is of a more complex nature. Most food poisonings are due to food derived from perfectly healthy and wholesome animals or plants which have subsequently undergone some bacterial decomposition, giving rise to poisonous products. Our knowledge of the specific causes of these poisonous changes is, however, very incomplete. A number of these organisms, such as the bacillus

botulinus and bacillus paratyphosus have been found in specific instances, but there are doubtless many organisms responsible for food poisonings which have as yet not been recognized. Bacterial growth in substances used as food is not usually injurious and may in some cases increase the palatability of food without destroying its wholesomeness. Cheese is an example of that. Little or nothing is known about the relation of visible signs of decomposition to the presence of poisonous substances, and it is at the present, impossible to say at what point in the process of decomposition a food becomes unfit to use owing to the accumulation of poisonous substances within it. There seems to be no connection between the natural repugnance to the use of a food and its unwholesomeness. There is also a possibility that other, more common, bacteria may exert an irritating effect by giving off poisonous substances. The addition of preservatives to food need not be discussed under this heading. Certain preservatives undoubtedly act harmfully by continuous use in the system, but they are ordinarily not used in quantities sufficient to bring about an acute attack of what may be called ptomain poisoning.

In the discussion of this subject, the purely bacterial infections conveyed by foods, such as tuberculosis, diphtheria scarlet fever, etc., are disregarded. The discussion deals strictly with what is commonly known as ptomain poisoning. A great variety of food is implicated.

#### MEAT AND SAUSAGE POISONING.

Sausage poisoning was first described in 1820 by Kerner, German poet and medical writer, who cited 174 cases with 71 deaths, in most instances connected with the use of smoked sausage. This form of poisoning is also called botulism, derived from the Latin word "botulus",

meaning sausage. These infections differ distinctly from paratyphoid infections which are also likely to be conveyed by sausages. Quite a number of instances of botulism have been recorded in this country, and traced to ham, beans and other foods, so that the name sausage-poisoning is hardly appropriate any longer. In true cases of botulism, the nervous symptoms predominate, and there may be only a slight or no abdominal symptoms. The interval between eating the guilty food and the onset of the symptoms usually is from twelve to forty-eight hours, but it may be less. The poison is produced by a highly resistant bacillus which does not grow in the human body, therefore true botulism is an intoxication and not an infection. Practically all cases of botulism have been caused by food which has been given some sort of preliminary treatment, such as smoking, pickling or canning then allowed to stand for a time, and eaten without cooking. Such poisonous food may be natural in appearance, taste and smell. It seems that meats and vegetables prepared in the home are more likely to give rise to botulism than those prepared in large canning factories, in which steam under pressure is used.

The flesh of a healthy animal is ordinarily free from bacteria at the time of slaughter, and decomposition begins at the surface of the meat, gradually extending inward. The flesh of diseased animals is more liable to undergo early putrefaction and poisonous changes than that derived from healthy animals. Hashed meat is especially apt to decompose because the bacteria have become well distributed throughout the mass. Minced chicken and chicken pie appear to be very frequent sources of acute poisoning in the United States and epi-

demics of sausage poisoning have repeatedly occurred. The organisms which are responsible produce powerful poisons which are not readily destroyed by boiling and therefore may remain in the food unless the cooking is thorough.

The symptoms of meat poisoning except those caused by the bacillus botulinus are usually vomiting, cramps and diarrhea. In poisoning caused by the bacillus botulinus, the nervous symptoms predominate, and the death rate may be as high as 40 per cent.

Thorough cooking eliminates the danger of meat poisoning due to bacteria. It must not be forgotten, however, that meat after it has been cooked and allowed to stand may be infected.

Many forms of meat poisoning have been observed. Some meats undergo changes that can be detected by ordinary means, while in still others, putrefactive changes are not apparent. The poisons vary in nature. The powerful ptomaines, cadaverin and putrescine, have been detected in some cases. Almost every kind and form of meat foods have caused poisoning at one time or another.

In the great majority of typical cases of ptomaine poisoning it has been found that bacilli are responsible. The so-called paratyphoid bacillus in particular has been found to be the cause. More such outbreaks were reported abroad than here, probably for the reason that no adequate investigation of food poisoning cases is generally carried out in American communities.

The majority of meat poisoning outbreaks that have been studied in recent years have been traceable to bacteria and not to ptomaines. In the opinion of some investigators the formation of poison by the paratyphoid group of bacteria is responsible for certain outbreaks, and also for some of the violent symptoms.

Cooking destroys these poisons, and it is for this reason that cooked foods have proved distinctly less liable to cause ptomain poisoning. Just how prevalent the paratyphoid group is in nature is a point yet to be determined. In the United States several instances of botulism are on record. Very little is known regarding the origin and distribution of the responsible bacillus. So far as can be learned the meat that has caused botulism has always come from perfectly sound animals.

#### FISH POISONING.

Fish poisonous is due to poisons natural to the fish, and also to poisonous decomposition products. In certain Japanese fish the roe is poisonous, and in other fish certain glands are poisonous during the spawning season. Bacterial poisons are likely to be formed in any kind of fish. Cases of this kind have resulted from eating spoiled canned salmon and sardines. It is known that some cool-water fish are poisonous. The flesh of the Greenland shark possesses poisonous qualities for dogs. The flesh or roe of the sturgeon, pike and other fish is also stated to be poisonous during the spawning season. The poison of the Japanese fish, fugu, produces cholera-like symptoms and is not destroyed by boiling. In Russia and Germany there are certain fish which, if eaten raw, may produce disease, but when thoroughly cooked are harmless. The cause is probably found in a bacterial disease of the fish. Ptomain poisoning, due to the poison given off by bacteria in fish meat is not uncommon.

Poisoning with shell fish is well recognized and particularly frequent during the warm season. Shell fish may carry injurious germs or they may be poisonous because of the decomposition which

has taken place after removal from the water.

There are three kinds of mussel poisonings recognized, each of which exhibits different symptoms. Poisonous substances have been detected in mussels by various investigators. Shell fish taken from filthy water are apt to be poisonous. Fresh shell fish that have been taken from clean water and have been washed with clean water, are generally safe. Kept at summer temperature, whether cooked or not, it is unfit for use.

#### CHEESE, MILK AND ICE CREAM POISONING.

Cheese poisoning was already known in North Germany in the Sixteenth Century. During the third quarter of the Eighteenth Century, this kind of poisoning was so common that several of the German states investigated the subject, and legislative enactments were passed in consequence. For a long time the belief was prevalent that the cheese acquired an impregnation from copper vessels used in the dairies, and accordingly, some states prohibited the use of copper for such purposes. The opinion was not borne out by chemical analysis. Later investigation ascribed the poisonous properties to lead, zinc, and mercury. The real cause was not definitely established until the latter half of the Nineteenth Century. In the years 1883 and 1884 there were reported to the Michigan State Board of Health about 300 cases of cheese poisoning. Professor Vaughan who investigated the subject was able to isolate a substance which he considered the real cause of the poisoning. Various observers who have followed him since have been able to separate various poisonous substances. They all admitted, however, that these poisons were the result of bacterial activity. As a matter of fact, quite a number were successful in detecting the organisms re-



sponsible for the formation of the poison. As a rule, the symptoms of cheese poisoning are of a severe character. Six hours may elapse before the symptoms begin to appear. This depends upon whether the harmful bacillus has liberated its poisons or not and if so to what extent. The symptoms may persist for several days and even for weeks. Many of the cheeses causing poisoning are seemingly in excellent condition.

In the summer, milk is undoubtedly a great factor in causing disease and death to infants. The poisonous action is largely due to bacterial changes in the milk. Extraordinary precautions are therefore essential in the production and care of milk to be used as food for children, particularly during the summer. Strict cleanliness, proper refrigeration, and pasteurization of milk of uncertain character may usually be relied upon to prevent milk poisoning.

Numerous diseases are transmitted through the agencies of milk, the cow herself being diseased or subsequent infection of the milk taking place. Ptomain poisoning due to milk may be the result of toxins formed in the milk by various organisms. The so-called tyrotoxicon is one of the poisonous substances which has been detected in milk, cream-puffs, ice cream and cheese. Sour milk or milk which is about to turn may cause gastric or intestinal disturbances in invalids and children. As far back as 1885, a poisonous substance was found in the milk, responsible for an outbreak. The milk was obtained from a dairy in which milking was done at midnight and at noon. The noon milk was the one that was poisonous. While still warm, it was placed in cans and delivered to the consumers in the heat of the day. The heat permitted the growth of bacteria which resulted in the forma-

tion of poisonous substances. There have been numerous other instances where milk has caused poisoning. On the whole, however, severe poisoning of adults with milk, ice cream or cheese is relatively infrequent.

Poisonous substances taken in with the food of the animal or administered to the cow in the form of remedies may appear in the milk and cause symptoms in the consumer. This, however, occurs rarely.

Vanilla ice cream and vanilla puddings have often been implicated, though some investigators have not hesitated to ascribe the poisonous quality to the vanilla itself. There is no good evidence that this is the case.

#### POISONOUS PLANTS.

Poisoning in an acute form has followed the use of sprouting and partly decomposed potatoes, and also various canned vegetables. Canned goods, particularly beans, are also subject to changes which may result in ptomain poisoning. The poison found is substantially the same as that found in sausages.

There are known over 16,000 leaf-bearing plants of which nearly five hundred have been alleged to be poisonous. Some of these are relatively rare, however. The actual number of poisonous plants, likely to be unintentionally eaten by human beings is not large. Investigators for the New York City Health Department have found that certain cases of alleged ptomain poisoning were really due to "sour-grass soup". This soup is prepared from the leaves of a species of sorrel, rich in oxalic acid. In one restaurant it was found that the soup contained as much as ten grains of oxalic acid per pint.

#### MUSHROOM POISONING.

The first historic instance of mushroom

poisoning occurred in the family of the Greek poet, Euripides, who lost in one day wife, daughter and two sons. Mushrooms are known to contain at least four classes of poisons. Poisonous mushrooms are often mistaken for edible mushrooms with serious results. If there is a ring about the stalk and the mushroom peels easily, and has pink gills, it is said to be non-poisonous. This rule, however, is not dependable. The number of species of poisonous mushrooms which are capable of causing death is not very great.

In the vicinity of New York City, there were twenty-two deaths from mushroom poisoning in one ten-day period in 1911, following heavy rains. The deadly Amanita, or death-cup, is probably responsible for the majority of cases of mushroom poisoning. It is estimated that from twelve to fifteen deaths occur annually in this country from this species alone. The poisons which have been detected in many species of poisonous mushrooms are muscarin and amanitin.

#### POTATO POISONING.

It has long been known that potatoes contain normally a very small amount of poison, called solamin, but it is only quite recently that it has been discovered that under certain circumstances the amount of poison may be sufficient to cause great disturbance. This is due to at least two bacteria which have been found. The most extensive outbreak of potato poisoning recorded occurred in 1899 in a German regiment, fifty-six members of which after eating sprouted potatoes, were seized with chills, fever, headache, vomiting, diarrhea and colic.

The majority of outbreaks of ptomain poisoning must be attributed to the presence of pathogenic bacteria or to poisons formed by the bacteria in animal and plant tissue.

The most obvious and probably the most important method of preventing infection with bacteria is the adoption of a system of inspection, which will exclude from the market, as far as possible, meat from infected animals. Thorough cooking also greatly diminishes the likelihood of trouble.

To *recapitulate* the poisonous substances in foods are for the most part of the same nature as the poisons of harmful bacteria. Ptomain undoubtedly occur at times in poisonous foods, but they are not now considered of so much importance in food poisons as formerly. In the majority of samples of poisonous foods, it has been impossible to detect ptomain and the more popular expression "ptomain poisoning" should give way to the more correct, even though general expression of food poisoning. In a considerable proportion of cases of alleged ptomain poisoning there is a large measure of uncertainty about the real source of trouble. The consensus of opinion has been in the direction of an increased recognition of the share of certain bacteria, especially those of the paratyphoid group. There is an important residue of unexplained food poisoning that needs still further investigation. The entire subject has been very excellently written up by Professor Jordan of the Chicago University in a recent publication. A very comprehensive investigation of the subject of ptomain poisoning is being carried on at present at the Harvard Medical School, under the direction of Professor Milton J. Rosenau. The investigation will consume several years and is certain to clear up a great many points which, in the light of our present knowledge, cannot adequately be explained.

In the meantime let us remember that we can do much to prevent ptomain

poisoning by following two simple rules:

1. Eat only food which has passed responsible inspection and comes from clean sources, and appears wholesome.

2. Heat all food thoroughly which can be heated before consuming without losing its identity as an appetizing staple food article.

#### MEDICAL PREPAREDNESS IN THE GREAT DRIVE FOR DEMOCRACY.

*By Joseph Colt Bloodgood,*

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These remarks are based upon my own observations.

These observations represent an intensive study since August 1914. The study consists of a careful reading of the literature, personal correspondence with medical men who have had experience at the front, with members of the Medical Corps and the Medical Reserve Corps of the Army, and, in addition, a very large correspondence with physicians and surgeons, chiefly in the Southern States, in regard to the Medical Reserve Corps.

The problem of medical preparedness may be divided into three parts: (1) the Medical Reserve Corps; (2) the general activities of the National Red Cross, and (3) the special activities of the Red Cross in securing the required number of trained women nurses.

#### THE MEDICAL RESERVE CORPS.

Granting that we have a sufficient number in the Medical Reserve Corps for the needs of the present Army of 1,000,000 men, we know that this number is deficient in medical men under the age of thirty-five and deficient in men with certain special training, for example, orthopedic surgeons.

In addition to this, the probabilities are that the medical profession of this country must furnish its quota for the second and perhaps third million men.

Granting that 10,000 medical men is the quota for 1,000,000 men on the firing line, this number of doctors will have to be increased as the reserves are called upon to take the places of the casualty lists. In addition to this we know that our allies—England, France, Italy, and Russia—will require from us a large number of trained physicians and surgeons.

It is my own estimate that if we desire to meet the medical situation with efficiency, we should prepare ourselves to select from the medical profession in the United States at least 45,000.

#### THE RED CROSS.

It is very important for the public in this country and the general medical profession to know that voluntary aid in time of war and in any great National emergency or catastrophe is essential.

The one and the best organization for the superintendance of all the activities which have to do with voluntary aid is and should be the Red Cross.

The Red Cross should be able to get its contributions from those who have an income not only sufficient for the necessities of their families, but for luxuries. Contributions for the Red Cross should represent the luxuries abstained from during this great emergency.

There is still another group who should contribute. The majority of the men and women who volunteer their services to the country, and who are commissioned with a definite rank and definite pay, give their services for a much smaller financial return than they had been previously earning in civil life.

Why should not those whose age,

physical defects, or lack of training, prevent them from serving the country, make the same financial contributions as those who enter the service?

The work of the Red Cross should in a large measure represent the labor of those who in time of peace have idle hours.

No doubt both men and women employed in the great industries concerned with munitions of war and the care of the civil populations will wish to help with part of their earnings and wish to give labor during their rest periods.

However, it is of the greatest importance that this class of patriotic workers should be protected. They need their rest periods as fatigue will make them stale for the increased efficiency necessary in the demands of this National War.

There are many smaller organizations raising money and stimulating the making of surgical and other supplies, but these organizations should realize the necessity for using the Red Cross for the one channel through which their money and supplies should be transported and distributed.

#### GRADUATE NURSES.

It would be as much of a mistake to send untrained women to our soldiers in France as to enlist untrained men in the Medical Reserve Corps. Unfortunately the voluntary nurses' aid or the partially trained female nurse seems very anxious to be allowed to go to France to help in the care of wounded there, but they do not show the same eagerness to assist in the nursing problems at home.

As it is possible to get a sufficient number of trained nurses for the Army hospitals in France, it will be unwise and unnecessary to send insufficiently trained women.

There is a large committee of experts

considering this difficult problem, but there are few facts that the public and the profession now should know.

Nurses trained in public health work should not be taken for the Army unless proper and efficient substitutes can be found for them, and except in a few instances this seems doubtful. The efficiency of the Army depends as much upon the protection and preservation of the health of the Nation as upon the protection and preservation of the soldier.

As the scarcity of trained nurses increases, the public should not employ or retain them in private homes. Individuals sufficiently ill to require the services of a trained nurse should go into a hospital where one or two nurses can care for a number of individuals as well as for one individual in a private home.

In some cities where there are a number of smaller hospitals the possibilities of closing one and enlarging another should receive careful consideration. Such a measure would undoubtedly release a number of trained nurses for Army work.

Women who have been trained as nurses, but who have left this occupation for one reason or another should send their names to headquarters of the National Red Cross in Washington, as they might be able to act as substitutes in home hospitals, and so release nurses for duty in France.

Young women of an age over twenty-five and with a good education, especially those with a college education, should volunteer to enter training schools for nurses. Women of this quality can be more rapidly trained and can be helpful to the Nation during this emergency, and can give up this work after the emergency is over.

#### THE MEDICAL PROBLEM.

Expert opinion states that the winning

of this war will depend as much upon the proper care of the soldiers by the Medical Department as upon any other factor.

The care of the soldiers begins with the physical examination, which should be so conducted by a sufficient number of doctors and a sufficient number of experts as to send to France only the young men physically fit.

If our present knowledge of preventive medicine and sanitation is given its opportunity, the soldier who goes to the front should suffer no disability, except from a bullet.

If the organization of the activities of the Medical Department from the firing line to the home hospital is given the means and the men, the wastage from gunshot should be reduced to a minimum.

There are many different problems in the treatment of a wound in war. The first, is to institute the expert treatment in as short a period of time as possible after the infliction of the wound.

This necessitates a larger number of stretcher bearers and a larger number of young men, well-trained surgeons with the troops and in the first dressing stations. The new problems of transportation and the treatment of wounded during the intensity of an action are by no means settled.

The hospitals provided with its expert staff of operators and assistants and trained nurses must be moved nearer the front as close as it is possible to find protection. This problem is easier when our Army advances and does not retreat.

At the present time the Carrel-Dakin method of treatment of wounds seems to be the end of choice, and the sooner this is instituted the better. The surgeons of this country must be taught this method and must be trained in all the

new experiences with infected war wounds.

There has already been one great contribution to the antitoxin treatment of infected gunshot wounds. Dr. Bull, of the Rockefeller Institute, has apparently discovered the antitoxin for the gas bacillus infection, not only a protective serum, but a curative one.

Next to the local treatment of the wound and the transportation of the wounded, comes the primary fixation of the extremity during the transportation and lately the proper fixation of the wounded limb during the healing of the wound. This, to a large extent, is a purely orthopedic problem, and at the present time there is a great deficiency in this country of trained orthopedic surgeons.

These facts demonstrate that at the present time the precision of wound treatment, transportation and orthopedic apparatus have by no means reached a position equal to that of preventive medicine and sanitation.

There is a large field for the surgical bacteriologist to follow the lead of Bull and discover, if possible more protective and curative sera.

There is also a large opportunity for the chemical investigator to continue along the lines of Carrel and Dakin and to discover, if possible, a more effective chemo-therapeutic agent for the continuous antiseptic treatment of wounds, for which at the present we have no curative and protective serum.

There is a large opportunity for experimentation and investigation of the practical problems as to when wound should be operated upon, as to the technique of this operation in the different regions, and as to the methods of drainage.

During the healing of the wound, es-

pecially on the extremities, there is ample opportunity for improvement and simplification in the methods of fixation.

The orthopedic work has become a first-line problem, and not, as many surgeons in this country formerly considered a third-line, or home problem.

It has been reported that some 300 soldiers were returned to London as hopeless cripples. Trained orthopedic surgeons in the third line were able to return 225 of these men to the front within one year.

It is easy to imagine that precious time would have been saved and the number would have been increased if this orthopedic treatment had been instituted in the first-line hospital by specially trained men.

It seems to be the opinion of the authorities in this country that no wounded soldier should be returned home until the most expert treatment in France has demonstrated that nothing more can be done to restore him to further duty. But even in this group the beginnings of instruction and re-education will have to take place with the beginning of his treatment of reconstruction.

For humanity's sake our soldiers must have this effectual medico-surgical care. In addition, it is also an economical problem. It will reduce the cost of the war. Apparently the most expensive thing in this war is the well trained soldier. But far more important than this consideration is the winning of the great drive for democracy, and this practically depends upon reducing the wastage to a minimum. This is largely in the hands of the Medical Department.

When the medical profession of this country appreciates this necessity, they will hear, understand, and answer the message which calls them to offer its ser-

vices to the country at home or with the Army.

The appreciation of the medical problems is an indication that you have heard the message, and the only answer is a voluntary draft. The medical profession is a special class, but it has not special privileges, only responsibilities.

A voluntary draft depends upon the proper appreciation by every member of the medical profession of his individual responsibility.

Individual responsibility means universal military training. The latter should be interpreted as a condition in which to meet the necessity of the Nation. Every individual, man or woman, in the country offers to do his or her part, and train for this part.

Efficiency of the Army in France must not be handi-capped by the inefficiency of those at home.

#### MEDICAL MEN UNDER THE AGE OF THIRTY-ONE.

Some of these physicians have been drafted and apparently granted the same exemptions as any other individuals. The probabilities are that these men will ultimately be turned over to the Medical Department of the Army. Every private soldier in the United States Army has a right to request an examination for commission. If he passes this examination he must be commissioned as an officer, if there is a vacancy. Medical men, therefore, if drafted, can request this examination, and if they pass it, there is no doubt as to the vacancy.

What is the individual responsibility of a graduate in medicine at the draft age, not drafted, or released on account of some proper exemption? From my study of the question it is the same, and it has no relation whatever to the draft. The Medical Department of the Army needs these young men. Their entering

the Medical Corps, should not depend upon whether they are drafted or not, nor whether, if drafted, they are exempt for some reason or other.

**The Hospital Internes.**—The majority of physicians under thirty-one make up our hospital internes, and all are agreed that it will be impossible to conduct the civic hospitals without the help of these men. How, then, should this problem be handed for the best interests of the hospital and of the Army?

Internes who have served one year or more in a hospital and who desires to enter the Medical Corps of the Army, Navy or Public Health Service should be released at once. The needs of those departments of the Government are urgent, and for the individual this is a life career and he should enter it the moment he has the proper requirements.

Internes who have served one year or more in a hospital who do not enter the Medical Corps of the Army, Navy or Public Health Service should be released for the Medical Reserve Corps of one of these departments, if it is possible to get a less experienced graduate for a substitute.

There are many young physicians in this country who began to practice immediately after graduation, either because they were financially unable to take a hospital year or because they could not find a vacancy, and perhaps a few because they could not pass the examination. These young physicians will undoubtedly be handicapped in the practice of medicine, for the rest of their lives. Here is an opportunity to remedy this defect and help both the individual and the community. Get hold of these men, substitute them in the hospitals for men who have one or more years experience, and thus release for the Medical Reserve Corps a group of men almost

indispensable for medicine and surgery in war.

As soon as these men have had their hospital year they can enter the Medical Reserve Corps.

Every civic hospital should reduce the number of its internes to the possible minimum. Those hospitals in cities associated with medical schools take some fourth year students and substitute them for internes physically fit to go into the Medical Reserve Corps. As hospital interns finish their one year's experience, only those physically unfit for the Army should be retained by the hospital for the position of Senior Interne. All the others should be allowed to enter the Medical Corps of the Medical Reserve Corps. No young physician with this training physically fit should waive this duty to his country.

If it is decided not to take women physicians into the Medical Reserve Corps, we should then offer to these young women internships in our hospitals and so release the men.

My correspondence demonstrates that what I have just written is possible and simply a question as to whether a majority of my colleagues will consider it feasible.

MEDICAL MEN BETWEEN THIRTY-ONE AND

THIRTY-FIVE YEARS OF AGE.

The Financial Obligations and Dependents.

My own investigation of the situation seems clearly to show that a large number of men at this age who are physically fit and specially needed on account of their training, do not volunteer their services because they have dependents or debts. Apparently the average well trained young physician starts in practice with no balance in bank, or even with debts. He soon learns that he has an increasing earning capacity, and he finds

it necessary, in order to improve himself and his earning capacity, to increase his overhead expenses. In view of the justifiable hope that his income will increase, he does not himself practice economy nor encourage his growing family to do so—a situation, therefore, entirely different from a similar educated individual on a salary.

In my opinion that this forms a very large group of physicians.

To meet successfully the medical problem of the war, the probabilities are we shall require more men in this group than any other. Their youth makes them especially qualified for the physical strain in the zones of advance. Many of them are specialists in the various lines of medicine and surgery.

At the present time it would appear that the "high price of doctors" might interfere very seriously with the work of the Medical Department of the Army. How shall this problem be met? There is no doubt that if the rank of the Medical Reserve Corps is increased the Surgeon General will be able to offer this group a larger number of captaincies and majorities. However, I am confident from my study that this will not settle the problem. These men must make a financial sacrifice. Their families must live more economically. Some provision must be made to help them with their debts.

Practically every doctor who goes with the Army makes a financial sacrifice. Every one who remains at home, who is not on a salary, will undoubtedly have an increased income. Some thought should be given to the proper adjustment of this purely financial problem. If it can be adjusted, it will release for the Army the men we need most.

At the present time the average age of medical men in training at Ft. Oglethorpe is over forty, a little younger in Ft. Ben-

jamin Harrison. It is also quite true that the majority of reserve officers sent to England and France are aged less than thirty-five, and that a number in this younger group are retained in base hospitals.

Nevertheless and in spite of this, the chief reason given by a young well-trained physician for not volunteering his services is financial. I have studied this in detail in the group of Johns Hopkins graduates in the Southern States. I hope shortly to publish this statistical investigation.

I have suggested to these men to try to form a partnership, so that if they go, the increased earnings of the partner left at home will meet the financial obligations of both. In a few instances this partnership has been satisfactorily arranged, and splendidly trained and physically fit men have entered the Corps. Their practice is being taken care of either by a man aged over fifty-five or one physically unfit.

#### PUBLIC HEALTH SERVICE.

No one seems to disagree that the men in public health work should not be disturbed. In fact, it would seem feasible to urge upon the different states that they greatly increase all public health appropriations, and if necessary increase the personnel. If the public health officers in this country had sufficient men and means, the reduction in the number of communicable diseases in this country would be so great that a number of physicians in practice would be released for Army work, because of reduction of sickness in the civil population. Dr. Williams, the head of the State Board of Health of West Virginia, called attention to this in relation to the scare from infantile paralysis.

The Medical Department of the Army, Navy and Public Health Service of the



Government will undoubtedly in the future employ the sanitary experts of the state and county more and more in the sanitation of the new established training camps.

If it is found that the state and county sanitary departments under the direction of officers of the Army, Navy, and Public Health Service, can properly protect the soldiers in these camps, medical men of the Reserve Corps will be released for sanitary work in France.

I would suggest to the public health service of the states and counties to select physicians physically unfit for work in France for sanitary duty at home, of course provided that their training is equal to the requirements.

#### MEDICAL SCHOOLS.

No one for a moment would agree that any teacher essential to instruction in the medical schools should be allowed to handicap its faculties by entering the Medical Reserve Corps for service in France, and apparently the medical schools in this country have given from their faculties up to the danger point.

The question to be considered is: Can more fourth-year men be sent with the base hospitals and receive their teaching there, as has been done by the Johns Hopkins Unit, and thus relieve the home group of teachers?

When training camps are near medical schools, should we not consider the employment of part of the time of teachers and experts in the community for the medical work in the training camp, and so relieve full-time men for service in France? I know that many dislike at the present time to consider anything but full-time reserve officers. But when the demand for 45,000 comes all of these possibilities will have to be considered in the readjustment and redistribution of the medical profession in order to

obtain the greatest efficiency in this drive for democracy.

At the present moment it is the duty of every graduate in medicine to consider his individual responsibility: First find out whether he is physically fit. If he is, decide whether he can be spared from the community. If he happens to be in the Public Health Service, or a teacher in a medical school, or the only physician in the rural district, there is no question as to his exemption from service in France.

If, however, he bases his exemption upon financial considerations, or dependents, he should make every effort by every possible means to so adjust his affairs that he can give himself to the service of his country needed because of his age and special training, and at the same time, through the co-operation and help of his colleagues, protect his family and provide for his debts.

### Miscellaneous Announcements and Communications

Huntington, W. Va. Dec. 21, 1917.  
Dr. James R. Bloss, Huntington, W. Va  
Dear Dr. Bloss:—

I have appointed a committee for the purpose of taking up with the State Compensation Commissioner the matter of raising his schedule fees. Also to take up such grievances and misunderstandings that our members may have now or will have in the future in their dealings with the office of the State Compensation Commissioner. The committee consists of Dr. W. W. Golden, Chairman, Elkins; Dr. S. R. Holroyd, Athens; Dr. J. Howard Anderson, Marytown; Dr. Chester R. Ogden, Clarksburg; and Dr. Geo. A. MacQueen, Charleston.

Members who have suggestions or grievances should at once write to the Chairman, or any member of this com-

mittee. In filing a grievance it is indispensable that all the facts should be clearly stated and all correspondence submitted. The committee's work will be facilitated, if members will make use of typewriters in their correspondence.

Respectfully,

J. E. RADER.

Pres. W. Va. State Medical Ass'n.

—o—

Dec. 21, 1917.

The Pacific Medical Journal, the oldest journal on the Pacific coast which has just completed its 40th volume, has been acquired by Dr. William J. Robinson and will be consolidated with The American Journal of Urology and Sexology. The combined journal will continue under the editorship of Dr. Robinson and will be published from 12 Mount Morris Park, West, New York City.

The Pacific Medical Journal.

The American Journal of Urology and Sexology.

—o—

November 9, 1917.

Dr. Jas. R. Bloss, Huntington, W. Va.

Dear Doctor:—

I wrote you before I left U. S. A. to send my Journal in care of Col. Wm. J. L. Lyster, Adostril House, London, Eng. so far I have received none.

Please forward it, beginning with September No. to my permanent address as follows:

1st Lt. Thos. J. McBee,

care of American Express Co.,

6 Haymarket, London, S. W.

England.

I have a pleasant assignment with British Forces, at present, and have charge of one surgical block of large Military Hospital. Would be glad to write you some of the interesting thing if I thought it would be news and pass censors.

Was surprised not to find but one

other West Virginian at army medical school.

Very truly,

THOS. JUD. McBEE.

—o—

Dr. James R. Bloss, November 27, 1917.

West Virginia Medical Journal,

Dear Dr. Bloss:—Huntington, West Va.

You, of course, have heard of the success which the Special Committee appointed at the Fairmont meeting had in interviewing the Compensation Commissioner regarding the raising of rates. We are to have \$16.00 per week instead of \$12.00 per week for caring for the Compensation cases, more nearly in line with the actual cost of the thing.

The Commissioner rules that we may charge not in excess of \$16.00 per week for all accident cases in which the injury was received November 1 or later.

I wish you would put in a little article of encouragement for the Hospital Association, explaining that the officers are planning how they may be of the greatest assistance to the Hospitals of the State not only at the Annual Meeting, but to keep in touch with all of the hospitals throughout the year, and help by the sending out of the latest knowledge on any point which may be of benefit.

I am having multigraphed a letter which Dr. McMillan is sending to all the Hospital executives of the State, urging upon them the securing of membership in the State Hospital Association, so that the officers may feel that the entire Hospital world of the State is behind them and at least ready to discuss whatever problems they have.

We would be glad if you would invite suggestions from the various executives and physicians as to the greatest needs of the hospitals of the State, that these needs may be discussed to the mutual advantage of us all.

Cordially yours,  
PLINY O. CLARK, Sec'y-Treas.

## IMPORTANT INFORMATION.

Editors: The following is offered for publication without cost to the government and for immediate release. I think you will agree that its news value warrants its publication.

S. A. HAYS, Solicitor.

Parkersburg, W. Va.

Dec. 11, 1917.

You won't have to figure out your own income tax all by yourself hereafter. The government is going to send out men to help you. It will be up to you to hunt up these men, who will be sent into every county seat town, and some other towns besides, to meet the people. Postmasters, bankers and newspapers will be able to tell you when the government's income tax man will be around, and where to find him. He will answer your questions, swear you to the return, take your money and remove the wrinkles from your brow. Return of income for 1917 must be made between January 1 and Mar. 1, 1918.

"The Government recognizes", Collector of Internal Revenue, S. A. Hays, said today, "that many persons experience a good deal of difficulty in filling out income tax forms. It recognizes too, that taxpayers resident at points where collector's offices are not easily accessible find it hard to get proper instruction in the law. Next year, when every married person living with wife or husband and having a net income of \$2,000, and every unmarried person not the head of a family and having a net income of \$1,000 for the year 1917, must make return of income on the form prescribed, there will be hundreds in every community seeking light on the law, and help in executing their returns. My own and every other collection district

in the nation will be divided into districts, with the county as the unit, and a government officer informed in the income tax assigned to each district. He will spend hardly less than a week in each county, and in some counties a longer time, very likely in the courthouse at the county seat town. In cities where there are collector's branch offices, he will be there, and in other cities possibly at the city hall. My office will in due time advise postmasters and bankers and send out notices to the newspapers stating when the officer will be in each county. It will be unnecessary for prospective taxpayers to ask my office for forms on which to make returns. The officer who visits their county will have them.

"It may be stated as a matter of general information that 'net income' is remainder after subtracting expenses from gross income, personal, family, or living expense is not expense in the meaning of the law, the exemption being allowed to cover such expenses.

The new exemptions of \$1,000 and \$2,000 will add tens of thousands to the number of income taxpayers in this district, inasmuch as practically every farmer, merchant, tradesman, professional man and salary workers and a great many wage workers will be required to make return and pay tax.

The law makes it the duty of the taxpayer to seek out the collector. Many people assume that if an income tax form is not sent, or a government officer does not call, they are relieved from making report. This is decidedly in error. It is the other way round. The taxpayer has to go to the government and if he doesn't within the time prescribed, he is a violator of the law, and the government will go to him with its penalties."

# The West Virginia Medical Journal

JAS. R. BLOSS, M. D., EDITOR  
C. R. ENSLOW, M. D.  
J. E. RADER, M. D., ASSISTANT EDITORS

Huntington, W. Va., January, 1918.

THE JOURNAL issued on the first of each month.

Subscription - - - - - \$1.50 per year  
Single Copies - - - - - 20 Cents

All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc. are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

### CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

### ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

### REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: United Woolen Mills Building, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

### NEW YEAR.

In the years gone by we have all, at this season, taken a more or less complete personal inventory of ourselves as men and as physicians. All of us have looked into our hearts and made resolutions as to our individual purposes for the coming year of our lives.

Many of our good resolutions have merely furnished additional paving material for that place we wish to avoid in the future life. Still each one of us is better, I am sure, for this stoek-taking. We do better work and do more good among our fellow men.

Today, as never before, should we

## OFFICERS OF THE STATE ASSOCIATION

- PRESIDENT—S. R. Holroyd, Atheus, W. Va.
- FIRST VICE-PRESIDENT—Chas. O'Grady, Charleston, W. Va.
- SECOND VICE-PRESIDENT—W. J. Judy, Belleville, W. Va.
- THIRD VICE-PRESIDENT—C. W. Waddell, Fairmont, W. Va.
- SECRETARY—J. Howard Anderson, Marytown, W. Va.
- TREASURER—H. G. Nicholson, Charleston, W. Va.
- DELEGATES TO A. M. A.—F. LeMoyné Hupp, Wheeling, W. Va.
- ALTERNATE—Heuri P. Linz, Wheeling, W. Va.
- CHAIRMAN OF THE COUNCIL—G. D. Jeffers, Parkersburg, W. Va.

## COUNCIL

- FIRST DISTRICT—J. W. McDonald, Fairmont, W. Va., one-year term; H. R. Johnson, Fairmont, W. Va., two-year term.
- SECOND DISTRICT—C. H. Maxwell, Morgantown, W. Va., one-year term; T. K. Oates, Martinsburg, W. Va., two-year term.
- THIRD DISTRICT—M. T. Morrison, Sutton, W. Va., one-year term; C. R. Ogden, Clarksburg, W. Va., two-year term.
- FOURTH DISTRICT—R. H. Pepper, Huntington, W. Va., one-year term; G. D. Jeffers, Parkersburg, W. Va., two-year term.
- FIFTH DISTRICT—W. H. St. Clair, Bluefield, W. Va., one-year term; J. E. McDonald, Logan, W. Va., two-year term.
- SIXTH DISTRICT—P. A. Haley, Charleston, W. Va., one-year term; H. L. Goodman, Charleston, W. Va., two-year term.

commune with our selves. The greatest crisis of our national life faces us. To physicians will fall great tasks. Let us each think sacredly of our duty, form our plans and, as physicians have always done and always will do, give far more than we receive.

I wish you each a prosperous New Year and a happy one in the consciousness of work well done.

### DUES FOR 1918.

The attention of our membership is called to the importance of making this the first professional New Year resolu-

tion to carry out. Do not put it off but **DO IT NOW!**

Each year the state Secretary has great trouble in keeping the lists of members correct. The mailing list of your Journal is compiled from lists received from him. A number of instances of complaint about not receiving the Journal have shown it was because the dues were not paid. In a few cases dues had been paid, but the County Secretary had made no return to the State Secretary.

Do not forget also the increased dues for the State Association for the fund to be established to help physicians needing assistance. I am sure that each member will be glad to pay this additional amount, to aid in such a worthy purpose.

Again please pay promptly.

Under the communications will be found one from Dr. J. E. Rader giving the personnel of the committee appointed to confer with the Workmen's Compensation concerning the fees paid for services rendered to persons treated who are under the regulations of that act.

The members of the association should get in touch with this committee and bring before it all complaints as to the unfair allowance for charge et cetera. It may be that some do not feel that any changes should be made. Let them too, be heard from. But by all means place everything possible before this body at the earliest moment. If these gentlemen are to meet the State Compensation Department they must know just what things to present for consideration.

Any communications on this subject will be published in the issue following their reception by the Editor.

HISTORICAL NUMBER OF THE KENTUCKY  
MEDICAL JOURNAL.

We must express to the Editor of our sister Journal, our appreciation of the Historical number, recently received. The great amount of labor necessary for the production of such an issue cannot be realized by the members of the profession. Truly it has been a great treat to go over this magazine.

The Editor wishes to extend his congratulations to his confrere.

#### EVERY DOCTOR IN THE MEDICAL RESERVE CORPS.

What an ideal situation it would be, if every doctor in the United States who is mentally, physically and morally fit, was in this Corps.

The time is coming, and in the immediate future, when the Medical Reserve Corps of the Army must be immensely augmented, and so as to enable the Surgeon General to have at his command for immediate assignment, as conditions demand, a sufficient number of trained medical officers, let us take the above thought seriously.

We all know, from past history, the conserving value of an efficient medical corps, and this means number, as well as training.

A statement made by one in authority in the Surgeon General's Office, "that our fighting forces would be disseminated by sickness and casualties in six months, were it not for an efficient army Medical Corps," clearly emphasizes the importance of every doctor in the United States, meeting the requirements above referred to, accepting a commission in the Medical Reserve Corps of the United States Army.

The struggle in which we are now engaged, and for which we are preparing to take such a prominent part, de-

pende for its success as much upon the medical profession, as it does upon our combatant forces, and while we do not know that any such intention as herein suggested is in the mind of the Surgeon General, it would at least give him the necessary Corps of medical officers, upon which to draw, and thus serve the best interests of our country, and the best interests of the medical officer serving.

## Society Proceedings

The Mercer Medical Society held a Medical Clinic in the Law & Commerce Building November 22nd beginning at 3 P. M.

There were a number of interesting cases exhibited. The two most interesting cases presented, first by Dr. Frank Pyott of Tip Top; a girl of fifteen years of age in which no definite diagnosis was reached. This girl has had severe hemorrhages of the lip for two years, in which every remedy has been tried, but so far the condition has not responded to treatment.

Drs. Clements and St. Clair presented a case, age twenty-six years old, occupation electrician, has had typhoid fever in 1901 and 1907, and had appendectomy in 1915, and found a rather normal appendix, kidney, heart and lungs. Normal symptoms; abdominal cramps coming on early in A. M. and five to ten in P. M. Most of the members present thought it might be a duodenal ulcer. The patient will be given several more tests and probably exploratory incision will be made later.

At 8 P. M. in the Chamber of Commerce Dr. S. D. Hatfield read a very interesting paper on NEPHRITIS, VARIETY, CLASSIFICATION AND TREATMENT. His paper was freely discussed, and the Society certainly did

enjoy having Dr. Hatfield with them, and will be glad to have him return as often as he can conveniently do so.

Dr. H. G. Steele read a paper in report of three cases of Pellagra, which was also freely discussed. Both papers showed that the author had given considerable thought.

There being no further business a motion was made and seconded to adjourn to meet the third Thursday in December.

E. H. THOMPSON, SEC'Y.

The Mercer County Medical Society met at the Chamber of Commerce at 8 P. M., December 20th. The president presiding. Minutes of last meeting were read and adopted.

Under Clinical Cases.

Dr. S. R. Holroyd reported a case of typhoid fever which he had been using urotropin. He did not use any anti-pyretics. He stated that in the initial stage of typhoid fever that it was his custom to use acetanilid and salol, reducing the doses as the heart demanded. He also stated that he had no regular routine of treatment. Dr. Hoge in discussing this, thought that excessive use of urotropin was contraindicated due to the fact of the irritation action on the kidneys. He also advised the use of it in infected gall bladder cases. Dr. Steele also discussed this case. In conclusion of this case Dr. Holroyd stated that he always gave 1-60th gr. of strychnia with the acetanilid and salol.

Dr. Steele reported a case of bronchial pneumonia in which the right lung had cleared up, but the left lung is still involved. Her temperature is running about 102. He advised that he was giving plenty of nourishment and allowing his patient to sit up. Dr. Hoge thought perhaps it might be due to Friedlanders

bacillus, but did not think it wise to allow the patient to sit up with that amount of temperature. Dr. Fox in discussing the case agreed with Dr. Hoge that he thought the patient should be kept quiet. Dr. Steele in closing the discussion stated that he could not make up his mind that this was a tubercular condition, and that he appreciated the free discussions of the case.

Under the head of papers the president read a telegram from Dr. W. A. McMillan of Charleston expressing his regrets that he could not be with us on account of illness in his home.

Dr. Holroyd was next on the program, and a motion was made and seconded to postpone his paper until the January meeting, which he will read at that time. A motion was made and seconded to meet the third Thursday in January at Bluefield, at which time the officers will be elected for the ensuing year.

E. H. THOMPSON, SEC'Y.

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Dr. James R. Bloss, Editor,  
Huntington, West Virginia.  
Dear Doctor:—

The Mingo County Medical Society met on the afternoon of November 20th, 2:30 o'clock in the Court House, Williamson, West Virginia. Present were Doctors Richardson of O'Keeffe, Rutherford of Thacker, Triplett of Matewan, Conley, Nunemaker and Salton of Williamson.

Doctor Richardson presided and the afternoon was spent in the discussion of cases. Dr. Richardson reported a case recently operated upon by himself which from the history and findings in the case was an unmistakable extra-uterine pregnancy which had ruptured on August 29th, and had come under his ob-

servation the latter part of September. The difficulty in controlling hemorrhage in this case was great. The uterus was so friable that no clamps were of avail, the tissues being too soft to withstand clamping. After some effort in this connection a complete removal of the uterus and appendages was found necessary in order to control the bleeding. Dr. Nunemaker reported a case of injury, fractured spinal column in lower dorsal region which immediately after the injury, showed very intense ecchymoses over entire face, neck, chest and upper extremities. This patient succumbed after 10 days fight for life. In discussing this case the question was raised as to the propriety of using the **catheter** in this class of cases. Whether it is better to catheterize and take chances on an almost sure cystitis following or to depend on the bladder draining itself by virtue of its overfilling Dr. Richardson in this connection remarked that he had catheterized one bladder from which he removed nine pints of urine. A case of supernumerary tib was reported which caused an obstruction to the circulation by virtue of its relation to the subclavian artery. A case of acute hyperthyroidism was reported following 36 hours after an operation for the relief of a Fibro-Adenomatous goitre.

Dr. W. T. McClellan was elected to membership and the application of Dr. A. Merrit Sorell of Vulcan was received.

A committee of three was appointed to act in conjunction with the Secretary to provide a lengthy program and a smoker for our meeting on the 11th of December. No further business the meeting adjourned at 4:20 P. M.

Respectfully submitted,

W. H. TRIPLETT, SEC'Y.

THE MINGO COUNTY MEDICAL  
SOCIETY.

Requests the pleasure of your presence  
at its

ANNUAL SMOKER

Vaughan Hotel, Tuesday Evening, Dec-  
ember 11, 1917, Eight O'Clock

COMMITTEE.

Dr. R. A. Salton; Dr. Tunis Nune-  
maker; Dr. G. B. Irvine; Dr. W. H.  
Triplett.

ON PROGRAM.

Dr. Chas. T. St. Clair, Bluefield; Dr.  
O. H. Jennings, Naugatuck; Dr. J. How-  
ard Anderson, Marytown; Dr. W. R.  
Whitman, or Dr. S. S. Gale, Roanoke.

MEDICAL SOCIETY ADVANCE  
FEES.

At a regularly called meeting of the  
Raleigh County Medical society, which  
met with Dr. J. A. Campbell, Thursday  
evening, Dec. 8th, at 7:30 P. M. the  
following physicians were present:

Drs. W. W. Hume, K. M. Jarrell, J.  
A. Campbell, Robert Wriston, E. S.  
Dupuy, D. W. Snuffer, J. E. Coleman  
and U. G. Cook.

The meeting was presided over by Dr.  
W. W. Hume, president of the society.

At a previous meeting, a committee  
was appointed to draft a new fee bill  
for the physicians of the county, and  
this report was heard at this time which  
was unanimously adopted by the society.

Medicines and physicians supplies, on  
the average have advanced over 1000 per  
cent; and this together with the general  
increased cost of living which hits the  
physician alike with other people, neces-  
sitated an increased price for their pro-  
fessional service.

Following the business meeting, all  
were invited to assemble in the dining  
room of the host and hostess, and were  
there served with all the good things to

eat, which would please the inner man,  
especially that of the doctor.

At the conclusion of the festivities, a  
rising vote of thanks was extended to  
Dr. and Mrs. Campbell, by the society  
for the delightful entertainment and  
hospitality.

K. M. JARRELL, M. D.

Sec'y Raleigh County Medical Society.

RESOLUTIONS OF CONDOLENCE.

Whereas the enemy death, has invaded  
our ranks and taken from us our beloved  
friend, Dr. Sidney J. Daniel, who was  
a member of this society in good stand-  
ing.

*Be it resolved:*

First, That we the Medical Society of  
Raleigh County, bemoan our loss in that  
a fellow physician, a co-worker for the  
good of humanity has fallen into the  
hands of the last enemy.

Second, That we unite in tendering  
our heartfelt sympathies to his bereaved  
wife, children and relatives in their ir-  
reparable loss of a loved one.

Third, That we sympathize with the  
community in which he lived, in their  
loss of a noble benefactor, and faithful  
physician.

Fourth, That these resolutions be  
spread upon the minutes of this society,  
and a copy be sent his wife, also to his  
brother Dr. G. P. Daniel, of Marshes,  
W. Va. and that copies be sent to the  
West Virginia Medical Journal and to  
each of the county papers with request  
for publication.

Respectfully Submitted,

U. G. COOK, M. D.

ROBERT TRESTOA, M. D.

K. M. JARRELL, M. D.

Committee.

The West Virginia Medical Journal,  
Huntington W. Va.

The Upshur Co. Medical Society met



in the Rexroad Hotel at French Creek, Nov. 15th 1917. After a bountiful repast (thanks to the proprietor) the meeting was called to order by the President Dr. White.

Minutes of last meeting read and approved.

The members present were: Drs. C. E. White, O. B. Beer, L. H. Forman, L. W. Page, D. M. Cutright, F. F. Farnsworth, H. O. Van Tromp. Visitors: Dr. Montgomery, Mr. Worth Forman.

Dr. Farnsworth discussed the present Vital Statistic Law, pointed out its inefficiency and urged the society to support and work for the Model Law as recommended by the Legislative Committee, and which is now in effect in several states.

Drs. Beer and Cutright reported a very severe case of Anterior Poliomyelitis where the sanitary conditions were the worst imaginable. No other cases developed although there were several young children constantly in the same room.

Dr. Forman spoke on the diagnosis and treatment of epitheliomata.

Dr. White conducted a quiz on blood pressure and on the use of the sphygmomanometer.

Adjourned to meet in December. Date to be set later.

H. O. VAN TROMP, Sec'y.

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## State News

Dr. Ross Dodson of Spencer who has been the first assistant at the Spencer State Hospital for the Insane for five years has been called to the Neurological Hospital at New York. Dr. Dodson had joined the Medical Reserve Corps sometime ago, but had not expected to be called for active duty so soon.

Dr. and Mrs. H. P. Gerlach of Huntington are spending the Winter at Palm Beach, Florida.

—o—

Dr. Sam R. Holyrod of Athens, W. Va., President of the West Va. State Medical Association has applied for a commission in the M. R. C.

—o—

Dr. Thos. J. McBee of Morgantown, First Lieut. in the M. R. C. is now seeing active service in a hospital, in London.

—o—

Dr. J. C. Kessler of Huntington has returned from Chicago where he had been taking a special study of genito-urinary diseases.

—o—

Dr. Thomas Hallanan of Barboursville has been very ill recently, but is now recuperating.

—o—

During the week devoted to the campaign against tuberculosis a number of the physicians of Wheeling made addresses in the churches, Drs. H. C. Wood of the state department of health also addressed some of these meetings.

—o—

The state health council has ordered the removal of the state hygienic laboratory from Morgantown, where it is connected with the university, to Charleston, where it is to become more truly an integral part of the health department, it was announced by Dr. S. L. Jepson, commissioner of health and secretary of the council.

The removal of the equipment however, will not be made until next summer at the close of the present university year. Two reasons were given for the action of the council. One of these is the inaccessability of the laboratory in its present location for the use of the people of the state; the other

the carrying out of a general plan to centralize all the branches of the department in one place under the direct supervision of the state commissioner. Dr. Arthur Lederer, is director of the laboratory.

—o—

The government hospital for the insane has been gotten ready to take care of soldiers at the front driven insane by the war, and all the plans are completed by the officials to handle these unfortunates of which there will be hundreds. Where their friends are prepared to receive them and care for them, they will be sent home, but otherwise they will become wards of the government. Men who go insane from causes other than those connected with actual war fare will be sent to asylums in their home States. Many soldiers went insane during the Filipino insurrection, and a majority of the inmates of the government asylum in Washington lost their reason while seeing service in the Islands.

—o—

Drs. J. Ross Hunter, W. E. Neal, H. A. Brandebury, T. W. Moore and J. C. Mattheys comprise the medical advisory board in connection with the medical advisory board in connection with the application to the new selective service order in the Huntington district. The Huntington district, one of eleven into which the state has been divided, includes Cabell, Wayne, Logan, Mason, Mingo and Lincoln counties.

The medical advisory boards will hear all appeals upon exemption claims for physical defects made from the examiners in the service of the local boards. In each district a hospital is selected at which examinations will be held by the board. The Huntington General hospital

has been selected in the Huntington district.

Other medical advisory board have been named as follows:

Bluefield District—W. H. St. Clair, T. E. Perry, E. H. Thompson, W. C. Shusher and O. F. Hare.

Charleston District—G. C. Schoolfield, Charles O'Grady, P. A. Haley, R. A. Ireland, J. H. McCulloch.

Parkersburg District—C. W. Albert, L. O. Rose, G. D. Jeffers, J. J. Goff and R. B. Miller.

Wheeling District—H. S. West, C. A. Wingerter, S. G. Hildreth II., W. T. Thornton, R. J. Reed.

Fairmont District—C. W. Waddell, H. R. Jolmson, J. A. Graham, J. W. McDonald and Hugh H. Carr.

Clarksburg District—R. A. Haynes, C. C. Jarvis, S. L. Cherry, J. E. Wilson and T. M. Hood.

Elkins District—William W. Golden, C. M. Hall, S. G. Moore and A. M. Fredlock.

Keyser District—C. S. Hofman, M. F. Wright, L. T. Kalbaugh, M. H. Maxwell and W. H. Walcott.

Martinsburg District—G. B. Hedges, H. G. Tompkins, W. T. Henshaw, R. W. Miller and T. K. Oates.

Hinton District — O. O. Cooper, George K. Nutting, W. L. Vansant and J. B. Cummings.

—o—

W. M. Prindle, city commissioner of health of Huntington announces that his department has promulgated a new rule, requiring physicians to sign all quarantine cards when they have ordered quarantines lifted. The cards are then returned by the physician or a member of the quarantine family to the health department, to constitute a record. After the return the house is fumigated and the children, if any, are given certificates

by the health department, signifying that their home has been fumigated, the quarantine lifted, and that they are permitted to return to school.

—o—

475 Graduate Nurses needed, 20,000 to be required in short time, nurses who prefer to remain in United States will have wishes respected.

Washington, Dec. 5.—Four hundred and seventy-five graduate nurses for "immediate and urgent army service" are needed before December 12, it was announced today, and in the course of the next year at least 20,000 will be required in army hospitals in this country and Europe.

"Of the total number of graduate nurses in this country approximately 80,000" said a statement of Miss Dora E. Thompson, superintendent of the army nurse corps, "only 3500 have so far been assigned to duty in the army service and of this number 1,500 are in France. We should have on file the names of thousands of nurses who could respond to a call on short notice."

Graduate nurses between the ages of 21 and 45 who pass the required physical and mental tests will be accepted. Traveling expenses are paid by the War Department and army nurses assigned to duty at military hospitals are provided with quarters and subsistence and are paid \$50 per month, with \$10 additional for foreign service. Nurses who prefer not to have service abroad, it was announced will have their preferences respected.

"The army nurses corps", Miss Thompson said, "will supply personnel to about one hundred base hospitals in this country, each with 65 nurses; to many base hospitals abroad, each with 100 nurses and to hospital trains, hospital ships and the evacuation hospitals.

Dr. J. C. Carper of Huntington has taken charge of the Sidebottom sanitarium, removing his offices from the Day and Night Bank Building to that place. Dr. Carper is a graduate of the Louisville University and has been located in Huntington for several months.

—o—

Dr. Solter of Marlinton spent the Christmas holidays in Huntington with his family.

—o—

Dr. J. E. Rader's son has passed the examination successfully for admittance into the aviation section of the signal corps and gone to San Antonio for training.

—o—

Dr. Osear Biern of Huntington who enlisted in the British army and was commissioned a lieutenant before America's entry into the war, has been transferred to the American army.

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## Medicine

Chiropractic Treatment Not Acceptable.—The Wisconsin commission having in charge the enforcement of the workmen's compensation law has held that chiropractic treatment does not constitute "medical and surgical treatment." Sylvester Jones, Janesville, was injured last February while in the employ of Sanford Severhill, both parties being under the compensation. Severhill held compensation insurance with the Employers' Mutual Liability Insurance Company. For a time Jones was treated by a physician, but later of his own volition changed to a chiropractor. The decision of the commission is that Jones is not entitled to reimbursement for the chiropractor's charges under the terms of the compensation law, which requires

the employer to furnish "medical and surgical treatment."

J. A. M. A.

Effect of Digitalis in Heart Disease.—Windle's experience of the clinical use of digitalis indicates that the drug has little, if any, power to bring about pulsus alternans in healthy or diseased conditions of the heart; and that in cases of heart disease in which this form of pulse is present there is no evidence that digitalis increases the irregularity; on the other hand, it frequently has the opposite effect, that is to say, the pulses become more equal in force and not uncommonly disparity in strength of the beats is temporarily abolished under the use of the drug, and the patients' symptoms for the time being are improved in all respects; moreover these good results not seldom ensue coincidentally with a considerable rise in the blood pressure. Windle has given digitalis for various reasons to persons with healthy hearts, and out of a number of such cases in which the drug was pushed until its full physiologic effect on the stomach was produced, cardiac irregularity, namely, sinus arrhythmia and extrasystoles, ensued in several, but pulsus alterations occurred in one instance only. Windle suggests that it is probable that the beneficial effects of digitalis in heart disease with pulsus alternans are largely due to its action in restoring the tonicity of the heart and slowing its rate, although comparison of the tracings taken before and after the use of the drug suggests that it may exert an improving effect on the essential cause which gives rise to the pulsus alternans; that this supposition is implausible is evidenced by the fact that under certain circumstances the alternation is readily reinduced.

Abs. J. A. M. A.

EPIDEMIC MENINGITIS.—Simon Flexner (*Journal A. M. A.*, August 25, 1917) points out that this disease has been more or less endemic in this country and in Europe ever since the severe epidemics of 1904-05 and that it is prone to become epidemic whenever many men are brought together in close contact as in army camps. It is of the first importance to bear in mind that the source of infection under such conditions is the presence of one or more carriers of the organism.

The carried cases are of two types; individuals who have the disease and those who are healthy but harbor the organism in their nasopharyngeal tracts. It is the latter which are the more dangerous, since they commonly escape detection until they have infected others. The mode of infection is usually via the nasopharyngeal mucosa and practically invariably arises from contact or association with a carrier. The infection may take two general forms: In the one the freshly infected person promptly develops symptoms and signs of the disease and is isolated; in the other the infected person may harbor the organisms in his upper respiratory tract for many days or weeks before falling ill, during which time he may transmit the infection to many others. The former type is relatively unimportant as a source of danger to his associates. In the presence of a case of meningitis appearing among a body of men, a search should be made to detect all carriers. This is not difficult if there is a reasonable bacteriological equipment and a few good bacteriologists are available. It consists in the taking of cultures, with the aid of the West tube, of the secretions of the nose and throat and growing them in suitable mediums. The meningococci can be recognized by the characters of their colonies, their fermentation reactions, their

morphology, and best of all by means of agglutination tests against known serums. Every carrier should be isolated at once and kept so until repeated cultures are negative. By this means it is possible to check an epidemic at its inception and save many lives and much illness. The details of the technic of making the cultures and identifying the organisms are given in the paper.

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NEW DIETETIC TREATMENT OF DIABETES MELLITUS—P. J. Cannidge (*British Medical Journal*, April 21, 1917) calls attention to the great frequency of the upper alimentary tract in diabetes and the fact that in the majority of such cases alimentary rest treatment generally gives very good results. They are, however very prone to relapse unless attention is given to the catarrhal element in the subsequent dietetic management. In that class of cases in which there is marked pancreatic deficiency, as shown by interference with the digestive functions of this gland, starvation treatment is of no material benefit and, as the digestive functions for all classes of food are impaired it is best to adopt a diet which will insure adequate nourishment and not worry about traces of sugar in the urine. In the hepatic type of diabetes a carbohydrate free diet makes matters worse and starvation is of less value than giving a diet with an abundance of green vegetables and dextrinized starches or pure dextrose. Other food may be added after a time. In the so called gouty type, or in that which disturbance of both pancreas and liver functions, a brief period of starvation may be of help, but satisfactory results can be obtained by limitation of the protein and carbohydrate intake for a few days and then giving one or two vegetable days and an occasional porridge or potato day.

The subsequent diet should be adjusted to the patient's tolerance for protein and carbohydrate and the purins should be kept as low as possible. Patients in whom the nervous factors predominate responded to alimentary rest followed by a diet rich in the green vegetables to supply an abundance of salts. Small doses of magnesium are also of much service. Allen's fasting treatment gives results which cannot be obtained by any other means, but it must be used with judgment. By its use coma and acidosis of severe degrees should be among the rarest complications of diabetes. This treatment should not be made a routine, but in every case the addition of protein to the diet should be made in accordance with the patient's ascertained tolerance for this food. It should be added slowly to a point where the protein nitrogen of the food just equals the nitrogen of the urine plus one gram daily for that lost in the feces. Fat should not be added to the diet until the patient has recovered a considerable tolerance for both protein and carbohydrate. Finally, the whole diet should be materially reduced at regular intervals to prevent overtaxing the patient's defective metabolic functions. If carbohydrate tolerance remains low one or two vegetable days should be prescribed each week.

THE THYROID IN GYNECOLOGY.—*Dr. Herman E. Hayd*, of Buffalo, recommended thyroid extract in the treatment of the hemorrhages in women, the causes of which were obscure, until a diagnosis could be established and the best kind of subsequent treatment decided upon. One patient, a woman, forty-three years old, with three children, for the past ten months had had a continuous dribbling and loss of blood, and at times had to go to bed, as the hemorrhage was excessive. Thyroid extract prescribed and curettage

was suggested for diagnostic purposes, but the patient did not take this good advice, and continued to bleed. Doctor Hayd was called and found her in a very nervous condition with the usual symptoms and picture of prolonged and exhausting hemorrhages. Vaginal examination showed the os closed and the uterus much larger than normal. A tentative diagnosis of myxedema was made and thyroid extract in increasing doses was given. The bleeding at once became less, strength began to return, and after four weeks another vaginal examination was made, when the os was found open, and a myxomatous polyp, the size of a small plum, was protruding, which was easily removed without anesthetic. The woman was now well, with good color, full of energy, and weighing 160 pounds. The thyroid in two grain doses was continued, with five grain tabloids of Bland modified, for some weeks. Doctor Hayd did not believe it was a mere coincidence that this polyp was found expressed out of the uterus during, but independent of, the thyroid treatment. The bleeding was at once influenced and notably decreased after a few days of thyroid medication. She took four grains, three times a day.

He could detail a number of encouraging experiences in the treatment of prolonged menstrual bleeding with thyroid therapy when a previous curettage did not bring about the expected relief. Perhaps some of these cases were due to a general fibrosis of the uterus, or to some disturbed circulation in the organ, and not to a thickened and softened endometrium where curettage was usually effective. In the amenorrheas of young girls, where the periods were irregular, scanty, or absent, he had of late years relied upon thyroid feeding in gradually increasing doses, in conjunction with

good hygiene, proper living, and exercise.

*N. Y. Med. Jour.*

INFLUENCE OF PREGNANCY ON THE DEVELOPMENT, PROGRESS, AND RECURRENCE OF CANCER.—*Dr. William Scaman Bainbridge*, of New York, cited two cases of malignancy in pregnancy which seemed to indicate a distinct influence of pregnancy upon the initiation, progress and recurrence of cancer. In the first case, recurrent carcinoma of the breast, there was a previous history of amputation of the right breast fourteen months earlier. When first examined, the patient, a primipara, was nearly five months pregnant and had a large mass in the right axilla and another above the clavicle, with metastases in the right lung. The patient and family refused to submit to the termination of pregnancy, and despite indicated treatment the disease extended rapidly and fatally in less than a year. The child was born at term and lived one month. In the second case, sarcoma of the eye, the patient, a mother of two children, was pregnant seven months when first seen. At this time she had a small growth which was promptly excised with an apparently safe margin of healthy tissue. There were three other successive operations for rapid recurrences and extension of the disease, all within a period of two months. Termination of the pregnancy had been refused and a healthy child was born at term. One month later the patient succumbed.

In the first case the growth above the clavicle was probably not malignant until pregnancy took place; from the history of the second case it would seem as if the beginning of the development of the sarcoma was closely related to the beginning of the pregnancy, and that the almost terrific rapidity of de-

velopment and recurrence after operation was commensurate with the progress of the pregnancy. From these and other personal observations, as well as from a digest of the literature, it was apparent that the weight of opinion substantiated the position that pregnancy exercised a stimulating, and hence a malign, influence upon coexistent cancer, not only of the organs most closely concerned in the pregnancy, namely, the uterus and breast, but of any part of the body. Therefore, in all such cases, especially in those similar to the second, there seemed little ground for delaying, or for failing to terminate the pregnancy as early as possible. It was interesting to note that relatively little attention seemed to have been devoted to the question of the influence of pregnancy on the development of cancer other than cancer of the uterus and breast, particularly the former.

*N. Y. Med Jour.*—12-8-17.

NEW ALCOHOL REGULATIONS—The food conservation law which prohibited the manufacturer of alcohol, except for nonbeverage purposes, and the new war tax on alcohol used for nonbeverage purposes have not only caused a great increase in the cost of alcohol and consequently in the retail price, but has also resulted in the imposition of certain vexatious regulations, which will meet the doctor at every turn when he desires to make use of alcohol. Numerous conflicting regulations have been issued by the Bureau of Internal Revenue, and these regulations have been changed from time to time so that the minor officials themselves are frequently at sea regarding the ruling. The latest information is to the effect that no alcohol can be sold, even on a doctor's prescription, as such, but only in the form of

medicated alcohol or denatured alcohol, the two being from a legal point of view quite different. Denatured alcohol contains substances which unfit it for use in medicine either internally or externally. Medicated alcohol can be medicated by the pharmacist himself according to any one of nine formulas. The formulas involve the dilution of the alcohol in some cases, and in all cases the addition of certain substances such as carbolic acid, formaldehyde, mercuric chloride, alum and camphor, lysol, or liquor cresolis compound which make it unfit for beverage use.

*N. Y. Med. Jour.*—12-8-17.

AMERICAN FIRMS LICENSED TO MAKE SALVARSAN.—The Federal Trade Commission has entered orders for licenses to three firms to manufacture and sell the product heretofore known under the trade names of Salvarsan, 606, Arsenobenzol, and Arsaminol, and hereafter this drug will be manufactured and sold under the name of Arsphenamine. The Public Health Service has prepared rules and standards for the manufacture and testing of Arsphenamine, and will supervise its manufacture. The three firms which will be hereby permitted to manufacture and sell Arsphenamine are: Dermatological Research Laboratories, of Philadelphia; Takamine Laboratory, Inc., of New York; and Faröwerke Hoechst Co. (Herman A. Metz Laboratory), of New York. Before the war began the patented drug was sold at \$4 per dose, which is approximately \$3,500 per pound, and speculatively it has brought as high as \$35 per dose. While the price of the product is not fixed at this time by the commission, the right to fix prices is retained, and a price of \$1 per dose to the Army and Navy, \$1.25 per dose for hospitals, and \$1.50 per dose

for physicians are the prices at which some at least, of the licensees have stated that they intend to offer the licensed drug.

*N. Y. Med. Jour.*—12-8-17.

PREGNANCY AT 65 YEARS OF AGE—M. E. Bove, Maple Ridge, Mich., writes in *Clin. Med.*, April, 1917: A woman here 53 years of age is now in her fourth month of pregnancy. The mother of this lady was 65 years old when she gave birth to her last child, and she was the mother of 25 children by four husbands.

#### THE EFFECT OF CALCIUM, WATER AND OTHER SUBSTANCES GIVEN INTRAVENOUSLY ON BLOOD COMPOSITION AND URINARY SECRETION.

By D. M. DAVIS.

Experiments are described in which it was desired to inject quantities of fluid intravenously in animals without consequent diuresis. This end was attained by injecting distilled water, mixtures of  $\text{CaCl}_2$  with  $\text{NaCl}$  solutions, and dilute solutions of dextrose at such rates that the animal received less than .85 gms. dextros per kilogram hour.

Over doses of Ca made the blood become more concentrated, with increased hemoglobin and diminished water content.

In all the other injections, there was definite hydremia, as shown by the dried weight of the blood. Simultaneously, the  $\Delta$  of the blood was shown to fall.

It appears that diuresis may be absent, therefore, while hydremia is present, and also while the blood sugar is increased by over 100 per cent. Since the  $\Delta$  has usually shown a fall, the

author hazards the suggestion that the tendency to diuresis, which is the result of an increase of any excretable substance in the blood may be counteracted by a simultaneous decrease of some other excretable substance in the blood.

Other aspects of the theory of diuresis are discussed.

The inhibitory action of Ca on urinary secretion, shown by J. B. MacCallum, is confirmed.

## Surgery

PERFORATING WOUNDS, WITH ENTRY AND EXIT WOUNDS PRESENT IN THE SKULL.—H. E. Gamlen and S. Smith (*British Journal of Surgery*, July, 1917) says that wounds of the above type have been comparatively rare, especially since the universal adoption of the helmet by the British troops, but a certain number have passed through their hands. Biparietal perforating wounds, usually caused by a rifle bullet, have perhaps been the most common examples of this type, and often in the cases that arrive here, surprisingly little damage appears to have been done to the bone or brain. In one case a shrapnel ball had passed through the brain from one parietal region to the other, and was found by x rays to be lying between the temporal muscles and the bone on the side opposite to that by which it had entered. Beyond slight apraxic symptoms the patient seemed little the worse for his injury, and was able to walk a few weeks later.

REPARATION OF CRANIAL DEFECTS BY CARTILAGINOUS GRAFTS.—H. L. Warren Woodroffe (*British Journal of Surgery*, July, 1917) sums up with regard to the reparation of cranial defects by cartilaginous grafts as follows: While no one would maintain that every case of



craniotomy should undergo a reparative operation, a very large percentage of such show symptoms which can be cured by cranioplasty. While many methods have been suggested, Morestin's cranioplasty by means of cartilaginous grafts is one of the easiest to perform; it can be undertaken at a comparatively early date; it gives a very high percentage of good results; the time of waiting for these results is short; and the operation is no more dangerous to the patient than is a radical cure of inguinal hernia.

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#### ETHER AND ETHERIZATION IN RELATION TO INFECTION AND IMMUNITY.

Dr. William D. Haines, Cincinnati: For the past two and a half years we have used ether intraperitoneally in all operative cases in which peritonitis was present. In forty-three recent cases the mortality was 9:13 per cent. In the total of sixty-six cases there occurred seven deaths, or a mortality of 10.4 per cent. for the entire series, which included gastro-intestinal perforations, gunfire and stab wounds, abortions, leaking pus tubes, and tuberculous peritonitis. In a number of the more virulent cases, ether was introduced through the drainage tube several times during the first and second days after operation. Post-operative complications, including shock, prolonged anesthesia, vomiting, dilatation of the stomach or heart, septic thrombophlebitis and gaseous distention of the intestine were not more frequent, severe or prolonged than in similar cases in which operation was performed prior to the adoption of ether in the treatment of peritonitis. Encouraged by our results, we have gradually enlarged the field of application to other infected regions of the body. Personal experience gained by reopening the abdomen for ileus and other postoperative conditions

has led me to conclude that the formation of adhesions is dependent on some inherent condition in the patient's constitution rather than on the type of infection or the use of ether intraperitoneally. I have observed no instances of immediate or remote toxicity, sloughing or increased drainage due to the use of ether. Changes in dressings have been less frequent, toxemia has been more rapidly controlled, and recovery has been hastened by the use of ether, in quantities regulated by the age and condition of the patients.

*Jour. X. M. A.*

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#### SURGICAL TREATMENT OF WOUNDS OF CHEST.

—Wounds of the chest, as seen at an advanced casualty clearing station, are classified by Anderson into two main groups from the point of view of prognosis: Group A: 1. Entrance and exit bullet wounds. 2. Entrance and exit shrapnel-ball wounds. 3. Wounds caused by small fragments of high explosive missiles. As a general rule these cases do exceedingly well if treated expectantly and aspirated or operated on when occasion demands. They can usually be evacuated to the base in from three to ten days, and the ultimate results are good. Of course, in certain proportion of such cases there is sufficient visceral injury to cause immediate or early death, but, as they seldom reach the casualty clearing station, they do not come within the scope of this paper. Group B: 1. Wounds caused by large irregular fragments of high explosive shell which have lodged in the thorax. There are almost always associated with (a) clothing and infection carried in, and (b) open sucking wounds of the chest wall. 2. Tangential wounds of the thorax, enfiling the ribs and driving portions of bone, etc., into the

pleura and lung. 3. Entrance and exit bullet wounds in which the exit wounds are explosive in character.

If treated expectantly only a very small percentage of Group B 1 reach the base, and many of those that are evacuated appear to die from the complications of their wounds. In group B 2 and 3 the prognosis is usually not so severe, but an unduly large percentage develop an infected hemothorax unless the chest wall wound is treated energetically. In the latter group the prognosis, when no operation is performed, is always worse in wounds of parts where there is a liberal muscle covering, for example, in the scapular region. The patients in Group B usually have died hitherto at the casualty clearing station from sepsis and exhaustion, and it is this group of cases which demands more vigorous surgical intervention.

*Jour. Am. A.* 12-8-17.

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The ideal methods of modern war surgery are (1) early operation, (2) complete excision of wound and damaged tissues, (3) removal of metal fragments and clothing, (4) mechanical cleansing of wound (the use of strong antiseptics is to be avoided), and (5) complete suture of wound. Provided one can get early and complete operation, there is far more danger from secondary than from primary infection. The treatment of wounds of the chest, therefore, follows the same lines as those of the abdomen, head, knee, or other joints; they require just as early operation, and Hathaway says, the results are just as good.

*Jour. A. M. A.*—12-8-17.

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The principles Roberts and Craig have tried to follow in the treatment of chest wounds recently dealt with have been:

operation at the earliest possible moment, free excision of all infected tissues, removal of the foreign body and cleansing of the pleural cavity or wound of the lung, followed by accurate suture of the lining membrane and tissues over it, whenever possible without drainage. Drainage of the pleural cavity has been employed only when one or other of these principles could not be fulfilled, for example, when a foreign body, with infection around it, could not be removed. When anaerobic infection of the superficial muscles is present the wound is left open to an extent corresponding to the area of the infection, for example in the case of a wound of the back when the more superficial muscles alone are infected it is possible to suture the pleura and leave the superficial part of the wound freely drained. There does not seem to be grave objection to washing out with, and possibly leaving inside the pleura, a few ounces of a nonirritating antiseptic, such as alkaline solution of sodium hypochlorite (Dakin's) or similar solution, but the necessity for this is by no means established.

*Jour. A. M. A.*—12-8-17.

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TREATMENT OF GUNSHOT WOUNDS OF ELBOW JOINT.—The result of primary excision of the elbow joint, according to Moullin, are wonderfully good, provided sufficient bone is removed; that is to say, the lower end of the humerus just above the level of the epicondyles, the whole of the head of the radius and the ulna at the same level. Even if the conditions are such that the wound is already infected, the drainage is so free that a serious degree of sepsis can usually be avoided, and there is not that enormous mass of callus thrown out, binding everything together and locking the fragments so that they cannot move.

Owing to the necessity of reeducating the muscles of the forearm, which have been separated from their attachments, it may be twelve months before recovery is complete, but the fingers and wrist can be used after the first few weeks, and, if a suitable splint is provided, the elbow as soon as the wound is sound.

*Jour. A. M. A.*—12-8-17.

MODERN TREATMENT OF BURNS.—Edward Hammond Risley (*Boston Medical Surgical Journal*, September 13, 1917) divides the problem of treatment of a burned patient into: 1, the treatment of shock, when present; 2, the selection of treatment for the burned area, involving the kind of first dressing to use and the prevention of sepsis; 3, the prevention and treatment of contractures; 4, the prevention and treatment of associated acute toxic nephritis and duodenal ulcer and the question of their relation to the toxemia. No attempt should be made to move the patient until he has been relieved by a generous dose of morphine. If shock is marked, subpectoral salt infusion and rectal shock enemata should be given while exposed areas are lightly covered with a warm blanket to prevent chilling. If this gives benefit within half an hour, one of three courses may be followed: 1. The clothing may be carefully cut away from the whole body and the patient exposed to the air, with the temperature of the room elevated to about 110 degrees F. by open fire or other means; this is the open air treatment. 2. He may be swathed with compress cloth saturated with a one to five per cent. solution of picric acid, to be left on for forty-eight hours; or the burned area, if not extensive, may be painted with tincture of the chloride of iron and the patient left without dressing in a

warm room. 3. Should the patient not recover rapidly from his shock he should be immersed in a continuous hot saline or boric acid bath, the clothing to be cut away after and not before he has been immersed. He should be kept in the hot bath until he has recovered from his shock, and should be reimmersed immediately on signs or recurring shock. Too much stress cannot be laid on this very vital, but often lightly considered, part of the problem of the care of burns.

The only point in favor of an oily dressing is that it is fairly painless. It is not as a rule sterile, it favors the growth of bacteria, keeps the discharges in contact with the wound, causes maceration, and must be changed every twenty-four hours. The points in favor of the picric dressing are: it can be sterilized; the discharge are absorbed by the dressing; the growth of bacteria is prevented; it is healing in itself; it acts as an analgesic, and the first dressing can be left forty-eight hours. The danger of poisoning is negligible. The writer considers the open air treatment superior to any in which any kind of dressing is used, at least for extensive burns. Patients so treated recover more quickly from shock, suffer less pain, and get a better start than others. For not too large burns of the first and second degrees painting with tincture of the chloride of iron is a satisfactory method. Its first application is painful, but analgesia, quickly supervenes. Repeated applications should be made once an hour or so until the affected area is well coated over and a dry protective layer is formed, after which only occasional applications need be made. The area is best left uncovered as a thorough drying is desired.

The writer believes that the percentage of contractures can be reduced at least

seventy-five per cent. by the prevention of sepsis, the early immobilization of extremities effected by properly applied splints or plaster casts, and the early employment of passive motion and massage. He formulates the following general rules for treating burned cases: 1. Combat shock first. 2. Treat all shocked cases or those with extensive burns by the open air method or the temporary use of the hot bath. 3. Avoid oily dressings. 4. In burns of the extremities, if fairly extensive, but not requiring open air, use picric acid. 5. In all other burns use picric acid, tincture of the chloride of iron, or the more modern paraffin film treatment, according to preference or experience. The paper closes with a discussion of the ambrine treatment, which he believes to be a decided advance over other methods, especially for burns of a limited area. Points in its favor are that it is not a painful dressing, it is easy of application and removal, does not favor infection, produces more rapid healing, and leaves a smooth, soft, pliable scar.

## Book Reviews

WHITE AND MARTIN'S GENITO-URINARY DISEASES. By Edward Martin, A.M., M.D., F.A.C.S. John Rhea Barton, Professor of Surgery, University of Pennsylvania; Benjamin A. Thomas, A.M., M.D., F.A.C.S., Professor of Genito-Urinary Surgery in the Polyclinic Hospital and College for Graduates in Medicine, Instructor in Surgery, University of Pennsylvania, and Sterling W. Moorehead, M.D., F.A.C.S., Assistant Surgeon to the Howard Hospital, Philadelphia, Pennsylvania. Illustrated with 422 engravings and 21 colored plates. Tenth edition. J. B. Lippincott Co., Philadelphia and London. Price \$7.

This is an old and well known work

on an interesting subject. It is adapted to the use of the student and the practitioner, having been rewritten and reset. Much that is obsolete has been left out. Much that has been proved to be of permanent benefit has been added. The subject of supplies is taken up and thoroughly discussed in several chapters. The laboratory diagrams and the treatment takes up two chapters in which the views of the authors are clearly set forth, making a reliable guide for the management of this all too prevalent disease.

We have received of THE PRACTICAL MEDICINE SERIES, comprising ten volumes on the year's progress in medicine and surgery. Under the general editorial charge, Chas. L. Mix, A.M., M.D., Professor of Physical Diagnosis in the Northwestern University Medical School, Vols. IV and V, on Gynecology, Pediatrics and Orthopedic Surgery respectively, Vol. IV, edited by Emelius C. Dudley, A.M., M.D., Professor of Gynecology, Northwestern University Medical School; Gynecologist to St. Luke's and Wesley Hospitals, Chicago. Series 1917. Chicago. The Year Book Publishers, 608 South Dearborn Street.

Vol. V edited by Isaac A. Abt, M.D., Professor of Pediatrics, Northwestern University Medical Schools, Attending Physician Michael Reese Hospital, with the collaboration of A. Levison, M.D., Associate Pediatrician Michael Reese Hospital. Orthopedic Surgery edited by John Ridden, A.M., M.D., Professor University Medical School, with the collaboration of Charles A. Parker, M.D. Series 1917. Price \$1.35 per volume. These volumes are two of a series of ten issued at about monthly intervals covering the entire field of medicine and surgery. Each volume is complete on the subject treated for the year prior to its publication.

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## VARIATIONS IN THE LATERAL PROCESSES OF THE FIFTH LUMBAR VERTEBRA IN THE ETIOLOGY OF BACKACHE.

By H. AUGUSTUS WILSON, M. D., F. A. C. S.

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*Delivered before West Virginia Medical Association. Fiftieth Annual Meeting, Fairmont, W. Va., Oct. 1917*

Backache is magnified by the laity from a symptom to a disease, its importance is exaggerated by patent medicine advertisers and cureall jobbers; like rheumatism and charity it covers a multitude of sins.

Backache whether localized or diffuse is variously interpreted by the patient and by the bias of the physician. The patient's description of the pain is often misleading, depending upon his susceptibility and sensitiveness. The sharp acute pain of one person is an ache or a dull throbbing pain to another. One

will hear that agonizing pain exists that is unendurable but the surgeon is not able to demonstrate it by palpation, forced postures or firm pressure. It would seem therefore that pain alone is of doubtful value and possesses importance only when associated with symptoms and signs that correlate and are demonstrable.

The term backache is associated with so-called rheumatism, sacroiliac sprain or relaxation, neurasthenic spine, static backache, visceroptosis, irritable or railroad spine, coccygodynia, sciatica, uterine disease and displacement, appendicitis, cystitis, scoliosis, osteo-arthritis, lumbago, occupation backache, cholecystitis and many other conditions.

David Silver (Penna. Med. Journ. April 1915, p. 510) has classified the etiology of backache into four groups:

- I. Organic nervous diseases.
- II. Osseous lesions.
- III. Ligamentous and muscular affections.
- IV. Diseases of the abdominal and pelvic organs.

There are many causes of backache

with only one of which this paper will dwell—The pain associated with impinging of the lateral process of the fifth lumbar vertebra with the brim of the ilium or with the sacrum is generally distinctly localized over the point involved. It is most frequently localized by the patient placing a single finger rather than the whole hand upon the painful spot.

The onset is most apt to be sudden, following wrench or other trauma; the pain is persistent in certain postures with freedom or lessening in other postures. Oft times the onset is gradual, at first occurring after assuming a position of the body best described as leaning backward, a position that increases the normal physiologic lumbar curve. There are at times also radiating pains or diffuse pains associated with it, often depending upon the character of the patient.

The fifth lumbar nerve forming a part of the cauda equina passes out from the spinal canal through the intervertebral foramina between the fifth lumbar vertebra and the sacrum. The anterior portion of the lumbosacral cord helps to form the tibial and the peroneal nerves. The fifth lumbar nerve supplies sensory fibres to the outside and back of the leg, to the inside of the dorsum of the foot, to portions of the great toe and the two toes next to it. It also carries motor fibers to the three glutei, both heads of the biceps, both hamstring muscles and a number of muscles in the leg. Oppenheim has directed attention to the frequency with which injury affects the sciatic nerve in the pelvis as shown in paralytic symptoms of the peroneal nerve.

It is analogous to the various reports of a patient when the ulnar nerve is pressed upon at the elbow. There is,

in addition to the localized pain at the elbow, a tingling sensation at the fingers, or a numbness is often spoken of. In like manner the contact of the lateral process of the fifth lumbar vertebra with the rim of the pelvis has associated with it what is described as sciatic pains or cystitis, or the abdominal pain varies as greatly as the pain of appendicitis, gall bladder or ovarian irregularities.

These remote pains of varying kinds when studied by the abdominal surgeon, the gynecologist, the internist, the neurologist, the Roentgenologist and the orthopedic surgeon are interpreted by each of them according to their own skill and inclinations.

With accumulating records of the great variety of shapes and sizes of the lateral processes of the fifth lumbar vertebra it is important to study a large group in order to determine a standard. Too much reliance should not be placed upon anatomical irregularities as shown by the radiograph for it has many times been demonstrated that the relative position of the lateral process depends upon the position of the tube when the X-ray when taken. I have seen three X-rays that were taken of the same patient on the same day by the same Roentgenologist. The first was taken with the tube directly over the lateral process and showed an appreciable contact of one lateral process with the sacrum. The second was taken with the tube about four inches above the first and showed an extensive overlapping. The third was taken four inches lower than the first and demonstrated a wide space between the bones. Therefore it is important that interpretation of X-ray plates by the clinician should be based upon information furnished by the Radiographer, or better still by a combined study thus embracing the clinical

phenomena and the radiographic findings.

The grave danger of exaggerating the importance of a single radiogram showing overlapping lies in the tendency to consider the condition amenable to surgical removal with disappointment often resulting. The surgical removal has been accomplished notwithstanding the extreme difficulty of the procedure, the difficulty of avoiding injury to the lumbosacral cord which lies directly over the lateral process of the fifth lumbar vertebra.

Temporary and permanent paralysis have resulted in many cases that have been successful as to the surgical removal of the offending process. In several cases surgical removal of the bone did not have the desired effect in relieving the backache. I recall an instance where a patient had persistent backache that continued after appendectomy, drainage of the gall-bladder, oophorectomy, stretching of the sciatic nerve and excision of the lateral process, entirely overlooking the static condition, the importance of which Lovett has demonstrated (*Journ. A. M. A.*, March 26, 1910, p. 1033). There are some patients who are peculiarly lacking in their response to the surgeons assurance that a surgical operation is imperative and that recovery of health depends thereon.

While not having a direct bearing upon the subject of this paper it is interesting at least to refer to other fields for an analogous condition. Thus it has been recorded that the accumulated results of appendectomy by many operators showed that fifty per cent were not benefitted and thirty per cent of the remainder were distinctly worse after the operation.

It therefore follows that given a patient with backache, distinctly localized pain as well as raidating pains down the legs and feet, radiographic findings of impinging lateral process of the fifth lumbar vertebra, a cure is possible by operative excision in less than thirty per cent; an improvement may be obtained in sixty-five per cent while a worse condition than the original painful back may result in an undetermined number of patients.

Adams (*Am. Journ. Orthopedic Surgery*, November 1910) refers to a patient aged 16 where the radiogram demonstrated a slight facet eroded in the ilium by contact of an unusually broad and long lateral process of the fifth lumbar vertebra. Following surgical excision the patient complained of the right leg being "dead and immovable". The knee jerks were active and equal, no apparent sensory disturbances, no swelling or discoloration. Two years later it is recorded that "the back caused no trouble".

Thompson and Fassett (*Northwest Med. Journ.*, June 1913) report two excisions of the lateral process. In the first case the operation was followed by several weeks of pain and the leg "jerked violently"; there was some paralysis of the foot and atrophy of the anterior muscles of the leg. In the second case following excision there occurred spasm of the toes and cramps in the legs with areas of hyperesthesia and anesthesia. The operators ascribed the unfortunate symptoms to unavoidable injury to the nerves at the time of operation. In both patients it is recorded that the original trouble was only partly relieved.

W. E. Shackleton (*Journ. A. M. A.*, May 20, 1916) gives the results of operations in seventeen patients by eleven surgeons:

5	Perfect .....	.29%
8	Good.....)	
1	Fair .....	.65%
2	Poor .....	
1	Too recent to report.....	.066%

These results are reported from the operators standpoint and from the well known conservatism in reporting their own results it is to be inferred that 29 per cent of perfect results is the highest attainable. It is impossible to understand just what is meant by the qualifying terms of good, fair or poor except that they rank lower than perfect results as viewed from the patient's as well as the surgeon's standpoints.

Blanchard and Parker (*Am. Journ Orthopedic Surgery*, October 1915) report an excision with this comment "We believe that this is the first case reported of removal of a transverse process of the fifth lumbar vertebra for the relief of an impingement upon the posterior wing of the ilium causing painful paralysis and total disability, in which the resection resulted in immediate and complete relief and that was not followed by symptoms of injury done to nerve structures".

On the other hand it must be recognized that occupation, posture or, in other words, static conditions are the most frequent etiologic factors of backache even when an impinging lateral process is demonstrable by radiography. A fairly typical report is presented to illustrate cause and effect and possible misinterpretation. Man, 24, robust, active, good health in every respect except backache. Occupation for seven years cigarmaker. Two to 3 hours after beginning work in the morning his pain began as an ache or feeling of discomfort. He would change his sitting position from forward bending to stretching backward and experience entire relief. Resuming

his work pain would recur becoming again more and more severe until he would find it necessary to get up and walk about to get relief. The noon hour would be fairly comfortable because he avoided the position that he was forced to assume in his work. In the afternoon, when he worked, the pain increased in severity and many times he was obliged to stop before his daily task was completed. His back was too tired to permit his doing anything in the evening so he sat and read until bedtime. He would roll and toss trying to assume a position free from pain, or even less painful, rarely being able to sleep more than during short intervals. The day following he would not go to work but stay on a lounge or sit in a chair, with very little walking. This would be followed by freedom from pain, good sound sleep at night, resumption of work next day. During a period of six months he was able to work only on alternate days. He changed his occupation and for a year had no backache. Believing that his former condition was rheumatism and that it had been cured he went back to cigarmaking and worked full time for two weeks when his so-called rheumatism returned. A radiogram demonstrated a slightly impinging lateral process upon the ilium, on the side corresponding with his pain. This radiogram was taken in the usual position of flat upon back on a straight hard table, the plate being beneath. An additional plate was taken with cushions so arranged as to force his spine into his working position and this showed a much greater overlapping of the bones thereby confirming the clinical diagnosis of bone contact.

The diagnosis would have been entirely correct but for a single anatomical fact. The lateral processes lie anterior to the ilia so that in forward bending



they are further away from the ilia than when the patient occupied an upright posture. Stereoscopic radiograms would have demonstrated the relative position of the bones in question. On single plates their shadows did overlap although the bones were separated by a considerable distance—The position of the tube was the cause of the apparent overlapping.

An attempt has been made to determine what is the normal shape and position of the lateral process of the fifth lumbar vertebra and especially its relation to the ilium as well as its bearing upon backache. Fifty-one patients with backache of various forms were radiographed and studied. The X-ray plates were all taken with the patient flat upon the back on a straight hard table. A great variety of shapes was demonstrated and great irregularity was found as to their relations with the ilia. It was frequently observed that where the overlapping was the most conspicuous there was the greatest lack of corroborative symptoms. It is proper to accept the established fact that there are not two noses alike or two eyes alike so the dissimilarity is observable in various anatomical structures as well as in their relations to each other.

It is fair to assume that the existing conditions and relations of the lateral processes of the fifth lumbar vertebra are normal to that individual patient. That occupation or injury may bring that part into prominence and that it will then become conspicuous—not as an abnormality—not as something to be excised, but something that indicates the avoidance of those conditions that brought it into prominence. If pathologically involved the etiological factors must be removed. Denuce (*Revue d'orthop.*, December 1913, p. 531) reports

a patient with great enlargement of the lateral process of the fifth lumbar vertebra, as demonstrated by Roentgen ray, that was associated with sciatica where the patient entirely recovered under antisyphilitic treatment. Ryerson (*Journ. Am. Med. Assoc.*, Jan. 2, 1915, p. 24) performed an Albee bone transplantation to prevent the patient from stooping forward.

Goldthwait (*Am. Journ. Ortho. Surg.*, February 1913) found in a freshly dissected subject bursæ between the tips of the lateral process of the fifth lumbar vertebra and the sacrum. He believes that such bursæ when once developed are capable of all of the phenomena of inflammation with resulting symptoms such as exist in bursæ elsewhere.

#### ANALYSIS OF 51 ROENTGENGRAMS.

There were 6 where both lateral processes were free from contact, long and thin.

- 4 both sides free, short and stubby.
- 5 both sides free, short and broad.
- 2 both sides free, short and very broad.
- 7 both sides free, 1 side bent.
- 1 both sides free, 1 side eroded.
- 2 both sides free, both had had periostitis on one side.
- 2 both sides free, both sides bent.
- 6 one side free, one side in contact.
- 1 one side contact, one side bent.
- 3 both sides overlapping.
- 2 one side overlapping, one side bent.
- 2 one side overlapping, one side in contact.
- 2 one side overlapping, one side very broad.
- 2 both sides in contact and both bent
- 2 one side fused to sacrum, one side in contact.
- 1 one side fused to sacrum, one side free.
- 1 both sides fused to sacrum

- .52% were free from contact.
- .12% were bent.
- .17% were in contact.
- .11% were overlapping.
- .04% were fused.
- .01% were eroded.
- .02% periosteal thickening.
- .99%

#### CONCLUSIONS.

1. The lateral processes of the fifth lumbar vertebra become etiological factors in backache (a) when they are involved in a pathological process, (b) when associated with bursa, (c) when forced into contact with the sacrum or the ilium, (d) when occupation induces a static condition.
2. Radiographic plates alone are apt to be misleading.
3. Unsupported clinical evidence cannot be convincing and conclusive.
4. A positive diagnosis depends upon an analysis of all obtainable facts.
5. The anatomical variations contraindicate any fixed standard as to size or shape.
6. Therapeutic measures either palliative or radical depend upon the cause.

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#### THE DIAGNOSIS AND TREATMENT OF URINARY LITHIASIS.\*

*J. Edward Burns, M. D.*  
Baltimore, Md.

Read at Fiftieth Annual meeting of W. Va. Med. Ass'n., Fairmont, Oct. 1917.

Urinary lithiasis embracing, as it does, the stones found throughout the urinary tract has, by means of modern diagnostic methods and operative procedures, been

brought from a position of great obscurity and dread to one in which no more accurate and beautiful diagnoses can be made, and where from a surgical standpoint no more gratifying and satisfactory results can be obtained. The X-Ray, cystoscopy, ureteral catheterization, renal functional studies, pyelography and the passage of the wax-tipped catheter have each contributed to make this one of the most scientifically accurate studies known to modern medicine. The exact size and location of the stone in the urinary tract, and if any damage has been caused thereby should be known absolutely before any operative procedure is undertaken. This last factor is essentially important for it alone is not only the index for operative interference, but is also a guide as to the extent to which the latter should be employed.

Clinically the most predominant symptom is pain, and it together with its typical radiation to the groin, penis and testicle, and accompanying abdominal symptom if the stone be located in the ureter or renal pelvis constitutes the so-called "renal colic". Pain may or may not be present, may or may not radiate, or the radiation may vary greatly from the classical picture according to the location of the stone in the urinary tract. For instance a stone in the renal parenchyma, in the upper portion of one of the calyces or in a diverticulum of the ureter or bladder may not cause pain or any other symptom and be only discovered accidentally when in the course of a thorough routine physical examination an X-Ray happens to have been made. The pain may be confined to the lumbar region or radiate to the shoulder instead of downward. The pain is most often caused by the passage of a stone down the ureter, and the intermittent dilatation of the renal pelvis and

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ureter by back pressure. It is often brought on or exaggerated by exercise, or the performance of a physiological function, as in defecation when the stone is in the lower portion of the ureter, the part adjacent to the rectum.

Urinary frequency often accompanies the pain and is most marked when the stone is in the bladder or urethra, the pain in the latter two instances being most marked in the suprapubic or perineal regions and radiating to the external urethral meatus. Frequency may be and often is entirely absent between attacks of pain.

Nausea and vomiting may or may not be present, is of a reflex character, and is often quite an annoying and persistent feature.

Chills and fever most often indicate the presence of an infection, but may be due to urinary absorption following the back pressure caused by the obstructing stone.

On palpation tenderness and muscle spasm may be present in the flank, at the costo-vertebral angle, or in the region of McBurney's point.

Examination of the urine generally shows the presence of red blood cells during or shortly after an attack of renal colic. Sometimes blood is present in such large amounts as to be plainly visible to the naked eye. Pus cells may occur in varying amounts according to the amount of infection present. Bacteria, most commonly colon bacilli, may also be found. Crystals of calcium oxalate, triple phosphates, urates, and uric acid may also be present. Under these latter conditions the urine is usually alkaline and the condition often long standing.

The X-Ray is by far the greatest aid in the exact diagnosis of the size and position of stones in the urinary tract.

It, however, is not infallible for more than thirty per cent of ureteral stones are not seen in the plain Röntgenogram. The opacity of stones to the X-ray depends upon their chemical composition, and this being so varied in itself may account to some extent for their not being located by this method. Stereoscopic X-Ray plates are often most important in distinguishing shadows outside the urinary tract, from the shadows of true calculi and this study is especially helpful if an opaque bougie or catheter be inserted into the ureter previously. In this connection pyelography should be mentioned although it will be taken up in detail under ureteral catheterization.

Cystoscopy is most important in the diagnosis of this condition, especially in connection with ureteral catheterization. Simple cystoscopy or the thorough viewing of the inside of the bladder should be a matter of routine in the examination of any case where a stone is suspected. If the stone be present in the bladder it is readily seen, can be measured and its external characteristics noted. It may be in a diverticulum and not seen although sometimes these may be cystoscoped themselves, and the stone seen. A spicule of the stone may be projecting from the orifice of the diverticulum and thus readily recognized.

Ureteral catheterization should always be done when a stone is suspected in either the ureter or kidney. The ureteral catheter may be stopped in its passage up the ureter on one side, the obstruction being due to the presence of a stone. In this way the exact distance of a stone from the ureteral orifice can be measured. Most important is the comparison of the functional activity of both kidneys, this study being all-

essential in the determination of the extent of the operative procedure. After the introduction of the catheter up both sides, the first specimen of urine collected from either kidney (a few cc.) is discarded, and the second specimen collected which is examined microscopically for cellular and bacterial contents, the urea determination being also made from this second specimen. This latter determination demonstrates the concentrating power of each kidney. Six miligrams of phenolsulphonephthalein are then given intravenously and the appearance time noted on the two sides. A half hour specimen from each side is then collected, the appearance of the phthalein on the first side being taken as the starting time for the determination. From these specimens the percentage excretion of phthalein is estimated and this considered an index of the functional activity of either kidney. With the catheters still in place 15 per cent thorium solution is allowed to flow by gravity into the pelvis of either kidney and ureter until the patient complains of a sensation of fullness in either kidney region. The thorium solution is still allowed to flow in while the exposure to the X-Ray is being made. By this means a pyelogram or the outline of the renal pelvis and ureter is obtained. A pyelogram is most essential in determining the degree of dilatation of the renal pelvis and ureter, in other words, estimating the degree of hydronephrosis and the damage to the renal parenchyma by back pressure from the stone. Sometimes the shadows of stones are brought out by the thorium solution when they are not seen in the plain X-Ray.

In this connection cystograms, or the outlining of the bladder by means of the X-Ray after the introduction into

it of thorium solution or any other solution opaque to the X-Ray may be considered. If a stone be present in a diverticulum the outline of the connection of the diverticulum and the bladder can be determined and again the shadows of vesical calculi are often brought out by the solution, when they are not seen in the plain X-Ray.

As stated before stones are often missed by the plain X-Ray and sometimes by the pyelogram. A wax tipped catheter should then be passed and examined for scratches. If the stone be in a diverticulum of the ureter, or high up in the calyces there will be no scratches upon the wax. This method is most helpful and should be used as a routine measure wherever a stone is suspected.

Gall-stone colic, chronic appendicitis and salpingitis are the conditions most commonly confused with renal colic. In gall-stones the location and radiation of the pain together with a previous history of jaundice and a urinary examination should help, and although a shadow be found in the region of the right kidney a pyelogram, especially a stereoscopic pair should clear up the situation. In chronic appendicitis the history, clinical findings and urinary examination should make the picture clear. While in salpingitis a condition so often bilateral, the history, vaginal and urinary examinations should leave no doubt in the mind of the attending physician.

Blood in the urine as you know is not always indicative of the presence of stone somewhere in the urinary tract. In the so-called essential hematuria, and when a tumor is present in the kidney, blood is found in the urine and clots may become lodged in the ureter giving rise to a typical renal colic. In acute nephritis and tuberculosis blood may also be present in varying amounts but

the other urinary findings such as casts, and pus and tubercle bacilli leave no doubt as to the diagnosis. In the case of tumor, nephritis and tuberculosis, stones may also be present, the indications for or against operative interference being decided by the extent of the disease process. Sometimes stones are bilateral in which condition a careful comparative study of the functional activity of both kidneys is so essential in order to determine which side should be operated upon first, and the extent of the operative procedure to be employed. Cardiac and pulmonary complications may also be present, and these should be most carefully studied, because upon their nature and extent depends entirely the question as to whether an operation should be undertaken or not.

Non-operative treatment is only to be employed when the calculus is small and the possibilities of its being passed spontaneously are quite good. If, however, the stone is large enough to cause any obstruction with a consequent hydronephrosis, and if infection be present the proper operative procedure should be instituted as soon as possible. For the relief of pain in renal colic morphia or pantopon and hot applications should be employed. At the same time it is well to force water. Dilatation of the lower portion of the ureter with bougies may help the stone in its downward passage, the application of heat through a metallic catheter may also help in this regard.

Sometimes the injection of oil through the ureteral catheter may help as a lubricant or more recently papaverin has been employed on account of its direct action on the smooth muscle of the ureter into the bladder, fulguration of the mucous membrane over this point, or cutting the ureteral orifice with suitably made scissors may enlarge the

opening of the ureteral orifice sufficiently to allow the stone to escape.

If the stone be free in the bladder and too large to pass through the urethra it may be crushed and evacuated by means of the evacuating lithotrite, provided there be no trabeculation of the bladder wall nor cellules, nor diverticula present in which fragments of the stone might engage and remaining behind form nuclei for the formation of other stones.

Operative treatment is always indicated when the stone is too large to be passed spontaneously and when infection is present, and is immediately indicated if there is impairment of renal function and damage to the kidney. The operation to be performed depending mainly upon the location and size of the stone.

Nephrectomy is always indicated when there is marked destruction of renal parenchyma together with infection, and if numerous stones be present. Such kidneys after nephrotomy often require a nephrectomy later and this latter is rendered much more difficult by the previous operation. Again after nephrotomy in such cases, there is sometimes complete destruction of renal parenchyma anyway, in the presence of infection. Nephrectomy here is much easier by the intracapsular method. Great care should be observed in the ligation of the renal pedicle, the three clamp method having proven most satisfactory.

Pyelotomy is a most satisfactory operation and should always be done if the stone be free in the pelvis, and the pelvis be not intrarenal. Often stones in the calyces can be removed with the forceps through a pyelotomy wound. The wound in the pelvis should be sutured (closed completely), and a drain should be placed down to the wound. The

drain should not be removed until after all drainage has ceased, this is also true of drains after nephrectomy, drains being only used in the latter instance in the presence of infection. Irrigation of the kidney pelvis with salt solution is most helpful in removing very small fragments of stone.

Nephrotomy is, as ordinarily done, the most destructive and most dangerous operation on the kidney and should be avoided whenever possible. In the case of a large stone filling completely the pelvis and calyces the only possible way of removal is to split the kidney from end to end, preferably by the Cullen and Derge method with silver wire, having previously applied a tourniquet around the renal pedicle. In the closure of the kidney by means of mattress sutures of chromic gut in alternate layers great care should be taken that the sutures are not too tightly tied, for if this occurs the circulation is interfered with and there is destruction of renal parenchyma, if on the other hand the sutures be tied too loosely there is great danger of hemorrhage. If after removal of the tourniquet the color of the kidney is good and there is no large amount of oozing from the cut surfaces the sutures are tied just right. Should the stone be sufficiently large to be palpated through the renal cortex it is quite easily removed by blunt probing and enlarging the opening in the renal cortex by means of a clamp. If, however, the stone be quite small and can not be palpated it can be accurately located by mathematical means and thus avoid the great mutilation of prolonged probing or splitting the renal cortex. The method is quite simple and consists in measuring off on the X-Ray, the distance of the shadow from one of the poles and convex border of the kidney shadow. This is done by having an assistant hold the plate up to the light and measuring the

above mentioned distances with a straight liver needle or fine probe. The kidney is grasped by the left hand, these distances measured on it and at the intersection of these two lines the liver needle is inserted into the renal cortex being pushed in until the stone is encountered. In this way a stone should not be missed for it can not help being in the line extending from the point indicated on the kidney surface by such accurate means. After the location of the stone the liver needle is withdrawn, a clamp inserted into the same opening, the latter enlarged and the stone withdrawn. By this method stones as small as one-half by three-fourth by one-half centimeters have been removed. If the wound is sufficiently large one mattress suture may be taken. After any nephrotomy a drain should be placed down to the wound and not removed until all drainage has ceased.

A stone in the middle and lower thirds of the ureter is removed by ureterolithotomy, through an abdominal incision. If in the upper portion of the ureter it is removed by exposing the ureter in the same manner as in nephrectomy. The abdominal operation is extraperitoneal and is done through an exaggerated McBurney incision, low down, near Poupart's ligament. On exposing the peritoneum it should be pushed toward the midline and in freeing it from the posterior wall of the pelvis the ureter is carried with it and can be readily felt in this position. It is then freed from its attachment and delivered as far as possible into the wound. After the stone is located by palpation incision is made over it and after its removal the ureteral wall sutured together. If the stone be low down next to the bladder it may be milked up the ureter so as to be the more easily removed. Sometimes stones are angulated and can not be milk-

ed up, their removal in this low position being quite difficult. A drain should always be placed down to the opening in the ureter and only removed after drainage has ceased. If ureteral catheter be passed up the ureter just before the operation it is often of great help in locating the ureter.

Stones in the bladder if not removable by litholopaxy for reasons previously stated, should be removed by suprapubic cystotomy. Drainage should be instituted in these cases, it being especially important to drain the prevesical space which as a rule is opened during the operation. Air dilatation of the bladder before the operation is a great help and makes a much cleaner operative field.

Stones sometimes become lodged in the urethra especially in the prostatic urethra and in the fossa navicularis and may require either an external urethrotomy or meatotomy as the occasion demands.

The differential diagnosis of urinary lithiasis, particularly where the kidney and ureter are involved in the process is frequently difficult and often involves prolonged and careful studies before treatment can be instituted with safety. The development of refined methods of diagnosis such as pyelography, renal function studies, etc., have rendered possible diagnoses of greater accuracy than in any other field of surgery.

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#### X-RAY EXAMINATION OF THE DUODENUM, GALL-BLADDER AND PANCREAS.

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W. A. QUIMBY, M. D.

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The Röntgen and clinical findings recorded in this paper are a part of the

observations made on cases referred for X-Ray examination of the gastro-intestinal tract. Data concerning functional phenomena in the abdomen, demonstrable by Röntgen methods, were tabulated and are submitted in the hope that special attention will be drawn to cutaneous manifestations of duodenal toxemias and the pathological and mechanical factors causing this special form of auto-intoxication, and that the value of X-rays in differential diagnosis of lesions of the duodenum, gall-bladder, and pancreas will be further appreciated.

In the upper right quadrant of the abdomen there is a group of organs and parts having a great variety of functions; these organs are complicated in structure and have a mechanical arrangement which permits of wide variations in the relative position and provides a prolific field for attacks of disease with numerous sequela. This portion of the abdomen normally contains the liver, gall-bladder, pyloric end of the stomach, a part of the duodenum and pancreas, the right suprarenal gland, the greater portion of the right kidney, a part of the great vessels, the upper portion of the ascending colon, the right transverse colon, usually a portion of the ileum and jejunum, a complex blood supply and lymphatic system, and some of the sympathetic nervous system and pneumogastric filaments.

There are numerous departures from this arrangement; any one of the above mentioned organs may not occupy the upper right quadrant, or there may be entire displacements or transpositions of viscera. The gall-bladder may be found anywhere in the abdomen; the stomach and duodenum may be entirely displaced to the left and below the right quadrant; the kidney may be in the pelvis with the suprarenal gland accompanying it; structures not normally found in the

upper right abdomen may appear in that position, and occasionally, for instance, the cecum and appendix may be lying in this region, either as a result of congenital development or from formation of adhesions; any portion of the colon may be found in the upper right quadrant, even the sigmoid may appear in this region. Any sections of the jejunum and ileum may be found in the upper right quadrant and may be involved in adhesions and other manifestations peculiar to the intestines. The hepatic flexure of the colon, together with the two arms, the ascending and transverse colon, is a frequent location of extensive complications ranging from adhesions, bands, and veils, to diverticula and numerous abnormalities and malignant processes. The X-rays have proved of greatest value in the determination of these conditions.

The liver, being the largest organ in this portion of the abdomen, is usually very conspicuous. X-ray examination informs us as to its relative size, marked abnormal development of its shape, and the presence around it of large collections of pus; occasionally calcium deposits and cysts may be seen within it. Several cases of tumor of the liver have been noted and easily demonstrated by the X-ray examination. This work usually calls for a preliminary examination, following which bismuth or barium meals are administered, or a bismuth enema is given.

The gall-bladder is easily demonstrated when its walls or contents are of abnormal density which is sufficient to cast a shadow on the X-ray plate of greater density than the surrounding tissue.

Frequently we can see shadows of the gall-bladder when the contents are only fluid or even when the walls are only thickened by connective tissue; also, pure cholesterol deposits can be depicted on

the X-ray plate. Such gall-bladders are very difficult to demonstrate except under ideal conditions demanding absolute fixation and complete suspension of all respiratory movements. Pathologists have pointed out the existence of fine crystalline deposits deep in the mucosa of pathological gall-bladders; these may contain some lime salts, which always materially increase the density of the gall-bladder or its contents.

Various figures have been given for the approximate proportion of gall-bladders which can be demonstrated on the X-ray plate. Doctor Case, of Battle Creek, gives a percentage of about forty-nine, although he thinks this is a little high; Doctor George, of Boston, states that he can demonstrate the gall-bladder in seventy per cent of the cases or even more, if care is exercised. A. J. Quimby's earlier observations claimed the demonstration of not over forty-five per cent of gall-bladders, but more recently he has been obtaining images of a larger percentage, and he is convinced that roentgenograms of almost all pathological gall-bladders can be obtained. Also, we are satisfied that the value of the x-ray in determining conditions of the gall-bladder can be greatly enhanced by taking into consideration adhesions involving the gall-bladder with adjacent structures, a condition which can be demonstrated by the administration of bismuth or barium salts in almost 100 per cent of the cases. From observation we are convinced that this is of greater importance than the determination of the gall-bladder alone as the adhesions of a vast percentage of the cases are the cause of the distressing symptoms that lead to operation; such findings cannot be made with the X-ray plate alone, but result from our additional use of the fluoroscope. Two cases have been obtained demonstrating the presence of duodenal con-



tents in the gall-bladder. The proof of this phenomenon is the entrance of bismuth into the gall-bladder. One of these patients had been subjected to a laparotomy and somewhat elaborate surgical procedure. At the time of the examination, a pool of bismuth was found lying far to the right in the region of the gall-bladder, just above the hepatic flexure; its shape and size was not that of the normal gall-bladder, but its fixed position, together with its extreme lateral location, proved it to be to the right of the stomach and duodenum.

Another case exhibited a pool of bismuth lying anterior to the second portion of the duodenum, being slightly larger than a normal gall-bladder, but pear shaped and giving other characteristics of a definite pouch, independent of the duodenum. Carman, of the Mayo Clinic, recently reported one case in which there was perforation between the duodenum and gall-bladder with the ascent of the opaque material from the duodenum into the branches of the hepatic duct.

Rosenow undertook some experiments which have definitely proved that the gall-bladder may become infected through the systemic circulation. This does not apply to all gall-bladder infections, and as Doctor Judd, of Rochester, recently pointed out, the frequency of the coexistence of ulcer of the duodenum and cholecystitis is well known, and he states that it is probable that in these cases of cholecystitis the infection is secondary to infections caused by organisms from the ulcerated area in the duodenum. He also points out that the normal duodenum is free from bacteria, but it can readily be seen that if there is delayed drainage in the duodenum, a culture field for bacteria is being maintained, and that the mucosa, is rendered more susceptible to infectious processes. It is probable that when the bacteria

exist in the duodenum they can travel directly up the ducts through regurgitation of the duodenal contents into the ducts and by the spread of the infectious process through the continuity of the mucosa.

Röntgenologists frequently see sections of the stomach or duodenum indented by an oval mass corresponding to the contour of the gall-bladder; some of the accompanying illustrations will exhibit this condition. If under the fluoroscope a tender point corresponding to this oval indenture can be demonstrated, and can be confirmed by a conspicuous shadow found in the same location in supplementary examination of the gall-bladder region, the gall-bladder has been located. That this localization is of value in diagnosing gall-bladder disease, must be accepted. The location of the tenderness can be defined and credited to the gall-bladder instead of the duodenum or pancreas; also, with this indenture in the shadow of the stomach or duodenum, together with the conspicuous shadow frequently suggestive of the gall-bladder, the relative size of the gall-bladder can be determined. Should there be found in this localized field, ill defined lines of a thread like character forming circles or whirls, we are justified in concluding that the gall-bladder contains stone covered with small deposits of lime salts. The difficulty of recognizing pathological gall-bladders when the abdomen is open is becoming more fully appreciated by the surgeons. Doctor Judd states: "It is difficult to recognize all cases of cholecystitis even when the abdomen is opened so the gall-bladder can be seen and felt". This being so, we may arrive at a period in the development of Röntgen work which will permit the findings of the X-ray plate to be a material factor in guiding the surgeon to a decision as to the existence of a

pathological gall-bladder and determine his procedure when the abdomen is opened.

The pyloric end of the stomach is readily demonstrated by administering bismuth or barium salts. It is so frequently found to the left of the median line that we cannot always regard it as an entity in the right abdomen; in fact, this is so frequent that the gastroenterologist has allowed this factor to enter into his differentiation of gastric and duodenal ulcer, pointing out that the position of the stomach in the left abdomen favors the ulcer being within the stomach. However, the X-ray has so thoroughly eliminated the hazard in locating the position of an ulcer as to render such fine points in diagnosis of minor importance. Following bismuth, we can localize a foreign body in the stomach whether it occupies the pylorus or some other section: we can determine the presence of gastric ulcer, and its relative position; we can define the location of a duodenal ulcer, differentiating it from a pancreatitis or tenderness originating from the gall-bladder; we can determine the presence of diverticula of the stomach and duodenum or any section of the intestines in this region. The relative length, size, and free drainage of the stomach and duodenum is easily determined.

In recent times the writer has been giving the second and third portions of the duodenum very careful consideration in this work. Some observations have been made that in some respects are regarded as original, not having been able to find literature bearing directly upon this subject from the standpoint that it has been observed. This has chiefly to do with the results of delay in the drainage of the duodenum and the resulting effect upon the gall-bladder and pancreas, and especially, cutaneous manifestations of

duodenal toxemia. These observations have frequently permitted us to determine the existence of a pancreatitis where it was unsuspected. Also, we have been impressed with the frequency of an advanced malignancy of the pancreas without material symptoms, a warning of the approaching fatality coming but a brief time before the death of the patient, for the pancreas has always been somewhat of an enigma, surprising the internist at most unfortunate times.

The duodenum is divided by anatomists into three or four portions, depending on its shape. The most common shapes are the V shaped and the U shaped, the V shaped consisting of three portions, and the U shaped of four portions. There are numerous departures from these two classes. The first portion of the duodenum can be considered anatomically as the terminal portion of the stomach. It is not so limited in diameter or mobility as the remainder of the duodenum, moving in normal conditions freely with the stomach to the point where it passes the duodeno-hepatic ligament. From this place, it normally descends in front of the suprarenal capsule and the right kidney, having to its inner side the head of the pancreas and great vessels, while to the outer side lie the gall-bladder, liver, and occasionally the hepatic flexure. The third portion of the duodenum, or the third and fourth portions, crosses the great vessels and spine, running upward to the left, sometimes lying on the anterior surface of the upper pole of the left kidney and suprarenal gland, and enclosing the lower part, and sometimes a portion of the anterior surface of the pancreas. Sections of the pancreas may pass anterior or posterior to the various segments of the duodenum or even entirely surround a portion.

The several sections of the duodenum

are of varied length, the first portion being about five centimeters, the second portion about eight centimeters, and the third portion about twelve to fifteen centimeters. Entering the second portion of the duodenum is a canal which carries the bile and pancreatic secretions. This enters the descending portion of the duodenum obliquely in the left side. Just before its entrance into the duodenum there is situated a small cavity known as the ampulla of Vater; this cavity is normally but a few millimetres in diameter, but is occasionally found to be about 1.5 centimetres in diameter, and one case can be recalled in which it was about 2.5 centimetres. When the common duct is large and its orifice is somewhat patent, the duodenal contents will pass into the ampulla of Vater; this has been witnessed a number of times. That this condition is occasionally a factor in the precipitation of pancreatitis we are convinced. Just what the cycle of events is which permits the inhibition of drainage of the duodenum and the accompanying pancreatitis, toxemia, etc., it would be difficult to say; however, we can probably illustrate what may occur in a given case. The patient gives a history of typhoid fever several years previous, since which time he has been subject to periods of headache, and gives an outline of his subjective symptoms about as follows: On arising, he feels excellent and will enjoy his breakfast, but from three to five hours after breakfast he begins to feel a malaise and mild headache; this will increase. At luncheon he may eat without enjoying his food. In the afternoon the headache may become so intense as to require some means of relief; there is also distention in the upper abdomen and perhaps a feeling of diffused pain in the epigastrium. He states that rest in bed or a reclining position may relieve him. Upon X-ray

examination it is observed that there is a delay in the drainage of the duodenum, material entering from the stomach accumulating in a large sac-like duodenum, almost the diameter of the stomach; tenderness is found both in the region of the pyloric end of the stomach and to the right of the second portion of the duodenum, but by displacing the stomach upward or to the left, the tender area is not changed. After determining that the duodenum is not draining properly and that it was unusually distended, if further inquiry is made into the history of the case, it is frequently found that the patient has been having skin lesions, such as dry eczema or psoriasis; several other types of sealy skin lesions may occur. Also, frequently, there is a history of sugar in the urine, although this is a factor in only about one-third of the cases.

Several writers have contributed to the subject of duodenal lesions and a determination of their presence by the X-ray. Jordan, of London, has pointed out the importance of determining the presence of duodenal retention as a result of kink at the ligament of Treitz; Pfahler, of Philadelphia, has indicated the value of this method of determining duodenal conditions. A. J. Quimby has discussed kink of the duodenum and the resulting delay in the drainage, in various papers. These communications so far, have confined themselves to the mechanical problems involved, and have not taken into consideration the possible clinical manifestations or results which may arise from a delay in the duodenum.

Observations have shown that while the obstruction of the third portion of the duodenum may be far from complete, they result in retarding the contents of the duodenum to such an extent as to delay the intestinal contents and cause

toxic symptoms from absorption of material in the duodenum.

Several contributors to medical literature have suggested the importance of duodenal toxemia or duodenal poisoning, but so far as the writer has been able to find in reviewing the subject, no attention has been given to some of the most marked clinical manifestations of duodenal toxemia. My observations have lead me to believe that the delay in the duodenum brings about organic changes in the pancreas and gall-bladder, together with their drainage canals, and that serious constitutional toxemias are brought about and that one of the most marked manifestations of this poisoning is in the skin.

Frequently, after fluoroscoping a duodenum, the writer has asked the patient if he had any skin lesions and have been answered: "I have been treated for psoriasis," "I have psoriasis," or "I have scaly patches on my skin," or a history of eczema may be given. In one instance, a physician who had an obstructed duodenum stated that he had a dry eczema of the extremities which had developed in recent years. Also, frequently a superficial inspection of patients with duodenal delay will convince the examiner that there are mild cutaneous manifestations of duodenal toxemia. In contradistinction this work has lead me to believe that the retention in the lower ileum and colon is more commonly found in the individual with an oily, oversecreting skin or an atrophied, pigmented skin.

The distinctive characteristics of the duodenal toxemia suggests that the split protein autointoxication stimulates proliferation of the horny layers of the epithelial structures, while toxic material absorbed in the lower intestinal tract, being end products, both bacterial and metabolic, have a selective action

upon the secretory glands of the skin, primarily stimulating them and in the reaction from this stimulation, atrophy of the skin occurs. "The majority of the German observers consider the inflammatory changes in the papillary layer of the corium to be primary; Unna thinks the first lesion is parakeratosis; Robinson and many English writers believe the primary lesion to be hyperplasia of the epithelium; while Crocker, Brooke, and others consider the changes in the corium and epidermis to be synchronous, and due to the same cause acting on both simultaneously" (1).

Some years ago, a well known laboratory experimenter demonstrated that the higher section of the intestinal tract, especially that portion within a few feet of the stomach, had a greater capacity for absorbing split proteins. Accepting this as true, we can look upon the phenomenon which takes place in the duodenum when delay in its drainage occurs as an absorption of partly digested protein material, with its resulting manifestations of autointoxication and skin lesions of a distinctive type.

#### CONCLUSIONS

1. The duodenum and its two accessory organs, the pancreas and gall-bladder, should be considered as an entity, a *duodenal trinity* to be studied as a unit, and when an incomplete obstruction is found in the second or third portion of the duodenum the pancreas and gall-bladder should be suspected as being involved secondarily.
2. The duodenal contents may readily escape into the ampulla of Vater and thence into the pancreatic and common bile duct, providing an easy route for infections of the pancreas and gall-bladder.
3. The X-ray permits us to localize tenderness exactly so as to determine

whether its source is the duodenum, the gall-bladder, or the pancreas.

4. Pancreatitis can be diagnosed very easily by the aid of the X-ray when accompanied by the fluoroscopic examination, and the result may be an earlier determination of the malignancy of the pancreas.

5. The location, size, and shape, together with the pathology of the gall-bladder, can frequently be fully determined by the X-ray examination, and the image on the X-ray plate is a guide as to the surgical procedure to be followed when the abdomen is opened.

6. One of the most conspicuous manifestations of duodenal toxemia is in the skin, and the skin lesions which prevail are of the dry, scaly variety.

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#### THE CELLULAR DETERMINATION OF SEX.

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By Percy J. McElvath, M. D. Bramwell,  
W. Va.

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Read before the Cabell County Medical Society November 1st 1917.

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I have long entertained the opinion that the beautiful axiom, THE UNIVERSE IS GOVERNED BY LAW, applies not only to the sun and planets in their courses, but, with equal force and completeness, to the complex phenomena of men and animals. I believe that the problems of heredity, sex, and development, which so fundamentally affect the human race and which have so long baffled investigators, are based on invariable natural laws, a proper knowledge of which will have a far-reaching effect on the development of the human race.

The famous aphorism, "Know thyself," applies especially to man as a complex organism, and with peculiar force to his sacred sexual relations in the propagation of his species. False modesty has too long been the handmaid of ignorance in the most important and far-reaching duty of human life, and it is high time that the scientist should realize that the improvement and development of the race lie within his domain and that all other biological laws dwindle into insignificance in comparison with this great problem.

Before Intelligence, in the form of man made its appearance on the earth, the evolution of life-forms had proceeded without apparent direction or reason; the multiplication and variation of species were stupendous. Most of these various forms are known today only as fossils in the graveyard of Evolution; many, however, have persisted and comprise the useful and useless animals that inhabit the earth with man. Few, if any, new species have originated since *Homo sapiens* appeared on the scene, and many, doubtless, may attribute their extinction to his interference. As the descendants of this wonderful primate gradually extend their dominion over the earth, the face of the planet is changed in many respects, many of the forces of nature are harnessed to do man's bidding and even evolution itself is made, in some degree at least, to serve his wants. Many animals that are useless or malignant have been exterminated or greatly reduced in number and range; others that are useful to man have been protected, increased in number, and improved.

Only within the last hundred years, however, have the great laws of natural selection and survival of the fittest been understood, with the result that man is

beginning to supplement natural selection with intelligent selection. By proper selection and breeding, many fruits, grains, and vegetables have been greatly improved, new kinds have been produced and even useless plants have been changed into useful food plants. Animals have been domesticated and, by selection, have been improved and made to serve man in various ways. The work of such men as Luther Burbank, Gregon Mendel, Charles Darwin, and others is eloquent of a glorious future, in which man, brought to a full realization of the possibilities of intelligent selection and breeding, will not only bend his energies to improve plants and animals, but will also undertake that greater and nobler work of improving the human species.

While the prevention of breeding by the deformed, the criminal, and the degenerate may be possible for centuries to come, it is possible to teach the people the fundamental facts and laws that govern the reproduction of the species and to publish, so that all may know, those conditions of health, nutrition, environment, and physical fitness that control and determine this all-important phenomenon. There is no biological process that approaches in importance that by means of which human life is propagated; and none about which greater ignorance prevails. It concerns not only the continuance of the race on the planet, but, very largely, the character of the race. Consequently, every individual who expects to become a father or a mother should know, to the fullest extent, the anatomy of the parts concerned, the biological and physiological laws governing them, and, especially, the rules and circumstances under which the finest specimen may be produced.

I firmly believe that a full and com-

plete knowledge of the conditions under which insemination, fertilization, and embryonic development take place will enable the scientist to solve the ultimate problems of inheritance and sex, which are acknowledged to be cell problems.

The problem of sex determination is probably a very old one. In fact, there are many rules and regulations in the laws of early civilizations, especially in the Mosaic laws of the Hebrews, which would lead us to believe that this important question was considered in those early times.

It is only in modern times, however, that any serious steps have been taken toward the solution of the problem of sex-control; and only since the renowned discovery of the cell by Schleiden and Schwann, in 1838-39, that any real scientific work has been done in this direction. In fact, up to the present time, the work done on this problem is totally unworthy of its imperative and far-reaching possibilities.

Investigators in this line may be divided into two groups: those who believe that external conditions determine the sex and those who maintain that the sexual cells differ from the first. Of these, workers in the first group were the earlier and, until recently, predominated; but, at present, scientists generally recognize the theory that sex determination depends primarily upon the sexual cells and not upon external conditions affecting the embryo. It will be seen that many conflicting theories have been advanced, some fanciful, some ingenious, but that no generally accepted laws have been laid down.

Among the early investigators was Charles Darwin, who reviewed the evidence obtainable in his time and expressed the belief that the tendency to produce male and female offspring was in-

herited and that by a process of natural selection it was adjusted to the needs of the species, but he did not discuss the nature of the determining factors. G. Canestrini was of the opinion that sex is determined by the number of spermatozoa that entered the ovum, but we now know that only one spermatozoon normally conjugates with an ovum. J. D. Hofaeker, in 1823, and M. O. Sadler, in 1830, collected a large series of statistics from which they drew the conclusion that, when the male parent is older and more mature, more males are produced. Some investigators have claimed that the sex of the offspring tends to be that of the less vigorous parent; while others have urged that the most vigorous parent gives his or her sex to the progeny. A large number of careful investigators have been led to believe that conditions of nutrition play a large part in determining sex, but in nearly every case other observers have obtained conflicting results or have drawn different deductions from the facts. E. Yung, from a number of interesting experiments, found that when tadpoles were reared under normal conditions, the proportion of male to female was about 43:57; but that when a flesh diet was provided, the percentage of females was greatly increased. Mrs. Treat showed that starved caterpillars turned into males, and E. Maupas took certain rotifers and demonstrated a relation between abundant nutrition and an excessive production of females. P. Gadds and J. A. Thompson (1889) asserted that factors external to sexual cells had a predominating importance in the determination of sex. They conceived of sex as an effect of an alternating rhythm of anabolism and katabolism to be observed throughout the living world, and supposed that femaleness was an expression of the anabolic or

constructive processes of living matter, whilst maleness represented the katabolic, destructive, or liberating process. Professor Thompson, in a later work (1907), however, practically withdrew his theory. Dowson, in his work on sex determination, has suggested that the ova from the right ovary produce male and those from the left, female, and reported many cases of male-productiveness from the right ovary and some female from the left. This theory, however, is disproved by the fact that there are cases on record where women, after having one ovary removed have produced both sex.

Investigators in the second group—those who believe that sex is predetermined in the sexual cells—have been less numerous than those in the first group, but they occupy more tenable ground. In fact, all true progress toward the discovery of the factors which determine sex became possible only after the enunciation of the cell-theory by Schleiden and Schwann. A long list of subsequent investigators have placed the cell-theory upon a firm basis and have done much to elucidate the mysteries of heritage and sex. Among the most important may be mentioned Kolliker, who, in 1841, demonstrated that the spermatozoa are not parasites but are cells generated in the testes; and Schweigger, Seidel, and La Valette St. George who, in 1865, proved that the spermatozoon contains not only a nucleus, as Kolliker believed, but also cytoplasm. Not less important was the discovery of Oscar Hertwig that fertilization of the ovum is accomplished by its union with one spermatozoon, and only one. In 1855, Virchow established the universality of cell-division. These and other discoveries demonstrated that the cell is the basis of life and led Wilson to

remark that "a single cell may contain within its microscopic compass the sum total of the heritage of the species." Among workers in the field of sex determination under the second group, the names of Gregon Mendel and E. B. Wilson stand out pre-eminent. In 1865, Gregon Mendel published an account of his experiments, but those valuable writings were not appreciated until recently and now bid fair to give him a name in the biological world second to that of Darwin. E. B. Wilson (1909) published a paper which has a very important bearing on sex determination. In it he gives a full discussion of the accumulated facts concerning the existence of different kinds of sexual cells and the nuclear changes which occur in ovogenesis and spermatogenesis. He considers over a hundred different species of insects, myrapods, and arachnids in which two kinds of spermatozoa are produced. These spermatozoa are formed in pairs, and the mother cell which gives rise to each pair exhibits paired chromosomes, one member of each pair passing into each spermatozoon. The mother cell contains also an unpaired chromosome, consisting in its simplest form of a single large chromosome, which Wilson terms the "X" element. The large unpaired chromosome may be one or more. This "X" element passes into one or the other of the spermatozoa, from which results that spermatozoa of two kinds are formed in equal numbers, the difference being the presence or absence of the "X" element. Eggs fertilized by spermatozoa containing the "X" element, become females; those without it, males. Eggs fertilized by spermatozoa containing the "X" element. Thus the "X" element, or the idiochromosome or idiochromosomes, as the case may be, becomes the index of sex.

In Herterakis, for example, all the mature eggs receive five chromosomes, while

half of the spermatozoa receive five and half but four. Upon fertilization of the egg by a spermatozoon containing five chromosomes a female is produced, those receiving four, males. The nucleus being otherwise of identical composition. This result is still more strikingly shown in cases where the X-elements consists of two or more chromosomes. Whatever be their number in the diploid group of the male—two in the *Syromastér* or *Fitchia*, three in *Prionidus* or *Sinea*, four in *Gelastocoria*—twice this number appear in the female groups. It has long been known that in uninterrupted parthenogenetic refraduction eggs which form a second polar cell, produce only male, (if unfertilized).

*(To be continued)*

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### Miscellaneous Announcements and Communications

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The Southern Section of the American Laryngological, Rhinological, and Otological Society will meet in Huntington, under the chairmanship of Dr. T. W. Moore, on Monday, February eleventh. It is the custom of each section of the organization to hold a meeting at the home of its chairman.

This is an exceptionally strong program and papers are being presented by some of the best known specialists in the world.

Dr. Moore extends a cordial invitation to all local members of the profession to attend the meeting.

THE AMERICAN LARYNGOLOGICAL, RHINOLOGICAL AND OTOLOGICAL SOCIETY.  
Southern Section.

Huntington, West Virginia

February Eleventh, 1918.

Assembly Room, Hotel Frederick



## PROGRAM

- 9:30 a. m. Call to order by the Chairman,  
T. W. Moore.
1. "Suppurative Otitis Media in Children:  
What Should be our Attitude Towards It?"  
By George L. Richards, Fall River, Mass.
  2. "Some Further Clinical Observations on  
a New Remedy for Chronic Otitis Media."  
.....By Mark Fisher, Parkersburg, W. Va.
  3. "The Labyrinthine Tests."  
.....By Chas. Graef, New York City.
  4. "Vestibular Nystagmus."  
.....By John Dunn, Richmond, Va.
  5. "Vertigo Due to a Focal Infection in the  
Appendix."  
.....By Geo. W. Mackenzie, Philadelphia.
  6. "Indications for Myringotomy; Is It a  
Simple Operation?"  
.....By J. A. Stucky, Lexington, Ky.
  7. "Dental Focal Infection."  
.....By E. J. Stein, Lancaster, Pa.
- 1:30 p. m. Luncheon for members with  
Chairman, Hotel Frederiek.
- 2:30 p. m.
8. "Three New Diagnostic Symptoms of  
Sphenoid Sinus Disease."  
.....By Jos. C. Beck, Chicago, Ill.
  9. "Report of Several Recent Cases of For-  
eign Bodies Removed from Bronchi; with  
Comments on Same."  
.....By J. W. Murphy, Cincinnati, O.
  10. "Infections of the Paranasal Sinuses in  
Infants and Young Children with Special  
Reference to Adenoids and Chronic Ton-  
sillitis as Etiological Factors."  
.....By L. W. Dean, Iowa City, Iowa.
  11. "Present Status of Nasal Septum Opera-  
tion."  
.....By Clifton Miller, Richmond, Va.
  12. "An Orbito-Palatal Route of Transillum-  
inating the Maxillary Sinus; Author's  
Method."  
.....By H. H. Briggs, Ashville, N. C.

Marytown, W. Va., Dec 29, 1917.

Dear Mr. Secretary or Treasurer:—

A Happy and Prosperous New Year to You and the Society you so ably represent is the wish of your State Secretary.

The fortunes of the W. Va. state Med. Association for 1918 are in your hands. These are strenuous times and unless we awaken to the necessity of redoubling our efforts in its behalf our State Association will not only not grow but will fall behind its previous record. Its prosperity depends entirely upon the energy you put forth in building up your Local Society. Will you not put your shoulder

to the wheel and help make this the greatest year in its history. You can do so in spite of the War and other difficulties, if you only will.

*First*—Send a circular letter to each member of your Society incorporating the following and anything else you think will help:

(a) Issue a call for a meeting of your Society for early in January fixing a definite date and place for meeting.

(b) Advise that the 1918 State Dues are \$1.00 more than last year and that this extra dollar will be set aside to create a fund for the relief of any member and his family, upon whom misfortune has fallen because of the War or otherwise. This will make the 1918 dues \$4.00 with the Defense Fund or \$3.00 without the Defense Fund.

(c) Urge the early payment of dues, regardless of when 1917 dues were paid. The Constitution provides that all dues should be in the hands of the Secretary on or before April 1st each year regardless of date of payment of dues for the year just preceeding.

*Second*—Hold your meeting at the time and place appointed and organize for the year by electing officers, if you have not already done so. Then start a campaign for new members, for only about half of the physicians of the State are members of our Association and surely there are a number of good men on the outside who should and will join if approached in the right way.

*Third*—Send me a list of the 1918 Officers as soon as they are elected. Also send me the names of any of your members who are in the active service of Uncle Sam. Do not call upon these for 1918 State Dues, for I have been instructed to place them on an Honor Roll and to remit their State Dues while in active service.

*Fourth*—Be on the 'Look-out' for good papers. If any are read before your Society during the year have the Society ask the Author to present the same before the next Annual Meeting of the State Association. I want every section of the State represented on our next years Programme.

With kindest regards and best wishes, I am,

Fraternally,  
J. HOWARD ANDERSON, Sec'y.

January 16, 1918.

Dr. James R. Bloss,  
Editor, W. Va. Medical Journal,  
Huntington, W. Va.  
My dear Doctor:

At the regular quarterly meeting held January 7th, Council of the Ohio State Medical Association very freely discussed that provision of the present War Revenue Law, by which an extra tax of 8 per cent is placed on the earned incomes of professional men, above \$6,000.00.

The Council had before it a copy of the Congressional Record of December 18th, containing remarks by several members of Congress on this particular section. After a free discussion, the enclosed resolution was unanimously adopted.

I am calling this matter to your attention in the belief that it would be effective for you to take some similar steps in your state. As the matter is now pending before the Senate, it would be well to act immediately if you think action is necessary. If members of the Senate hear from the profession throughout the United States on this point, they may give this matter the consideration it deserves.

Very sincerely yours,  
G. V. SHERIDAN, Ex. Sec'y.

Copy of resolution unanimously adopted by Council of the Ohio State Medical Association, at the regular quarterly meeting held in Columbus, Monday, January, 7, 1918.

"Resolved by the Council of the Ohio State Medical Association, after a careful investigation of Section 209 of the War Revenue Law: That that provision is entirely unfair, and works a serious injustice to professional men, this injustice being more particularly marked in the case of physicians, who without exception have always done a large amount of charity work, and who in particular as the result of the war have had increased work with lessened incomes:

That the tax is particularly obnoxious because it imposes a special burden upon men who earn their incomes, while it exempts from that burden owners of inherited wealth, who earn nothing but are simply parasites:

That we, therefore, call upon our representatives in Congress to use their utmost endeavors to secure a repeal of this unjust and erroneous tax which, so far as we can learn, has not been imposed, or even contemplated, in any of the other countries engaged in the present war."

Huntington, W. Va., Jan. 16, 1918.  
To the Editor:  
Dear Sir:

To publish the enclosed press matter will be a patriotic service. To make editorial mentioning of the same will aid materially in interesting your readers in behalf of this great cause, and will be most highly appreciated.

The sending of marked copies is of importance.

Yours truly,  
WEST VA. WAR SAVINGS COMMITTEE  
By Wiatt Smith, Publicity Director.

*From Publicity Director West Virginia War-Savings Committee—for Immediate Release.*

The War-Savings Campaign in West Virginia for the sale of \$28,000,000 in War-Savings Stamps in the State during 1918, is growing like a snow ball rolling down hill, gaining in force and size every time it turns over. This declaration has been issued from the office of State Director Robert L. Archer of Huntington. The State Director and the members of his organization have been greatly encouraged recently by the many evidences of increasing interest on the part of the public in War-Savings Stamps and Thrift Stamps.

In all centers where there has been any pronounced activity results are beginning to manifest themselves. J. H. Long, Postmaster at Huntington, states that his force is selling War-Savings Stamps and Thrift Stamps at the rate of \$1,000 per day. Many banks and sales agencies in Huntington are also issuing the Stamps rapidly and it is considered a safe estimate, with due allowance for the fact that some of the local agencies are purchasing their supplies from the post-office, that the volume of sales in Huntington has reached \$2,000 a day.

True Huntington is the seat of State Headquarters and that city has had unusual opportunities for learning about the W. S. S. movement, but the situation in other counties is such that it is clearly proved that efficiency in the promotion of the War-Savings campaign depends largely upon local organization, and notable success has been achieved by Chairman John L. Dickinson of Charleston, who, with his co-workers, is making W. S. S. a familiar term throughout Kanawha County, and in Bluefield, under the leadership of Chairman L. A. Hooper of Mercer County, the committee

has established almost seven hundred agencies for the sale of War-Savings Stamps and Thrift Stamps, in addition to having inaugurated what is widely known as the Bluefield plan for the placing of a Thrift Card with one Thrift Stamp in the hands of every school child.

Chairman H. W. Chaddock of Taylor County was one of the few leaders who got their work started before the Christmas holidays. Enthusiastic reports have been received from Grafton, where Mr. Chaddock has headquarters, especially concerning the work in the schools.

There are only a few Counties in which the work is not being pushed and State Director Archer feels sure that the first of February will not see an inactive locality in the State.

As the result of the widespread adoption of what is known as the "Bluefield plan" of placing a Thrift Card with one Stamp attached, in the hand of each school child, it is already assured that between thirty and forty thousand West Virginia school children will soon be started as war-savers. Every school child in Bluefield has already been so provided, as have the children of Westmoreland, Wayne County and Charleston and Kanawha County while the money has been provided for the placing of a Thrift Card and one Stamp in the hands of each of the twelve thousand school children in Cabell County, of which Huntington is the County seat, while on strength of the movement launched recently at the meeting of the Boys' and Girls' Farm Clubs at Morgantown a guarantee has been given of the placing of a Thrift Card in the hands of each club member in the State, of whom there are about ten thousand.

As the result of the recent announce

ment of the Treasury Department ruling permitting the establishment of stations for the sale of War-Savings Stamps and Thrift Stamps the bonds of red tape which had been hampering County organizers have been loosened and Stamps are being placed on sale in hundreds of places throughout West Virginia. That the hundreds will rapidly grow into thousands seems certainly assured. It is the desire of the National War-Savings Committee that as many as can be persuaded to do so become authorized agents of the Treasury Department for the sale of War Savings and Thrift Stamps. It is hoped that there may be between four and five thousand such agencies established in West Virginia during the present month. It is the purpose of the people in charge of this W. S. S. campaign that War-Savings and Thrift Stamps shall be on sale at more places than other articles.

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War-Savings Societies by the score are being organized in West Virginia. A Society may be organized by any group of ten or more persons, and upon proper application a certificate of affiliation with the National War-Savings Committee will be issued. The purposes of a War-Savings Society are as follows:

(1) To awaken a realization among the men, women and children of the entire nation that in their hands lies the key to the successful prosecution of the war; that they can render the most far-reaching, patriotic service through refraining from the purchase of all unnecessary articles confining themselves to the use of such things as are necessary for health and efficiency, thereby releasing labor and material for the support of our armies in the field; and that there is not enough labor and materials for the support of our armies in the field; and that there is not enough labor in the

United States to produce the great variety of articles needed to support our soldiers and at the same time to provide all the comforts and luxuries we used to enjoy when there was no war.

(2) To lay the foundation of thrift and economy throughout the United States and to bring home to the people the fact that intelligent and consistent savings is not a dry problem in economics, but is the most vital, practical step toward personal success.

(3) To obtain for the uses of the Government large sums of money through the sale of W.-S. Stamps, and at the same time furnish a method by which the small investor may put his savings in the immediate service of his country. Members of War-Savings Societies pledge themselves to support the Government by refraining from unnecessary expenditures, by systematic saving and by obtaining new members. A pamphlet describing in detail the method of organizing and conducting these Societies has been issued to the County Chairmen for War-Savings, and those interested in this plan may secure the information from the Chairman of the W. S. S. organization in their particular Counties.

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Postoffices and postal employees are contributing largely to the early success of the War-Savings campaign in West Virginia and throughout the nation. In almost every instance the Postmasters of West Virginia have given their enthusiastic and hearty co-operation to the movement, though there have been reported to the office of State Director Archer in Huntington several offices where the movement has not been given proper attention. Steps are being taken to secure information in regard to the offices where, either for reason of antagonism or indifference, the W. S. S. work has

been neglected. In such cases an effort will first be made to secure co-operation of the Postmasters and their employees through local organizations and if this fails, the matter will be brought to the attention of the Postoffice Department at Washington. This applies to carriers on both city and suburban routes to whom the following instruction has been issued from Washington: "Carriers are required by law, and are hereby directed personally to solicit the sale of Thrift Stamps and War-Savings Certificate Stamps to postal patrons, both on and off their routes and shall make every effort consistent with the proper performance of their regular duties to encourage the sale of these obligations of our Government".

The regulations also provide a fixed credit of not less than \$15.00 which shall be extended to the Postmaster to village and rural carriers' and for favorable notation on the records of the carriers who produce good results through their efforts to sell Stamps.

Dr. J. R. Bloss, Editor  
W. Va. Medical Journal,  
Huntington, W. Va.

Dear Doctor:—

During December the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion with New and Non-official Remedies:

Calco Chemical Company:  
CHLORAMINE-B (CALCO)  
CHLORAMINE-T (CALCO)  
DICHLORAMINE-T (CALCO)  
HALAZONE (CALCO)

Dermatological Research Laboratories, Philadelphia Polyclinic Arsenoben-zol (Dermatological Research Laboratories), 0.4 Gm. Ampoules.

Farbwerke-Höchst Co.:

NOVOCAINE.

A. Klipstein and Co.:

Sterile Solution Coagulen-Ciba (3 per cent.) 1.5 Cc. Ampoules.

Sterile Solution Coagulen-Ciba (3 per cent.) 20 Cc. Ampoules.

Tablets Coagulen-Ciba, 0.5 Gm.

Yours truly, W. A. Puckner, Sec'y.  
*Council on Pharmacy and Chemistry.*

Chicago, Ill., January 14, 1918.

Dear Doctor:

We believe you will confer a distinct favor on your readers by publishing the attached notice, or one of a similar nature, which you can prepare. It is just possible these swindlers may victimize your readers in the name of other publications, or even your own *Journal*.

Very truly yours,  
COOPERATIVE MEDICAL ADV'NG BUREAU

#### BEWARE OF SWINDLERS

No doubt you may have seen the several notices, under "General News" in the *Journal A. M. A.* in several recent issues, entitled "Once more a warning." These refer to swindlers operating in different sections of the country, various letters having been received from victims in Ohio, Colorado and other widely separated states. Now comes a letter from the well-known publishing house of W. B. Saunders Co. of Philadelphia, saying a man under the name of E. T. Rogers, claiming to represent the University Progressive Club of Cincinnati, for medical and other journals, has been victimizing physicians in Illinois; and the same subscription swindlers, or another under the name of Robert Wayne, has been relieving physicians of their well earned cash in the region of Gary, Ind. It is believed there is concerted action, perhaps by an organized band, being taken at this time of the year, to victimize physicians on so-called "subscription" schemes. Every

physician should decline to pay any money by check, or otherwise, to subscription agents not personally known to him, or for whom other physicians cannot vouch. Many of these so-called agents operate under the guise of students "working their way through college."

#### WARNING!

Physicians are warned against paying any money to parties representing themselves as agents for *The Advance Society*, University of Illinois, North American Bldg. Chicago, Ill.

These parties are operating all over the country, soliciting subscriptions for various journals and incidentally endeavoring to collect any money which they may learn to be due pharmaceutical houses.

Physicians will confer a favor upon us by notifying us at once if approached by such agents.

Pay money for accounts of the Abbott Laboratories to authorized Abbott representatives only.

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#### REPORTING OF ACCIDENTS FROM LOCAL ANESTHETICS.

To the Editor:—The Committee on Therapeutic Research of the Council on Pharmacy and Chemistry of the American Medical Association has undertaken a study of the accidents following the clinical use of local anesthetics, especially those following ordinary therapeutic doses. It is hoped that this study may lead to a better understanding of the cause of such accidents, and consequently to methods of avoiding them, or, at least, of treating them successfully when they occur.

It is becoming apparent that several of the local anesthetics, if not all of those in general use, are prone to cause death or symptoms of severe poisoning in a

small percentage of those cases in which the dose used has been hitherto considered quite safe.

The infrequent occurrence of these accidents and their production by relatively small doses point to a peculiar hypersensitiveness on the part of those in whom the accidents occur. The data necessary for a study of these accidents are at present wholly insufficient, especially since the symptoms described in most of the cases are quite different from those commonly observed in animals even after the administration of toxic, but not fatal, doses.

Such accidents are seldom reported in detail in the medical literature, partly because physicians and dentists fear that they may be held to blame should they report them, partly, perhaps, because they have failed to appreciate the importance of the matter from the standpoint of the protection of the public.

It is evident that a broader view should prevail, and that physicians should be informed regarding the condition under which such accidents occur in order that they may be avoided. It is also evident that the best protection against such unjust accusations, and the best means of preventing such accidents consist in the publication of careful detailed records when they have occurred, with the attending circumstances. These should be reported in the medical or dental journals when possible; but when, for any reason, this seems undesirable, a confidential report may be filed with Dr. R. A. Hatcher, 414 East Twenty-sixth Street, New York City, who has been appointed by the Committee to collect this information.

If desired, such reports will be considered strictly confidential so far as the name of the patient and that of the medical attendant are concerned and

such information will be used solely as a means of studying the problems of toxicity of this class of agents, unless permission is given to use the name.

All available facts, both public and private, should be included in these reports, but the following data are especially to be desired in those cases in which more detailed reports cannot be made:

The age, sex, and general history of the patient should be given in as great detail as possible. The state of the nervous system appears to be of especial importance. The dosage employed should be stated as accurately as possible; also the concentration of the solution employed, the site of the injection (whether intramuscular, perineural or strictly subcutaneous), and whether applied to the mouth, nose or other part of the body. The possibility of an injection having been made into a small vein during intramuscular injection or into the gums should be considered. In such cases the action begins almost at once, that is, within a few seconds.

The previous condition of the heart and respiration should be reported if possible; and, of course, the effects of the drug on the heart and respiration, as well as the duration of the symptoms, should be recorded. If antidotes are employed, their nature and dosage should be stated, together with the character and time of appearance of the effects induced by the antidotes. It is important to state whether antidotes were administered orally, or by subcutaneous, intramuscular or intravenous injection, and the concentration in which such antidotes were used.

While such detailed information, together with any other available data, are desirable, it is not to be understood that the inability to supply such details should prevent the publication of reports

of poisoning, however meager the data, so long as accuracy is observed.

The committee urges on all anesthetists, surgeons, physicians and dentists the making of such reports as a public duty; it asks that they read this appeal with especial attention of the character of observations desired.

TORALD SOLLMANN, Chairman,

R. A. HATCHER, Spec'l Referee.  
Therapeutic Research Committee of the  
Council on Pharmacy and Chemistry  
of the American Medical Association.

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NAVY'S CALL FOR BINOCULARS, SPY-GLASSES AND TELESCOPES — "THE EYES OF THE NAVY".

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Dear Sir:—

The Navy is still in urgent need of binoculars, spy-glasses and telescopes. The use of the submarine has so changed naval warfare that more "EYES" are needed on every ship, in order that a constant and efficient lookout may be maintained. Sextants and chronometers are also urgently required.

Heretofore, the United States has been obliged to rely almost entirely upon foreign countries for its supply of such articles. These channels of supply are now closed, and as no stock is on hand in this country to meet the present emergency, it has become necessary to appeal to the patriotism of private owners, to furnish "EYES FOR THE NAVY".

Several weeks ago, an appeal was made through the daily press, resulting in the receipt of over 3,000 glasses of various kinds, the great majority of which has proven satisfactory for naval use. *This number, however, is wholly insufficient, and the Navy needs many thousands more.*

May I, therefore, ask your cooperation with the Navy, to impress upon your subscribers, either editorially, pictorially

or in display, by announcing, in addition to the above general statement, the following salient features in connection with the Navy's call:

All articles should be securely tagged giving the name and address of the donor, and forwarded by mail or express to the Honorable Franklin D. Roosevelt, Assistant Secretary of the Navy, care of Naval Observatory, Washington, D. C. so that they may be acknowledged by him.

Articles not suitable for naval use will be returned to the sender. Those accepted will be keyed, so that the name and address of the donor, will be permanently recorded at the Navy Department, and every effort will be made to return them, with added historic interest, at the termination of the war. It is, of course, impossible to guarantee them against damage or loss.

As the Government cannot, under the law, accept services or material without making some payment therefor, one dollar will be paid for each article accepted, which sum will constitute the rental price, or, in the event of loss, the purchase price, of such article.

Toward the end of January, it is proposed to distribute throughout the country, posters making an appeal to fill this want of the Navy.

As this is a matter which depends entirely for its success upon publicity, I very much hope that you will feel inclined to help the Navy at this time by assisting in any way that lies within your power.

Very sincerely yours,

FRANKLIN D. ROOSEVELT, Assistant Secretary of the Navy.

To The Editor:—

In connection with the registration of German alien enemies which will take

place during the period February 4th to 9th, inclusive, you are respectfully requested to publish the following notice as soon as possible:

NOTICE TO REGISTRANTS AND TO REGISTRATION OFFICERS—REGISTRATION GERMAN ALIEN ENEMIES, FEBRUARY 4th to 9th INCLUSIVE.

All registration officers are reminded that many registrants will need assistance and advice in filling out their registration affidavits and they are requested to aid such persons in every proper way. Registrants are not to be treated as persons of evil disposition, and the registration officers are urged to deal with them in a courteous and friendly manner.

No fees are to be charged to or gratuities accepted from registrants by registration officers for administering oaths or for any other reason.

C. E. SMITH, U. S. Marshal.

Huntington, W. Va. Jan. 29, 1918.  
Editor West Va. Med. Journal, City,  
Dear Doctor Bloss:—

Will you please announce that Maj. Henry D. Jump of the Surgeon-General's office, Washington, D. C., will be in Huntington to address the Cabell County Medical Society, February 12th in regard to the Medical Officers Reserve Corps.

This address will be delivered in the assembly room of the Hotel Frederick at 8:30 p. m. All physicians of the surrounding county societies are urged to attend.

Maj. Jump will be in Huntington the following day to consult with any physicians desiring to make inquiries concerning entering this branch of the country's service.

Very truly yours,

J. ROSS HUNTER.



# The West Virginia Medical Journal

JAS. R. BLOSS, M. D., EDITOR  
C. R. ENSLOW, M. D.  
J. E. RADER, M. D., ASSISTANT EDITORS

Huntington, W. Va., January, 1918.

THE JOURNAL issued on the first of each month.

Subscription . . . . . \$1.50 per year  
Single Copies . . . . . 20 Cents

All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

## CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

## ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

## REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: United Woolen Mills Building, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

## DR. ANDERSON'S COMMUNICATION.

Please read this and then do all in your power to comply. He outlines a very comprehensive program for the work of county medical societies during the coming year. If each member will but do his part, which is not difficult, think what the aggregate will be for the State Association.

It is given as a reason for poor attendance, in many instances, that there is nothing to be gained by going to the meetings. The best answer to this that we know of is to advise the members to attend and lend his aid in making the

## OFFICERS OF THE STATE ASSOCIATION

PRESIDENT—S. R. Holroyd, Athens, W. Va.

FIRST VICE-PRESIDENT—Chas. O'Grady, Charleston, W. Va.

SECOND VICE-PRESIDENT—W. J. Judy, Belleville, W. Va.

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ALTERNATE—Henri P. Linz, Wheeling, W. Va.

CHAIRMAN OF THE COUNCIL—G. D. Jeffers, Parkersburg, W. Va.

## COUNCIL

FIRST DISTRICT—J. W. McDonald, Fairmont, W. Va., one-year term; H. R. Johnson, Fairmont, W. Va., two-year term.

SECOND DISTRICT—C. H. Maxwell, Morgantown, W. Va., one-year term; T. K. Oates, Martinsburg, W. Va., two-year term.

THIRD DISTRICT—M. T. Morrison, Sutton, W. Va. one-year term; C. R. Ogden, Clarksburg, W. Va., two-year term.

FOURTH DISTRICT—R. H. Pepper, Huntington, W. Va. one-year term; G. D. Jeffers, Parkersburg, W. Va., two-year term.

FIFTH DISTRICT—W. H. St. Clair, Bluefield, W. Va. one-year term; J. E. McDonald, Logan, W. Va., two-year term.

SIXTH DISTRICT—P. A. Haley, Charleston, W. Va., one-year term; H. L. Goodman, Charleston, W. Va., two-year term.

sessions "worth while". If all of us would do this how profitable to the society and to the member himself.

Particularly let us be on the lookout for articles by the members. It may be that it is only the report, carefully worked out and written up, of some unusual case or of investigation along a certain line. How much of interest to us is buried in this way. If the officers or any member of one of the component organizations know of work of this kind being done let him insist upon it being written for the local society and then printed in the State Journal. Many men dread presenting an article for fear of

criticism, but honest criticism is the best of teachers.

Think Dr. Anderson's letter over and lend your individual efforts to make this the banner year of the association.

#### ACCIDENTS FROM LOCAL ANESTHETICS.

Attention is directed to the communication from the committee on Therapeutic Research, which appears in this issue. It is certainly a very timely one. We shall only be able to form definite opinions in regard to these dangers after a large amount of material has been received and classified.

Many of us have had unpleasant experiences in this respect. We should lend our assistance to our profession by reporting our experiences in the use of these drugs. Often the fear of blame being attached to us, to which the committee calls attention, restrains us from making reports. It seems that we should lose sight of this side of the matter in trying to find out what the dangers are, how to avoid them if possible and just how much blame for carelessness and so on is to be attached to the administrator. Possibly some of us are too prone to criticise others on the hear-say of bystanders, either lay or professional, without the facts. The findings of this body, should place us in position to feel sure of our ground.

The following is an editorial by Herbert Kaufman, which appeared in the *New York American* a few months ago. It appears to your Editor to have some food for thought in it and for this reason is reprinted.

#### MOBILIZING THE PROFESSION FOR WAR.

Until the entire medical profession of the United States, or at least those who are mentally and physically fit and within the age limit, are mobilized within the Medical Reserve Corps of the United

States Army, not until then can we give to the Surgeon General that efficiency which he so badly needs in having a large Body of Medical Officers upon whom to draw.

You may never be called, at the same time your joining the Medical Reserve Corps and placing your services at the command of your country, clearly indicates the patriotism which the medical profession, as a whole, should evince and which we must manifest if we are to win the war.

Every doctor must realize that success depends upon a carefully selected and thoroughly trained Body of Medical Officers.

By careful selection, we mean the placing of a medical officer in a position where he is best fitted for the service, and only by having an immense Corps or the entire profession mobilized upon a war basis, can we serve our country to the best possible advantage.

This mobilization of the entire profession should come from within the Body itself, but every physician coming within the requirements of the service, as to age and physical fitness, should seriously consider this suggestion and not wait for complete mobilization but apply at once for a commission in the Medical Reserve Corps of the United States Army.

It is not only for the combatant forces that medical officers are required but for sanitation, hospital camps, cantonments and in other departments where the health and life of the forces are dependent upon the medical officer.

We have within the profession a sufficient number of doctors to fully meet the requirements of the Surgeon General's Office whatever they might be, but to be of service, you must join the Medical Reserve Corps to enable you to meet

the appeal which is now being made for a large and efficient Medical Reserve Corps upon which the Surgeon may draw as requirements demand.

## State News

Drs. J. I. Miller and C. C. Hogg of Huntington have gone to California and Washington on an extended pleasure trip.

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Born—On Sunday December 30th, 1917 to Dr. and Mrs. J. A. Guthrie of Huntington, a son.

—o—

Dr. T. J. Farley of Holden was a recent visitor in Huntington.

—o—

Dr. A. P. Butt of Davis is taking a special course in operative surgery and attending clinics in New Orleans.

—o—

Dr. W. P. Sammons of Cameron has been commissioned first lieutenant in the M. R. C. and reported to Fort Oglethorpe, January 23rd.

—o—

Among recent visitors in Huntington were Dr and Mrs. McCord of Marlinton.

—o—

Miss Frances Bromberg who recently graduated at the Chesapeake and Ohio training school for nurses in Huntington has been appointed superintendent of the hospital at Clifton Forge, Va.

—o—

Dr. George R. Parker a well known specialist located at Williamson has been sent to Russia as a member of a detachment which recently left Fort Benjamin Harrison on a mission to that country. The nature of the assignment is not known. Dr. Parker is an officer of the M. R. C.

Dr. A. L. Peters of Fairmont is in New York for a five or six weeks taking special work in surgery, systoscopy, and gynecology, at the New York Polyclinic Medical School and Hospital.

—o—

The name of Dr. J. W. Parsons of Huntington as one of the members of the Medical Advisory Board of the district of Huntington was omitted by mistake in the January *Journal*, giving the list.

—o—

An epidemic of typhoid fever in Tucker County has been investigated by Dr. H. B. Wood of the state health department; the disease was prevalent among the foreign residents of the town of Pierce.

—o—

Dr. H. E. Summers, a well known dentist of Huntington has received his commission as first lieutenant in the M. R. C.

—o—

The state board of pharmacy composed of the following members: Dr. F. A. Walker of Sutton; Dr. J. N. Judy, Petersburg; Dr. J. R. Ellison, Wellsburg; Dr. B. E. Downs, Welch; Dr. S. M. Scott, Jr. Terra Alta held an examination recently in Huntington at the Hotel Frederick. Nineteen applicants were present taking the examination for registration.

—o—

Dr. N. B. Ferguson of Huntington died recently at his home.

Dr. Ferguson had been in ill health for nearly a year. He insisted upon going about and performing his regular duties until the very last, however.

He was born at Wayne Court House in 1853. His father, Jamison Ferguson, is still living, being now 87 years of age. He studied medicine in Cincinnati and,

after receiving his degree, practiced at Ironton for six or eight years, then at Wayne for two years, after which he came to Huntington, where he remained until his death. He was a member of the Masonic order, Vinson lodge, number 66. He married Miss Rebecca Frazier, of Wayne, in 1875.

—o—

The local County Exemption Boards from Fayette, Raleigh, Boone, Braxton, Clay and Kanawha, together with the Medical Advisory Board from Charleston, met the 19th of January in Charleston to receive instructions from a member of the Army Medical Corps, Captain Nelson, designated from Camp Lee.

—o—

Dr. W. W. Tompkins and Dr. James Putney of Charleston have returned from a visit to New York.

—o—

Dr. W. F. Shirkey, Jr. of Charleston has gone to Fort Oglethorpe for military training.

—o—

Dr. J. E. Cannaday of Charleston was appointed by the President as Medical Aide to the Governor of West Virginia.

—o—

Major Henry D. Jump, of the Office of the Surgeon-General, expects to be in Huntington the evening of February 12th, and will make an address to the physicians of Huntington and vicinity at that time. Major Jump is a very attractive gentleman, and it is hoped that he will have a large and enthusiastic audience.

—o—

Recently the Huntington General Hospital, for many years a landmark both as a building and as an institution, was removed from the old site on Fourth avenue, near seventh street to a hand-

some and thoroughly modern quarters at 1616 Sixth avenue where it will be housed in the building recently erected by Mrs. Lydia Smith, and in its inception intended for a woman's and children's hospital.

It is stated that Mrs. Smith, owner of the building, will operate the hospital as business manager, and that associated with her will be Dr. Vina B. R. Roberts, of the Huntington General Hospital.

For some time the Huntington General Hospital organization consisting of a number of well known physicians and surgeons, had been confronted with the problem of securing new quarters. A number of prospects were considered, but upon the whole it was the consensus that the Smith property, built especially for hospital purposes, and constructed according to the latest plans for hospital efficiency, offered the best solution.

Dr. J. E. Rader, president of the Huntington General Hospital, stated that every appurtenance to the modern and thoroughly equipped hospital, would be installed in the new quarters. Dr. Rader, as well as the other officers of the Huntington General, are highly elated with the new home for the old institution.

The present capacity of the new home of the Huntington General is forty patients. This, many believe, will be materially enlarged at an early date.

The officers and executive committee of the Huntington General are as follows: Dr. J. E. Rader, president; Dr. C. C. Hogg, treasurer; Dr. F. A. Fitch, secretary.

The executive committee will be composed of: Drs. Rader, Hogg, Fitch and H. A. Brandebury. They will act as board of directors with Drs. T. W. Moore, Karl C. Prichard, C. T. Taylor, C. M. Hawes, Earl B. Gerlach, E. S. Buffing-

ton, L. B. Lawson, I. R. Lesage, H. C. Solter and W. E. Neal.

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DR. THEO. C. JANEWAY DEAD

Noted Diagnostician, Professor of Medicine at Johns Hopkins, died from pneumonia at his home in Baltimore, December 27th, after an illness of six days. Dr. Janeway was but forty-five years of age at the time of his death.

## Society Proceedings

Huntington, W. Va., Jan. 28th, 1918.

Dear Doctor Bloss:—

I am sending you a report of the last two meetings of the Cabell Co. Medical Society:

The Society met on January 10th in room No. 210 at the Frederick Hotel.

The house was called to order by Dr. C. M. Hawes, the newly elected president, the following members being present; Drs. Mathews, Marple, Bloss, Hogg, Lesage, I. C. Hicks, Fitch, Yost, Prichard, Hopkins, Morrison, L. V. Guthrie, E. B. Gerlach, Hawes and Pepper.

The minutes of the last meeting were read and approved, after the report of clinical cases, Dr. L. V. Guthrie gave an informal and extemporaneous, but very interesting talk upon some mental and nervous diseases.

The secretary reported that the next meeting of the society would be at the Dixie Theatre and that two surgical operations would be demonstrated by motion pictures.

It was moved and seconded that the Lawrence Co. (Ohio) Medical Society and the Boyd Co. (Ky.) Medical Society be invited to meet with us at this time. Carried.

On motion, the society adjourned, R. H. Pepper, Secretary.

The Cabell County Medical Society

met at the Dixie Theatre, on January 24th and as announced at the last meeting two surgical operations were demonstrated by motion pictures, the subjects were as follows:

Hernia, Radical Cure of Congeital Inguinal by J. Bently Squirer, M. D.

Bone-Graft, (Inlay) Non-Union of Tibia by Fred H. Albee, M. D.

I am, Fraternaly Yours,

R. H. PEPPER, Secretary.

The Mercer County Medical Society met at the Chamber of Commerce, Bluefield, W. Va. at 8 p. m. The president presiding. Minutes of last meeting were read and adopted. The secretary read the annual reports from the secretary and treasurer, and it was turned over to the auditing committee, which committee found it correct. He also read a letter from Dr. J. H. Anderson, State Secretary, which contained some splendid suggestions for the future progress of our Society.

The president read his annual address, which was turned over to the secretary who mailed it to the State Journal for publication.

The next on the program was Clinical Cases:

Dr. S. R. Holroyd asked the opinion of the Society of the value of camphor and oil in pneumonia which was discussed by several members present, who thought it would not be well to rely on it entirely. Dr. Vass thought perhaps the average physicians began too late in using it.

Next on the program was an address by Dr. Holroyd, The History and Progress of the Mercer Medical Society, which will be published in the *Journal*. This was a splendid paper and was enjoyed by everyone present.

Next in order was the election of of-

ficers for the ensuing year, with the following result:

- Dr. J. F. Fox, President.  
 Dr. C. C. Peters, 1st Vice-President.  
 Dr. T. H. Becker, 2nd Vice-President.  
 Dr. F. F. Holroyd, 3rd Vice-President.  
 Dr. E. H. Thompson, Secretary.  
 Dr. T. E. Peery, Treasurer.

Censors:

Drs. E. W. Horton, A. H. Hoge and J. R. Vermillion. Dr. Vermillion being elected to act in place of Dr. H. W. Hays who is in the government service.

Delegates to State Meeting:

- Drs. H. G. Steele and C. C. Peters.

There were a number present who paid their dues, and it will be appreciated if the members will remit promptly when they receive their notices.

I wish to call the attention again to the by-laws of the State Association of which a member is delinquent if his dues are not paid by April 1st.

There being no further business a motion was made and seconded to adjourn.

E. H. THOMPSON, Secretary.

## Book Reviews

### Vol. III. International Clinics.

A quarterly of illustrated clinical lectures and especially prepared original articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Othology, Rhinology, Laryngology, Hygiene and other topics of interest to students and practitioners by leading members of the medical profession throughout the world.

Edited by H. R. M. Landis, M. D. Philadelphia, U. S. A. with the collaboration of C. H. Mayo, M. D., Rochester. Sir Wm. Osler, Bart, M. D., F. R. S.,

Oxford. Rupert Blue, M. D., D. P. H., Washington, D. C. Frank Billings, M. D., Chicago. John S. Clark, Philadelphia. A. McPhearson, M. D., Toronto. Jos. J. Walsh, M. D., New York. J. W. Ballentyne, M. D., Edinburg. Chas. Greene Camston, M. D., Geneva. Arthur Beifeld, M. D., Chicago. Richard Kuntz, Vienna. with correspondents in Montreal, London, Paris, Berlin, Vienna, Leipsic, Brussels and Geneva.

Twenty-seventh series, 1917.

Philadelphia and London.

J. B. LIPPINCOTT COMPANY

Price \$2.00

This volume is rich in splendid materials and is more than up to the usual quality.

### FOOD FOR THE SICK

By Solomon Strouse, M. D.

Associate attending physician, the Michael Reese Hospital; Professor of Medicine at the Post Graduate Medical School, Chicago, and Maude A Perrny, A. B. Dietician of the Michael Reese Hospital, Chicago. 12 mo. of 270 pages, price \$1.50 net.

W. B. SAUNDERS Co.

Philadelphia and London.

This is a book well worth the careful attention of the profession, the nurse and student as well. The author as stated in the introduction endeavors to show both the "how", the "why", of each certain diet recommended for use in the different conditions. There are 285 diets and 124 special recipes given. altogether a very satisfying production.

### The Fundus Oculi of Birds.

Especially as viewed by the ophthalmoscope; a study in comparative anatomy and physiology.

Cascy Albert Wood, Chicago, The Lakeside Press, 1917. Price \$15.00.

This book is produced after years of

investigation and research and whatever may have been or is the aim of the producer he has succeeded in getting up an interesting and beautiful book. There are numerous illustrations including sixty-one colored prints and 145 drawings. The atlas will no doubt be of great interest to ornithologists and ophthalmoscopists.

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### Surgery and Disease of the Mouth and Jaws.

A practical treatise on the surgery and diseases of the mouth and allied structures, by Vilray Papin Blair, A. M., M. D., F. A. C. S. Professor of oral Surgery in the Washington University Dental School and Associate in Surgery in the Washington University Med. School. Third Edition revised so as to incorporate the latest war data concerning gunshot surgeries of the face and jaws, compiled by the Section of Surgery of the Head, sub-section of plastic and oral surgery, office of the Surgeon-General of the Army, Washington, D. C. With 460 illustrations. C. V. Mosby Co. St. Louis, 1917.

The subjects treated of in this book include very many of those mentioned with scant consideration in books on general surgery. Herein they are well considered and the treatment freely and lucidly described. In the opening chapters, Chapter III is given up entirely to the preparation of the operator, the operative fields, instruments, dressings etc. In Chapter IV is found a very enlightening discussion on the occurrence and treatment of shock, hemorrhage and allied complications. This latest edition has been revised, rewritten and added to in such a way as to bring the work thoroughly up to date.

Diseases of the Skin—Their Pathology and Treatment by Milton B. Hartzell, A. M., M. D., L. L. D., Professor of Dermatology in Pennsylvania University.

Price \$7.00. Philadelphia and London. J. B. Lippincott Co. 1917.

This is, comparatively speaking, one of the new books on this subject and is claimed as largely the outcome of the author's own experience as worker and teacher in this special department of medicine for more than twenty-five years. It is prepared with the ambitious object in view of "supplying a textbook for the student of medicine and a practical guide for the general practitioner in the recognition and treatment of diseases of the skin and as a work of reference for the dermatologist." The mechanical execution and material is excellent. It is well illustrated, having 51 colored plates and 242 cuts in the text.

The article on syphilis comprises forty pages of concise, well written, well illustrated matter and excellent formula. In his article on Pellagra the author discusses treatment with scant consideration of medical measures, mentioning arsenic as being of some value in the opinion of a number of authorities but recommending the method of Goldberger as being the most promising of success.

In a well written article on skin cancer the basal-celled and prickle-celled cancers are mentioned but no discussion is entered into although the recognition of the difference is claimed by some late writers to be of the very greatest importance.

Taken as a whole it is a very desirable book, worthy of a place in any professional library.

## Propaganda for Reform

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### SOME MISBRANDED MINERAL WATERS.

Shipments of the following bottled mineral waters were seized by the federal authorities, and on prosecution declared misbranded under the provisions of the U. S. Food and Drugs Act: (1) Baldwin Cayuga Mineral Water; (2) Bowden Lithia Water; (3) Carbonated Colfax Mineral Water; (4) Chippewa Natural Spring Water; (5) Crazy Mineral Water; (6) Crystal Lithium Springs Water; (7) Gray Mineral Water; (8) Henk Waukesha Mineral Spring Water; (9) Seawright Magnesian Lithia Water; (10) White Stone Lithia Water, and (11) Witter Springs Water. The "lithia" waters (Nos 2, 6, 9 and 10) were in each case declared misbranded in that they did not contain sufficient lithium to warrant the term "lithia" in the name. A number (Nos. 1, 3, 5, 6 and 11) were declared adulterated in that they contained filthy or decomposed animal or vegetable substances of an excessive number of bacteria. Most of the waters (Nos. 1, 3, 4, 6, 7, 8, 9 and 10) were declared misbranded because the curative claims made for them were found unwarranted, false or fraudulent (Jour. A. M. A., Dec. 1, 1917, p. 1901).

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Salvarsan Manufacture Authorized in U. S.—The Federal Trade Commission has granted orders for licenses to three firms to manufacture and sell arsphenamine, the product heretofore known under the trade name of salvarsan, patent rights to which have been held by German subjects. Provided conditions of the license are accepted by the firms, the following will be authorized to make and sell arsphenamine: Dermatological

Research Laboratories of Philadelphia; Takamine Laboratory, Inc., of New York, and Herman A. Metz Laboratory of New York. The license stipulates that the name arsphenamine be used in connection with the trade name, that the product must be submitted to the U. S. Public Health Service for examination before sale, and reserves the right to fix the price (Jour. A. M. A., Dec. 8, 1917, p. 1989).

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Anasarcin and Anedemin.—These are the twin nostrums of cardiac pseudo-therapy. Cardiac disease with its resultant renal involvement is frequently encountered; and running, as it does, a chronic course, it offers an almost ideal field of exploitation for the typical nostrum vender, who is more familiar with human credulity than with this preparation. Anedemin is said to consist of apocynum, strophanthus and squill with elder—an irrational mixture of three heart drugs with inert elder. Anasarcin has been stated to contain sourwood, elder and squill. Anasarcin is a dangerous remedy in the hands of the average clinician, and its use is at all times to be condemned. In view of the dangers attending the incautious use of any member of the digitalis group of drugs, it is impossible to condemn sufficiently the recommendation that the use of Anasarcin should be continued without cessation until all symptoms of dropsy have disappeared. In the present state of our knowledge of cardiac drugs, it is indisputable that digitalis and tincture of digitalis are best suited for the treatment of cardiac disease except in those few cases in which intramuscular or intravenous administration must be employed temporarily for immediate effect. (Jour. A. M. A., Dec. 8, 1917, p. 1992).



The Carrel-Dakin Wound Treatment—From observations of the results of the treatment of wounds by the Carrel method, Wm. H. Welch is convinced that Carrel deserves credit for calling the attention of surgeons to the possibility of the sterilization of infected wounds by chemical means. The Carrel method actually accomplishes sterilization sufficiently for surgical purposes. The destruction of surface bacteria without injury to the body tissues is of primary importance.

(*Jour. A. M. A.*, Dec. 8, 1917, p. 1994).

Strandgard's T. B. Medicine—The resident physician of a Canadian sanatorium states that the Dr. Strandgard's Medicine Company of Toronto, Canada, is attempting to sell its "consumption cure" called Strandgard's T. B. Medicine to Canadian soldiers who are being treated at the sanatorium (*Jour. A. M. A.*, Dec. 15, 1917, p. 2060).

Pepto-Mangan—Physicians having served the purpose of popularizing it, Pepto-Mangan (Gude) is now advertised in newspapers. In consideration of the established facts in regard to the absorption of iron and its utilization, all possible excuse for the therapeutic employment of Pepto-Mangan, in place of iron, has vanished. False claims regarding the efficiency of the preparation have been circulated by its promoters, and about two years ago the Council on Pharmacy and Chemistry reported that while the statements were no longer made, they had never been definitely admitted to be erroneous by the Breitanbach Company, and that Pepto-Mangan was then being exploited to the public indirectly. From a reading of the present advertisement in a medical journal, one can only suppose that this was intended to

mislead physicians. The physician who prescribes Pepto-Mangan as a hematinic shows ignorance of the most rudimentary facts of iron therapy, and the intelligent patient soon perceives his limitations.

"Useful Drugs" contains a list of iron preparations that are suitable for all conditions that call for iron. William Hunter discusses the subject of anemia and its treatment at considerable length in "Index of Treatment", Editions 6, p. 17-37, and gives many prescriptions containing iron for use under different conditions (*Jour. A. M. A.*, Dec. 29, 1917, p. 2202).

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VERNOL AND NOVOCAIN TO BE MADE IN AMERICA AS BARBITAL AND PRO-CAINE.

The Federal Trade Commission which has already issued licenses to three manufacturers to make salvarsan in the United States under the name of Arsphenamine, has recently issued a non-exclusive license for the manufacture of veronal to the Abbott Laboratories, of Chicago. It is stipulated that the name "Barbital" shall appear on the package together with the scientific name diethyl-barbituric acid. The name vermol may also be used on the package in an explanatory sense.

The commission has also issued licenses to the Rector Chemical Company, of New York, and to the Farbwerke-Höchst Company, of New York, for the manufacture of novocain under the German patent, with the stipulation that it shall be designated as Pro-Caine. The licensees are required to pay five per cent. of their gross receipts to the Federal custodian of alien property. The commission reserves the right to fix the prices on these drugs if it should become necessary. These three synthetics are the first for which licenses to manufacture have been issued under foreign patents by the Fed-

eral Trade Commission, and physicians would do well to make a note of the new names assigned to the drug by the commission. *N. Y. Med. Journal*, 12-29-17.

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New and Non-Official Remedies    fill fill

Borchardt's Malt Sugar—A mixture containing approximately maltose, 87.40 per cent.; dextrin, 4.35 per cent.; protein, 4.40 per cent.; ash, 1.90 per cent., and moisterel .95 per cent. It may be used when maltose is indicated in the feeding of infants, particularly in the treatment of constipation. The Borchardt Malt Extract Co., Chicago.) *Jour. A. M. A.*, Dec. 1, 1917, p. 1875).

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Tyramine-Roche — A brand of tyramine hydrochloride complying with the standards of New and Non-official Remedies. The Hoffman-LaRoche Chemical Works, New York (*Jour. A. M. A.*, Dec. 1, 1917, p. 1875).

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Atophan — A proprietary brand of phenyleinchoninic acid complying with the standards of the U. S. P., but melting between 208 and 212 C. For a description of the actions, uses and dosage, see New and Non-official Remedies under Phenyleinchoninic Acid and Phenyleinchoninic Acid Derivatives. Atophan is sold in the form of pure atophan and as atophan tablets 0.5 Gm. Schering and Glatz, New York (*Jour. A. M. A.*, Dec. 8, 1917, p. 1971).

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Arsphenamine — The federal Trade Commission having adopted the name "arsphenamine" as the term to apply to 3 - diamino - 4 - dihydroxy-1-arsenobenzene, first introduced as salvarsan, the Council on Pharmacy and Chemistry voted to adopt this abbreviated name in place of arsenphenolamine hydrochloride now in New and Non-official Remedies.

Arsenobenzol (Dermatological Research Laboratories).—A brand of arsphenamine. It has essentially the same actions, uses and dosage as salvarsan. It is supplied in ampules containing, respectively, 0.4 Gm. and 0.6 Gm. Manufactured and sold by the Dermatological Research Laboratories, Philadelphia Polyclinic, Philadelphia, Pa.

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Salvarsan—A brand of arsphenamine. Supplied in 0.6 Gm. ampules. Manufactured and sold by Farbwerke-Hoechst Co., New York.

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Chloramine-T — Sodium paratoluene-sulphochloramide. It has the actions, uses, dosage and physical and chemical properties given in New and Non-official Remedies, 1917, for chlorazene.

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Chloramine-T (Calco) — A brand of chloramine-T. Manufactured by the Calco Chemical Co., Bound Brook, N. J.

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Novocaine. — The monohydrochloride of paraminobenzolydiethylamino-ethanol. Actions, uses and dosage, see New and Non-official Remedies, 1917, p. 31. Manufactured by Farbwerke-Hoechst Co., New York (*Jour. A. M. A.*, Dec. 22, 1917, p. 2115).

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## Medicine

DAVIS, A. B.; THE CONTROL OF UTERINE HAEMORRHAGE.

*Bull. Lying-In Hosp. N. Y.*, 1917, xi, 158.

Davis states that while uterine hæmorrhage may occur at any time from birth to the end of life, it is most frequent during the child-bearing period of a woman's life. This flow has a wide range as to cause, amount, duration, and severity. Bleeding from the vagina is occasionally seen in the hæmophilic infant

during the first four days of life. It is usually accompanied by bleeding in other parts of the body, and local treatment is of little value. From 1890 to 1909 there occurred in the Lying-In Hospital 18 such cases, and later during a period of one year 12 of these cases appeared. By the infusion of twenty to thirty ccm. of fresh human blood serum three times every twenty-four hours these infants were saved.

In certain individuals anæmia and a depleted physical condition may cause excessive and frequent loss of blood. The treatment in these cases is regulation of the mode of life, adjusted diet and tonic treatment.

In discussing hæmorrhage during pregnancy, labor, and the puerperium, the author doubts that he has ever met with a true case of menstruation during pregnancy. There is, however, occasional unmistakable evidence that the capacity of the uterine cavity is not fully occupied by the contained ovum in the early months of pregnancy, and it is therefore conceivable a flow of blood may appear coincident with the periodical congestion of menstruation without causing decidual detachment. At such times pregnant women should avoid nervous and physical exertion. The greater number of hæmorrhages occurring during pregnancy have their origin at the site of some degree of detachment of the placenta. During labor this may continue an active cause. After delivery hæmorrhage can come from but two sources, the placental site or laceration.

The treatment of threatened abortion consists in the application of a light ice-bag over the lower part of the abdomen and the use of some form of opium. In the treatment of hæmorrhage in connection with inevitable and incomplete abortion the indications are the same.

In the early months packing the cervix and vagina will control the hæmorrhage. Within twenty-four hours after packing, the uterus should be curetted with a dull instrument, swabbed with half strength tincture of iodine and packed with five per cent iodoform gauze. The gauze is removed within twenty-four hours. During the fourth and fifth months better results may be secured by emptying the uterus in two sittings, packing with gauze for twenty-four hours and then removing the placenta and fœtus.

In the treatment of placenta prævia it should be remembered that all patients are better risks if treated in a hospital. The number of methods advocated seems to indicate a lack of reliability. In the writer's opinion cæsarean section is the method of choice and should be given first place in cases of placenta prævia in primiparæ when the cervix is dense and undilated and there is severe hæmorrhage. He has performed 348 abdominal cæsarean sections, 12 of which were of placenta prævia. In cases where the hæmorrhage is profuse after the delivery of the placenta, the uterus and vagina should be firmly packed, pituitrin injected, and the fundus held until it shows no tendency to considerable relaxation. Transfusion of carefully tested blood has saved a number of cases.

In accidental hæmorrhage occurring late in pregnancy the indications is immediate cæsarean section. Postpartum hæmorrhage may come from the placental site, from lacerations of the cervix or uterus, or from all of these. If the hæmorrhage is profuse, the indications are for immediate removal of the placenta, either by expression or by manual separation with the hand inside the uterus. Ergot or pituitrin in these cases will aid retraction or contraction of the uterine muscles. Pituitrin acts more quickly

and forcibly than ergot, through its action is not long sustained. Without waiting for the action of these drugs, every other method should be brought into use, i. e., massage of the fundus, forced anteflexion of the uterus against the symphysis, compression of the fundus with one hand externally against the other hand in the uterus, hot intra-uterine douche (118 to 120° F.) of normal salt solution, bichloride of mercury (1-10,000), tincture of iodine, or acetic acid, two quarts to four quarts of hot water. In case the douche is not quickly at hand, a pad of cotton gauze saturated with acetic acid and applied freely all over the interior of the uterus has proved successful many times.

Hæmorrhage due to laceration of the cervix cannot be controlled by packing. If large arteries have been torn, packing is a dangerous procedure. Hæmorrhage from laceration of the perineum or vagina may be profuse enough to be dangerous, but being accessible, should be controlled by ligatures and sutures which repair the lacerations.

There is a form of postpartum hæmorrhage which appears in a few cases at about the tenth or twelfth day; this should be treated by rest in bed, an ice-bag over the lower abdomen and one ccm. of pituitrin three times a day. Late postpartum hæmorrhage occurring two or three weeks after delivery should be treated after the same plan advised for incomplete abortion.

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#### MEDICAL MANAGEMENT OF PEPTIC ULCER.

William S. Knox (*Medical Sentinel*, November, 1917) says that the sole object of medicine treatment is to render the gastric juice alkaline and to keep it so from early morning until late at night. This is accomplished by means of feeding the patient each hour from

7 a. m. to 9 p. m. and midway between each feeding administering alkali nitrate in sufficient doses to neutralize the acidity of the individual case. Late in the morning and in the afternoon and evening the stomach is aspirated and the contents analyzed to determine whether or not acidity is being controlled. If free acid is discovered the amount of alkali is increased correspondingly until absolute control of the case is obtained.

If distress or burning is felt during the night, the stomach is emptied of any secretions it may contain and alkali again administered. The diet while under control consists mainly of milk and cream, cereals, eggs, and soups. The patient must remain in bed for from three to six weeks, preferably in an institution. Ambulatory treatment is doomed to failure and should never be attempted. Since no two cases will behave in just the same way, constant vigilance over the gastric secretions by means of the stomach tube cannot be relaxed: if it is neglected the patient is subjected to a hit or miss chance for recovery. No detail can be omitted and the many failures encountered represented, ninety-nine time out of a hundred, failure to adhere to the strict rules of the game. Knox is of the opinion that an ulcerated duodenum or stomach will heal spontaneously if given but half a chance. Even in the presence of corrosion by the gastric juice, provided the corrosion period does not exceed in duration that of normal gastric digestion, the tendency of an ulcer is to cicatrize spontaneously. Gastrænterostomy enables the stomach to evacuate itself in normal time or less, thus rendering conditions relatively favorable to healing, and will suffice to cure the majority of peptic ulcers, but he believes that the operation is not justified in many cases.

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## THE CELLULAR DETERMINATION OF SEX.

By Percy J. McElrath, M. D. Bramwell,  
W. Va.

Read before the Cabell County Medical  
Society November 1st 1917.

(Continued from last Month)

If, on the other hand, the egg is fertilized, a female is always produced, or, if there is only one polar cell formed, a female is the inevitable result.

The difference in the zygote of all these animals is simply a greater number of chromosomes in the female and at least one less in the male.

### THE SPERMATOZOON.

On examination of a microscopic field of normal human seminal fluid we find different kinds of spermatozoa; some have very small heads while others are very large and still others varying in size from the largest to the smallest.

The head of the spermatozoon is

nude, having no cytoplasmic covering, while from one-third to three-fourths of the posterior end is covered, depending upon the size of the nucleus, when the nucleus is large about one-third of it is covered while two-thirds of the small heads are covered. The cytoplasm is seen to extend back forming a cover for the body and tail. The three axial filaments passing out from the nucleus through the body and tail are, according to Wilson, metamorphosed centrosomes.

### THE HUMAN OVUM.

The human ovum presents for examination; nucleus, cytoplasm, vitelline membrane and the zona pallucida.

The zona pallucida is produced from the waste products of the ovum and the cells forming the discus proligerous. On insemination very many spermatozoa may enter this deposite and swim around freely until some one of them enter the cytoplasmic field, fertilizing the ovum.

The vitelline membrane is described by the best authorities as being a tough and elastic membrane which may be proven by placing a cover glass over the

ovum and making pressure until it is comparatively flat and immediately upon release of the pressure the normal round shape is resumed. It is not provided with a micropile like many other ova are.

The Nucleus is a small round body situated in the cytoplasm and is made up of chromosomes with a reticulum thrown out over them. On division the reticulum is absorbed and the chromosomes divide into equal halves by splitting length wise and each daughter cell receives one-half of the chromosome from the parent nucleus. "In both sexes the final reduction in the number of chromosomes is effected in the course of the last two cell-divisions, or maturation-divisions, by which the definitive germ-cells arise, each of the four cells thus formed having but half the usual number of chromosomes. In the female but one of the cells forms the 'ovum' proper, while the other three, known as the polar bodies, are minute, rudimentary, and incapable of development. In the male, on the other hand, all four of the cells become functional spermatozoa", Wilson.

The centrosome is a cell organ of more than ordinary interest in the study of the cellular determination of sex. The centrosome and aster disappear in the ovum on completion of the second or last maturation division.

It is described as an independent and permanent cell organ, scarcely larger than a cytomicrosome, possessing specific physiological properties, assimilation, growth, division, and may persist from cell to cell without loss of identity. Bovari, who studied this organ of cell division was led to the following conclusion: "The ripe egg possesses all of the organs and qualities necessary for division excepting the centrosome, by which division is initiated. The sper-

matozoon, on the other hand, is provided with a centrosome, but lacks the substance in which this organ of division may exert its activity. Through the union of the two cells in fertilization, all of the essential organs necessary for division are brought together; the egg now contains a centrosome which by its own division leads the way in the embryonic development", Wilson.

The male or the female chromosome presents a condition for an acute line of demarcation of sex, in the idiochromosomes, as the case may be, but one in which there could be no variation. The chance in all conditions would be the same for male or female. Consequently, this could not be the determining factor in the human race.

On examination of the cytoplasm of the ovum we find that a small or a large ovum will produce either male or female and that it does not give rise to the determination of sex.

The nucleus of the spermatozoon has always been described as being covered by the cytoplasm. On careful examination, I find that it only covers the posterior one-third to three-fourths and that the anterior or free end is nude. It is the location of the anterior border of this membrane upon the head which gives rise to the variation of sex. The location of the anterior border of this membrane varies as the size of the nucleus changes, the posterior third of the large head is covered while it gradually moves to the anterior free end until it may cover more than three-fourths of this nucleus. The anterior border of the cytoplasmic membrane being situated posterior to the largest circumference of the large headed spermatozoon, would not clash with the tough elastic vitelline membrane of the ovum, nor become disengaged as it passes through, while on

the other hand, the anterior border of this membrane being situated anterior to the largest circumference of the small headed spermatozoon, would clash and become stripped off, as the nucleus passes through the tough elastic vitelline membrane, when only the naked nucleus would enter the ovum. Thus the male is produced from the large and the female from the small spermatozoon.

When all of the spermatozoon enters the ovum taking with it both body and tail, it is probable that the male amphias-ter is produced from them. In female production only the naked nucleus enters the ovum taking with it a centrosome, producing a rejuvenescence of the female amphias-ter.

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EVIDENCE OF CELLULAR DETERMINATION OF SEX, IS SUPPORTED BY THE FOLLOWING.

Direct Cellular Inheritance.

Unisexuality of the ovum.

Relation between the primordial cells and the body produced from them.

Variation of mortality of the male as compared to that in the female.

Variation in the size of the male as compared to that in the female.

Automatic adjustment of sex.

Variation of sex.

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DIRECT CELLULAR INHERITANCE.

By direct cellular inheritance, we mean that when two homogeneous cells conjugate the offspring is the same or a duplicate of the two gamets. And when two heterogeneous cells fuse, the hybrids may show a very considerable range of variation, while some individual will nearly approximate to the character of either cell. In case of the conjugation of the ovum and spermatozoon, we have the fusion of heterogeneous cells,

in which case only one or the other is produced without variation and never both.

In the higher order of animals, the number and size of the chromosomes are microscopically the same in both the male and the female gamets. The cytoplasm of the female gamet is entirely void of appendages of any kind. The spermatozoon, on the other hand, is provided with an organ of locomotion, the tail, which is composed of two or more axial filaments covered by a cytoplasmic envelope. In case, all the cytoplasm and its contents, the axial filaments, are stripped off the nucleus of the spermatozoon and only the nucleus enter the egg, they could not enter into the inheritance of those appendages. If the spermatozoon transmits only the naked nucleus, in female-production, both the male and female gamets being free of all appendages, we could not anticipate the reproduction of those organs which have not been handed down by either of the parent cells. And true to this line of reason, the ovary produces only ova, never spermatozoa.

In male-production, the entire spermatozoon enters the cytoplasm and participates in the formation of a male-producing zygote. In this case the body, tail and the cytoplasmic covering of the posterior third to two-fifths of the nucleus and all the body and tail enter into the formation of the zygote. The axial filaments in the body and tail are metamorphosed centrosomes which are the most important organs of cell division. The male-producing cell receiving this important organ of cell division would probably impart to it a stimulus so powerful that all offspring would inherit this organ, and true to this line of reason, they are present on all male primordial cells.

## THE UNISEXUALITY OF THE OVUM.

The fact that only one sex comes from an egg or ovum, is supportive to this line of reason. "In man twins may be born and these twins may be of two kinds. First, those that are developed from two different eggs, each of which has its own chorion and develops its own placenta. These kind may be designated as false twins, and in the matter of sex, they may be male or female, or both male, or both female. The matter varies as in statistics of birth in general. In the other group, however, of true twins or identical twins, the two embryos are developed from a single ovum and are included in a single chorion. In such cases the sex of the twins is always the same, they are both boys or girls" (Howell). On this subject Montgomery says: "We come now to the inquiry of what process determines that an egg shall develop into a male or female individual. And just here it is to be noted that the sex of the individual is probably determined not later than the stage of fertilization of the egg. This is to say, despite the numerous experiments made in the hope of securing positive results, it has not been possible to alter the sex rate by external influences acting after the one-cell stage of the organism. The nearest approach to securing this end has been reached by Shull who found that by altering external conditions, namely, composition of the water, the relative numbers of male-producing and female-producing individuals can be changed in *Rotatoria*. The main result reached after much experimentation and discussion is that the sex of the individual is probably established not later than the stage of fertilization; and there is still no body of evidence that the sex state so established can be changed by influences acting during a later stage.

In this connection may be noted the interesting cases of polyembryony, where several embryos come from the same egg. This has long been known for trematodes and cestodes, more recently for some parasitic wasps (Marshal, 1904, Silvester, 1906), and has been known within the year (1911) for the armadillo by Newman and Patterson. In these cases all of the embryos from one egg are the same sex, which shows that the sex feature must be stamped in the organism very early". We may consider the above citations positive proof that the sex is not determined later than the moment of fertilization and before the nucleus enters the cytoplasmic field.

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RELATION BETWEEN THE PRIMORDIAL-CELLS AND THE BODY PRODUCED FROM THEM.

There is a definite relation, in both the animal and the vegetable kingdoms, between the size of the male and female primordial cells and the size of the body produced from them. All things being equal, a large grain of corn from an ear should produce a larger stalk, a larger ear and more perfectly filled out and better grains than a smaller grain from the same ear. This fact is made use of by many of the farmers who select their seed corn. They first, select the stalk, number and size of ears are considered, the maturity of all the grains as a whole and finally the condition of the individual grains all are taken into consideration. This same law is taken advantage of by some of the cotton growers of the south. The stalk, number of bolls, quantity of cotton in each, the fibre of the cotton and finally the size of the seed are all duly considered. Now, if we select the smallest grain of corn from the ears so selected and the smallest cotton seed and plant them, all other conditions being



equal, one could not hope to produce as large a stalk and as good all-round result as might be anticipated from the largest grain of corn and the best cotton seed, so selected.

A large egg from any of the animals will produce a larger embryo than a small egg, all other conditions being equal. In 1891, Drisch, was able to follow out the development of isolated blastomeres of sea-urchins eggs separated by shaking to pieces the two-cell and four-cell stage. Blastomeres thus isolated segmented and gave rise to perfectly dwarf plutei of only half (or quarter) the normal size. Shortly afterward Wilson obtained similar results in the case of *Amphioxus*, here the isolated blastomeres behaved from the beginning like a complete ovum of half the usual size. This experiment has been tried out in the Teleost *Fundulus* (Morgan, '95,2) in *Triton* (Herlitzka, '95), and in a number of hydromadusae (Zoga, '95, Bunting, '99).

The most striking of these cases is that of the hydroid clytia, in which Zoga was able to obtain perfect embryos, not only from the blastomeres of the two-cell and the four-cell stages, but from eight-cell and even from sixteen-cell stages, the dwarf in the last case being but one-sixteenth the normal size. In the above citations it is plain and easy to see that a large seed will produce a larger plant than a small seed, all other conditions being equal, that a large egg will produce a larger embryo than a small egg and that a large ovum and a large spermatozoon will produce a larger embryo than a small spermatozoon and a small ovum. Following this line of reason, we see the effect of this law in the human race, the women are generally and uniformly smaller than the men, while both have been subjected to the same con-

dition in everything except the egg from which they were produced. The female-gamet from which both men and women are produced are the same morphologically; a small ovum, or a large ovum, may produce either male or female, which may be readily demonstrated in the aves family. There could be no difference in the chromatine or chromosomes for the size and number are the same in both male and female. There is no change in the cytoplasm for there is no locomotion or exertion on its part to change its quantity or quality. There has never been a cytological law evolved by any one which would lead us to suspect a change in the chromosomes, cytoplasm of the female gamet, higher order of animals, that would give rise to the variation in the sex. Therefore we are forced to look to the male gamet for a variation which would produce either male or female. The spermatozoon is provided with a tail, which imparts to it the power of locomotion. When the spermatozoon leaves the Sartole cell it ceases to take in food and as it moves about the large round head, or nucleus, becomes small and pointed. On examination of a microscopic field of spermatozoa, we can see that from one-third to one-half of a fully matured nucleus must be used up before it becomes female-producing, or in other words, before the sex-membrane would clash with the vitelline-membrane stripping it off the head, permitting only the nude male nucleus to enter the cytoplasm.—The average weight of a man is one-hundred and fifty pounds, and that of a woman one-hundred and twenty-seven. If the male-gamet and the female-gamet share equal in producing the body, we can allow seventy-five pounds for the ovum and seventy-five pounds for the fully matured spermatozoon which would pro-

duce a male weighing one hundred and fifty pounds. Now, if the ovum is fertilized by a female-producing-spermatozoon, one which has lost from one-third to one-half of its size on account of locomotion incident to fertilization, it would only impart stimulus for the production of from thirty to fifty pounds of weight to the female,—giving her weight of one hundred and twenty five pounds or less. Thus, we see the difference in the size of the spermatozoa precisely accounted for in the variation in the size and weight of the man as compared to that of the woman.

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VARIATION OF MORTALITY OF THE MALE AS COMPARED TO THAT OF THE FEMALE.

Staticians in general give the mortality of male as one hundred and thirty-six to one hundred and forty-four while the female is only one hundred.

If we use the sex membrane as the line of sex determination this variation of mortality can be accounted for. In studying a field of spermatozoa we note some will produce male on account of their large size while others will produce male on account of their rapid movement. Should ovipont take place at the time of insemination the small defective but ultra-active spermatozoa will fertilize the ova in proportion to their number present, producing defective males. Should ovipont from any cause be delayed from two to six days all the small and defective spermatozoa shall have been wafted back into the vagina, only the very best specimen of spermatozoa remaining in the Fallopian tubes which have now been reduced in size to female-producing. Here it is that we see the female produced from the select survival of the fittest and the male from the survival of the quickest rather than the fittest.

VARIATION IN THE SIZE OF THE MALE AS COMPARED TO THAT IN THE FEMALE.

It is claimed by the statisticians that there is a greater variation in the size of the male than that in the female. This condition may be observed by anyone. We have some small men and not a few who are six feet six inches and more while we might look the globe over and not find a woman that tall. While the females run more uniform in size and vary from one-third to one-sixth smaller than the males. It is a fact that both have been subjected to the same conditions and environment at all times and in all nations in everything except the cells from which they were produced. This being the true condition it is quite evident that we must look to the primordial cells for the variation. This variation could not be caused from the chromosomes of either or both cells nor the cytoplasm of the ovum as both are the same in either sex. consequently, the sex-membrane is the only thing left to guide us to this variation. When ovulation takes place during insemination fertilization is liable to take place from any one of the spermatozoa present ranging from the smallest to the largest giving rise from the smallest to the largest males respectively. The large round headed spermatozoa producing male on account of their size and the small ultra-active cells producing male on account of their ability to dash through the vitelline membrane carrying its body and tail into the cytoplasmic field. On the other hand, the females are produced from those that have been reduced in size to such an extent that the sex-membrane is stripped off as it passes through the vitelline-membrane to the cytoplasmic field. This condition prevents female production until the spermatozoa are more uniform in size; the small and defective, if they

should make entrance into the oviducts, are soon wafted back into the vagina, precluding a possibility for them to fertilize the ovum. Thus we see the females produced from the spermatozoa that have been reduced to a uniform size and the males from those varying from the largest to the smallest.

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#### AUTOMATIC ADJUSTMENT OF SEX.

The number of male as compared with female may and often do vary in the different species of animals, nature having clothed each with power, in a general way, to produce the most needed. This biological law is beautifully illustrated in the case of the honey-bee, in which the queen-bee may produce either male or female at will. That there is some physiological law which governs this all important phenomenon in the human race is evidenced by the approximate number of male and female as maintained by some underlying process. The sex-membrane acting as the determining factor will produce automatically male or female, in a general way, as may become most needed. The determination of sex may be caused from either parent producing automatically the most needed. When the male has retained the semen in the vesiculae seminales for several days, indicating the need of the female, the chance for female-production from such semen is great on account of the spermatozoa having been reduced in size to female-producing. The male in this condition ejects the seminal fluid very soon during coition thus failing to bring the female to orgasm. When the female fails to reach orgasm during coition ovipont is not liable to take place. Insemination taking place without ovipont, the spermatozoa are forced to remain in the oviducts until the latter occurs which may be several days, during this time the

male-producing spermatozoa become female-producing. On the other hand, if the semen is ejected often and the vesiculae seminales are kept well drained, a male is indicated, the spermatozoa are all large male-producing and when the male is in this condition he is more liable to bring the female to orgasm on account of the prolonged activity on his part to eject the semen. Accordingly, when both conditions occur synchronously, all male producing spermatozoa in the vesiculae seminales and ovipont, a male is very liable to be produced or where either condition is present it increases the chance for male-production.

When the female is in a run-down condition, debilitated or anemic from any cause, a female offspring is indicated. The female being in a run-down, debilitated or anemic condition will delay the maturity of the Graafian follicle and render her more passive during coition which lessens the chance for ovulation. When the maturity of a Graafian follicle is delayed the female is more liable to insemination before the follicle can be ruptured by orgasm of the female. When the female is in a full-normal condition or plethoric, the production of male offspring is indicated, this condition will increase the chance for male on account of the maturity of the Graafian follicle after menstruation. She is given to more activity during coition and more liable to orgasm which causes ovulation. When ovipont takes place during insemination the best condition possible is rendered by the female for male production and when it is delayed the chance for female production is increased in proportion to the delay.

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#### VARIATION OF SEX.

It is a notorious fact that the children of the harlot are excessively female, this

being due to early insemination after menstruation. It is a well established fact, that the Jews produce from twenty to thirty per cent more males than female, which is undoubtedly due to the female observing the Levitation law, in which she is admonished not to allow insemination until nine days after cessation of menstruation.

From a record of one thousand couple, I find out of one hundred and fifty-seven children, born nine months after marriage one hundred and twenty-nine are boys and twenty-eight girls, ten months after marriage, fifty-three boys and one hundred and thirty-six girls; this goes to show that early insemination after menstruation will produce female and late insemination, male, and also shows that aged and small headed spermatazoon produce females and the large headed males.

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#### SOME PROBLEMS OF CARDIOVASCULAR DISEASE\*

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The central pump and its tubal connections, including the kidney filters, may be subjected to extraordinary wear and tear, and the pathological and functional manifestations of this wear and tear, though variously distributed in locality and time, may be brought into one focus and looked at as a whole; and this whole we call cardiovascular disease. The essential unity of cardiovascular disease is found in the etiology and interrelationships of its different

manifestations; and these make it possible to consider it as a clinical entity and to treat it as such. It is not synonymous with arteriosclerosis, or chronic nephritis, or chronic myocarditis, although those are the three principle pathological foci around which its manifestations cluster, so to speak.

Of the problems presented by this disease, only two will be discussed here, viz, its prophylaxis and the treatment of the high blood pressure which is often found associated with it.

The prophylaxis of cardiovascular disease is one of the large things in preventive medicine, and one which deserves more attention than it has generally received. This disease occupies relatively as large a place in the morbidity of the latter half of life as diseases of bacterial origin do in the first half. Its prevention or postponement means much in prolongation of life and usefulness and well as saving of misery. The loss to the world from the shortening of the period of useful human activity caused by the premature development of this widespread disease is difficult to estimate, but it looms large enough to make its prophylaxis a medical thing of the first magnitude.

This prophylaxis must take into account the etiological factors. Among those factors heredity stands out prominently. The quality of the material of which the cardiovascular apparatus is made differs widely in different individuals, and this quality is inheritable. One may inherit such an apparatus of poor material just as he may inherit a constitution subnormally resistant to tuberculosis. Heredity also admits other things which bear on cardiovascular disease, particularly conditions of metabolic insufficiency, which make excessive irritation and early de-

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\*Read before the American Congress on Internal Medicine and also the Ohio County Medical Society, W. Va., Dec. 28, 1917.

generation of the tissues of the cardiovascular apparatus, as well as increased demands on the eliminative functions. Similar tastes and tendencies, occupations and environments, moreover, are apt to be present in successive generations and to increase the effect of heredity. A tendency to cardiovascular disease can always be suspected when the patient shows a family history of apoplexy, brights disease, diabetes, obesity, gout, migraine, chronic arthritis or heart disease. It is a matter of strong probability that persons with such a heredity, when they come to middle life, will begin to wear out as to their heart, arteries or kidneys, if they live as their forebears did, or even if they live in the conventional way. This probability is increased if they early exhibit signs of symptoms which suggest metabolic insufficiency, such as obesity or periodical headaches. The so called "sick headaches", occurring periodically, are particularly suggestive of nitrogenous metabolic insufficiency and all that implies. These people if they would escape their bad inheritance must adopt a mode of living which will protect them as far as possible from the action of the other causative factors of cardiovascular disease.

Excessive work, physical and mental, are important factors in the production of this disease, and factors which usually can be controlled. Acute cardiac overstrain may leave the heart permanently damaged or predisposed to degenerative changes; and long continued physical overstrain may produce cardiac hypertrophy, arterial hyperplasia and a predisposition to early degeneration of the circulatory apparatus. Prolonged mental work, the burden of heavy responsibilities, and worry long continued may do the same thing as also may exces-

sive indulgence in social dissipations, late hours and excitement. If physical, mental or emotional overstrain compel the circulatory apparatus for long periods to maintain an average endarterial pressure considerably higher than it is accustomed to, it is easy to understand how permanent damage to that apparatus can result.

A factor of great, of not paramount importance in the etiology of cardiovascular disease, and one which is to a considerable extent under control, is the excessive, or relatively excessive burden which is laid on the circulatory apparatus by the metabolism connected with the processes of nutrition. The work of transforming material from the outside world into the living tissue of the body and available fuel, and getting rid of the deleterious by-products formed in the preparation for utilization of the food material, rests to a large extent on this apparatus. Also, its structures are subjected in the meanwhile to the irritating and disintegrating action of the toxic by-products of an extensive chemical activity.

The specific poisons of the infectious diseases also may be causative factors in the production of cardiovascular disease. Syphilis, rheumatic fever and typhoid fever deserve special mention in this connection.

Besides the toxemic strain of an unfit diet or a bacterial infection, a related element in the causation of cardiovascular disease, and one which usually can be controlled, it would seem, is chronic poisoning by alcohol, tobacco, coffee and lead. These poisons may disturb digestive operations, thereby favoring the production of intestinal toxins; or the liver, thereby weakening the strongest defense of the body against poisons; or organic functions which directly or in-

directly affect the circulatory apparatus; and it is possible that they may themselves directly irritate or injure the cardiovascular tissues.

In the prophylaxis of cardiovascular disease the easy life and the easy diet are of the first importance, and they are particularly necessary for those whose heredity marks them out as probable victims of the disease. The easy life needs no special explanation, but it may not be amiss to say a few words in explanation of the easy diet.

The progress of civilization has changed man's ways of life, in many particulars, more rapidly than his organism could make the necessary adjustments; and especially severe has been the strain of these adjustments on the large part of the population which in one or two generations has made the change from the more natural country life to the more sedentary and exciting city life. Along with the notable increase in the proportion of our population living in cities has been observed a great increase in the mortality from cardiovascular disease. The conventional diet, which has been developed not only to meet the nutritional needs of the body, but also to gratify cultivated and artificial tastes, and which is largely a habit, remains now practically what it was in the prescientific period; and it has no regard for the easement of the strain of these adjustments, but continues to impose an unnecessary metabolic burden; even if quantitatively correct, it is qualitatively wrong in that it admits regularly an unnecessary amount of toxic waste which the organism has to get rid of. The easy diet is regulated with the object in view of reducing to a practical minimum, that is a minimum consistent with nutrition and comfort, the amount of work which the organism

has to do in feeding itself and fuelling itself, and clearing off the table and cleaning out the furnace. The easy diet should be regulated quantitatively, so as to limit the amount of the various food elements ingested to the reasonable needs of the body, avoiding on the one hand *luxus* consumption, and on the other, undue encroachment on the margin of nutritional safety; and it should also be regulated qualitatively.

Qualitative regulation of the diet takes into account the composition and qualities of various articles of food, with special reference to their reaction on the human physiology after ingestion. Different articles of food may have the same proportions of the various food elements, they may have the same amounts and kinds of protein and the same fuel value, and from the point of view of quantitative dietetics be equivalent; while from the point of view of what happens to them and in consequence of them in the body they may be far from equivalent. Boiled spinach and boiled cabbage may analyse about the same, but from the point of view of the easy diet they show differences. Dextrose and saccharose may supply the same number of calories, weight for weight, but from the point of view of qualitative dietetics they have not the same physiological value. An ounce of lean beef and an ounce of cottage cheese contain about the same amount of protein, with the same kinds and proportions of amino acids, and about the same fuel value; but they are by no means of equal value in a prescription for an easy diet.

Perhaps the most important thing in the matter of the easy diet is the selection of the protein containing articles, for the burdensome and poisonous substances which are produced as by-

products in the preparation for utilization of protein in the body stand out prominently in the etiology of cardiovascular disease; and the amount of those poisons produced varies much in the cause of different articles. How shall we make the selection?

The answer is found to a large extent in the fact that most of these toxic protein fragments are broken off from the protein molecule and its derivatives by certain classes of bacteria which are regularly present in the alimentary canal; and the further fact that the activity of these bacteria is largely dependent on the chemical reaction of the media in which they live; they are particularly active in an alkaline medium, and not so in an acid one. These facts suggest that the protein containing articles of food which easily or regularly become acid or stay so long are the best protected from the action of the protein poison-splitting bacteria, and are therefore the best suited to supply protein in the easy diet.

The practical application is not difficult, for it is a matter of common observation that some protein containing articles of food easily turn sour because of their susceptibility to the action of harmless acid forming bacteria, and that some do not. Milk, bread and cereals turn sour when they spoil, but animal flesh and eggs putrefy when they spoil. In fact, it is possible to divide practically all the articles of food containing protein into two great classes, according as they turn sour or putrefy when they spoil, and the dividing line runs very strictly between the animal and vegetable kingdoms until we come to milk, which is an animal food, but does not putrefy but regularly sours when it spoils. This is a fact of great importance in the matter of the easy diet, because milk is

an article rich in protein, and animal protein, and protein which contains all the amino acids needed by the body and in approximately the proportions which the body can utilize. It also happens, as a nearly universal rule, that the class of protein containing articles which sour when they spoil contain little or no free split proteins of the undesirable purin class, while the contrary is the case with animal flesh. The easy diet, then considered from the point of view of its protein ration, should be largely if not altogether lactovegetarian. Yet it is possible to say a word in favor of a small portion of animal flesh in the diet of the average case. The healthy body is so accustomed to bathing with these putrefaction poisons that complete deprivation of them might result in weakening of a useful function. The principle of variety also enters into the question to a slight extent, and also the matter of regard for habitudes.

In this connection a word about vegetarianism may be in place, in order to make clear the fact that vegetarianism and the easy diet are in no way synonymous. A purely vegetarian diet is a hard one, because of the difficulty of getting from vegetable articles protein which favor the nitrogenous economy which the body needs, to say nothing of getting them in the ideal proportions which favor the nitrogenous economy of the body. Most of the vegetable proteins are "imperfect proteins," considered in relation to the body needs, and although it is theoretically possible to combine different imperfect proteins so as to make them supplement each other, there are practical difficulties in the way. The easy diet requires that a certain proportion of its protein be derived from animal sources, for the reason above suggested; and it is fortunate that

of the three classes of animal foods, viz. flesh, eggs and milk, there is one, milk, which is particularly easy on every count; and this fact makes the easy diet essentially a lactovegetarian one, which is very different from a vegetarian one.

The second of the two problems connected with cardiovascular disease selected for discussion here is the treatment of high blood pressure. High blood pressure is often found associated with cardiovascular disease and its treatment as a symptom some times comes into question. What should be our therapeutic attitude toward this symptom?

We can no longer accept symptomatic treatment as a universal dogma, because symptoms are not essentially diseases or parts of diseases which call for suppression or ablation. Nor are they always or necessarily manifestations of disease. On the other hand, they are often evidences of nature's counter operations to overcome disease, and are physiological rather than pathological processes. Such seems to be fever, which in general, may be taken as nature's constructive reaction against invading microorganisms or their toxins. Even more plainly high blood appears to be a conservative physiological procedure.

It may safely be assumed that whatever the circulatory apparatus does regularly is in the interests of an adequate circulation, and high blood pressure consequently appears as a manifestation of compensatory activity to meet some unusual circulatory requirement. It may signify that the organism is trying to maintain an adequate circulation in the presence of some obstruction, or some extra demand for elimination; the high pressure may be required for the benefit of a vital region whose blood supply is impeded by arteriosclerosis; or it may be required for the

elimination of retained waste products whose elimination has been rendered more difficult by pathological changes in the kidneys. With this understanding of the significance of high blood pressure, viz. that it is physiological instead of pathological, and regularly useful rather than harmful, its direct treatment becomes restricted to the exceptional cases in which nature has lost her control over the situation and is overdoing her duty, (in the presence, perhaps of an insuperable obstacle, such as a large blood clot pressing on the brain); as shown by elevation of the pressure to a point which threatens immediate injury to the circulatory apparatus itself. In such cases the use of direct means to lower the pressure, viz. the administration of arteriodilators, may be indicated temporarily. But in general, the only treatment of high blood pressure which is rational is that which is directed toward removing or improving the conditions which make it necessary; and the most important and by far the most effective part of this indirect treatment consists in the easy diet.

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#### SOME OBSERVATIONS TOUCHING RECENT ADVANCES IN MEDICINE AS RELATED TO DISEASES OF THE HEART.

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Read before the Mercer County Medical Society, Bluefield, Sept. 20, 1917.

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In view of the wealth of scientific literature available, I am not sure but that an informal paper based rather largely upon personal experience and impressions may be of more interest, and perhaps of greater value, at this time



than one whose aim is more pretentious. From this view point, I shall, at the outset, ask your indulgence for whatever may seem trite or dogmatic.

Of diseases of the heart, that having to do with the valves is most frequent, and most discussed, so first arrests our attention. Familiarity with the signs and symptoms incident to a deviation from normal is emphasized by a recent observation of Sir James McKenzie in which he states: "As a young man I told people with heart murmurs that they were in a bad way, but they did not die and I began to separate the murmurs—the innocent ones from those of importance." Now while the degree of accuracy with which the comparative importance of the valvular murmur is interpreted depends greatly upon individual experience and aptitude, I believe it may be stated as a fact that one fairly well trained and a careful observer can pick out and classify valvular lesions almost as well as another. That there is here left but scant room for a divergence of opinion stands in sharp contrast to most lesions of like importance in other vital organs, notably the lungs, brain and kidneys. So while for our present purpose we pass this interesting aspect of cardiac disease, the underlying cause of the crippling of the valves is of first importance, for if I read the signs of the times correctly, it is exactly in the removal of this that modern medicine promises most in cardiac diseases, and this from a bacteriological and seriological standpoint.

As is well known, valvular lesions, have for an indefinite time, been for the most part rightly ascribed to rheumatism as a chief factor, and rheumatism has in turn, had for its scientific basis, in so far as we knew, uric acid, and other like intangible causes. The light before us

is yet dim, but is steadily guiding us to specific causative agents. The weight of evidence is now so strong as to approach a certainty that the infection in a very large proportion of children, if not in adults, has its origin in diseased tonsils, and it is certainly an open question if other foci of infection such as the gall bladder and appendix, which are frequently sources of the disease as the years advance, may not, in turn be due to an earlier invasion of the tonsils. While stress is here laid upon the tonsil as a focus of infection, it cannot in any sense be regarded as the only or perhaps, even the chief source of such infections in adult life, certainly not after the age in which one expects the tissues to begin to degenerate and the muscular walls of the heart and vessels to take up the burden rather than the valves; for somehow it seems that these latter structures suffer more from active inflammatory conditions early in life, due, no doubt, to a direct invasion of the offending organisms, while later the damage is perhaps, done more by the toxins and products of the organisms attacking the more solid structure. In these stages it is remarkable how frequently one finds such changes in conjunction with badly infected teeth and gums. Now while in the full flush of this newly acquired knowledge we may overvalue it, it will be interesting to see where we are left in the matter when we have had time to carefully view and weigh it from every standpoint, for indeed it may be that we even underestimate it at this time.

Somewhat in contrast to the comparative ease with which cardiac murmurs may be made out, and their importance estimated, is the difficulty in determining the importance of cardiac irregularities. As is well known, almost any

child, may at times, have an irregular pulse due to pneumogastric influences, which are physiological; likewise, many people go through a long and active life with extrasystoles, and as a consequence irregular pulses, in whom no lesion whatever can be made out either in the valves or in the muscle of the heart. Standing over against these however, all of us see at intervals, irregular hearts, associated with failing compensation, so that given a case of irregular heart action, with whose history we are unfamiliar, a most difficult problem is presented. It has been within the last decade since McKenzie's invention of the Polygraph, that the term, auricular fibrillation, has made its appearance in Medical Literature, and that the studies incident have placed the therapy of cardiac diseases upon a more definitely scientific basis. In making this statement, however, it should be borne in mind that the foundation of the work was laid in the histological studies, which showed the sequence of the cardiac beat; that is, that the impulse has its origin at the Sino-auricular node, situated at the origin of the venacava, from which point it radiates wave like, bringing both auricles into action simultaneously, passing on through the auriculo-ventricular node, or bundle of His, thence spreading over the ventricles, bringing them into action as the auricles relax. When the point of original impulse becomes involved to extent of working overtime producing irregular waves with a resulting tetanic conditions of the auricles, at the same time interfering with the normal passage of the conductive waves through to the ventricles, delirium cordis, or auricular fibrillation as above mentioned is the result, constituting one of the most dangerous conditions with which

we have to deal, and yet the one without dispute, in which Digitalis comes into its own, acting in many cases like magic, so that in every instance there is a very practical side to the determination of the character of the irregularity.

To these also, must be added the irregular heart due to mitral stenosis, which forces itself upon our consideration in every such instance, but whose signs are well known, and may be differentiated with ease when they are classical but in cases of weak heart action are difficult of interpretation. It would of course, be ideal, if every case could be examined with instruments of precision under favorable conditions, but as a matter of fact, many of these patients are so desperately sick when seen that they cannot be kept quiet for instrumental tracings, so that after all, we must reluctantly admit that such instruments are of value for research and teaching purposes rather than for practical every day work. The fact is that if one utilize carefully the history of a case, his observation as to the character of the valve lesion if any, the blood pressure, the cardiac area and last but not least, the frequency and force of the heart beat, the character of the irregularity can in most instances be determined. Briefly one may say that almost without exception, cases of auricular fibrillation show, by the general appearances of the patient, that there is serious failure of the circulation, and if one may use a contradictory phrase, the one characteristic of the heart beat is its irregular irregularity; in other words in simple extrasystoles, for instance, the dropped beats occur at certain intervals, and there are thrown in between more or less regular pulsations. In the disorder under consideration, the pulsations are like the ticks of a watch

without a balance wheel, or the exhaust of an automobile without the proper timing. An interesting and important observation has also been made by some one that in other forms of irregularity, if the heart beat be increased to more than a hundred and twenty, it practically always becomes regular, so that an irregular pulse above one hundred and twenty many fairly be classed as one of auricular fibrillation.

Syphilitic Aortitis is a condition about which perhaps too little is being said, for while although the number of cases arising in a given general practice are not very large, were it more constantly borne in mind, some cases would perhaps be diagnosed early enough for better results in treatment, if not, certainly those of us who have cases of Syphilis under observation, would be impressed by this additional danger besetting the pathway of individuals so infected, and would impress them just a little more strongly with the importance of a thorough and systematic treatment. The necessity of a Wasserman in cases presenting an element of doubt goes without saying.

The question of the relation of high blood pressure to cardiac disease is one of ever increasing interest, for most of these cases escaping cerebral hemorrhage eventually die from heart failure. From the nebula which still surrounds this condition more particularly in relation to its etiology and prognosis in the individual some semblance of shape and substances, is gradually being evolved. It seems to be now generally conceded that in the cases which have to do largely with the kidneys, the course toward a fatal termination is much more rapid. This is due, one would surmise to the additional poison added, just in the ratio of the progress of the kidney

lesion. In contrast to these it is a source of gratification and surprise the length of time which many patients live and get along fairly well, provided their lives are properly regulated, whole pressures are constantly high, but in whom there is but little kidney involvement. Since these things are true it is a matter of no little consequence to determine in each case as to the relative involvement of the structures under consideration. While it is probable that the practical value and ease with which the phenolphalein test of the kidney output may be made is too little appreciated by most general practitioners, the more accurate metabolic tests depending upon the nitrogen output in the urine need only be mentioned as being too complicated for general use. I do wish, in this connection, however, to call attention to the very great help to be had from careful observation of the specific gravity and quantity of the urine. As is well known during the day the normal kidney excretion consists of a greater proportion of fluid and less of solids as compared with the night urine with the consequent lower specific gravity. The healthy kidney goes to sleep at night as it were. In case of the contracted kidney which usually goes with the high pressure cases it has difficulty in getting rid of the solids both by day and by night and so an excessive quantity of water is pushed through in the effort at compensation, and it is worked over time, the patient being compelled to void one or more times during the night; so that the low specific gravities of both day and night urine, the nocturia, and the increased total quantity are symptoms of very great diagnostic importance ranking for practical purposes well up with the tests above mentioned. The absence of albumin in these cases is of little con-

sequence. One can most surely say that with a normal specific gravity and output in these cases there is but little damage to kidney structure.

Like Banquot's ghost there stands in the back ground for most of us cases which have not shown any marked cardiac symptoms. Men, perhaps in the midst of active and important duties, or women who are the mainstays of their families, who, without apparent rhyme or reason are attacked with symptoms which may, indeed, be remote from the heart, often, in fact, such as are characteristic of digestive disturbances, and who, with scarce a word of warning or adieu, pass suddenly of cardiac failure, a victim of the sudden giving way of the muscles.

Of all the problems presented in cardiac disease it seems that there are none in which we have made less progress than in the actual determination of the varying conditions and changes in the muscular structure of the heart, and in its ability to carry the varying load placed upon it. This can better be understood when one comes to consider the great number of avenues through which the load may from time to time be increased or diminished and the varying sources of debilitating factors such as the toxins above referred to carried in the blood stream, to say nothing of the deleterious agents which so often arise from defective food metabolism. As great as is the problem, however, at least something is being accomplished. Aside from the things which may be gained by the usual routine of physical examination, perhaps the one greatest aid in determining the functional capacity of the muscle is the variation between the diastolic and systolic blood pressure upon exercising. Another very important symptom to be noted is that in the cases

of irregular heart above referred to in which muscular involvement is suspected, the irregularity as a rule grows worse upon muscular exercise, if there be a serious pathological condition, while on the other hand the beat is steadied if it be mainly functional. Is it too much to hope that we may yet learn the language in which the faltering heart speaks in complaining of its burden?

Approaching the question of broken compensation, all are agreed that the one measure of greatest importance, after having looked into the causative agents is so far as possible, is to reduce the load carried by the heart to the minimum in the way of absolute physical and mental rest, which is best accomplished by placing the patient in bed, in whatever position is most comfortable. As to drugs, in the acutely decompensated cases, for immediate relief personally I have found nothing quite so good as a hypodermic of Morphine to tide over the crisis, supplemented by Codine by the mouth later on as may be needed to secure the proper rest, although the great good to be obtained by venesection in suitable cases should be constantly borne in mind.

Of cardiac tonics and stimulants, Digitalis in full doses, is King regardless of the lesion, and if it fails, I doubt if any will succeed, provided it has been properly used, and a fresh reliable preparation chosen. The Committee of Pharmacy and Chemistry of the *A. M. A.* has done invaluable work in showing that practically all liquid preparations of the drug deteriorate very rapidly, but unfortunately it seems that it is difficult to get Pharmacists to appreciate this, and to stock their preparations in small quantities from reliable people who are willing to date the time of manufacture. As to the particular preparation used,

it probably makes but little difference provided it be one that contains all the active principles of the drug, but in favor of the tincture, it may be said that it has the advantage of the ease with which the dosage may be regulated, as well as being supplied now by a number of reliable firms, assayed to a definite strength. The size of the dosage however, is one of very greatest importance. Personally, I have obtained best results by beginning with as large a dose as would seem safe and pushing to a point of physiological effect, looking out for signs of poisoning, which in my experience show up first in the digestive tract, and are very much more likely to take place when large doses are being given if the patient be allowed to be up and around. As to the contra indications for Digitalis, in spite of all that has been said in the past, there is probably but one that needs careful consideration, and that is heart-block, in which it is positively dangerous. Cohn, of the Rockefeller Institute has, however, in this connection, done a great service in emphasizing the great danger of sudden death in giving a hypodermic of any digitalis preparation within a week from the time of its administration by the mouth. On first seeing a case of broken compensation with threatening death, there can be no question as to the good effect of a hypodermic of a reliable preparation, notably of Digipuratum, if obtainable. Next in value would perhaps come Digipoten of domestic manufacturers, and last Digilen, and Digitalin, the latter, perhaps, of but little value.

Any of these may of course be repeated, provided the drug be not at the same time given by mouth. When patients tire of the taste of any one preparation it is a great relief often to change to a different one.

In the watterlogged cases, there is but little room to doubt but that salt free diet given according to the method of Karrell is most valuable, and it is wonderful to note the good effect of a few small doses of Theocin given in conjunction, provided the bad effect indident to its tending to lower blood pressure be borne in mind.

In addition to small doses of Digitalis long continued, the question of 'exercise in cases slowly regaining compensation is of greatest importance, especially that it be begun at first passively in bed, and gradually increased to moderate active movements such as walking and horse-back riding.

I wish to conclude by a summary of the pleas which it is the purpose of this paper to make.

*First*, the more careful guarding of children against infective foci, which underlie bacterial invasions of the heart and joints, notably those of the nasopharyngeal regions, which somehow seem to be an especial menace during early years.

*Second*, that in view of the importance of suppurative foci about the teeth, sinuses, and elsewhere, as an etiological factor in diseases of the organs of circulation, among those approaching middle life, that a more concerted effort be made to impress the necessity of a periodical inquiry into the condition of these organs, which inquiry should include a careful survey of the various sources of early decay, as well as the organs of nutrition and excretion.

*Third*, that more pains be taken to secure fresh potent preparations of Digitalis properly standardized.

## PYELITIS

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*S. L. Cherry, M. D., Clarksburg, W. Va.*

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Read at the Annual Meeting, West Virginia Medical Association, Wheeling, May, 1916.

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**DEFINITION**—Pyelitis is an infectious disease of the pelvis of the kidney characterized by a continued fever and the presence in the urine of pus and bacteria. The inflammation may be limited to the pelvis but the kidney itself is always involved to some extent. The infection may be unilateral or bilateral, acute or chronic. The colon bacillus is the cause in at least 90 per cent of the cases.

**FREQUENCY**—Pyelitis is especially apt to occur in infancy and makes up one per cent or more of the complaints of this period. Females are much more often attacked than males, the inference being that the short urethra in the female affords a ready access to the colon bacillus from the discharges of the bowel. Pyelitis complicates 20 per cent of all pregnancies, and when severe causes a large percentage of abortions. It is much more frequent in adults, both male and female, than is generally supposed.

**PATHOLOGY**—The colon bacillus found in the urine of cases of pyelitis undoubtedly comes originally from the bowel of the patient. It may reach the pelvis of the kidney by entering the urethra and ascend upward along the lymphatics of the ureter; it may pass directly from the bowel to the pelvis by way of the lymphatics; or it may pass to the kidney and pelvis by the blood stream. Leaving out cases of infections of the genito-urinary tract secondary to stone, tubercle, tumor, etc., it is probably true that

all cases of genuine pyelitis such as are described in this paper are hematogenous in origin and are always preceded by an infectious involvement of the kidney itself. This has been shown experimentally by Rosenow and others. This involvement of the kidney substances is usually moderate in degree and the integrity of the kidney is restored with the subsidence of the pyelitis. Less commonly the kidney is riddled with small miliary abscesses which may completely destroy its substance.

**SYMPTOMS**—After a short period of malaise the disease sets in abruptly with a high temperature, (101-103) headache, loss of appetite, etc. There may be a dull ache and tenderness over one or both loins and pain and burning on urination. In the majority of cases, however, especially in children, nothing can be found in the physical examination to account for the high temperature and sick patient. The diagnosis can not be made without an examination of the urine, and the urine, if examined will always be found characteristic. The urine is pale in color, cloudy and **ACID**. Under the microscope the field is seen swarming with pus and bacilli along with a few hyaline casts and a few red blood corpuscles. There is usually only a trace of albumin, and the specific gravity runs around 1012.

In the absence of urine examination many cases either go undiagnosed or are called typhoid fever, malaria, grip, tuberculosis, stomach trouble, etc. Appendicitis may be diagnosed if there is pain and tenderness anteriorly.

Pyelitis in pregnant women will often give an almost typical picture of appendicitis.

The presence of high fever and vomiting may lead to a diagnosis of acute in-

digestion. It is indeed surprising what different diagnoses can be made of pyelitis if the urine is not examined.

**COURSE** — Under appropriate treatment nearly all of the cases get well. Relapse is frequent. Unrecognized cases are apt to become chronic, although cases that are well treated will often show that they do not entirely clear up. So far autopsies have been done only on those cases which had kidneys filled with one or more abscesses.

**TREATMENT** — The routine treatment should consist of rest in bed, a thorough initial purge and the use of either the acid or the alkaline treatment, but never both together.

**ACID TREATMENT** — This consists in the administration of urotropin and the maintenance of urinary acidity, since urotropin will split off free formaldehyde only in an acid medium. The initial doses should be small but must rapidly be pushed to the point of tolerance. No alkalis should be given. If the urine is alkaline acid sodium phosphate should be given. 200 grains of this salt will make an alkaline urine acid in 5 hours. If relief is not obtained in several days the urotropin should be stopped and the alkaline treatment commenced.

**ALKALINE TREATMENT** — Potassium citrate is given with plenty of water until the urine is rendered alkaline. As much as 60 grains a day may be given to a child of two.

Under this form of treatment the majority of patients will get well but it is well to continue the treatment for several weeks after the acute symptoms have subsided.

A few cases are violently ill from the start with extreme prostration, high temperature, marked pains in the loin while the urine instead of having a trace

of albumin is loaded with it. These are the cases in which the kidney is studded with miliary abscesses and nephrotomy must be considered if medical treatment is without effect.

Chronic cases should be treated along the same lines as above noted. The results, however, are discouraging as far as cure is concerned. The urine should be carefully examined for tubercle bacilli and stone and renal malformations be looked for with the X-ray. In the absence of these the pelvis of the kidney may be irrigated with some silver preparation such as 5 per cent collargol, argyrol or even very dilute silver nitrate.

Vaccines if used should be autogenous but not much can be promised for them.

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#### NOTES ON THE ANNUAL SESSION OF THE SOUTHERN SURGICAL ASSOCIATION.

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*By J. E. Comodory, M. D.*

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St. Augustine, Florida, December 18th-20th, 1917.

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This, the thirtieth annual meeting, was the first one ever held in the state of Florida, there being but few members in that state. St. Augustine is a town of much more than passing interest. It is the oldest settlement in the United States even antedating the first colony of the Pilgrim Fathers at Plymouth Rock. The principle object of antiquarian interest there is an old Spanish Fort, which was ninety years under construction, and was finally completed in the year 1756. Although it had fallen somewhat into decay, the United States Government recently obtained copies of the plans from the Spanish Government, and completely restored the fort accordingly. This structure is a typical defensive

arrangement of the Middle Ages or the period following, prior to the advent of the modern high explosives. Although Fort San Marco, as it was called, was frequently attacked and several times besieged, it was never taken, and possibly could not have been, so long as the food supply held out. The walls were too high to scale and too thick for the artillery of the time to penetrate. It was surrounded by a moat which was filled with water by the action of the tides, the water coming in through valves which automatically closed when the tide began to recede. The arrangement of the walls and the mounting of the guns were such, that should a storming party ever attempt to cross the moat, they could be easily destroyed by an enfilading fire from the corners which were known as the bastions of the fort. The entrance was protected by a drawbridge over the moat, still further by the portecullis. Out in front of the entrance also was situated a small defensive fort called the barbican. From the rampart above the gate, there were holes made through the floor for the purpose of pouring molten lead on the heads of attackers, should they be able to gain the main entrance. Access to the ramparts was by means of an incline known as the ramp. Up this the guns and munitions were dragged on rollers.

The dungeons were completed in all the details necessary for frightfulness as carried out in the time of the old Spanish Conquistador. When the Spanish Government turned over the fort to the Federal Authorities, they were possibly ashamed of some of these dungeons, and had about that time, or earlier, caused them to be walled in so carefully that their existence was not suspected, and they remained undiscovered, until through accident, when some soldiers

were moving a heavy gun over the ramparts of that particular bastion, the heavy gun broke through into a dungeon which contained two human skeletons. In one of these dungeons the rotting timbers of a rack were found and in another were fixtures for chaining prisoners to the walls in such manner that they could neither stand erect nor sit down. After St. Augustine ceased to be a Port of Call from Spain, the town passed into obscurity. Flagler, the builder of the Florida East Coast Railway, the overocean end of which is flung out over coral reefs and concrete arches as far as Key West, again put St. Augustine on the map. He determined that the early Spanish influences should be continued, especially as far as architecture could make them. All of the old streets were carefully preserved, two handsome tourists hotels, the Ponce de Leon and the Alcazar, were built. These are both beautiful examples of old Spanish architecture. The town, as in most Spanish towns, is built around a court or plaza, known as the Plaza de la Constitution. Near the center of this plaza is an obelisk in the side of which is set a tablet calling attention to the date on which a liberal Constitution was granted by the Cortes of Spain.

Watts discussed the subject of subacute pancreatitis, and advocated drainage as the most satisfactory method of treatment. He thinks that in case of chronic pancreatitis, pure and simple, that the drainage of the gall bladder is probably the best thing to do.

Willis reported four cases of successful removal of the ruptured spleen. He spoke of some new symptoms noted in this condition. One of these was pain referred to the region of the left shoulder. This disappeared after the removal



of the spleen, and freeing the abdominal cavity from the large amount of loose blood.

Guerry described his operation for the reconstruction of the common bile duct. He does not attempt a typical reconstruction of the duct, but freely mobilizes that portion of the fixed duodenum into which the common duct enters at the Ampulla of Vater. This enables him to connect up the duodenum with even a short remaining stump of the common duct.

I reported a case of unusually long resection of the small intestine, ten feet of the small bowel, together with the cecum, and several inches of the ascending colon being removed. This patient developed obstruction post operatively, but finally recovered from this, although the abdomen had to be opened twice in order to relieve the obstruction. A good deal of care was necessary in this case to secure the proper nourishment of the patient. Edward Martin in discussing this case, stated that after abdominal operations, it was exceedingly important to be able to recognize the development of obstruction, and to meet it promptly in order that the life of the patient might be saved.

Thorning discussed the phenomenon of retrograde peristalsis in the second and third portions of the duodenum. He had observed this through the fluoroscope, and believes that it throws considerable light on the subject of post operation vomiting in many cases.

Ureteral calculus was discussed by Hunner. He thinks that these foreign bodies often owe their beginning, perhaps always, to some sort of infection, and that once the habit is established, they are exceedingly prone to recur. They are often associated with strictures of the ureter.

Dr. Robins believes that recurrences of stone in the kidney after operation is exceedingly common, and that there is no means of preventing this recurrence short of the removal of the kidney, which naturally, is a rather serious remedy to contemplate. Dr. Mason and several others discussed the subject of proper surgical management of the kidney following a subparietal rupture. The general consensus of opinion was that it was far better to suture the ruptured fragments together, thus giving a chance for the restoration of a highly essential organ. A few, however, advocated the removal of a kidney in case the pelvis was badly torn. Hunner, however, states that this is no reason whatever for the removal of the kidney, that if we fear leakage from the pelvis, we should take care of this by introducing a small drain. Personally, I have had two cases in which the body of the kidney was torn in two, the rupture extending well down into the pelvis. I roughly sutured the kidney together with catgut, purposely overlooked the tear in the pelvis, introduced a cirecete drain down to the pelvic portion of the kidney, and had primary healing of the wound with urinary leakage for a few days only. If any portion of the kidney still has any short of blood supply intact, it can be repaired by suture with expectation of a good result.

Mayo was not present, but his paper reviewing the cancer problem, was read. In all essential details, it is similar to the review of the cancer problem made by him at the Chicago meeting.

Parham summarized the literature concerning cancer shock and its management. Warmth and quiet, transfusion of blood in cases in which there has been great loss of that element, and water or saline solution by drop method by rec-

tum were the principal measurements recommended. The intravenous use of normal saline solution was not thought to be of any great value.

Haggard gave a most eulogistic review of the relations existing between the Medical Profession in this country and the great European War. Franklin Martin praised the work being done by secretaries Baker and Daniels, Samuel Gompers and other prominent leaders in Washington.

Edward Martin described the technique of Dichloramine-T, and showed moving pictures of many cases of wounds under treatment. It is rather reassuring to hear a man of his calibre come out strongly in behalf of the use of antiseptics in the treatment of wounds.

Reder described a case of ununited fractures of the femur treated by himself by the bone transplant method. After securing union, he found that the other leg was so much longer that the patient was unable to walk, and in spite of the fact that there had been failure of union in the fractured side, he resected the femur of the well side sufficiently to bring about equal lengths in the two legs.

Shands described the technique of making celluloid splints for treatment of fractures, and various other orthopedic conditions. These splints are very beautiful, and fit accurately. Certain steps in the process of their manufacture even make them fire proof.

Payne reviewed acute injuries to the head, and spoke of the advantages of subtemporal decompression for the relief of pressure. He, along with many others, has abandoned the horse shoe flap, and makes a simple straight incision in line with the fibers of the temporal muscle. He advises taking the pulse rate, also the blood pressure every thirty

minutes during the early observation period.

Ransohoff showed illustrations of a number of cases of fracture of the cervical spine. As a general rule he does not believe that operation holds forth many advantages in such cases. He quoted the advice of Horsley in favor of non intervention during the early period. DuBose exhibited a large number of photogaphs of cases in which he had done various plastic joint operations and bone transplants for the relief of certain conditions associated with fractures.

Ochsner showed that eventually we will have a specific for every infectial organism. He has been doing much experimental work along this line of research and some of his results have been very gratifying.

McGlannan spoke of his experiences in the treatment of certain infections with serum. He believes that the future holds forth a great field for this work.

Clark again reviewed the use of radium in the treatment of uterine bleeding, and as he has previously shown, his results are very good.

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### Miscellaneous Announcements and Communications

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Military Hospital, R. A. M. C. Mess, Curragh Camp, C. Kildare, Ireland, January 8, 1918.

Dr. Jas. R. Bloss

Editor W. Va. Medical Journal,  
Huntington, W. Va., U. S. A.

Dear Editor:

Your letter of December 10, 1917, received. I am now getting the *Journals*, thanks.

Will be glad to write you a paper later but just now I want to draw your attention to a matter that will be more

interesting to the profession generally, than a paper from me. It is as follows:

St. Fitzgerald, M. O. R., C. U. S. army loaned to British Royal Army Medical Corps was I am informed, the first American killed in action since U. S. declared war. He was killed early in the summer in his tent, beside a British Base Hospital in France by a German bomb. He was in U. S. Army under the command of General Pershing, but temporarily loaned to the Royal Army Medical Corps as also 2,000 of us are.

Gen. Pershing is the commanding officer of all the American expeditionary force and I am glad to see that from all parts of U. S. The first three of his men that lost their lives at the front have been given due credit.

I would not like to see Lieut. Fitzgerald, his family and the profession overlooked. So far as I know only a passing notice has been given to him.

The profession both state and national has stood by and seen credit taken from them in the past. I hope your *Journal* and its readers will get sufficient data and if the information I am giving is correct, will see that some movement is started to give due honor to Lieut. Fitzgerald. Information can be gotten from War Department or Surgeon Generals office.

It is not my motive to take any glory from our great commander General Pershing or from the three brave boys who lost their lives in the trenches, purely a matter of giving honor to those in the order of which it occurred and of which little or nothing has been said.

Should any subscriptions be necessary you can put me down for a substantial amount.

Very truly,

T. JUD. MCBEE.

Dear Dr. Bloss:

Will you print the following in your next issue?

TO THE SECRETARIES OF THE COUNTY SOCIETIES:

Thus far your State Secretary has received the 1918 Officers List for only three of the Component Societies. Will you not get together and organize for the year and send me a list of the newly elected officers.

1918 Dues are now coming in. Have you sent in those of your Society? Remember they should be in by April 1, 1918 and that they are \$4.00 this year, if you wish Defense Fund protection.

Have you secured any new members? If so send in, with their names, data as to College and Date of Graduation, Age, and Date of License in the State.

Fraternally,

J. HOWARD ANDERSON, Secy.

—o—

Dear Fellow Member of the State Hospital Association:

Judging from some of the inquiries I have received of late, the State Compensation Commissioner has not notified the hospitals of the State regarding the increase in rates which became effective November 1, 1917.

Allow me to quote from a letter received from him under date of November 9th as follows:

"Replying to yours of November 3rd, with reference to increase in hospital rate, beg to advise that the new rate will be \$16.00 per week, to include bed, board, dressing, nursing and materials, and will apply on all cases in which the injury has been received on or after November 1st, 1917."

This increase was brought about as a result of the solicitation of the Committee in whose hands you placed the matter of the increase desired by the

hospitals, composed of Dr. John C. Moore, Dr. A. K. Kessler and Dr. C. A. Wingerter. And to this Committee the Association owes a debt of gratitude.

While the present rate of \$16.00 per week probably does not cover the actual cost for a large percentage of hospitals, yet it is a substantial assistance in these days of the extreme high cost of everything pertaining to the care of the sick.

You will be interested to know that the membership of the Association is increasing rapidly within the last few months. But your assistance in securing new members will be appreciated by us and them.

Very cordially and fratrnally yours,  
 PLYN O. CLARK, Sec'y.

—o—

Dear Fellow Member of the West Virginia Hospital Association:

There has been a question raised of late regarding the obtaining of alcohol by privately owned and operated hospitals free of tax and that this may be clearly understood by all the members we have obtained an opinion fro Mr. S. A. Hays, Collector of Internal Revenue Service for the District of West Virginia which is as follows:

“Replying to your letter of the 11 inst. in which you request to be advised as to whether privately owned and operated institutions may withdraw alcohol free of tax or not, under Section 3297 R. S., you are advised that under date of July 8, 1916, the Act relating to withdrawal of alcohol free of tax by scientific institutions, colleges of learning and hospitals, was amended in such a way as to limit the privileges of granting tax free alcohol to only such hospitals as are maintained by endowment or otherwise, and are not conducted for profit.

Under the amendment above referred

to, this office is of the opinion that privately owned hospitals operated with the intent of profiting therefrom, whether or not they show a profit or loss, cannot be granted the privilege of withdrawing alcohol from bond free of tax, and as I am required to strictly follow the regulations in such matter, I will be unable to approve such withdrawals, unless informed otherwise by the Department.”

Cordially yours for service,

PLYN G. CLARK, Sec'y-Treas.

—o—

FROM PUBLICITY EDITOR, WEST VIRGINIA WAR-SAVINGS COMMITTEE, HUNTINGTON, WEST VIRGINIA.

—

Something more potent than words must be employed in order to bring the people as individuals each to a sense of individual and personal responsibility for the winning of the war. Each person needs to be brought to a realization of the fact that any act of wanton wastefulness or anything else that tends to hinder the government in the prosecution of the war is likely to have a direct relation to the wounding or killing of an American soldier “over there”. How to do this is a question which is troubling Robert L. Archer, of Huntington, State Director of War Savings Campaign.

John E. Norman, State Educational Director for War Savings, found an apt reply to a man who argued that his individual contributions to the War Savings campaign would not win the war, and he had as well not make it.

“You had just as well say”, replied Mr. Norman, “that the soldier who is at home on a furlough cannot win the war by himself, and for that reason he might as well stay at home.”

The War Savings propaganda has been and is being spread broadcast in the State. It is hard to believe there is a hamlet or countryside in the state into which the news of the War Savings plan has not filtered. The post offices, the teachers, the newspapers, the ministers, the Four-Minute Men, the organized War Savings Committees and many others are contributing to this end. But though pleasing progress has been made, much has yet to be done before the stupendous task of selling \$28,000,000 in stamps in West Virginia is accomplished. There is every confidence that it will be accomplished, but it will not be accomplished fully through the conversation of a spendthrift people into a fairly frugal one unless the lesson sinks deeper than it has.

In order to accomplish this, there must be brought home to all a sense of the stern necessity which confronts the nation. It is not idle talk to say that each person is responsible to any degree because of the failure to contribute his all to the prosecution of the war. A nation which, while having given up its sons to the chance of war, refuses to give up its follies in order that those sons may fare better and have better chances of coming home, is a paradox—a sad paradox. What can you do that is too much if your son or your brother can place his life in the balance, or merely leave a pleasant and profitable employment, to endure the hardships of army life?

But of what avail are words? They are staring from the printed page, ring-

ing from earnest lips and yet we go on carelessly and negligently while men shiver, freeze, bleed and die. There are still those who are doing no part either in sacrifice or service. How long can this thing be? Surely it will not be very long before some horror grips our hearts, and bowed down in grief and shame, we kneel before the altar by which we are so thoughtlessly passing.

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January 19, 1918.

Dr. James R. Bloss,

Huntington, W. Va.

Dear Doctor:

Enclosed find a few items from the Council of National Defense which I thought you might wish to publish in the next number of the *State Journal*. I am including a percentage table of the different states showing the percentage of physicians who have so far offered their services to the Government. It is to be hoped that West Virginia will come forward and take her place along with the neighboring state of Pennsylvania. The Surgeon-General has asked for 8,000 more physicians and as the second draft is called this additional number of physicians will be required to properly look after the men, and it is the desire of the War Department to have them, as far as possible, trained in advance of the actual need. Since our standing is well below the average in the number that have volunteered so far, it is up to us to look the situation squarely in the face and meet it.

Sincerely yours,

J. E. CANNADAY, M. D.

Major M. R. C.

STATEMENT OF PHYSICIANS RECOMMENDED FOR COMMISSIONS IN  
M. O. R. C.

	Number of Physicians In State	Number Recommended Dec. 15th	Percent Recommended
Alabama .....	2,568	289	11.3
Arizona .....	307	65	21.2
Arkansas .....	2,637	170	6.4
California .....	5,687	700	12.3
Colorado .....	1,733	172	9.9
Connecticut .....	1,678	186	11.1
Delaware .....	261	33	12.6
Dist. of Col. ....	1,482	218	14.7
Florida .....	1,321	215	16.3
Georgia .....	3,421	379	11.1
Idaho .....	439	61	13.9
Illinois .....	10,648	1,436	13.5
Indiana .....	4,872	554	11.4
Iowa .....	3,751	413	11.0
Kansas .....	2,683	343	12.8
Kentucky .....	3,584	536	15.2
Louisiana .....	2,060	243	11.8
Maine .....	1,205	127	10.5
Maryland .....	2,292	376	16.4
Massachusetts .....	5,689	694	12.2
Michigan .....	4,360	660	15.1
Minnesota .....	2,447	386	15.8
Mississippi .....	2,084	240	11.7
Missouri .....	6,399	738	11.5
Montana .....	636	113	17.8
Nebraska .....	1,911	283	14.8
Nevada .....	154	37	24.0
New Hampshire .....	690	73	11.3
New Jersey .....	3,239	463	14.3
New Mexico .....	430	61	14.2
New York .....	15,670	2,254	14.4
North Carolina .....	2,102	333	15.8
North Dakota .....	586	95	16.3
Ohio .....	8,045	918	11.4
Oklahoma .....	2,634	282	10.7
Oregon .....	1,187	166	13.9
Pennsylvania .....	11,502	2,055	17.8
Rhode Island .....	772	86	11.1
South Carolina .....	1,399	158	11.3
South Dakota .....	676	92	13.6
Tennessee .....	3,457	323	9.3
Texas .....	6,240	726	11.6
Utah .....	465	63	13.5
Vermont .....	668	76	11.4
Virginia .....	2,547	326	12.8
Washington .....	1,695	273	16.1
West Virginia .....	1,729	201	11.6
Wisconsin .....	2,803	433	15.4
Wyoming .....	251	16	6.4

TORRANCE, G.: INTUSSUSCEPTION IN CHILDREN. *N. Y. M. J.*, 1917, cvi, 400.

Intussusception is essentially a disease of childhood. The diagnosis can frequently be made from the mother's story. The sudden onset of symptoms, vomiting, pallor and sudden acute pain in the abdomen, and usually in the first twelve hours the appearance of blood in the stools with differentiate this lesion from colitis, the only condition to be ruled out.

X-Ray pictures may be used to show the intussusception. The tumor felt by rectum is very often a late finding. The author quotes from Ladd, who says that this condition occurs in healthy and well-nourished children under one year of age. It sometimes follows whooping cough and one case is reported caused by round worms.

In one series of 46 cases a large percentage gave a history of either marked constipation or diarrhoea. The author believes that operation should be the only treatment considered, and advises a right rectus incision thus exposing the iliocæcal junction. Reduction is successful in from eighty to ninety per cent of cases. Various authors are quoted; some suggest the suturing of the head of the cæcum to the pelvic peritoneum and ileum to the ascending colon. Others maintain that it is not necessary to take special means to prevent recurrence.

The recurrences are infrequent and are found mostly in those cases where the cæcum is not fixed at time of the previous operation. The mortality is very high in cases operated upon after seventy-two hours.

# The West Virginia Medical Journal

JAS. R. BLOSS, M. D., EDITOR  
C. R. ENSLOW, M. D.  
J. E. RADER, M. D. ASSISTANT EDITORS

Huntington, W. Va. March, 1918

THE JOURNAL issued on the first of each month.

Subscription . . . . . \$1.50 per year  
Single Copies . . . . . 20 Cents

All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

### CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

### ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

### REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: United Woolen Mills Building, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

## State News

Dr. Emerson Megrail of Wheeling who is now a first lieutenant in the M. R. C. is stationed at Camp Pike, Little Rock, for the present.

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Dr. Charles W. Halterman of Clarksburg has been commissioned a captain in the M. R. C.

—o—

Dr. L. S. Henley of Huntington has returned from Baltimore where he took a post graduate course of lectures.

## OFFICERS OF THE STATE ASSOCIATION

- PRESIDENT—S. R. Holroyd, Athens, W. Va.
- FIRST VICE-PRESIDENT—Chas. O'Grady, Charleston, W. Va.
- SECOND VICE-PRESIDENT—W. J. Judy, Belleville, W. Va.
- THIRD VICE-PRESIDENT—C. W. Waddell, Fairmont, W. Va.
- SECRETARY—J. Howard Anderson, Marytown, W. Va.
- TREASURER—H. G. Nicholson, Charleston, W. Va.
- DELEGATES TO A. M. A.—F. LeMoyne Hupp, Wheeling, W. Va.
- ALTERNATE—Henri P. Linz, Wheeling, W. Va.
- CHAIRMAN OF THE COUNCIL—G. D. Jeffers, Parkersburg, W. Va.

## COUNCIL

- FIRST DISTRICT—J. W. McDonald, Fairmont, W. Va., one-year term; H. R. Johnson, Fairmont, W. Va., two-year term.
- SECOND DISTRICT—C. H. Maxwell, Morgantown, W. Va., one-year term; T. K. Oates, Martinsburg, W. Va., two-year term.
- THIRD DISTRICT—M. T. Morrison, Sutton, W. Va., one-year term; C. R. Ogden, Clarksburg, W. Va., two-year term.
- FOURTH DISTRICT—R. H. Pepper, Huntington, W. Va., one-year term; G. D. Jeffers, Parkersburg, W. Va., two-year term.
- FIFTH DISTRICT—W. H. St. Clair, Bluefield, W. Va., one-year term; J. E. McDonald, Logan, W. Va., two-year term.
- SIXTH DISTRICT—P. A. Haley, Charleston, W. Va., one-year term; H. L. Goodman, Charleston, W. Va., two-year term.

Dr. and Mrs. C. M. Hawes of Huntington spent several days in February at Camp Lee, Petersburg, Va. with Major and Mrs. Hawes.

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Dr. J. W. McDonald of Fairmont and Dr. W. E. Slathers of Buckhannon were recent visitors in Washington, D. C.

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Dr. W. F. Dailey formerly of Cumberland, Md. is now located at Terra Alta.

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Dr. W. P. Sammons of Cameron now

a first lieutenant in the M. R. C. is stationed at Fort Oglethorpe, Ga.

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Dr. F. F. Farnsworth formerly located at Frenchton has entered into an association with Dr. Gory Hogg of Harvey in the mine practice of the Loup Creek Section.

—o—

After two years in the service of West Virginia, Dr. H. B. Wood, assistant state health commissioner, in charge of the division of contagious diseases for the state department of health, has resigned to accept the position of epidemiologist for the New York state department of health. In his new work he will also have charge of the division of contagious diseases in New York state.

—o—

Dr. James C. Preston, of Hellier, Ky., has successfully passed an examination for a commission in the medical reserve corps of the United States army. He came to Huntington to take the examination. Dr. Preston is a graduate of the Chicago college of medicine and surgery, and has been practicing in Pike county.

—o—

Governor Cornwell has announced the appointment of Dr. E. H. Thompson of Bluefield, as a member of the state health council to succeed Dr. L. H. Clark, of Northfork, who recently resigned because of the press of his personal practice.

—o—

Sanitariums for the treatment of soldiers suffering from tuberculosis are to be established at New Haven, Conn., and at Whipple Barracks, Prescott, Ariz., in addition to those to be built at Asheville and Denver, Col. It is understood that they will cost about \$550,000 each. The medical department's announce-

ment gave no indication as to when work would be started.

—o—

The next Conference of Health officers will be held at the Hotel Frederiek, Huntington, April 24th. This will be followed by an executive meeting of the Public Health Council on the 25th.

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Dr. Charles W. Halterman of Clarksburg has announced that he will limit his practice to Nervous and Mental Diseases.

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Dr. T. J. Farley formerly located at Lorado is now at Amherstdale.

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Dr. L. C. McNeer of Dante, Va. spent several days recently with his family in Huntington.

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Dr. C. T. Taylor of Huntington spent several weeks in Florida in February.

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## Society Proceedings

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The Little Kanawha and Ohio Valley Medical Society met in the parlors of the Chancellor Hotel, Parkersburg, January 3, 1918 at 8:30 P. M., the president Dr. L. F. Keever in the chair.

A paper on the Red Cross work in America and Europe was read by Dr. H. A. Giltner and discussed by all the members present. On motion of Dr. R. L. Brown, the secretary was instructed to secure publication of Dr. Giltner's paper in the local papers and that it be forwarded to the secretary of the state society for publication in the State Medical Journal.

Election of officers followed:

President—Dr. Robert L. Brown, Parkersburg.



First Vice-President—Dr. C. L. Muhleman, Parkersburg.

Second Vice-President — Dr. C. E. Grimm, St. Marys.

Third Vice-President—Dr. P. W. McClung, Elizabeth.

Secretary — Dr. H. A. Giltner, Parkersburg.

Treasurer—Dr. S. H. D. Wise, Parkersburg.

Councillors—Dr. Rolla Camden, W. B. Richardson, R. B. Miller, Parkersburg, E. S. Goff, Spencer, U. L. Deerman, Reedy.

The Society then adjourned.

T. L. HARRIS, Sec'y.

Parkersburg, W. Va. Feb. 19, 1918.

Dr. J. R. Bloss,

Huntington, West Va.

Dear Doctor:

The Little Kanawha and Ohio Valley Medical Society met at Parkersburg on Thursday, February 7th, 1918.

Dinner was served at the Chancellor Hotel at 6:30 P. M., thirty-one members and guests being present.

At 8:00 P. M. the meeting was called to order in the Y. M. C. A. auditorium by the 1st vice-president, Dr. C. L. Muhleman, the president Dr. R. L. Brown having been called out of the city.

This being an open meeting, the usual form of procedure was omitted.

Dr. Frank Le Moynes Hupp of Wheeling was introduced and presented a most excellent and comprehensive paper on "The Carrel System in the Treatment of the Wounds of War and Civil Practice". Following the reading of his paper, Dr. Hupp showed a large number of slides on the screen of actual cases in which the method is used and demonstrated its great value.

Discussion was led by Dr. R. B. Miller who was followed by Drs. Campbell, Jeffers, McNeilan, Camden, Wise, Grimm, Park, Goff and Judy.

An invitation had been extended to nurses, Red Cross workers and to all others interested, with the result that the auditorium was filled with an enthusiastic audience.

Yours Fraternally,

H. A. GILTNER, Sec'y

SECRETARY'S ANNUAL REPORT

Of the Mercer County Medical

Society for 1916.

Now having been president of this society for the past year (1917) and most of us, speaking of the members of the society, believe it to be one of the best if not the best County Medical Society in the state of West Virginia.

Having served you one year in the highest official capacity connected with the society, I feel at liberty to speak more freely on some subjects of interest to this society and the profession in general than if I had read this report before the election of officers in January 1917.

A seal was procured which the society needed for years.

The Secretary attempted several times to obtain from the State Secretary a charter, but so far is known by me that has not been accomplished, at the same time Dr. Anderson has permission from the house of delegates to send us one.

Here is a brief outline of the years progreme's rendered as to the names of visiting physicians, clinics, and etc:— Dr. R. H. Pepper, Huntington, W. Va., Dr. C. C. Waston, Salem, Va., Dr. Davis, Charlottesville, Va. Dr. H. B. Stone, Roanoke, Va., Drs. Murat Willis, C. C. Coleman and Hutchinson, Richmond, Va., Dr. J. R. Bloss, Huntington, W. Va., Dr. S. S. Gale, Roanoke, Va., Clinics at St. Lukes and Virginia General Hospitals, and the Bluefield Sanitorium, meeting of the Society at Mercer Healing

Springs and a visit to the Husband's Ice Cream Plant.

We met once each month and had from one to three good papers read at each meeting; the discussions at these meetings and clinics were interesting, and instructive. In fact we had very good meetings throughout the year.

When the secretary requested you to assist him in getting up his report for the society and *Journal* by asking you to give him a complete list of operations at your clinic and details of same, or asked you for a brief outline of the case you reported and you failed to give him this information, don't cuss or complain at him if he did not make a complete record of your clinic or case to the *Journal*. Again in his notices of the meetings when he asks you to let him know if you expect to be present or asks you to send him the title of your paper, don't treat either lightly, but do your part which helps to make a better program, if you neglect to make a reply to his request don't blame any one but yourself, if a few or none discuss your paper.

Assist your secretary in every way possible, encourage him for every successful move he makes, he is the life and back-bone of every society if he is endowed with the right kind of medical enthusiasm and impartial progressive spirit.

A Secretary who has shown the right kind of spirit and enthusiasm in trying to build up the society one year should be elected to serve the second term, as he fails to more than get on to the running of the society in one year.

When I was elected Secretary in January 1915, one of my friends said to me "Old boy you have a job on your hands" and it proved to be some considerable job. Often times these things are just what we make out of them. It was some

work. I did the best I could with pleasure, but still I feel as though I should have done much more. The members responded to my calls so freely that I feel the Secretary might have done more to make the success of the Mercer Society more attractive and inviting to members who attended very seldom.

It has been gratifying to me to know that some physicians of this society felt it their duty to respond on the program when their names were placed on same, and many times without a word of objection.

One good member of this society was heard to say in a conversation with a visiting surgeon "we expect to hold a clinic here in the hospital one day next week, we have a Secretary of our society who calls on us to hold a clinic once a year, and we have to do as he says". You well know none of you were compelled to do as your secretary requested, but the idea of giving these clinics was to give our surgeons and physicians connected with the hospital an opportunity to let the physicians in this section of the county know what efficient work is being done at home, and at the same time afford these physicians a chance to see some of the latest surgery and learn some of the modern methods of diagnosis and treatment of medical cases, without spending considerable money and valuable time at some of the large cities, attending lectures and clinics.

It was the object of your secretary for the year of 1915 and 1916, especially for the year of 1916 to give each of you an opportunity to take part in some one of the monthly programs and if any one of you have not had that pleasure it was not intentional with him, I'm sure but simply an oversight.

The method used to have good programs at each meetings was given con-

siderable thought and I believe my plan of announcing as many as four or five names on the program, two to four months in advance has been the best method adopted in this society yet. Some of the secretaries of other Medical societies throughout the state make up their programs the first month for the entire year, and that I believe an excellent idea. Give every one a chance to show to the society what there is in him, don't wait for him to volunteer, conscript him, learn what special line of medicine or surgery he is fitting himself for, or is expecting to take up and then select that particular man, the best possible subject for that program, the one you consider most efficient and adapted for that subject or symposium.

We all are good for something to this world and we may accomplish something great if we will only apply ourselves to that which we are most interested in, provided we have the opportunity, so let us assist each other in acquiring or demanding that opportunity.

Some of the members appeared more than once on the program during the year of 1916, that is no fault of theirs, but yours, they were ready and willing, and you let the opportunity slip. Now why not call upon the fellow who is willing to lend a helping hand at all times to make Old Mercer Medical Society hum.

You may say, well, he had his nerve to consent to appear on the program so often or to speak so many times on that subject when a discussion was up before the society, I don't call that nerve, I call that interest and enthusiasm; any time he speaks too long or too often there is a ruling in the by-laws to govern that—the presiding officer has the authority to call him down.

It has been reported by visiting physi-

cians that we are "a jolly good bunch", now let us be always a lot of jolly good fellows, but let us show them too that we have considerable gray matter in our craniums, the cells of which are very active, and that the dignity of our society is above the average.

An attempt was made to compile all the names of you physicians under a list of specialties with the hope of encouraging each member to do more efficient work; but that list is far from being complete.

As I have retired from that most important office of Secretary and now is the time to elect some one to fill that exalted station, I am at liberty to make this suggestion that, we pay our secretary twenty-five dollars per year, and should he make a proficient and valuable secretary one year and be elected to serve a second or more terms that he be allowed from \$10.00 to \$25.00 in addition per year, and this extra amount be paid him according to the discretion of a committee of five drawn by ballot from the names of all the members of the society except the secretary elect, who is exempt, and these names to be drawn from a hat on the night the officers are elected. This committee is not to give its decision until the end of that fiscal year, and that decision to be made according to the efficient service the secretary has rendered to the society.

Now I want to thank you all for electing me president of the Mercer County Medical Society, which was one of the heights of my ambition when you elected me secretary three years ago.

We have had some very interesting meetings this year, but owing to the condition of our country, being in the midst of war, some of our good physicians having enlisted in the medical reserve corps and other trying circumstances

which possibly could not have been bettered, I feel we have had quite a successful year.

Now who ever is elected as our President for this year, let us choose one of the best men we have regardless of his politics, religion or faction he belongs to, if such exists in our society. Then each of us pledge ourselves to give him our utmost and enthusiastic support and make the coming year the most pleasant, most enthusiastic and most instructive in the history of the Mercer County Medical Society.

Thanking you one and all for your most hearty co-operation throughout the past year.

I remain yours fraternally,

JAN. 17, 1918.

H. G. STEELE.

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## Medicine

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### UNTOWARD EFFECTS OF EMETINE HYDROCHLORIDE.

C. Mattei (*Paris Medical*, October 13, 1917) states that in some cases of amebic diarrhea administration of emetine causes at first, or even throughout the treatment, an increase in the number and size of the bowel movements, distinct benefit appearing only two to eight days after termination of the course of injections. Ampoules of the drug prepared a number of months before use were observed to be less active and to cause local inflammatory reactions more frequently than freshly prepared solutions. Nausea and vomiting appeared in some cases after the second or third daily dose of 0.08 gram. Toward or after the close of a series of injections, low blood pressure and impaired cardiac power was noted in all the author's cases of emetine intoxication, numbering nine out of 220 cases treated. At times cardiac insufficiency appeared suddenly,

and in one instance of this type death in collapse followed. In three cases of fatal dysenteric cachexia, rebellious to emetine, persistent tachycardia and embryocardia appeared four to eight days after the close of a series of emetine injections and are believed possibly attributable to the drug. In each of these three cases, expectoration of 500 to 600 grams of clear fluid, mucous secretions daily had been noticed before the beginning of the cardiac disturbance. In two cases there were superadded paroxysms of inspiratory spasm resembling a prolonged hiccough. The patient, sitting up in bed with the mouth wide open, strove vainly for twenty or thirty seconds to complete the respiratory cycle by expiration. Paresis of the muscles, especially of the neck or lower limbs, dysphagia, and distinct persistent trismus were noted in a few cases. Impairment of urea elimination through the kidneys was shown by studies of Ambard's quotient to be a very frequent effect of the drug. Of sixteen patients receiving over one gram of emetine within thirty to thirty-five days, seven showed toxic symptoms immediately or within a week after the conclusion of treatment. Apparently one gram is the maximum safe dose in a month's time. *N. Y. Med. Jour.* 1-5-18.

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### LUMBOSACRAL BACKACHE IN WOMEN.

Dr. Edward H. Richardson, of Baltimore, Md., said that the determination of the specific cause of lumbosacral backache in a woman involved a careful study both in the domain of the orthopedist and in that of the gynecologist. In the former, we must scrutinize the lower spine and the lumbosacral and the sacroiliac articulations very closely for evidences of arthritis, injury, and chronic strain from one or more of the

causes enumerated above. In the last the point to remember was that with rare exceptions whatever the nature of the particular gynecological disorder it produced lumbosacral backache only through the strain incident upon faulty posture, and that no matter how skillful our operative therapy, it would often fail utterly to relieve the backache unless supplemented by orthopedic measures which would restore normal balance. *N. Y. Med. Jour.* 1-5-18.

Washington, December 24, 1917.

Owing to the overcrowding of naval training stations as a result of the rush of those within the draft age to get into the navy before the time limit of noon, December 15th, the naval medical officers are apprehensive of disease epidemics. At this time, about 82,300 men are at the training stations. It was expected that, when these enlistments were made, many of the boys would spend the holidays at home and would not join until after January 1st, but few of them appear to have taken advantage of this opportunity, and there is a repetition of the old conditions of overcrowded barracks, with special reference to sleeping quarters. In the latter particular, the medical officers have been insisting that there should be a five foot individual sleeping space, which is regarded as a separation essential for the preservation of health in service dormitories. At the training station, Great Lakes, Ill., there are 22,000 men, for example, which necessarily produces congestion and prevents the application in an effective way of the detention system. For the present, the rates of admission to the naval hospitals are remarkably low, there being only twenty-seven cases of pneumonia and nine of cerebrospinal fever in the naval service.

An unusual case coming to the attention of the navy physicians recently is that of a radiooperator on board one of the small vessels. During a long watch, he undertook to heat the radio room by a charcoal stove. He apparently did not observe any unusual odor, and when the time came for his relief he was found unconscious on the floor. He died two days later of carbon monoxide poison. A dog also in the room at the same time, was found unconscious, but he fully recovered. *N. Y. Med. Jour.* 1-5-18.

#### ACIDOSIS, ESPECIALLY IN DIABETES.

Albert H. Rowe (*California State Journal of Medicine*, November, 1917), after a rather full discussion of acidosis and its diagnosis, insist that in beginning the treatment of a diabetic it is most important to investigate thoroughly the power of elimination of acids by the body. A routine ferric chloride reaction, ammonia determination, a determination of the alveolar carbonic dioxide tension, or better of the carbonic dioxide tension of the plasma, should be made, and as acidosis may develop during fasting, these investigations should be continued throughout the treatment. The aim should be to prevent, rather than to treat, acidosis. Several measures found useful in doing this are given: 1. The source of supply of acid bodies is eliminated by cutting out the fats from the diet and gradually eliminating the proteins and finally the carbohydrates. This procedure is particularly useful in the obese, in diabetes of long standing, in patients with damaged kidneys, in children not accustomed to fats, in cases of infection, and in operative cases. 2. Acidosis can be prevented if the patient's tolerance for carbohydrates can be improved. 3. To prevent acidosis in very fat individuals a great weight reduction is often necessary, thus doing away with

the fat from which acid bodies might be derived. 4. The question whether alcohol is useful to prevent acidosis when given during fasting is unsettled. 5. In building up the diet after the fasting period acidosis can be prevented by the inclusion of as much carbohydrates as the patient can stand without a return of sugar in the urine. When moderate acidosis is present, as determined by complete laboratory tests, the following measures may help to dispel it: 1. Fasting. In using this method the alkali reserve of the blood should be closely watched for some cases of acidosis are aggravated by fasting. 2. Feeding of carbohydrate protein diet. When acidosis is found by laboratory analysis to increase with fasting, the feeding, of green vegetables and small amounts of protein is indicated. 3. Intermittent feeding and starvation. 4. Weight reduction. 5. Increase in diet. Alkali should be given only when the laboratory tests show danger of approaching coma, i. e., more than 2.5 grams of ammonia and a carbonic dioxide tension of thirty millimetres of mercury. If the danger is slight, only small doses should be given until the carbonic dioxide tension has been definitely raised. The danger of too large doses of alkali is emphasized but it should be given when coma is threatening. In the treatment of coma the credit of the following is given to Joslin. He lays stress on putting the patient to bed and keeping him warm and at rest. Bowels should be emptied. Elimination of acid bodies should be encouraged by a large fluid intake by mouth and colon and, if necessary, intravenously. A large amount of alkali should be crowded into the patient, preferably by the mouth, but if this is impossible, intravenously. Digitalis and

caffeine should be given to support the heart and morphine to control the nerves.

In chilblain, the treatment is local and constitutional. Locally apply:

R Iodine, ..... 4;  
Ether, ..... 30;  
Collodion flex., .....100.

A simple protective dressing with boric acid or the following ointment will be found beneficial:

R Phenol, ..... 1;  
Tr. iodini, ) .....  
Acidi tannici, ) ..... aa 2;  
Simple ointment, ..... 4.

Internally, give calcium chloride or lactate, in doses of seven and a half grains three times daily in chloroform water. Do not give longer than four or five days. There is a lack of calcium salts in the tissues of those predisposed to chilblain, and here the administration of these salts seems to act favorably.

#### PURE ALCOHOL NOT OBTAINABLE.

The United States Food Control Act which became effective on August 10, 1917, imposes very rigid restrictions on the purchase, use, and sale of alcohol. Numerous conflicting regulations were issued by the Bureau of Internal Revenue, but these have been revised so that they are at least comprehensible although very exacting. Physicians will be surprised to learn that the pharmacist is forbidden to sell any pure alcohol, even on the prescription of a physician. The pharmacist can, however, dispense a physician's prescription in which pure alcohol is an ingredient, provided the prescription contains "active medicinal ingredients, for which the alcohol is a solvent or necessary diluent."

The only way in which a pharmacist can dispense alcohol is in the form of medicated alcohol, the medication to be

introduced at the time of, and not in advance of, the sale. The medication which may be used must conform to one of the following ten formulas:

1. Carbolic acid, 1 part; alcohol, 99 parts.

2. Formaldehyde, 1 part; alcohol, 250 parts.

3. Bichloride of mercury, 1 part; alcohol, 2,000 parts.

4. Bichloride of mercury, 0.8 gram; hydrochloric acid, 60 c. c.; alcohol, 640 c. c.; water, 300 c. c.

5. Bichloride of mercury, 1½ grains; hydrochloric acid, 2 drams; alcohol, 4 ounces.

6. Formaldehyde, 2 parts; glycerin, 2 parts; alcohol, 96 parts.

7. Carbolic acid, 1 dram; tannic acid, 1 dram; alcohol, 1 pint; water, 1 pint.

8. Alum, ½ ounce, formaldehyde, 2 drams; camphor, 1 ounce; alcohol and water, each 1 pint.

9. Lysol, 1 part; alcohol, 99 parts.

10. Liquor Cresolis Comp. (U. S. P.), 10 c. c.; alcohol, 1,000 c. c.

The alcohol thus medicated must bear a poison label. It is quite important that physicians should bear these facts in mind as they will find themselves confronted with this law and these regulations whenever ordering alcohol for their patients.

Aside from this particular phase of the regulations a number of very onerous conditions are imposed on the retail pharmacist preliminary to his obtaining permission to sell alcohol even in the medicated form. As a consequence of these restrictions many pharmacists have wholly abandoned the sale of alcohol, and physicians may find some difficulty in obtaining even the medicated form in some sections. It is much to be regretted that the Government has taken such a narrow view in its efforts to enforce the Food Control Act, as it would seem that

regulations might have been drawn up which would have made it possible for physicians to prescribe alcohol when needed without restricting them to the use of the particular forms of medicated alcohol provided for in the above regulations. We commend this matter to the consideration of the legislative committees of the various medical associations, who should be able to devise and have adopted some modification of the regulations which would meet the requirements of the Government without imposing such objectionable restrictions upon the practice of medicine.

*N. Y. Med Jour.* 12-29-17.

## Surgery

### LIQUID PARAFFIN DRESSINGS.

Stewart (*Medical Record*, June 23, 1917) notes that rectified paraffin acts toward patients and bacteria much as interposed and sterile glass might do. It appears almost neutral to both germs and tissues. It does not become softened and macerated like the watery solutions, nor hardened as does alcohol, nor does it become rancid as do vegetable oils; nor do bandages soaked in it adhere, nor vulnerate on removal.

Three methods are used in bandaging. A couple of yards may be unrolled, cut off, and used to surround the limb after the manner of a sling. The ends of this short piece should be made to cross at the wound, and a pull should be made upon right and left hands at the same time, thus furnishing opposing forces which bring the wound edges together and relieve any strain which might tend to pull them apart. This maneuver may be repeated two or three times, or until the bandage is wound round and round the limb so far as its length will permit. When this is completed a pad or wipe

is placed over the seat of the wound, and finally all fastened securely by a roller. The wound should be cleansed, should be filled as full as possible with the paraffin, should be surrounded with cable cord to prevent direct pressure, should be bound with a rather short double-handed bandage, and the whole should be covered and completed in the usual manner.

If paraffin is to be used successfully, the dressings must be adapted to it, the wound must be prepared for it, and these are in addition to the usual teachings of good surgery. After a piece of cable cord (No. 60) has been dropped into a cup or bowlful of liquid paraffin it becomes promptly soaked. This cord is picked out with forceps and adjusted around a wound. Thus the wound cavity is deepened, its capacity for holding the paraffin is increased, yet at the same time the bandage is held off from coming into contact with the wound itself. The patient may be trusted to put upon the outside of an otherwise undisturbed bandage, one-half teaspoonful of the liquid every hour from 8 a. m. to 8 p. m., and one tablespoonful at 10 p. m. No harm can come from its abuse.

After a considerable trial of this simple method it was supplemented by adding one grain of calomel, 6 grains of iodine, and two drachms of ether to 2500 grains of liquid paraffin. The resultant solution looks like one of potassium permanganate. After standing for a few hours it precipitates hydrargyrum biniodide. About two-thirds of the iodine remains in solution, and the supernatant liquid is slightly antiseptic, though not at all irritating to wounds (peritoneum, urethra, etc., as test tissues) nor absorbable by the tissues, in which it is quite different from mixtures that contain animal fats or vegetable oils.

This solution dropped into sinuses causes prompt healing.

The writer states that if he were asked to plan a fool-proof technique for the laity or for first-aiders he would recommend this as standing the test of manipulation by ignorant and dirty fingers: Make a solution of one heaping teaspoonful of bicarbonate of soda, or of washing soda, or of hard brown laundry soap, to one quart and a half of water. Boil hard for ten full minutes. Put in a fountain syringe and irrigate the wound thoroughly, using a medicine dropper for a nozzle. After running the whole quantity through and over the wound apply the liquid paraffin and bandage.

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KREUSCHER, P. H.: SEMILUNAR CARTILAGE: FRACTURE-DISLOCATION AND FRAGMENTATION

*Surg. Clin. Chicago*, 1917, i, 787.

The author discusses the treatment of fracture-dislocation and fragmentation of the internal semi-lunar cartilage. He states that one of the most frequent lesions in or about the knee-joint, which may not be recognized when the patient is first examined, is semilunar cartilage disease. There may be present a simple dislocation of part or all the cartilage or there may be fracture-dislocation or fragmentation.

Etiologically several types are recognized: (1) fracture or dislocation due to direct external trauma; (2) malposition or fragmentation of the cartilage, due to internal trauma, i. e., very quick twisting or flexion of the knee-joint under weight; (3) loosening and fraying of the cartilage due to chronic synovitis or osteo-arthritis.

Kreuscher quotes various authors who give the relative proportion of injuries to internal and external cartilages as fol-



lows: Morrison, 50 internal to 1 external; Walton, 81 internal to 4 external; Martin, 92 internal to 8 external.

When a patient presents himself, giving a history of an external trauma or a twisting of the knee-joint which is followed by considerable pain and swelling, one must at once think of a cartilage injury. If in addition there is a history of locking of the knee-joint and the typical acute pain accompanying it, followed by the disappearance of this condition after manipulation or rest, then it is quite possible that it is a case of fragmented or loosened cartilage. When the locking recurs repeatedly, or when a small body can be felt under the skin internal to the patella, which is not freely movable, then a diagnosis of internal semilunar cartilage injury is justifiable.

The treatment is surgical and should be carried out as early as possible. The author holds with Murphy that the best time for operation is from seven to ten days after the original dislocation or repeated attack of the same trouble.

The operative technique is as follows:

“The patient is placed upon the operating table flat on his back, with his knees flexed over the end of the table and the head and body lowered, essentially a Trendelenburg position. The knees are flexed at right angles to the thighs, as this gives the very best possible position for opening the knee-joint at the semilunar cartilage location. An incision about  $2\frac{1}{2}$  inches long is made parallel to and either internal or external to the ligamentum patellæ, as the case may be. After the incision has been extended downward to the upper end of the tibia it is curved outward and almost parallel with the articulating surface of the tibia for a distance of about  $1\frac{1}{2}$  inches. This gives almost a

right-angled incision, and after cutting through the skin and fatty tissue exposes the true capsule of the joint. A fresh scalpel is used in making the incision through the capsule about on the same lines as the skin incision. This brings one down to the synovial capsule, which is opened with great care, and for the first time the joint cavity is opened. Before beginning the operation it is necessary that a very firm tourniquet, in the form of a large rubber tube or an oversized band, such as is used on the blood-pressure apparatus, be applied high upon the thigh. This prevents all bleeding from the skin and subcutaneous tissue, so that the field is practically bloodless, and it rarely becomes necessary to introduce a sponge into the wound or into the joint. When the synovial capsule is opened the joint fluid often escapes very freely if the injury has been a recent one. If it is clear synovial fluid the loose or fragmented cartilage may be clearly seen in the field and grasped with a forceps and drawn outward. In the ordinary case a curved scissors frees that portion of the semilunar cartilage which still remains attached with very little difficulty. If any difficulty is encountered at all, an adduction of the leg on the thigh, in the case of an internal semilunar cartilage operation, gives one free access to the posterior portion of the semilunar cartilage attachment. Great care is exercised not to injure the surface of the joint in any way. After the cartilage is removed the edges of the synovial membrane are approximated and sutured with fine catgut. The capsule is closed with catgut and the skin sutured with horsehair and the operation is completed.”

After-treatment consists in placing the leg in a straight wire cage and applying

a Buck's extension with a weight of from 12 to 15 pounds, so as to keep the joint surfaces separated during the process of repair. After twelve to fifteen days active motion is permitted, and at the end of three or three and one-half weeks the patient is able to be about on crutches.

The operation for the removal of the semilunar cartilage in uncomplicated cases is very successful. The absence of the cartilage in the knee-joint does not interfere with the function of the joint.

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GOODWIN, T. H.: WAR SURGERY.

*Mil. Surg.*, 1917, xli, 279.

Sepsis has proved to be a very serious and general complication of almost every class of wounds at the front. The cause is the extreme pollution of the soil in the fighting area, due to the extensive manuring for cultivation. The badly destroyed and devitalized tissues furnish a most favorable nidus for the growth of any bacteria which may have gained entrance to the wound.

At the field ambulance and casualty dressing station the patient is first given an injection of antitetanic serum. The field dressing which usually has been put on too tightly should be taken off and as much dirt and blood as possible washed away. Hopelessly torn and damaged tissues should be removed. Where necessary the patients ought to be anaesthetized, the wounds enlarged and mechanically cleaned and counter drainage established. The wounds should not be sutured. Bleeding arteries should be exposed and ligated rather than an attempt made to check hæmorrhage by tamponing the wounds. Antiseptics have proved disappointing; adequate drainage and mechanical cleansing form the most essential steps.

Collapse and shock which result usually from hæmorrhage or exposure to cold, wet, hunger, as well as from injuries to viscera or large bones, or from long ambulance rides, are best treated by rest, warmth, hot drinks, or if contra-indicated, hot saline per rectum. Gas gangrene usually occurs within three days. The temperature is subnormal. Treatment consists of free incision, removal of dead tissues, thorough cleansing of the wound, removal of foreign bodies, hydrogen peroxide irrigation and establishing efficient drainage.

Fracture wounds should be explored under anaesthetic and treated as any other wounds, foreign bodies and completely detached bone fragments should be removed, free drainage provided for and the limb immobilized. At the casualty dressing stations humerus fractures are best treated by application of short wooden splints and by bandaging the arm to the side, while femur fractures are usually held by Thomas knee splints or Page splints. At the base more complicated methods can be used for the purpose of getting and maintaining correct apposition, but plates and screws, etc., should be avoided.

Knee-joint wounds are more serious in consequence than those of any other joint. For the more serious cases the joint should be freely opened and drained and continuous irrigation used. Wounds of the head require expedient operation for the sake of cleansing. Otherwise operation is on the whole less frequently necessary than has been believed. In injuries to the spinal cord it is interesting to note that an indirect injury producing a concussion may give symptoms very similar to those following direct trauma. Penetrating wounds of the chest if not immediately fatal have a good prognosis. Absolute rest, free

use of morphia if necessary, is essential. Hæmothorax should not be tapped within the first week because of the danger of producing another hæmorrhage. Infection of hæmothorax is common.

The majority of cases of gunshot wounds of the abdomen die on the field. Primary operation for intestinal wounds is indicated if the patient is seen within the first 24 hours and is in good condition. Wounds of the kidney seldom require operation unless there is continuous bleeding. Trench foot or frost-bite is due to prolonged exposure to a low temperature, especially associated with wetting and a lowered general condition. Prophylaxis is infinitely more important than any treatment. Loose boots thoroughly greased, change of socks, dryness if possible, and exercise, will aid greatly in warding off frost-bite. The trench foot washing stations have done much to reduce the incidence of this affliction. The gas mask is a good protection against gas attacks. The treatment of gas cases consist chiefly in absolute rest and oxygen, expectorants and venous section in the badly cyanosed.

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HUNT, J. G.: THE OPEN-FLAP METHOD OF TREATING PERFORATING BRAIN WOUNDS.

*Lancet*, Lond., 1917, exciii, 494.

This method is based upon sound elementary surgical principles, i. e., unobstructed drainage and minimum interference with the damaged parts at time of operation and during the subsequent weeks of healing.

The first step consists of turning down a goodsized flap of scalp with perichondrium sufficient to expose freely the whole area of bone injury. The wound in the bone is enlarged and all depressed fragments removed, and in addition a

margin of healthy dura surrounding the damage portion of the membrane is exposed. The wound in the brain and dura is disturbed as little as possible. Foreign bodies, if superficial, are sought for. When the brain is much damaged, the opening in the dura, if small, should be freely enlarged by radiating incisions.

A strip of iodoform gauze is firmly inserted between the dura and the overhanging edge of the bony hole. It shuts off the general meningeal space from the infected wound, and stimulates the formation of the natural barrier of adhesions between the coats of the dura. A loose pad of fluffed iodoform gauze is lightly packed over the whole denuded area.

The scalp flap may then be loosely replaced over the gauze, or it may be held down out of the way by one or two silkworm sutures. The outer dressings are of plain gauze moistened with saline or boric solution, and should be changed twice daily. The iodoform gauze must not be disturbed for from 5 to 7 days. At this date the hernia cerebri will be found well developed. In none of the cases of hernia was there more than one diopter of disc swelling at any stage. The author believes the formation of hernia is due to local increased vascularity, inflammatory œdema, and rounded infiltration.

In a large number of cases seen by the author in which the flap was resutured with or without drainage tubes, there was a latent period of hopeful convalescence of from seven to ten days, followed by a sudden rise of temperature and early death from meningitis. The post-mortem showed that the soft necrotic brain matter composing the hernia had spread out beneath the skin flap and had become virulently infected.

The hernia reaches its maximum size

about the end of the second week and then slowly recedes, so that in four to six weeks it no longer projects above the bony parts, and the whole wound will be covered by healthy granulation. The skin flap may then be safely replaced.

The author states that in more than 50 cases of his own knowledge the results, as regards life-saving and ultimate restoration of function, have proved far better by this than by any other method adopted.

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PORTER, M. F.: CHOLECYSTECTOMY.  
*Ann. Surg., Phila.*, 1917. lxxvi, 321.

The result of study and experience in about 1,000 cases of surgical diseases of the gall-bladder and gall-duets have led to the following conclusions:

1. The gall-bladder is an important organ but not vital.
2. Cholecystectomy increases bile pressure in ducts favoring danger from pancreatitis.
3. Symptoms of gall-bladder disease are only partially caused by tissues of the gall-bladder proper.
4. Recurrence of symptoms after cholecystotomy means overlooked stones, re-formed stones, infection of the bile stream, or hypercholesteræmia.

The gall-bladder should never be removed save when necessary for the cure of the disease for which operation is done. It is generally agreed that gall-bladders of the following types should be removed: (1) hydrops with obliteration of cystic duct; (2) chronic empyema; (3) the cholesterolin or strawberry gall-bladder; (4) calcareous or fibrous degeneration; (5) carcinoma, when limited to the gall-bladder; (6) extensive

laceration or perforation. Many would add gangrene, yet the mortality is higher after cholecystectomy in such cases than after cholecystotomy and drainage.

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#### THE ROLE OF SYPHILIS IN SURGERY.

*Dr. George Gellhorn*, of St. Louis, Mo., said that he had seen extensive suppurations of the abdominal incision resist all possible treatments for weeks, but turn into clean and vigorously granulating wounds as if by magic when antiluetic treatment was instituted. He recalled four cases in which the entire abdominal incision broke open about a week after operation. The tissues of the abdominal wall showed no tendency whatever to unite, but there was no suppuration present. All four patients were profoundly cachectic. Two were probably not luetic, but one was a frank syphilitic and the fourth, despite a negative Wassermann, was probably diseased. It would be interesting and important to know how high the percentage of syphilis was in such cases of complete disinclination of the tissues to heal. He had at present under his care a woman with tertiary syphilis in whom several surgeons had unsuccessfully attempted to repair a third degree laceration of the perineum. He subjected this patient to energetic antisymphilitic treatment with the view of softening the cicatricial tissues about the vulva and of forestalling disturbances of wound healing. In the course of this treatment, which included several injections of salvarsan, a laparotomy for pus tubes became necessary; and the patient went through this operation without the slightest complication.

# The West Virginia Medical Journal

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## THE EVOLUTION OF MEDICAL LEGISLATION IN WEST VIR- GINIA.

By William W. Golden, M. D., F.A.C.S.  
Elkins, W. Va.

Read at Fiftieth Annual Meeting West  
Virginia Medical Association, Fairmont, Oct.  
1917.

### PRELIMINARY REMARKS

In an address entitled "Our Public Health Law—A Brief History of its Genesis and its Important Provisions" I took occasion to point out that in a broad sense medical legislation is a part of public health legislation. Medical men fully understand this. They understand that laws regulating the practice of medicine are as much in the interest of public health as are those which are enacted in the interest of safe water or proper disposal of sewage. Incompetent medical practitioners, no matter what their conventional or legal designation may be, are a menace to the community in more than one way. Improper diagnosis and treatment are injurious to public

health for the obvious reason that they endanger the life and health of individuals constituting the public. But in addition, incompetence in the profession of the healing art means the failure to detect foci or sources of communicable diseases with consequent disaster to the community in life, health and business.

In the lay mind, however, medical laws are not distinctly associated with public health. The people generally look upon medical legislation as a matter mainly, if not altogether, in the interest of the members of the medical profession, viewing it at times even in the light of class legislation. It is quite important that the people's mind should be freed from such a misconception. As leaders in matters of public health, it behooves us to do what we can to enlighten the public on this subject. Since I became officially identified with the public health affairs of this State I have omitted no opportunity to make this matter clear to the public. Some of you perhaps may recollect an address which I delivered some time ago and which was published in our *Journal* with the title "Typhoid

Fever and Illegal Practitioners versus the State of West Virginia". This title I selected not merely because it covered the two subjects which I discussed in that address but also for the special purpose of associating the two conditions as of equal public health importance. On many other occasions I have pressed the same view to the front. Educational efforts of this kind, I have no doubt, have in the past contributed much towards the progress that medical legislation has made in this State, and it must be continued until the laws regulating the practice of medicine in West Virginia will be equal to those of any of our progressive neighboring States which at present they are not. West Virginia has an advantage over many States in the fact that the administration of the laws governing medical licensure is in the hands of the Public Health Council. This in itself stamps these laws as distinctly in the interest of public health. There was a time when I shared the view of some who believe that medical licensure should be taken from the Public Health Council (or Board of Health) and placed in a special body of medical examiners, as is the case in some States. I adopted that view when I first became a member of the State Board of Health, because I noticed that at the official meetings the time was almost entirely given up to matters of licensure. It occurred to me then that if there were a special medical examining board the members of the Board of Health would have to utilize their meetings in the interest of public hygiene and sanitation. However, with the enactment of our recent substantial public health laws and the granting of an increased appropriation the members of the Board of Health and of the Public Health Council have shown

themselves more than willing to give their time to matters of public hygiene and sanitation. In fact their eagerness and enthusiasm in this phase of their duties have been so great of late that it looked as if medical licensure was doomed to a place of very small importance in their estimation. This, however, was only apparent so, as at recent meetings the Council has devoted very much time to a consideration of our needs in medical legislation about which I hope to tell you later. In view of this experience I am satisfied that the administration of the laws of medical licensure can well remain in the hands of the Public Health Council, thus helping our citizens to gain and maintain the view that medical legislation is part and parcel of our public health code; that it is simply one phase of public health affairs; that it is in the interest of the people in general and not of any class of it. There is another important reason why it is best that the administration of the medical laws should remain with the Public Health Council. I shall not dwell much upon this reason, for a hint to the wise should be enough. Just so soon as a special medical examining board is created, such boards will multiply with the number of irregular sects, leading to the usual dire consequences.

#### THE LAW OF 1881.

It is claimed that West Virginia was the first State in the Union to enact a law regulating the practice of medicine. Be that as it may, the first law for this purpose in our State was enacted with the law creating a State Board of Health on March 8, 1881, and went into effect 90 days thereafter. Under this law persons permitted to practice medicine were required to obtain a certificate from the State Board of Health which

was granted on either of the following conditions: 1. Graduation from a reputable medical college. 2. Ten years of continuous practice in this State prior to the enactment of that law. 3. An examination by members of the Board for the Congressional district in which the applicant desired to practice. Some amendments to this law were passed the following year, but my understanding is that the law remained substantially the same for upwards of twenty years. The credit for the passage of this act belongs to the late Dr. J. E. Reeves who seems to have placed medical West Virginia on the map of this country in more than one way. In a personal communication our highly esteemed contemporary Dr. L. D. Wilson of Wheeling writes me as follows: "The original act was passed almost entirely through the efforts and influence of Dr. Reeves of this city, and was drawn up by the late James H. Ferguson of Charleston. Of this I am personally cognizant". Historians should accept Dr. Wilson's testimony on this point as final. It is evident that the requirements were not very high, and it is more than probable that any one with a smattering knowledge of medicine of that day could obtain a State license, although it is a matter of common knowledge that some of the ablest men of the profession of the State have taken up their practice during that period. However, it was a very much needed beginning and proved a substantial starting-point for all subsequent medical legislation.

#### THE LAW OF 1895.

In the early nineties the profession all over the United States became aroused to the peril of the low grade commercial medical schools which were multiplying with great rapidity and became

opprobriously known as diploma mills. Some of our large cities could still boast of one or more schools of a high character. But for every one such there were many schools founded as a rule by men with sordid motives and maintained wholly in the interest of advertising the members of their faculties to the ignorant public. The product which these diploma mills ground out became a serious menace to the people of this country and was covering the medical profession with disgrace. How to remedy this evil became a burning question in those days with the true leaders of our profession. All ideas to accomplish this by national legislation proved to be impracticable because of our form of government. It became evident that each State would have to act for itself in this matter through its police power; and so one State after another amended her medical laws so as to require a State examination as a condition to the granting of license to practice. In some States this condition was in addition to graduation from a reputable medical school, while in others it was the sole requirement. I am under the impression that New York State was the first one to enact this protective legislation. The State of West Virginia was among the very early ones to fall into line; and in 1895 our medical law was amended so as to require an examination by the whole Board of Health as the sole requirement to practice. Graduation from a medical school was not required. The subjects on which the applicants were to be examined were specified in the law and practically covered all the branches of medicine.

It is my understanding that the State Medical Society was responsible for the enactment of this amendment. This, however, is merely a formal and general statement. As is usual with the work of

such organizations, achievement is traceable to some one or few persons. I am not sure whether I can state positively who all are to be credited with this improvement in the medical law, but I know that the late Dr. Daniel Mayer of Charleston, President of the State Medical Society at that time, had much to do with it.

#### THE LAW OF 1907.

For awhile this amended law seemed to be a satisfactory improvement in the desired direction. Soon, however, the permission of undergraduates to take the examination proved very objectionable for two main reasons. 1. While there always have been men of much ability and high ideals on the State Board of Health, because of politics the majority of them were not always thus equipped for their duties. As a result, many undergraduates passed the Board's examinations largely through the cramming of compends. While some of these licentiates have since justly attained high standing in the profession, others remained without further self-improvement and swelled the number of our poorly equipped physicians to a very marked degree.

As the neighboring State improved their medical laws and raised their requirements, our State became a variable dumping-ground for the flunks of other States, except when in spite of politics fortune favored the Board with a majority of members of superior attainments and ideals. Thus, for instance, in the year 1906 the Board rejected no less than 42 per cent of all applicants, most of whom were undergraduates. 2. As stated, the turning out of so many incompetent physicians by the medical diploma mills led many States to attach little importance to the value of medical diplomas and instituted the requirement

of a State examination. It soon became evident that, while such a requirement was proper, in fact under the circumstances unavoidable as far as recent graduates were concerned, it was quite a hardship on the older practitioner when on account of ill health, new family ties, or other reasons, he was compelled to take up his residence and practice in another State. After much agitation and study it was found that the only practical way of relieving this hardship was by a systematic exchange of courtesies between States to recognize one another's license in lieu of an examination. That is to say registration by reciprocity. It is quite obvious that no State would recognize the license of another unless the legal requirements were at least as high as her own. The fact that West Virginia did not require graduation from a medical school as a condition of eligibility to take the examination of the State Board of Health soon became conspicuous and made it impossible for her practitioners to be permitted to practice in other States on the basis of reciprocity. Because of these two reasons the need of further amending our law became sorely felt by the profession of the State. It naturally became a frequent topic for discussion at the meetings of the State Medical Association. The Medical Association made several efforts with the Legislature before it finally succeeded. My personal knowledge of, as well as participation in these efforts, began with the year 1903, while I was serving as Secretary of the State Medical Association. In that year the matter was in the hands of Dr. W. S. Keever of Parkersburg, as chairman of the Medical Association's committee on public policy and legislation. In his report at that year's meeting, which was held at Charleston, he attributed the failure



of his committee's efforts to opposition from the State Board of Health. This I found to be correct. For years there existed between the State Medical Society and the State Board of Health a spirit of unfriendliness and even antagonism, which at times amounted to mutual contempt. On the part of the Medical Association this feeling was engendered by a belief that the appointments on the Board were made solely on political grounds. It was said among its members that the qualifications of the appointees were judged by the services they rendered to the dominant party in the preceding election and not by their scientific and professional attainments, and in this way they explained the frequency among the members of the Board of men who served as chairmen of political county committees. The fact that notwithstanding this method of appointment the Board often did have men who were unquestionably competent to discharge their duties as members of it was not given much consideration. The members of the State Board of Health naturally resented this opinion and were able to retort in kind by pointing out that not infrequently the affairs of the Association were not free from objectionable political methods and unworthy personal motives. This will in a measure explain why it was that the Association's bill of 1903 contained a provision which virtually placed the appointments on the Board of Health in the hands of the Association, and why this bill, therefore, was particularly obnoxious to the members of the Board. The meeting was made memorable by the bitter denunciation in which the members of the Association freely indulged against the members of the Board. It became evident to me that, if we were to succeed in amending the medical law, the two or-

ganizations must be brought together in cooperation. To this end I labored with the result that in the fall of 1904 a special meeting of the officers of the Association was held at Parkersburg with Dr. G. A. Aschman as an important participant, at which was present by invitation a delegate from the State Board of Health. A bill was drawn up providing for the requirement of a diploma from a reputable medical school as well as an examination by the State Board of Health as a condition for licensure, and for the establishment of reciprocity with other States. The former clause to take the power of appointment away from the Governor was not inserted. The bill was introduced in the Legislature of 1905 but failed to pass. This failure was due to opposition from two sources. First, from the osteopaths, who at that time were clamoring for legal recognition. Second, from the members of the Pharmaceutical Association of this State, who somehow erroneously got the impression that this bill contained something which was inimical to their interests. I was never able to learn just what that was and how it came about. It was evidently based upon misrepresentation, and I suspect was fabricated by some one for a purpose. In the fall of 1906, profiting by the experience of the past, we again held a special meeting at Parkersburg to which I invited delegates from the State Pharmaceutical Association, as well as from the State Board of Health, and the Eclectic and Homeopathic State Medical Societies. With the exception of the Homeopathic, all these organizations were represented at our meeting. The bill of two years ago was again adopted and all the delegates present promised the support of their respective organizations, which we received in due time. As its President at that time, I succeed-

ed in getting from the Association ample latitude for the exercise of my judgment and efforts in the matter, as well as all necessary pecuniary aid. I appointed Dr. J. E. Robins, chairman of the lobbying committee, and the bill was once more introduced in the Legislature at its session of 1907. After a troublesome experience with the osteopaths, who by very peculiar methods succeeded in getting on favorable terms with many of our legislators, our bill passed, but not until we permitted a new irregular sect to be inflicted upon the State. Incidentally a rather important section of the old law was smuggled out. I could write a very interesting chapter about this and our general experience with the osteopaths at that time and since, but will let it wait for another occasion.

#### THE LAWS OF 1915 AND 1917.

The medical law as amended in 1907, therefore, required from one wishing to practice medicine in this State that he must be a graduate of a reputable medical school and pass a written examination before the State Board of Health. These requirements were very good as far as they went. They were fundamental. They have enabled us to enter into reciprocal relations with about one-half of the States of the Union. However they have gradually become inadequate. The demand for better physicians has been steadily growing all over the country, so that the standard of requirements in many States has become higher. This has been accomplished in three ways. 1. By refusing to recognize medical schools of low rank. 2. By requiring a preliminary education of a standard high school or its equivalent, and at least one year's work in chemistry, physics and biology of a college grade. 3. By making all the requirements a matter of law and not a matter

of mere regulations of the Examining Board. The necessity for further amending our medical law has been very clear to many of us for some time. But owing to the crying need of improvement in our laws pertaining to public hygiene and sanitation, we directed nearly all of our energy with the last two legislatures to this purpose. In the meantime the Public Health Council did what it could to remedy the deficiency in the medical law by certain regulations. For some of these regulations the power of the Council under the law is quite clear. For instance, ever since July 1913 the Public Health Council has refused to recognize diplomas from medical schools designated by the American Medical Association as belonging to Class C. The law says that the applicant must be a graduate of a reputable medical school so considered by the Public Health Council, which clearly gives the Council the power to discriminate. This is not clearly the case with a certain other regulation of the Council. I refer to the regulation requiring a preliminary education of a high school or its equivalent. These two regulations have rendered great service. First, by reducing the number of licentiates, and, second, by furnishing the State with physicians of better education and training. As to numbers: Among the people there are some who believe that it is of benefit to have a larger number of physicians than is really necessary, on the assumption that the benefit of competition in general life applies to the practice of medicine. But we as medical men know better than this. We know that overcrowding of the profession has led to great harm both to the people and to the members of the profession. Overcrowding means poverty and with that go many unfortunate things. It is the overcrowding of the

profession in this State which has caused many members of it in the past to fall out of touch with the progress of medicine; and, therefore, many of them were not as useful as they might have been, and some of them became downright incompetent. It takes money with which to buy books and appliances and enable one to revise his mental equipment by a postgraduate course of study every now and then. It is the overcrowding of the profession and the consequent meager rewards of its practice that has placed a stigma upon us in this State in recent years by driving two of our members, through the gateway of politics, into the penitentiary of our own State, and two others into the penitentiaries of other States. It is the overcrowding of the profession and the supposedly consequent beneficent competition which are responsible for starting the curse of fee-splitting which is spreading in our own State, as well as in many other States. By slowing somewhat the rate of increase of the members of the medical profession, I believe, the Council has rendered a substantial service to our people. To be sure, in the present National emergency a larger number of physicians would be an advantage, but this certainly cannot be an argument in favor of maintaining an excessive number in normal times. Furthermore, the type of physician of which the excessive number consisted in the past was mainly such that would have been worse than useless in the army as well as in civil life. As to the quality of our licentiates: There has been a striking improvement in this respect. About six years ago, when I first joined the State Board of Health, many of the examination papers were so bad in their English, as well as in technical knowledge, that one felt it a punishment to

have to read them. The average janitor or orderly about a hospital or medical school could have done no worse at our examinations than did some of our applicants. A large number of this class, of course, failed, but I fear that many slipped through. It is quite different now. Nearly all of the examination papers can lay claim to fair English and the technical deficiencies are comparatively small in number. Thus the number of failures in 1915 was only six and one-half per cent. Contrast this with the 42 per cent of 1906. In addition to these two regulations we have instituted a practical examination and have used it with much satisfaction for the last two years.

As you see, we have fared quite well under the law of 1907, but this only because members of the Council have dared to interpret and apply the law in a manner to harmonize with the spirit of the time and the needs of our people. We believed that the people of West Virginia, although largely of rural character, were entitled to competent medical services as much so as the people of large cities. The idea that any sort of a doctor is good enough for West Virginia has not been entertained. The plea of the poor man's boy has not had much if any force with the Council when it meant to turn loose an incompetent physician. But other States have found it unsafe to leave such important matters to the discretion of the examining boards. You can never tell what may happen to the personnel of such a board. In our own State we have had good boards and we have had indifferent boards and history is very likely to repeat itself. During the period of my connection with the Board there were men on it of the very highest attainments and ideals, but for a time at least they were outweigh-

ed by men with low standards, either on account of small attainments, or on account of indifference to ideals. While I can recall with pleasure the association with fellow-members who would have been an ornament in professional circles anywhere in the country, I regret to state that no such pleasure has been vouchsafed to me of all the members. For these reasons efforts are being made in many States to have all the requirements for the practice of medicine written into the law. A number of States have had it this way for some time. Recently our neighboring State of Virginia did so, as well as California, Tennessee, New Hampshire, New Jersey, Pennsylvania, etc. There is no question in my mind that all other States will soon adopt the same view and will refuse to reciprocate with any State whose requirements are all, or in part, subject to the discretion of the ever-changing members of politically constituted examining boards. These were the considerations which led me to persuade the Public Health Council to become sponsor for the pre-medical education bill which was passed by the last Legislature, exactly as drawn up by Dr. F. F. Farnsworth and myself and has since become a law, thanks to the efforts of Dr. Chas. A. Sinsel and Dr. H. R. Werner, respectively Chairman of the Committees on Medicine and Sanitation in the Senate and House. This law provides that after the year 1920 all applicants to practice medicine in this State will have to present evidence of a high school education or its equivalent and one year's courses in chemistry, physics and biology of a college grade. I wish to call your attention particularly to the additional provision of this law that the evidence of this preliminary education must be passed upon by our State department

of education and not by the Public Health Council. This, I believe, is as it ought to be. These requirements are not quite as far advanced as they are in some States, where on the side of preliminary education two years' of college work in addition to high school are required, and on the side of medical education a hospital year in addition to four years of medical school. In the course of time these requirements will become general, and I have no doubt that we will not lag behind very long. In the meantime, however, for the next four years the degree of preparedness of our medical licentiates will continue to be determined altogether by the Council. It is, therefore, to be hoped that the appointive power will exercise particular caution and will select the fittest for membership on the Council.

I will merely mention here the amendment of 1915, which gave a legal definition, and an excellent one, to the term, "practice of medicine". That amendment was passed as part of the law which reorganized and changed our board of health into a State department of health. But as I have already dwelt upon this in my address, "Our Public Health Law—A Brief History of its Genesis and its Important Provisions", I shall stop with this reference.

The evil of secret fee-splitting has invaded our State many years ago, but of late years it has assumed considerable proportions. An inquiry into this matter has convinced me on the one hand that this evil has not yet reached the extent that it has in several nearby States, but on the other that it was threatening to become infinitely worse, if not checked. Educational methods have been tried and failed to such an extent that from the platforms of some of our societies men have ventured to

argue in favor of fee-splitting. A few years ago our State Board of Health passed a resolution declaring this practice as dishonorable conduct within the meaning of the law and threatened to revoke the license of any one found guilty of it. This, too, failed to have any deterring effect. Drs. J. R. Hunter, J. E. Canaday and myself, at the suggestion of the first named, agreed to try legislation as a remedy. In consequence a law prohibiting this practice was passed by the last Legislature. The draft of this law was drawn up by Mr. Harry Irons, a prominent attorney of Huntington, and was put into its final form by the able jurist, the Hon. W. B. Kittle, Judge of the 19th Circuit, to both of whom thanks are hereby extended.

I presume that this sketch of medical legislation will be grossly deficient without stating the fact that in some respects our State has become verily ultra-progressive, if you will permit such a characterization of the law passed by our last Legislature creating the new profession of chiropody and placing it under regulation of the Public Health Council. And in this connection we should congratulate the people of the State that they have been spared the affliction of the chiropractor as a legalized practitioner.

Passing for a moment from medical legislation to the broader subject of public health, it is with extreme regret that we have to chronicle the defeat at the last Legislature of the vital statistics bill. This bill was virtually the well known model law on this subject which has proven successful wherever it has been adopted, and the number of States which have adopted it is large. The bill was introduced in both Houses. It passed the Senate. In the House on the second reading on a test vote it mustered

up a strength of 67 against 13. I was in Charleston at that time "looking in" on the Legislature and when I saw what happened on the second reading, I left for home and jubilantly reported over the State the certain passage of the bill, soon to learn that it had been overwhelmingly defeated on the third reading. Just why this radical change in the attitude of the House towards this bill I have not been able to learn, except perhaps that between the time of the second and third reading some members of the department of health had incurred the displeasure of certain members of the House on account of an effort to oppose the passage of the chiropractor bill. This was very unfortunate, as the need of reliable vital statistics in our State is sorely pressing. That a civilized commonwealth should go on without an accurate accounting of its vital assets is remarkable; that thousands of our citizens should be indifferent to the fact that they can not officially prove the dates of their birth is puzzling; and that the legal profession of the State should not have shown their interest in the passage of a bill which would have gone a long ways towards simplifying many a legal procedure, and what is more important, would have added a substantial safeguard against the concealment of crime is not merely remarkable and puzzling but truly provoking. We should extend thanks to all these who tried to help in efforts to pass this bill, and particularly to the United States Census Bureau which has gone to the trouble to write a letter to every member of the Legislature explaining the desirability of the vital statistics bill and urging its passage.

However, as I look back and recall our very meager medical legislation prior to 1917, and particularly when

I recall the merely nominal public health code as it existed prior to 1913; and when along with all these I recall the fact that up to the last named year the total appropriation of money for all the functions of our State Board of Health did not exceed \$2,500—I rejoice in the progress that we have made and rejoice in the fact that a kind Providence has favored me with the good fortune to have a share in the promotion of it. We have set the pace. It is up to our successors to maintain it, and, if possible, surpass it.

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### THE CAUSE OF TUBAL PREGNANCY.

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When a fertilized ovum lodges in a Fallopian tube it very soon destroys the portion of the tube in direct contact with it, and at the same time destroys anything that might have caused that particular ovum to lodge at that particular place. The resulting inability to show a definite cause of lodgment has given rise to many diverse explanations of the failure of the ovum to pass through the tube.

Herzog 1 admits that he does not know the cause of tubal pregnancy, but states that "certain alleged causes, formerly frequently cited as responsible for tubal pregnancy, such as inflammatory diseases of the uterus and tubes, must be absolutely discarded. We know that these very diseases accused of being the cause of tubal pregnancy, make a woman

sterile for the time being, and therefore exclude tubal as well as normal uterine pregnancy". On the other hand Mall 2 after mentioning some of the rarer tubal anomalies says:—"Much more commonly associated with tubal pregnancy is a chronic inflammation followed by adhesions and kinking of the tube". In regard to the mucous membrane of the tube he says — "Such an inflammatory process is signalized not only by an inflammatory reaction in the tube wall, but also by pronounced changes within the tube lumen, the most common of which is a condition known as follicular salpingitis. The tubal folds hypertrophy, and, when sections are made, small cavities are seen between the folds; hence the term "follicular".

From these statements and others of a similar trend it is clear that no common ground has been reached by investigators as to the definite cause of the lodgment of the ovum in its passage from the ovary to the uterus, and that further observations on this subject might throw some light upon it. To aid in this work I have taken twenty pregnant tubes that had sufficiently long undilated portions remaining between the pregnancy and the uterus to make a block and have examined them microscopically. In eight instances sections from the opposite tube also have been made.

To properly interpret sections of this kind the reactions and results due to infection in the tubes and also the reactions due to pregnancy in the uterus must first be noted.

#### REACTIONS AND RESULTS DUE TO INFECTION.

One of the first changes that commonly takes place in an infected tube is the sealing up of the fimbriated extremity. A tube closed in this way does not allow either the spermatazoa or the ovum

to pass and consequently there is never a tubal pregnancy when this has occurred. While the sealing up of the end of the tube is the rule there are many exceptions leaving a large number with patulous fimbriated extremities. The explanation of these differences in the effect on the fimbriated end probably is in the intensity of the inflammatory process, the patulous extremity being found most frequently following a mild infection, and the closed tube following a more virulent type.

The degree of reaction and the results of an infection of the mucosa and wall of the tube are directly as the virulence of the infection and its duration.

The changes in the wall of the tube can be dismissed after noting the presence of the round cell infiltration which varies greatly with the virulence of the infection, and in some instances, lingers after the active reaction has disappeared from the mucosa.

The changes in the mucosa are marked by round cell infiltration and the destruction of epithelium. This destruction of epithelium is greatest on the free borders of the folds, and is responsible for the adhesions that remain after the infection subsides.

It should be remembered that active infections of the tube are always short lived processes. When the recession comes we find that there are permanent changes in the mucosa. If the mucosa is not destroyed entirely and the fimbriated end of the tube is open, there remains one of two conditions; either the folds of the tube are seen adhering to each other, forming numerous secondary canals within the calibre of the tube, or; the partly destroyed folds are enormously thickened by the increase of connective tissue. Not infrequently both of these conditions are found in the same

tube. It would hardly be possible for any one of the secondary channels formed by the adhesion of folds of the mucosa to each other to retain a uniform calibre. The manner of their formation necessarily results in the calibre of each channel varying throughout its length. The round cell infiltration in the mucosa has disappeared. In some instances there still remains some round cell infiltration in the walls, but when the process is complete all round cell infiltration disappears.

#### REACTION DUE TO PREGNANCY.

In the uterine wall, during pregnancy, the striking features are the increase in the size of the cell elements of the normal wall with the apparent decrease in the chromatin, and a marked round cell infiltration. This round cell infiltration is of exactly the same character as is seen in infections of the uterine wall, except that it is never so intense as that present in the more virulent infections. The same changes are noted in the walls of the tubes in tubal pregnancies.

#### FINDINGS IN PREGNANT TUBES.

Of the twenty tubes examined all but one showed results of a past infection. The one in which there was no such evidence was associated with a large uterine fibroid and the pregnant tube was found crowded down in the pelvis under the tumor. In all the others were found the same changes that have been described as being found subsequent to salpingitis. In some the folds of the mucosa were partly destroyed and the remaining ones were much thickened by an increase of the connective tissue. In others there were many adherent folds converting the lumen of the tube into numerous separate canals. The sections of course show the condition of the mucosa at only one point between the pregnancy and the uterus, but when we

bear in mind that the longitudinal folds of the mucus membrane extend the whole length of the tube, and that a gonorrhoeal infection in a tube extends the whole length of the tube, it is fair to presume that the condition of the lumen at the point the ovum lodged was similar to the condition at the point of section.

The sections of all the tubes showed the same enlargement of all the cells making up the walls and the round cell infiltration that is present in the uterine wall during pregnancy. The only difference being that the reaction of the normal cells and the round cell infiltration is apparently greater in the wall of the pregnant tube than in the wall of the pregnant uterus. In one or two sections the round cell infiltration is so intense as to indicate the presence of an active inflammatory process. However, it is very difficult, if not quite impossible to draw a sharp line of distinction and say that one tube has in it a process of infection plus the reaction due to pregnancy, and the other one is a tube that has been infected and has at present only the reaction due to pregnancy. I believe that it is not necessary to be able to make this distinction with accuracy, because as has been noted previously the tendency, at least in some instances, is for the mucosa to recover from an active infection before the wall does, and it is quite within the possibilities for the mucosa to so far recover from an infection as to allow the passage of spermatazoa without the appearance of an active infection having disappeared from the walls of the tube.

#### THE TUBE OPPOSITE THE PREGNANCY.

Among the eight tubes examined from patients in whom a pregnancy was present in the opposite tube, one was found that was normal, showing only the cell

changes that result from pregnancy. This tube is from the patient who had the fibroid previously mentioned. Two tubes were much distended; one was filled with blood and one with pus. Four showed many adhesions between the folds of the mucosa splitting the lumen of the tube up into numerous channels of various sizes. Four showed great increase in the connective tissue in the remaining folds. Two had the blood vessels of the wall markedly dilated and filled with blood. All of them showed round cell infiltration in the walls of the tube. In other words, the picture presented by all except one was that of a tube that had been infected, but in which there was no active process at the time the tube was removed. Even the tube distended with pus showed by the condition of the small amount of mucosa remaining that the process was an old one long since inactive.

From these findings it is clear that nineteen out of twenty of these cases of extra-uterine pregnancy followed an infection of the tubes. Not a single one of the opposite tubes showed an infection present at the time the tube was removed. I do not believe that the round cell infiltration in any of the pregnant tubes was other than that due to the pregnancy, although it is possible that an impregnated ovum may lodge in a tube before the reaction due to an infection has entirely disappeared from the walls. These sections show that the impregnated ovum lodges in tubes that have been infected, in which the permanent results of the infection of the mucosa are present, but in which the mucosa is free from infection at the time the pregnancy takes place.

The term "follicular salpingitis", applied to the results of the infection of the mucosa should be discarded, because



there are no follicles and it is not a salpingitis, but a condition post infection.

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### RED CROSS IS THE MOBILIZED HEART AND SPIRIT OF THE PEOPLE. ITS PART IN THE WORLD WAR.

*By Dr. H. A. GILTNER, Parkersburg.*

Read before L. K. and O. V. Medical Society.

At the battle of Solferino, in the Italian war of 1859, Henri Dunant, of Geneva, who witnessed the battle and described the suffering of the soldiers, suggested the idea of organizing in all civilized countries, a permanent society of volunteers which, in war, would render succor to the wounded without distinction of nationality. The matter was taken up by the Geneva Society of Public Utilities, a committee appointed, and a call issued to all European governments, as well as military, medical and philanthropic notabilities, to meet at Geneva, October 26, 1863, at which thirty-six delegates including representatives of fourteen nations, responded to the call.

The first Red Cross Society was organized in Wurtemberg in December, 1863, and in 1864 the Geneva convention provided for the neutrality of ambulances and military hospitals, and adopted the red cross as the emblem. This agreement was signed by delegates of twelve European countries, and practically every civilized nation has acceded

to it, and in light of recent events, some to whom this term can not be applied.

Although the convention was international, the society of each country is national in scope, and independent from the others, and each governed by laws of its own. An international committee, composed of nine Swiss residents of Geneva, occupies itself with the general interests of the movement and acts as an official medium of communication between the organizations. The president is Gustave Ador, and international conferences are held every five years.

The prototype of the American Red Cross was the United States Sanitary Commission, organized for relief work during the Civil War. The first American Red Cross Society, founded in 1866, failed through lack of support, but in 1877 a self-appointed committee was formed, which met in Washington, D. C., with Clara Barton at its head, and from this dates the American Red Cross, as we know it today.

#### RED CROSS WORK IN WAR.

The magnificent work done in peace times on the occasion of any disaster is so well known that it is merely mentioned in passing, for that work pales into insignificance when compared with the stupendous undertaking rendered necessary by the world war, and it is along that line that this paper will be directed concerning the organization, purpose and a brief outline of the actual relief work.

The American Red Cross is an incorporation with headquarters in Washington, the president of which is the President of the United States, *ex officio*, the affairs of which are administered by a certain committee through its various subdivisions and bureaus, this function since the beginning of the

war being largely taken over by the war council appointed by the President. This council consists of seven members, of which Henry P. Davison of J. P. Morgan & Co., is chairman.

The medical advisory committee consisting of some of the most eminent medical men of the country, acts in conjunction with the war council in matters of medicine and sanitation. The active head of the organization is now centered in the general manager, Harvey D. Cibson, president of the Liberty National Bank of New York City.

#### FIELD DIVIDED.

The field is broadly divided into the department of military relief, bureau of naval relief and department of civilian relief, each with an executive responsible to the general manager. These grand divisions are still further subdivided into bureaus and divisions for special lines of activity.

The actual relief work is performed by surgeons, nurses and the necessary subordinates, incorporated into various organizations, such as ambulance companies, base hospitals, hospital units, surgical sections, sanitary training detachments, etc.

An ambulance company consists of one captain, four first lieutenants, one first sergeant, eleven sergeants, five mechanics, two cooks two assistant cooks, twenty chauffeurs, two musicians and forty-three privates, a total of ninety-two.

A typical base hospital unit contains twenty-two physicians and surgeons, two dentists, sixty-five Red Cross nurses and 152 enlisted men. Most of the base hospital units have been built around the personnel of various hospitals and medical schools.

Hospital units are intended to sup-

plement and assist military hospitals already established, and in general is organized in connection with the staff of a civil hospital, with a staff too small to organize a base hospital. It is composed of one director, one adjutant, two chiefs of service, four staff physicians, four staff surgeons, one head nurse, twenty nurses, three clerks and the necessary orderlies, not to exceed a total of fifty.

Sanitary training detachments are for the purpose of instructing men for sanitary service.

#### PART OF SERVICE.

During time of peace, the Red Cross personnel is the reserve for the army and navy, but when called into active service in time of war become an integral part of the service, wear the uniform and receive the same pay as one of similar grade in the regular service, are transported, subsisted and furnished suitable quarters at government expense.

The Red Cross is a voluntary organization, financed by the different chapters and by individual contributions, and in war time acts only through cooperation with the army and navy. It contributes, broadly speaking, to these great aims:

1. To be ready to care for our soldiers and sailors on duty wherever and whenever needed:

2. To shorten the war, by strengthening the morale of the allied peoples and their armies by alleviating their sufferings in the period which must elapse before the American army can become fully effective abroad:

3. To lay the foundation for an enduring peace, by extending relief and sympathy to the civilian population among our allies and carrying to them

an expression of sympathy in a practical way.

The preparation of this work must be carried on in America, and is:

1. To take such measures as are necessary in co-operation with the army and navy, for the protection of the health and welfare of our fighting men in camps and contonments, and of civilians whose welfare is involved in war conditions.

2. To stimulate and guide the work in the manufacture of supplies and comforts needed by troops and civilians abroad and by men training in this country:

3. To co-operate with the government and relief agencies in caring for dependent families of men in our services and to relieve, as always, suffering caused by disaster.

4. To maintain, at the lowest cost consistent with efficiency, machinery to assure the uninterrupted performance of these duties and of the relief work in Europe.

The enormous activities of the Red Cross are made possible only by money in unlimited quantities, and thanks to the untiring energy of faithful workers and the generosity of the American people, this essential element has been produced in great abundance.

During the recent "Red Cross week," when \$100,000,000 was called for, \$14,000,000 in excess of that figure was pledged, and while reports are not yet available regarding the present campaign for new members, it is positive that more have been secured than was anticipated. Untold sums will yet be required, and no one can doubt but what the patriotic public will respond whenever future calls are made.

#### WHY PRIVATE ENDEAVOR.

The question may well be asked why private endeavor should undertake a

work of such magnitude, instead of the government. The answer is:

Through the Red Cross, women and children, who can not go to the front, may aid those who can, and by this means fully one-half the nation can serve the country in the war emergency, and by concentrating through a voluntary organization, relief work can be accomplished with less delay and more economy. The war gives the opportunity to show the generous and sympathetic of all true patriots, regardless of age or sex, and by the close co-operation, through the Red Cross, make it possible to do this great work for humanity on a scale demanded by the immense numbers involved in sorrow and suffering.

Magnificent work is being done in equipping hospital and ambulance units, in handling special problems of health and sanitation in connection with cantonments and camps, and in supervising the manufacture of surgical dressings and hospital supplies in such quantities that military hospitals, wherever located, shall not be handicapped by lack of them.

By co-operation with various hospitals and medical schools, fifty base hospitals have been organized, and forty-five ambulance companies have

*To Be Continued.*

### Miscellaneous Announcements and Communications

Shenandoah Jet. W. Va., March 16, 1918

Dr. James R. Bloss, Editor

W. Va. Med Journal

Huntington, W. Va.

Dear Doctor:—

The next meeting of the W. Va. State Medical Association will be at the Hill Top Hotel, Harpers Ferry Oct. 1, 2 and 3rd 1918. This being the selection

of our society. Will you please announce it in your *Journal*.

I am enclosing the names of the men on Committee-

Fraternally,

C. C. Johnson.

Committee on Arrangement and Entertainment:

R. E. Venning, Charles Town,  
Chairman.

B. B. Ranson, Harpers Ferry.

T. K. Oates, Martinsburg.

J. M. Sites, Martinsburg.

G. J. E. Sponseller, Martinsburg.

Howard Osborn, Rippon.

A. B. Eagle, President

F. M. Phillips, Vice-President.

C. C. Johnson, Sec'y.

Ex. Officio.

Resolution Unanimously Passed by the Ohio County Medical Society, Friday, February 22, 1918.

Whereas, the Owen Bills 3748, and the Dyer Bill, H. R. 9563 creating advance rank for officers of the Medical Corps, is now before Congress and,

Whereas, the Medical profession has long realized the importance of this advance standing for physicians serving in the Army, and has felt the great value to the health, welfare and efficiency of our soldiers, coming through orders given by medical officers of higher rank than those which are now accorded; and knowing that from past experience in warfare, recommendations involving the life and health of our Army, given by a medical officer to a line officer of superior rank failed to carry weight, necessary for such vitally important recommendations; and appreciating that the early passage of these bills will mean another step toward safeguarding our sons, our firesides and democracy:

Therefore, be it resolved that this Ohio

County Medical Society urge your undivided influence and support of these two bills. We furthermore know that by so doing you will be rendering a patriotic service to your West Virginia commonwealth and your Country.

Committee:

Frank LeMoyne, Hupp, M. D.

Charles Wingerter, M. D.

Robt. J. Reed, M. D.

“The Nurses Examining Board of West Virginia, will meet in Charleston, Wednesday, May 1st, for the purpose of examining nurses applicants. A large number of nurses who are desirous of offering their services to the Government will take advantage of this opportunity to comply with the regulation of the War Department.”

Sincerely yours,

J. E. Connaday.

#### NOTICE!

Dear Mr. Secretary and Members of each Local Society:

We had 930 paid members enrolled for 1917. Thus far we have received the 1918 Dues of only 170 members. According to the By-laws all 1918 dues should be in the State Secretary's hands by April 1, 1918. Mr. Member have you paid your 1918 dues? If not do it at once so your Secretary can send them to the State Secretary. Otherwise your name may be dropped from the mailing list of the *Journal* and from the Roll of the Association. Do not delay because our Annual Meeting does not come until September or because of the War but attend to this matter at once.

Are there not some physicians in your neighborhood who do not belong to your Society? Can you not gather them into the Fold? We want not only to hold our own but to grow. Growth means work

upon your part. Let us all become enthusiastic and make this the biggest year in the history of our Association. Make it a personal matter and growth will result.

Fraternally,  
J. Howard Anderson.

Surgical Section of the W. Va. State  
Medical Association.

All interested in the Surgical Section of the coming session of our State Association please take note.

We hope to make this a great event, I expect to write many of you in detail asking your advice and outlining my own ideas as to the conduct of this section.

It is inevitable that I should overlook some of you.

To avoid this will all who are interested in this section drop me a postal card.

I will then write you in detail.

Do it now.

A. P. Butt, Sec'y

#### AMERICAN MEDICAL ASSOCIATION.

Chicago, March 18, 1918.

West Virginia Medical Journal,  
Huntington, W. Va.

Gentlemen:—

Enclosed find news items which will be of great interest to your readers in connection with the coming of the American Medical Association.

Note first the make-up of the Executive Committee having charge of the general meeting of the Association. This is necessary so that Doctors will know to whom to write for information.

Kindly give as much publicity as possible to the following: that there will be five days of Clinics given under the auspices of the Association beginning Thu-

rsday of the week previous and continuing to the Tuesday evening of the Convention week. These Clinics will cover every phase of Medicine—Surgery and Specialties and will be conducted by our greatest Clinicians. Also give as much publicity to other enclosed items, as possible.

Very truly,  
Chas. J. Whalen, M. D., Sec'y.

#### ASSOCIATION NEWS.

The Chicago Session—Committee on Arrangements.

The Local Committee on Arrangements for the Annual Session of 1918 to be held in Chicago, June 10-14, is actively engaged in perfecting plans for the comfort and entertainment of the Fellows of the Association and their guests.

All correspondence with the Local Committee on Arrangements or with any of its subcommittees should be addressed to 25 East Washington Street, Chicago.

#### CLINICS

The chairman of the subcommittee on clinics, Dr. Charles F. Humiston, announces that there will be a series of clinics for the Fellows of the Association on Thursday, Friday and Saturday, June 6, 7 and 8, and on Monday and Tuesday, June 10 and 11. Further announcements regarding the clinics will appear in these columns from time to time.

#### ALUMNI AND SECTION DINNER.

Alumni and section dinners will be held on Wednesday evening from 6 to 8 o'clock so as not to conflict with other events which are being planned. The chairman of the sub-committee on alumni and section entertainment, Dr. J. H. Stowell, announces that his committee is cooperating with officers of alumni associations in arranging for reunions. The committee desires, also, to assist the of-

ficers of those sections which desire to arrange for section dinners.

Charleston, W. Va., Feb. 23, 1918.

Dear Doctor:—

The Surgeon-General has recently issued a call for 8,000 more physicians. Arrangements are being made for the second draft and it will take a large additional number of physicians to furnish the necessary Medical Officers for this increase to the National Army. Please think this matter over seriously, and if you feel that, patriotically speaking, you can afford to offer your services, please do so. Military service entails sacrifices for the most of us. We are up against a serious situation, one which must be looked squarely in the face and met in the same way. In Pennsylvania 18 per cent of the physicians have applied for commissions, in North Carolina 14 per cent, in West Virginia only 11 per cent of the physicians have so far applied. We are well below the average, let us try to come up in line.

Hoping that you will let me hear from you soon, I am,

Yours very truly,

J. E. Cannaday, Chairman,  
State Medical Defense Committee.  
S. L. Jepson, Secretary,  
State Medical Defense Committee

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COUNCIL OF NATIONAL DEFENSE  
Washington.

The Council of National Defense today authorized the following statement:

For the purpose of completing the mobilization of the entire medical and surgical resources of the country, the council of National Defense has authorized and directed the organization of a "Volunteer Medical Service Corps" which is aimed to enlist in the general war-winning program all reputable physicians

and surgeons who are not eligible to membership in the Medical Officers' Reserve Corps.

It has been recognized always that the medical profession in made up of men whose patriotism is unquestionable and who are eager to serve their country in every way. Slight physical infirmities or the fact that one is beyond the age limit, fifty-five years, or the fact that one is needed for essential public or institutional service, while precluding active work in camp or field or hospital in the war zone, should not prevent these patriotic physicians from close relation with governmental needs at this time.

It was in Philadelphia that the idea of such an organization was first put forward, Dr. William Duffield Robinson having initiated the movement resulting in the formation last summer of the Senior Military Medical Association with Dr. W. W. Keen as president—a society which now has 271 members.

Through the Committee on States Activities of the General Medical Board the matter of forming such a nation-wide organization was taken up last October in Chicago at a meeting attended by delegates from forty-six states and the District of Columbia. This Committee, of which Dr. Edward Martin and Dr. John D. McLean — both Philadelphians — are respectively chairman and secretary, un-animously endorsed the project. A smaller committee, with Dr. Edward P. Davis, of Philadelphia as chairman, was appointed to draft conditions of membership, the General Medical Board un-animously endorsed the Committee's report, the Executive Committee — including Surgeons General Gorgas of the Army, Braisted of the Navy, and Blue of the Public Health Service—heartily approved and passed it to the Council of National Defense for final action, and the

machinery of the new body has been started by the sending of a letter to the State and County Committees urging interest and the enrollment of eligible physicians.

It is intended that this new Corps shall be an instrument able directly to meet such civil and military needs as are not already provided for. The General Medical Board holds it as axiomatic that the health of the people at home must be maintained as efficiently as in times of peace. The medical service in hospitals, medical colleges and laboratories must be up to standard; the demands incident to examination of drafted soldiers, including the reclamation of men rejected because of comparatively slight physical defects; the need of conserving the health of the families and dependents of enlisted men and the preservation of sanitary conditions—all these needs must be fully met in time of war as in time of peace. They must be met in spite of the great and unusual depletion of medical talent due to the demands of field and hospital service.

In fact, and in view of the prospective losses in men with which every community is confronted, the General Medical Board believes that the needs at home should be even better met now than ever. The carrying of this double burden will fall heavily upon the physicians, but the medical fraternity is confident that it will acquit itself fully in this regard, its members accepting the tremendous responsibility in the highest spirit of patriotism. It will mean, doubtless, that much service must be gratuitous, but the medical men can be relied upon to do their share of giving freely, and it is certain that inability to pay a fee will never deny needy persons the attention required.

It is proposed that the services rendered by the Volunteer Medical Service Corps shall be in response to a request from the Surgeon General of the Army, the Surgeon General of the Navy, the Surgeon General of the Public Health Service, or other duly authorized departments or associations, the general administration of the Corps to be vested in a Central Governing Board, which is to be a Committee of the Medical Section of National Defense. The State Committee of the Medical Section of the Council of National Defense constitutes the Governing Board in each State.

Conditions of membership are not onerous and such are as any qualified practitioner can readily meet. It is proposed that physicians intending to join shall apply by letter to the Secretary of the Central Governing Board, who will send the applicant a printed form, the filling out of which will permit ready classification according to training and experience. The name and data of applicants will be submitted to an Executive Committee of the State Governing Board, and the final acceptance to membership will be by the national governing body. An appropriate button or badge is to be adopted as official insignia.

The General Medical Board of the Council of National Defense is confident that there will be ready response from the physicians of the country. The Executive Committee of the General Medical Board comprises: Dr. Franklin Martin, Chairman; Dr. F. F. Simpson; Vice-chairman; Dr. William F. Snow, Secretary, Surgeon General Gorgas, U. S. A.; Surgeon General Braisted, U. S. Navy; Surgeon General Rupert Blue, Public Health Service; Dr. Cary T. Grayson; Dr. Charles H. Mayo; Dr. Victor Vaughan; Dr. William H. Welch.

# The West Virginia Medical Journal

JAS. R. BLOSS, M. D., EDITOR  
C. R. ENSLOW, M. D.  
J. E. RADER, M. D. ASSISTANT EDITORS

Huntington, W. Va. March, 1918

THE JOURNAL issued on the first of each month.

Subscription . . . . . \$1.50 per year  
Single Copies . . . . . 20 Cents

All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

## CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

## ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

## REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: United Woolen Mills Building, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

# Editorial

## CHANGES OF ADDRESSES, ETC.

In the last few weeks we have been in receipt of a number of letters from Secretary Anderson regarding failures to receive *Journals* by State Association members. It is desired that the members will write direct to the editor, when *Journals* do not reach them. This will save much confusion. Not only this but it will be quite saving in postage for the Association which is a larger item of expense than is realized.

## OFFICERS OF THE STATE ASSOCIATION

PRESIDENT—S. R. Holroyd, Athens, W. Va.

FIRST VICE-PRESIDENT—Chas. O'Grady, Charleston, W. Va.

SECOND VICE-PRESIDENT—W. J. Judy, Belleville, W. Va.

THIRD VICE-PRESIDENT—C. W. Waddell, Fairmont, W. Va.

SECRETARY—J. Howard Anderson, Marytown, W. Va.

TREASURER—H. G. Nicholson, Charleston, W. Va.

DELEGATES TO A. M. A.—F. LeMoyné Hupp, Wheeling, W. Va.

ALTERNATE—Henri P. Linz, Wheeling, W. Va.

CHAIRMAN OF THE COUNCIL—G. D. Jeffers, Parkersburg, W. Va.

## COUNCIL

FIRST DISTRICT—J. W. McDonald, Fairmont, W. Va., one-year term; H. R. Johnson, Fairmont, W. Va., two-year term.

SECOND DISTRICT—C. H. Maxwell, Morgantown, W. Va., one-year term; T. K. Oates, Martinsburg, W. Va., two-year term.

THIRD DISTRICT—M. T. Morrison, Sutton, W. Va., one-year term; O. R. Ogden, Clarksburg, W. Va., two-year term.

FOURTH DISTRICT—R. H. Pepper, Huntington, W. Va., one-year term; G. D. Jeffers, Parkersburg, W. Va., two-year term.

FIFTH DISTRICT—W. H. St. Clair, Bluefield, W. Va., one-year term; J. E. McDonald, Logan, W. Va., two-year term.

SIXTH DISTRICT—P. A. Haley, Charleston, W. Va., one-year term; H. L. Goodman, Charleston, W. Va., two-year term.

The mailing list is revised each month and corrections of addresses made where notice is received. It is impossible to do this however until members write. One member wrote that he had not received a copy for over a year. We knew nothing of this and at once looked it up. Since then there has been no further complaint.

So let me insist that you notify the editor at once of your change of address or the failure to receive your *Journal*. Remember, too, to give us the "Post-office" address. There are frequently returned copies marked "no



such office", yet the address on them is the one given us by Secretary Anderson.

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#### REPORTS FROM COUNTY SECRETARIES

It is a matter of very great regret to me that we are unable to give interesting State News and County Society Reports. The *Journal*, our *Journal* suffers because of this oversight on the part of the busy Secretary. It is to them that we look for news items as well as reports of the meetings of the societies. Try to imagine your feeling if you were "our" editor upon picking up the *Journal* of another Association and finding notices of deaths, removals, marriages among W. Va. State Association members, which had never been heard of by the W. Va. *Journal*.

There may be criticisms which you would like to make of *The Journal*. There may be some encouragement you have to offer (there is a death of this last). Then please write it. If our State Association is to advance, to grow into a stronger more helpful organization, each individual member must feel his or her responsibility.

It devolves upon the Secretary to make the members of this society keep these aims in view. Then write of the transactions to the *Journal*.

In this connection attention is called to the fact that the postal regulations require all members dropped from the mailing list, whose dues are not paid by April 1st. The by-laws of the State Association are explicit in this direction. Please heed Dr. Anderson's communication regarding the dues, Mr. Secretary, and then promptly forward them to him, that an accurate report may be sent us for correcting the mailing list.

#### WANTED!

The request is made for a copy of the issue for April 1917. Will some member who does not have his *Journals* bound please send this to us. It is to complete the volume for files of a Medical College Library.

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#### MEDICAL LEGISLATION BEFORE CONGRESS.

In this issue you will find a resolution passed by the Ohio County Society, also in the report of the meeting of the L-K. & O. V. Society of the action taken by them relating to the Owen-Dyer bill. Each of our component organizations should study this bill and take suitable steps to call the attention of our senators and congressmen to the justice and above all the necessity for this legislation. The great press of their duties under this strain of war legislation leaves but little opportunity for them to study into the merits of this bill. The fact that the organized medical profession finds it is necessary for the national welfare in this world crisis, to ask for the passage of this legislation should be brought to their attention by letters from the societies and the individual members as well.

The following editorial from the J. A. M. A. is pertinent:

The Owen-Dyer Bill for Increased Rank.

Last week we printed the text of a bill just introduced simultaneously in the Senate by Senator Owen and in the House of Representative Dyer. The numbers are, respectively, S. 3748 and H. R. 9563. These bills consist of two paragraphs. The first reads:

"That hereafter the commissioned officers of the Medical Corps, and of the Medical Reserve Corps, of the United States Army on active duty shall be distributed in the several grades in the same

ratios heretofore established by law in the Medical Corps of the United States Navy."

The bill is essentially the same as that introduced by Senator Owen last July. The latter—the Owen bill of July—provided definite percentages which should be applied to the distribution of the various grades in the Army. These were the same as apply to the Navy. The Owen-Dyer bill provides that the officers of the Medical Corps and of the Medical Reserve Corps of the Army on active duty shall be distributed in grades in the same percentages as established for the Navy: the end-results are the same. The wording of the present bill is undoubtedly more diplomatic, since it presents to senators and congressmen a simple request to grant to one branch of the Service the same ranks as prevail in another branch of the Service which performs essentially the same duties and fulfills the same requirements.

The following table shows the percentage distribution in the various grades of the regular Army and Navy medical corps as at present constituted:

	Army Present Law Per Cent
Lientenants .....	
Captains .....	67.2
Majors .....	23.7
Lieut.-Colonels .....	5.42
Colonels .....	3.16
Brigadier-Generals .....	None <sup>1</sup>

	Navy Present Law Per Cent
Lieut. Junior Grade .....	
Lieut. ....	64
Lieut.-Commander .....	23.5
Medical Inspector (Comm.) .....	8

Medical Director (Capt.) .....	4
Medical Director (Rear Admiral .....	0.5

I. Surgeon-General Gorgas is a Major General by special act of Congress. Ordinarily the Surgeon-General is a Brigadier-General.

It must be borne in mind in considering the above table in its relation to the proposed legislation that the distribution given in the table applies, so far as the Army is concerned, only to the regular Medical Corps; it does not apply to the Medical Reserve Corps. The Medical reserve Corps as constituted by the National Defense Act. is limited in rank to the three grades of lieutenant, captain and major, with no percentage limitations.

The Owen-Dyer bill provides, first, higher grades and an increased percentage of officers in the higher grades. Second, and this is important, the bill provides that an officer in the Medical Reserve Corps on active duty may achieve the same rank as an officer in the regular Medical Corps. If the bill becomes a law, including both the regular Corps and Medical Reserve Corps, and basing the percentage estimate on 20,000 officers in active service (required for an army of 2,750,000 men), there may be 100 brigadier-generals, 800 colonels, 1,600 lieutenant-colonels, 4,700 majors, and 12,800 captains and lieutenants.

Both the Owen bill of last July and the present Owen-Dyer bill provide for the appointment of "consultants". The paragraph in the former reads:

"The President shall have authority to appoint officers of either corps as 'consultants,' with the duty of acting in an advisory capacity, making inspection and reports on medical, surgical, or sanitary questions, and such other duties as may

be required by the chief of the Medical Department.”

The following is the paragraph in the new Owen-Dyer bill:

“The Surgeon-General shall have authority to designate as ‘consultants’ officers of either corps and retire them as the interests of the service may require.”

It will be noted that the first bill assigned to the President the authority to appoint these consultants, and defined their duties. The Owen-Dyer bill gives the Surgeon-General the right of appointment, but it does not specify what the duties of these consultants shall be.

The Owen-Dyer bill will, we are sure, have the approval of every physician, whether he be in the Medical Corps, in the Medical Reserve Corps, or a private in the ranks of the general profession. It is not only a bill that we can heartily endorse, but, also one that we should feel it a duty to support. But those who write to their congressmen or senators should inform them that the increased rank, and the authority which goes with it, is desired not for the increased pay which will come with the advance rank, nor as a salve to the pride of these officers, but primarily in the interest of sanitary and health conditions of our army and as common justice to men who are making tremendous sacrifices. Nevertheless, whatever may be the verdict of Congress in this matter, medical men will play the game and do their duty; but Congress should be given to understand that these men at the present time are working under a heavy handicap which a wise Congress will remove without delay.—Editor, *Journal A. M. A.*, Feb. 23.—1918.

THE ANNUAL MEETING.

The date for the Fifty-first Annual

Meeting has been decided upon. It is October first, second and third at Harpers Ferry. The meetings will be held at the Hill Top House. The personell of the Committee on arrangements is given in the communication from the Secretary, published in this issue.

Let us begin to plan for this meeting now. We must plan our papers and prepare to make this the very best meeting we have ever had. Attention is called to Dr. Butts’ “notice” in this connection.

Society Proceedings

Huntington, W. Va., Mar. 9th 1918.

Dear Doctor Bloss:—

I am sending a report of the last two meetings of the Cabell County Medical Society, as follows:

The meeting of the Cabell County Medical Society was called to order, at 8:30 o’clock by the president, Dr. C. M. Hawes, with the following members present:

Drs. Hopkins, Hicks, Pickering, Fitch, Rowsey, Pritchard, Hunter, Marple, Henley, Hawes and Pepper.

Clinical cases were reported by Drs. Rowsey, Pritchard, Hawes, Fitch, Hicks.

It was moved by Dr. Hunter that Dr. Pritchard report his case in detail with photographs to the W. Va. State Journal for publication. Carried.

On motion the following bills were allowed, and ordered paid.

The Clinico Film Co. .... \$10.00

The Lyric Amusement Co. .... \$ 7.00

On motion the society adjourned.

H. R. Pepper, Sec.

A meeting of the Cabell County Socieety was called to order by the President,

Dr. C. M. Hawes, on March 14th at the Frederick Hotel.

The following members were present; Drs. Lesage, Henley, Hogg, Kessler, Yost, Hicks, Morrison, Prichard, Bloss. Hunter, Marple, Fitch, Hawes and Pepper.

The minutes of the last meeting were read and approved. The secretary then read the resignation from the society of Dr. E. E. Noel, it was then moved by Dr. Bloss that this resignation be laid on the table, and that Dr. Hicks be appointed to confer with Dr. Noel as to the cause leading to the resignation. Carried.

Dr. Hawes was called away and the Vice-president, Dr. Marple was called to the chair. Interesting clinical cases were reported by Dr. Lesage, Morrison, Hicks and Bloss.

The bill of the secretary for postage (\$13.28) was allowed. Adjourned.

Yours fraternally,  
R. H. Pepper, Secretary.

Parkersburg, W. Va.

The Little Kanawha and Ohio Valley Medical Society met at the Chancellor Hotel on March 7th at 8:45 P. M., the President Dr. Robert L. Brown, in the chair. Present, Drs. Jeffers, Prunty, Keever, Stille, Miller, Richardson, Wise, Bush and Giltner.

The application of Dr. S. Warren Bush was received and Dr. Bush was elected to membership.

A resolution was passed endorsing the Owen and Dyer bill for the relief of the Medical Reserve Corps of the Army and the Secretary was instructed to draft letters to the U. S. senators from West Virginia and the Representative from this district, requesting their influence in favor of the measure.

Dr. Geo. D. Jeffers gave a very in-

teresting and instructive talk on the work of the Medical Advisory Board which was discussed by the members.

Dr. Roy Miller then took up the subject of Tuberculous Peritonitis and gave case histories of a large number of cases coming under his observation. Discussion followed.

A motion was passed that the president appoint a committee to write the members of the society in the government service, giving the news of the society and appreciation of the patriotic work they are now doing. Drs. Wise, Miller and Bush were appointed members of this committee.

A motion was passed instructing the secretary to purchase a service flag for the society which is to be placed in the place of meeting.

There being no further business the society then adjourned.

H. A. Giltner,  
Secretary.

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## State News

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Dr. W. R. Cummings one of the well known physicians of Huntington is very ill. He recently suffered a cerebral hemorrhage.

Among the recent visitors to Washington from West Va. were Drs. J. R. Hubbard and W. S. Carper of Morgantown, Dr. James Thomas of Bramwell and Dr. and Mrs. M. J. Bartlett of Clarksburg.

Dr. W. P. Sammons of Cameron, first lieutenant, M. R. C. has been transferred from Camp Greenleaf, Fort Oglethorpe, Ga. to the staff of surgeons of the Post Hospital, Scott Field, Belleville, Ill. Here is located the aviation section of signal corps, U. S. A.

Dr. Hugh W. Neel formerly located at Cass, and a member of the Barbour Randolph-Tucker Society is now at

Staunton, Va. Dr. Neel recently suffered a slight stroke of paralysis, from which he is happily recovering.

The life history of the rat is being shown at the various moving picture theatres in the state. The film is called "The Menace of the Rat" and has been sent out by Dr. Jepson.

The following invitation was received from Dr. W. H. Triplett, first lieutenant, M. R. C. Camp Greenleaf, Chickamauga Park, Ga. Dr. Triplett was one of the men who enlisted sometime ago from Buckhannon.

The honor of your presence is requested at the Opening Exercises of the Warden McClean Medical Auditorium Camp Greenleaf, Chickamauga Park, Ga. Monday, March 11th 1918. 10:00 a. m.—Presentation of Auditorium at the Camp 2:00 p. m.—Review at Fort Oglethorpe. 5:00-7:00 p. m. — Buffet supper at Hostess' House. 7:30 p. m.—Entertainment at Big "Y", Ringgold and Lafayette Roads.

Those who desire, will be supplied with accommodations, if due notice is given. Address: Auditorium Committee, Camp Greenleaf, Chickamauga Park, Ga.

#### Auditorium Committee:

Lt. Col. Roger Brooke, M. C.

Major Mahlon Ashford, M. C.

Major H. L. K. Shaw, M. R. C.

Major N. M. Owensby, M. R. C.

1st Lieut. W. H. Triplett, M. R. C.

Camp Greenleaf, Chickamauga Park, Ga.

Dr. S. L. Jepson, State Health Commissioner was in Huntington recently for a few hours, enroute from Wheeling where he had been attending to matters connected with his office.

First Lieutenant W. C. Slusher, M. R. C., of Bluefield, West Virginia, who has been taking a special course of training at Fort Oglethorpe, has recently been

assigned to the Rockefeller Institute, New York, where he is taking a special course under the direction of Professor Simon Flexner. Later on, Lieutenant Slusher expects to be assigned to the Army Medical School in Washington.

First Lieutenants G. F. Grisinger of Gauley Bridge, J. O. Hicks of Huntington, R. H. Eanes of Widen, and R. E. Woodall of Bintree have been promoted to the rank of captain. Captain L. C. Covington, M. R. C. of Charleston, W. Va., has recently been promoted to the rank of Major, and is now Chief of the Eye, Ear, Nose and Throat Department at the Base Hospital, Camp Cody, Deming, New Mexico.

Captain Eugene Davis, M. R. C. was a few weeks ago promoted to the rank of Major, and assigned to duty at Camp Gordon. Recently he has been quite sick and is on a furlough at present. He has been spending some time in New Orleans.

First Lieutenant George W. Shriver of Clendenin, W. Va., who has been on duty at Camp Upton is home on a furlough.

Drs. P. L. Gordon and H. G. Bieler, both of Charleston, have recently been ordered to Fort Oglethorpe to take the course of training given at that camp.

The State Health Department has secured the services of Dr. R. W. E. Cole as epidemiologist to succeed Dr. Wood recently called to New York. Dr. Cole will assume his new duties April 1st. He is a graduate in public health from Harvard Medical School, has had hospital experience as interne in several hospitals including the United States Marine Hospital at the port of New York. He was also surgeon of the U. S. Coast & Geodetic Survey and has had service in the Phillipine Islands with work in conjunction with medical servi-

ces of Army, Navy and Philippine Bureau of Health. For the past two years he has been epidemiologist of the Health Department in the City of Akron, Ohio."

## Things of Interest about Products Advertised in YOUR Journal

### AMERICAN VERONAL.

In the Trading with the Enemy Act recently passed by Congress, provision was made for the licensing of American manufacturers by the Federal Trade Commission to produce articles and substances patented in this country by enemy aliens. Already a number of chemical manufacturers have taken advantage of this provision, among them The Abbott Laboratories of Chicago, which has applied for and secured a license for the manufacture of Veronal, which, however, will be known hereafter by the name BARBITAL. This is the official name given it by the Federal Trade Commission, and this name must be used as the principal title by every firm manufacturing it under license from our Government.

The Abbott Laboratories have already begun the manufacture of Barbitol (formerly known as Vernal), and we understand that in short time it expects to have an abundant supply of this well known hypnotic, and that it will be made generally available through the trade. The quality of the product is guaranteed. Indeed, before a license is granted for the manufacture of any of these patented synthetics in the United States, the product must be submitted to rigid investigation at the hands of a chemist designated by the Federal Trade Commission. In this way Americans are as-

sured of supplies of the American-made products at reasonable prices, and the manufacture of fine American chemicals is given the stimulus which it requires.

Those interested are urged to communicate with The Abbott Laboratories Chicago.

### AN ENORMOUSLY POWERFUL GERMICIDE.

Germicidal Soap Mild (P. D. & Co.), which contains 1 per cent. of mercuric iodide, has a carbolic-acid coefficient of 30. In other words, this soap (not the mercuric iodide it contains) as a germicide is 30 times as active as pure carbolic acid. Pure carbolic acid is 20 times as active as the carbolic solution usually employed (5 per cent.); so Germicidal Soap, 1 per cent, is  $30 \times 20$  or 600 times as active as a 5-per-cent. solution of carbolic acid. A rich lather will contain 1 per cent. of Germicidal Soap—which is therefore six times as active as 5 per cent. carbolic or equal to 30 per cent. carbolic. Yet Germicidal Soap does not irritate the skin or injure steel or nickel.

Germicidal Soap is useful in every department of medical practice. In obstetrics and gynecology it is a valuable antiseptic, deodorant and lubricant for the examining finger or instrument. In surgery it is an admirable general disinfectant; it can be used to prepare antiseptic solutions without measuring, weighing or waste. In office practice it is useful as a disinfectant for the hands after examinations and in the treatment of parasitic diseases. It is serviceable in cleansing minor wounds; as a deodorant in cases of hyperidrosis with offensive odor; for cleansing the scalp and checking dandruff. It may be used as a shaving soap by patients having sycosis, and in the treatment of pustular acne and furuncles it may be applied freely to

prevent a spread of the infection. Vaginal douches prepared from it are less irritating than those containing mercuric chloride, and have the added advantage of the detergent effect of the soap.

The soap is marketed in two strengths: Germicidal Soap 2% containing 2% of mercuric iodide; Germicidal Soap Mild, containing 1% of mercuric iodide. The 2% soap is recommended only when an exceptionally strong disinfectant is needed.

The so-called fractional method of gastric analysis advocated by Rehfuess has been found to have such advantages that it has been introduced in the Battle Creek Sanitarium, where test meals to the number of thousands are given each year. To the patients, the new plan is vastly preferable. Indeed, the swallowing of what was often called "the garden hose" was attended in most cases by actual suffering and in many by severe pain. Under the fractional method, a very small tube is used. An oval tip, made of metal and perforated, makes the swallowing easy. Of course, it is inconvenient to have to sit for an hour and a half or two hours without removing the tube, but there is no real distress. The usual test meal of two slices of toast and a glass of water is given, at intervals of half an hour, a small specimen of the gastric juice 10 or 16 C. C. is taken, until the acidity curve begins definitely to come down.

Under the old method, the practice was to take out all the gastric juice at the end of an hour. At Battle Creek, the period had been lengthened to an hour and a quarter because this was found to be the usual time of greatest acidity. A comparison of the two meth-

ods shows that the original plan was misleading in many instances. Under that procedure, cases would be set down as normal if the acidity was shown to be at the usual percentage one hour after the meal. However, as the fractional method proves, many patients who have the right acidity at that minute, many have for too little or too much, before and after the hour has passed. By studying the complete cycle of digestion, an accurate diagnosis may be made.

## Book Reviews

Technic of the Carrel method by J. Dumas and Aurie Carrel authorized translation by Adrian V. S. Lambert, M. D. acting professor of surgery in the college of Physicians and Surgeons.

Columbia University, New York, with an introduction by W. W. Keen, M. D., L. L. D., F. R. C. S. (Hon.) Published by Paul Hoeber, New York, Price \$1.25.

This brochure is an exposition of the Irrigation Treatment of Wounds by the Carrel Method. It is not designed as a treatise on surgery but as an aid to nurses, undergraduates and the practitioner to enable them to acquire a knowledge of the method and an exact application of the same whereby the best results may be obtained. It is sufficiently well illustrated to show the apparatus used in the several methods of application, also the formula and method of preparing the solution to be used.

Impotence Sterility and Sex Gland Implantation.

By G. Frank Lydston, M. D., D. C. L. formerly professor of Surgical Disease of the Genito-Urinary Organs and Syphilology in the medical department of

the State University of Illinois, member of the Society on Authors, London, England, etc. The Riverton Press, Chicago. 1917. Price \$4.00.

In this work the distinguished author discusses the numerous disorders of the sexual functions including the opinion arrived at by himself and others as determined from extensive research and study. As a result of his personal work in the implantation of the sex gland in both male and female he concludes that from certain nervous disorders and other diseases, great relief may be obtained in as much as they will again supply the internal secretions of the organs.

Intestinal Stasis and Constipation compiled by R. H. Ferguson, M. D. In this book are set forth the requirements as to quality, quantity, viscosity, specific gravity and other important characteristics of liquid petrolatum as interpreted by the home of Squibb and Sons, as well as opinions by many prominent members of the medical profession throughout the country tending to show numerous conditions in which its use has been found to be of the greatest utility, the book is published for the use of the physician and surgeon, and may be obtained of, E. R. Squibb and Sons, Medical Department, New York.

American Addresses By Berkley Moynihan, M. S., F. R. C. S. W. B. Saunders Company, 1917., Philadelphia and London. Price cloth \$1.75 net.

This little volume is made up of a number of papers read in America at Chicago and other places by the distinguished surgeon and author and will be found to be most interesting and instructive. The causes of the war are first taken up in an entertaining and scholarly manner, then follows, to the

practitioner, the most material part. Gun Shot Wounds in general and their treatment, then wounds of the knee joint and treatment, wounds of the peripheral nerves and treatment and Gun-shot wounds of the Lungs and Pleura with treatment summed up in conclusions. It is needless to add the exalted position, extensive experience and remarkable success of the author entitles anything he may say to the highest consideration.

#### The Third Great Plague-

Discussion of Syphilis for Everyday People. By John H. Stokes, A. B., M. D.: The Mayo Clinic, Rochester, Minnesota. 12 mo. 200 pages. W. B. Saunders Company, Philadelphia and London. Price \$1.50 net.

This little book as stated in the authors preface is to place accepted facts in such form that they may become matters of common knowledge and thereby arouse such of the public as may be personally concerned to a sense of duty to themselves and future generations.

Physical Diagnosis—By W. D. Rose, M. D., Lecturer on physical Diagnosis and Associate Professor of Medicine in the Medical Department of the University of Arkansas.

With 295 illustrations. St. Louis, C. V. Mosby Company. Price \$4.00. This book will be found to be of special value to the general practitioner for quick reference. It is profusely and well illustrated with the view of bringing the reader as nearly in personal touch with the patient as may be possible.

In one chapter is an explanatory method of taking the blood pressure and the technique of applying the same both by palpation and auscultation. The Barany tests are given in a concise and



practical form with tables showing clinical facts upon which these tests are based.

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Talk on Obstetrics, by Rae Thornton LaVake, M. D. Instructor in Obstetrics and Gynecology, University of Minnesota; Obstetrician in charge of the Out-Patient Obstetric Department of the University of Minnesota; Associate Attending Obstetrician and Gynecologist to the Minneapolis City Hospital; Obstetrician-in-charge of the Out-Patient Obstetric Department of the Wells Memorial Dispensary; Obstetrician to the Sweedish and Abbott Hospitals, Minneapolis. One Time Assistant Resident Obstetrician to the Sloan Hospital for Women in New York. St. Louis, C. V. Mosby Company 1917.

In the author's preface to this little book we are given to understand that it is intended for the use of undergraduate students and Practitioners not as a substitute but as a supplement to the text books to which it is in no way comparable. However this may be the book will be found to be chock full of the "meat" of the matter and well worth a place on any practitioner's library table.

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Blood Transfusion, Hemorrhage and Anaemias. By Bertram M. Bernheim A. B., M. D., F. A. C. G. Instructor in Surgery, The John Hopkins University; Captain in Medical Officers' Reserve Corps, U. S. Author of "Surgery of the Vascular System" etc.

The J. B. Lippincott Company Philadelphia and London. Price \$4.00. This is a very important subject taken up in this book, and should be thoroughly appreciated and understood by every practitioner of medicine and surgery so that

on cases of emergency occurring with more or less certainty in the course of every practitioner's professional life may be met with a successful application of this measure and thereby the saving of a valuable life accomplished. The practice or operation of blood transfusion is an ancient one for we read of a notable one as far back as 1492 when it was unsuccessfully resorted to in the case of an eminent Catholic Divine, Pope Innocent VIII. Since then sporadic efforts and a great deal of writing and discussion with rather futile results have been indulged in up to the time of Crile's book in 1909 entitled "Hemorrhage and Transfusion", again aroused renewed interest in the procedure since which time an improved technique has advanced the operation to more nearly a simple and harmless one of great value. A great many methods have been devised and perfected, and in this work all of any importance are described and the manner of doing them fully explained and illustrated. The adaptability and the results to be expected in accidents and diseased conditions are discussed in chapters VIII, IX, X, XI, and XII. There is also attached an appendix in which hemolytic and agglutination tests are described which should always be made except in cases of great emergency.

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Diseases of the Heart. A clinical treatise for the general practitioner by Edward F. Cornwall, Ph. B., M. D., Attending Physician, Williamsburgh and Norwegian Hospitals; Consulting Physician Bethany Deaconesses Hospital; Formerly Professor of Medicine Brooklyn Post-Graduate School; Fellow of the American College of Physicians, The American Congress on Internal Medicine, and the American Medical Association; Member of the American Therapeutic

Society, etc. New York, Rebman Company, 1917. Price \$1.50.

To those of us who are inclined to be old fashioned this book is an excellent guide for quick reference. A tabulated, well arranged abridged treatise considering first general diagnosis, second special diagnoses. In part second therapeutics special and general is taken up and discussed with a fair degree of thoroughness. To those of us who believe in the comparatively newly advanced theories in regard to the function of the heart muscles in disease production there is but little more than cursory mention. Taken as a whole the book is well worthy of careful perusal, as much of proved practical information will be found.

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Neurosyphilis — Modern Systematic Diagnosis and Treatment. Presented in One Hundred and Thirty Seven Case Histories, By E. E. Southard, M. D., Bullard Professor of Neuropathology, Harvard Medical School; Pathologist, Massachusetts Commission on Mental Diseases; Director, Psychopathic Department Boston State Hospital; Vice-President American Medico-Psychological Association and H. C. Solomon, M. D., Instructor in Neuropathology and in Psychiatry, Harvard Medical School; Special Investigator in Brain Syphilis, Massachusetts Commission on Mental Diseases; Acting Chief of Staff, Psychopathic Department, Boston State Hospital. W. M. Leonard, Publisher, Boston. 1917. Price \$5.00.

In this book is a discussion of the author's cases of highly interesting, very important nervous affections resulting from Syphilis. The opening chapters are taken up with a description of the nature and forms and a system-

atic diagnosis of the various phases of Neurosyphilis illustrated by case relation for which treatments are suggested. The book ends with a concluding summary and key and an appendix. The high quality of intelligence, and perserving endeavor of the authors entitle the work to the fullest consideration from which much valuable information upon which may be based a working knowledge of these perplexing affections by those who may be interested in this subject.

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Clinical Lectures on Infant Feeding. "Boston Method" by Lewis Webb Hill, M. D., Junior Assistant Visiting Physician, Children's Hospital, Boston; Alumni Assistant in Pediatrics, Harvard Medical School.

"Chicago Methods" by Jesse Robert Gerstley, M. D., Instructor in Pediatrician, Michael Reese Hospital, Chicago.

W. B. Saunders Company, Philadelphia and London. 12 Mo. of 337 pages. Illustrated. Price \$2.25 net.

In this book are published a series of lectures given under the auspices of the State Board of Health of North Carolina and the University of North Carolina. They were delivered to two sections of six classes each organized, one in the eastern section of the state and one in the western. Needless to say the information to be found in these pages is of the greatest importance to the practitioner. Both methods having been thoroughly tested and found to be practical and in the main satisfactory the practitioner may safely adopt either.

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## Health News

### KEEP THE FARMER WELL

It has been stated that the supreme need of the nation during the coming

months is an abundance of foodstuffs. The truth of this statement is being more and more brought home to every citizen as the days go by, the constantly increasing prices of food materials constituting reliable evidence that the situation is becoming acute. One reason for this is the scarcity of labor in our rich agricultural sections, a condition which can not be altogether relieved. Another reason, and one which is frequently overlooked, is the lack of efficiency in the present day worker, particularly when due to disease. It is estimated that 4 per cent of the population of certain sections suffer from malaria, a disease which lessens production and results in serious economic loss.

“Keep the farmer well” should be a fitting slogan of the present day. There never was a time when production was in such need of stimulation and when able-bodied men and women were in such demand. Every case of malaria, typhoid fever or other efficiency reducing disease among the productive population means that the output of food is appreciably reduced and that the shortage is measurably increased. A large part of the lands in the richest sections of the South, and to a less extent in the North as well, is today partially or wholly unproductive on account of being overrun with malaria, with a consequent loss of millions of dollars. It is entirely feasible to reclaim these lands and thus increase the nation's output. In certain areas the working ability of the population has been so affected by this disease that not only is there a shortage of growing crops but also of lumber, cotton and other manufactured goods. The moving of agricultural and manufacturing hands into these districts would not materially improve the situation as the newcomers would suffer a

loss of efficiency fully as great as that of the older residents. However, if coordinated, intelligent and well directed effort is instituted this serious economic handicap under which we are laboring can be easily overcome. Already examples of individual accomplishment along this line are plentiful.

At Crossett, Ark., a town of 2,000 people, the United States Public Health Service working in co-operation with the International Health Board, in one season reduced the incidence of malaria by over 80 per cent. The cost of the work was \$1.23 per person, less than what one would have paid for a single visit of a physician; this, too, in one of the worst malarious districts of the country. At Lake Village, Ark., the annual financial losses sustained by people protected against malaria averaged but 23 cents per family, as reckoned from money expended for physicians and medicine and absence from work on account of sickness. In the same town the neighbors of these citizens who employ no control measures against the disease sustained an annual loss of \$77.21 family, to say nothing of the economic loss resulting from decreased efficiency. One of the progressive railroads west of the Mississippi river foresaw this problem, and appropriated funds to keep its employees free from malaria in order to maintain its working force at the top notch of efficiency. The State of Mississippi has inaugurated active steps which will lead to an increased output from each farm and other efforts along similar lines are being made.

If this same active interest in malarial control can be extended generally this disease, which has been a severe handicap to the development of certain regions, can be checked and bumper crops produced. Tremendous opportunities in

this regard are open to federations of women's clubs, chambers of commerce, civic leagues and farmer's organizations, and all such effort will be repaid a hundred fold. The principles governing malarial eradication are inexpensive, easy of application, and easily understood by any citizen of average intelligence. So important does the government consider this work, particularly in view of the necessity of cultivating every foot of ground during the coming year, that steps have been taken to have the Public Health Service prepare and distribute directions as to how it may be accomplished. Any farmer who is even remotely interested in the problem can write to the government and obtain this information free of charge.

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In cooperation with the Woman's Committee of the Council of National Defense, and therefore with the principal woman's organizations of the country, the Children's Bureau is preparing plans for a *child welfare campaign for the second year of the war*. The first aim of the campaign will be to secure the Public Protection of Maternity and Infancy.

Public health authorities agree that one-half the deaths of infants are easily preventable, and that if children were well born and well cared for there would be practically no deaths of babies. Three hundred thousand American children under 5 die each year. Authorities also tell us that most of the fifteen thousand mothers who died last year died needlessly.

It is the plan of the Children's Bureau to save a certain definite proportion of these lives. It is believed that one hundred thousand lives can be saved this year notwithstanding the withdrawal of

a large proportion of doctors and nurses for war service.

The State councils of defense and the State women's committees are called upon to be responsible for the State quotas. The actual methods by which those lives are to be saved are those whose effectiveness in saving children's lives is already demonstrated. They are described at length in various pamphlets which have been prepared by the Children's Bureau.

Briefly the methods are as follows:

First: The registration of births so that there may be an immediate record of every child born; and nursing and medical skill may be provided whenever family income does not permit its being secured independently.

Second: For every mother prenatal care, necessary care, of doctor and public nurse at confinement, and after care.

Third: Children's conferences where well babies can be taken periodically to be weighed and examined, and clinics where sick children may be given medical advice.

Fourth: The organization of State and city divisions or bureaus of child hygiene.

Fifth: The guarding of the milk supply, that every child may have his quota of clean, pure milk.

Sixth: An income making possible decent living standards.

In 1916 and 1917 a nation-wide baby week was held under the auspices of the General Federation of Women's Clubs and the Children's Bureau which has resulted in awakening a new sense of civic responsibility for infant life in thousands of localities, and has secured many new activities such as nursing services, clinics, children's conferences, better milk and food supplies, better enforcement of birth registration laws.

In many communities the Baby Week

celebrations have cost large sums, in others the Baby Week has proved an exceedingly effective means of awakening permanent interest at little or no expense.

Valuable as Baby Week is, however, the present emergency demands a longer and more comprehensive program. After the Nation's soldiers are provided for, the second year of the war should be dedicated by the civilian population to preserving the lives of the Nation's children. Is there any greater patriotic duty for the civilian population than to safeguard the welfare of the Nation's children?

Hence this year the plan is simpler and yet more farreaching than ever before. It should be far more effective because through the women's committees not only the General Federation of Clubs but all the great women's organizations of the country will lend their cooperation.

Economy in unnecessary expenditures so as to save for essentials should characterize all this year.

It is known that the examinations of the draft have resulted in a considerable number of rejections for physical defects which might have been remedied in infancy or early childhood if then recognized. Weight and height constitute on the whole a fair standard of development; how do the young children of the United States measure up to such a standard?

As a test of child welfare, to inaugurate the Children's Year which begins on April 6, the anniversary of the declaration of war by the United States, a nation-wide weighing and measuring of babies and children of pre-school age is proposed. No general test of children of pre-school age has ever been made, and an examination of such children with

special reference to weight and height is now proposed as the primary feature of the war time Children's Year.

#### BRITISH MEDICAL PROFESSION APPROVES HEALTH INSURANCE

How does the medical profession in England, after five years' practical experience, regard the Health Insurance Act? "Favorably," finds the British Medical Association after a painstaking inquiry among all local branches and panel committees. And, the Association's Committee remarks, "the degree of unanimity so far disclosed is somewhat remarkable."

The report, which has appeared in the *British Medical Journal*, points out minor defects in administrative detail that may be easily corrected and suggests that the scheme, which is proving a distinct gain to the medical profession as well as to the public health, be still further expanded.

The most important improvements recommended by the Committee and adopted at the Annual Representative Meeting of the Association relate to provisions not found in the existing British Act but contained in the tentative health insurance bill prepared by the American Association for Labor Legislation in cooperation with the American Medical Association, and now being studied by official commissions in eight states in this country with a view to legislation. These provisions, now found desirable by the British doctors, include the extension, under certain conditions, of the advantage of medical care to dependents of insured persons, and also the extension of the scope of medical benefit to provide *all* necessary medical care — specialists and nursing services, institutional treatment, maternity attendance, etc., — instead of only that

which can be furnished by the general practitioner.

Perfection of the existing panel plan and of the basis of payment for medical service is recommended, as against any immediate consideration of a new system in the direction of a state medical service, though the Association recognizes the need for an extension of the number of salaried medical officers in the field of preventive medicine. ?

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#### BRITISH MEDICAL ASSOCIATION TAKES ISSUE WITH AMERICAN CRITIC OF HEALTH INSURANCE

The official publication of the British Medical Association, after practical experience under the national health insurance Act since 1911, has taken issue with statements made in the widely distributed pamphlet "Facts and Fallacies of Compulsory Health Insurance," by Frederick L. Hoffman of the Prudential Insurance Company of America. "His statement that insurance in England is a failure, is certainly open to dispute," says an article in the *British Medical Journal*. "Even if it were admitted that the results have not reached expectations, it might still be argued that any such comparative failure arose from the insurance not going far enough, or from detail in administration which experience will correct, and not from any defect necessarily inherent in compulsory health insurance."

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### Propaganda for Reform

Patent Medicines.

From the Philadelphia Ledger.

At a time when additional revenue is imperatively needed, why do patent medicines escape a fair share of the burden? In the estimated returns from the new

war tax bill these are credited with a contribution of only \$3,000,000, while cigars, cigarettes and tobacco are expected to bring in \$55,000,000, fermented liquors \$45,000,000, soft drinks \$14,000,000, and wines \$10,000,000. It is not a sufficient answer to say that these other things are luxuries—that is only partially true, at best. Nor can it be argued, on the other hand, the patent medicines are necessities; that again is only partially true. For, although some of them serve a useful purpose, by far the greater number are injurious. They either do not cure the complaints for which they are recommended or they bring on others. It is notorious that some widely sold compounds contain a high percentage of alcohol, and that their "tonic" effect is the result of the alcohol in them, not of the other ingredients. Their large sale in "dry" territory is proof enough that they are largely used as substitutes for undisguised spirits, and often do more harm. The world would be much better off if most of them were taxed out of existence.

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Dr. J. R. Bloss, Editor.

W. Va. Medical Journal,

Huntington, W. Va.

Dear Doctor:—

During January the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion with New and Nonofficial Remedies:

The Abbott Laboratories:

Chlorazene Surgical Powder.

Calco Chemical Company:

Betanaphthyl Salicylate (Calco)

Merk and Company:

Acetylsalicylic Acid-Merk.

Yours truly,

W. A. Puckner, Sec.

Council on Pharmacy and Chemistry.

## New and Nonofficial Remedies.

Sterile Solution Coagulen-Ciba (3 per cent.) 1.5 Cc. Ampoules.—Each ampule contains 1.5 Cc. of a 3 per cent solution of coagulen-Ciba. A. Klipstein and Co., New York City.

Sterile Solution Coagulen-Ciba (3 per cent.) 20 Cc. Ampoules.—Each ampule contains 20 Cc. of a 3 per cent. solution of coagulen-Ciba. A. Klipstein and Co., New York City.

Tablets Coagulen-Ciba 0.5 Gm.—Each compressed tablet contains 0.5 Gm. coagulen-Ciba and 0.48 Gm. sodium chloride. A. Klipstein and Co., New York City.

Dichloramine-T (Calco. — Paratoluenesulphonedichloranide. — This is said to act much like Chloramine-T, but is capable of being used in a solution of eucalyptol and liquid petrolatum, thus securing the gradual and sustained antiseptic action. Like Chloramine-T, dichloramine-T (Calco) is said to act essentially like the hypochlorites, but to be less irritating to the tissues. Dichloramine-T (Calco) is said to be useful in the prevention and treatment of diseases of the nose and throat. It has been used with success as an application to wounds, dissolved in chlorinated eucalyptol and chlorinated paraffin oil. Manufactured by the Calco Chemical Co., Boundbrook, N. J.

Halazone-Calco.—Parasulphonedichloramidobenzoic acid. — It is said to act like chlorine and to have the advantage of being stable in solid form. In the presence of alkali carbonate, borate and phosphate it is reported that halazone in the proportion of form 1:200,000 to 1:500,000 sterilizes polluted water. Manufactured by the Calco Chemical Co., Bound Brook, N. J.

Chloramine-B (Calco).—Sodium Benzenesulphochloramine.—It contains from 13.0 to 15.0 per cent. available chlorine.

The actions, uses and dosage for Chloramine-B (Calco) are claimed to be essentially similar to those given in New and Nonofficial Remedies, 1917, for Chlorazene. This compound was introduced into medicine by Dakin. Its physical and chemical properties are similar to those of chloramine-T. Manufactured by the Calco Chemical Co., Bound Brook, N. J. (Jour. A. M. A., Jan. 12, 1918, p. 91).

Chicago, Feb. 27, 1918.

Dr. J. R. Bloss, Editor

W. Va. Medical Journal,  
Huntington, W. Va.

Dear Doctor:—

During February the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion with New and Nonofficial Remedies.

*The Abbott Laboratories:*

Chloreosane.

Barbital-Abbott.

Procaine-Abbott.

Dermatological Research Laboratories,  
Philadelphia Polyclinic:

Arsenobenzol (Dermatological Research Laboratories) 1 Gm. Ampules.

*Eli Lilly and Company:*

Typhoid Vaccine, Prophylactic

Typhoid Vaccine, Therapeutic.

Typhoid Mixed Vaccine, Lilly.

*Merck and Company:*

Mercury Benzoate-Merck.

*Monsanto Chemical Works:*

Halazone-Monsanto.

*H. K. Mulford Company:*

Bulgarian Bacillus. Friable Tablets.

Yours truly,

W. A. Puckner, Sec'y.

Council on Pharmacy and Chemistry.

Barbital. — Diethyl-Barbituric Acid, first introduced under the name Vernol. In small doses barbital is a relatively safe

hypnotic, but fatalities have followed its indiscriminate use. It is claimed to be useful in simple insomnia, as well as in that accompanying hysteria, neurasthenia and mental disturbances. From 0.3 to 1 Gm. (5 to 15 grains) in hot water, tea or milk, or, if in wafers or capsules, followed by a cupful of some warm liquid.

**Barbital-Abbott.**—A brand of barbital complying with the New and Nonofficial Remedies standards. The Abbott Laboratories, Chicago.

**Mercury Benzoate-Merck.**—A brand of mercuric benzoate complying with the New and Nonofficial Remedies standards. Mercuric benzoate has the properties of mercuric chloride. It has been said to be useful for hypodermis use and in gonorrhoea. Merck and Company, New York.

**Chloreosane.**—A liquid obtained by chlorinating solid paraffin. It contains about 50 per cent. of chlorine in stable combination. Chloreosane is used as a solvent for dichloramine-T; with it solutions containing as much as 8 per cent. may be prepared. When used in a hand atomizer, chloreosane solutions of dichloramine-T may be made less viscous by the addition of 10 per cent. of carbon tetrachloride. The Abbott Laboratories, Chicago.

**Betanaphthyl Salicylate-Caleo.**—A brand of betanaphthyl salicylate complying with the New and Nonofficial Remedies standards. Betanaphthyl salicylate is believed to act as an intestinal antiseptic and, being excreted in the urine, to act in a similar way in the bladder. It is said to be useful in intestinal fermentations, catarrh of the bladder, particularly gonorrhoeal cystitis, rheumatism, etc. The Caleo Chemical Co., Bound Brook, N. J.

**Acetylsalicylic Acid-Merk.**—A brand of acetylsalicylic acid complying with the

New and Nonofficial Remedies standards. Acetylsalicylic acid is employed in rheumatic conditions, and especially as an analgesic and antipyretic in colds, neuralgias, etc.

**Chlorazne Surgical Powder.**—An impalpable powder composed of chlorazene, 1 per cent.; zinc stearate, 10 per cent., and sodium stearate, 89 per cent. Chlorazene Surgical Powder is absorbent, slightly astringent, and forms a closely adherent film when applied to the skin. It may be dusted freely over denuded or abraded areas, cuts, wounds, and skin eruptions. The Abbott Laboratories, Chicago, (Jour. A. M. A., Feb. 16, 1918, p. 459).

**The Carrel-Dakin Wound Treatment.** William H. Welch writes that he was most favorably impressed with the Carrel treatment of wounds, and believes that Carrel should receive credit for calling attention to the possibility of the sterilization of infected wounds by chemical means. He holds that while undoubtedly the technic of the Carrel treatment is elaborate and requires an intelligence and skill on the part of the surgeon which cannot be counted on for the average surgeon, and that while the preparation of the neutral solution of sodium hypochlorite also requires chemical skill, surgeons should acquaint themselves with the principles and technic, and try to overcome the difficulties of applying the treatment (Jour. A. M. A., Dec. 8, 1917, p. 1994).

**Hemo-Therapin.**—The Council on Pharmacy and Chemistry reports that, according to the Hemo-Therapin Laboratories, New York, Hemo-Therapin is a "combination of highly refined creosols and phenols (which have been detoxicated by special process) with salts of iron, potassium, sodium, phosphorus and calcium in minute but physiological pro-



portions—the solution as a whole being designated to approximately closely in various fundamental details the chemistry of the blood.” No statement is made, however as to the quantities of the several ingredients, nor is any information given as to the identity of the “creosols” and “phenols”, or as to the nature of the processes whereby these are “detoxicated”. The Council explains that the Hemo-Therapin Laboratories ask physicians to believe that the occasional intravenous administration of this liquid will benefit or cure a long list of ailments, including erysipelas, septicaemia, pyemia, puerperal infection, malaria, pneumonia, typhoid fever, diabetes, chronic Bright’s disease, goiter, arteriosclerosis and locomotor ataxia. The testimonials which are presented for the claims bear a striking likeness to those found in “patent medicine” almanacs. One of the cases is a woman who was bitten by a snake seventeen years ago and who, on the anniversary of the bite, suffers severely from the original bite (Jour. A. M. A., Jan. 5, 1917, p. 48).

Venosal.—The Council on Pharmacy and Chemistry reports that Venosal, sold by the Intravenous Products Company, Denver, Colo., is inadmissible to New and Nonofficial Remedies because its chemical composition is indefinite; because the therapeutic claims are exaggerated, and because the composition is unscientific. Venosal is a solution of sodium salicylate containing also colchicum and an insignificant amount of iron. Since it is possible to obtain the salicylate effects promptly and certainly by oral administration, the inherent dangers of intravenous medication render its routine employment unwarranted. At this time, when economy is a national policy, a further objection to the use of Venosal is the unnecessarily high expense of Ven-

sal itself and the administration (Jour. A. M. A., Jan. 5, 1917, p. 48).

Our Archaic Patent Laws.—The reports of the Council on Pharmacy and Chemistry on Secretin-Beveridge and the Need for Patent Law Revision are opportune. At the request of the National Research Council the “Patent Office Society”, an association of employees of the U. S. Patent Office, has created a committee to study the U. S. Patent Office and its service to science and to arts. There is no question that one of two things is needed: either a radical change in the patent law itself or the application of more brains in its administration. Now the United States Patent Law is too often used to obtain an unfair monopoly of a medicament or to abet quackery (Jour. A. M. A., Jan. 12, 1918, p. 95).

Secretin-Beveridge and the U. S. Patent Law.—In 1916, A. J. Carlson and his co-workers demonstrated that commercial secretin preparations contained no secretin, and that secretin administered by the mouth or even into the intestine was inert. Yet a U. S. patent was subsequently issued to James Wallace Beveridge, for a process of preparing secretin preparations which would contain secretin when they reached the consumer, and in a form resisting destruction in its passage through the stomach. At the request of the Council on Pharmacy and Chemistry, A. J. Carlson and his associates studied the stability of the secretin made according to the Beveridge patent. The investigation shows that the patent gives no process for the manufacture of commercially stable secretin preparations, nor any means for preventing the destruction of secretin by the gastric juice when administered orally (Jour. A. M. A., Jan. 12, 1918, p. 115).

Need for Patent Law Revision.—The

Council on Pharmacy and Chemistry publishes a report prepared by its Committee on patent law revision, which is an appeal for an amendment of the patent law which governs the issuance of patents on medicinal preparations, and more particularly for a revision on the procedure under which such patents are issued. The report points out that to increase our national efficiency, the government must protect and stimulate science, art and industry, and at the same time curb waste of the country's resources; and that, to this end, the patent office should encourage discoveries which go to increase national efficiency, and refuse patent protection when such protection is not in the interest of national efficiency, conservation of energy and material resources. The report presents a considerable number of specific instances which demonstrate that patent protection has been given where it was not deserved and not in the interest of the public. The report concludes with a reference to the investigation of a patent granted for a preparation of secretin, apparently without any attempt to confirm the highly improbable claims of the patent application (Jour. A. M. A., Jan. 12, 1918, p. 118).

Arsphenamine.—No, this is not a new chemical, it is simply the name adapted by the Federal Trade Commission for the Hydrochloride of 3-diamino-4-dihydroxy-1-arsenobenzene—in other words, salvarsan. The three firms which have been licensed to manufacture this drug are permitted to have their own trade names for it, but the official name "arsphenamine" must be the prominent one on the label of all brands. Hence physicians should at once make it a point to learn and use the name "arsphenamine" (Jour. A. M. A., Jan. 19, 1918, p. 167).

Cactina Pillets.—According to the

manufacturer of Cactina Pillets (The Sultan Drug Co.), "cactina" is "invaluable in all functional cardiac disorders such as tachycardia, palpitation, arrhythmia, and whenever the heart's action needs regulating or support." The manufacturer gives no information as to the mode of action of "cactina", but states that it is totally unlike that of digitalis. An examination of the literature indicates that *Cactus grandiflorus* is therapeutically inert, and no one except Mr. Sultan of the Sultan Drug Company claims to have isolated an active principle of it. The Council on Pharmacy and Chemistry examined the literature relating to cactus and certain proprietary preparations, including Catina Pillets, alleged to be made from cactus, and reported that the literature does not afford a single piece of careful, painstaking work which lends support of the claims made for Cactina Pillets. Since then, Hatcher and Bailey examined genuine *Cactus grandiflorus*, and also found that the drug was pharmacologically inert (Jour. A. M. A., Jan. 19, 1918, p. 185).

Surgodine.—The A. M. A. Chemical Laboratory having found Surgodine (Sharp and Dohme) to contain 2.51 Gm. free iodine (instead of 2.25 per cent. as claimed) and 1.78 Gm. combined iodine (probably chiefly hydrogen iodide), the Council on Pharmacy and Chemistry reports that it is essentially similar to the official tincture of iodine except that it is considerably weaker and, instead of potassium iodide, it presumably contains hydrogen iodide and probably ethyl iodide to render the iodine water-soluble. Its composition, however, is secret. The Council held Surgodine inadmissible to New and Nonofficial Remedies because its composition is secret; because the therapeutic claims made for it are ex-

aggerated and unwarranted, and because it is an unessential modification of the official tincture of iodine. Surgodine is a good illustration of the economic waste inseparable from most proprietary medicines. While the free-iodine strength of Surgodine is only about one-third that of the official tincture, its price is between two and three times as high (Jour. A. M. A., Jan. 26, 1918, p. 257).

Dionol.—If physicians take the word of the Dionol Company, the therapeutic possibilities of Dionol are apparently limited only by the blue sky. Even the company admits that "the unprecedented range of action" of this marvel "may come as a surprise". A glance over the published case reports confirms the inference. Dionol is furnished in two forms: as an ointment and as an emulsion. Dionol itself is a sort of glorified petrolatum, the use of which is said to prevent the leakage of energy from the nerve cells, and by overcoming the short-circuiting always said to be present in inflammations, is asserted to accomplish its wonders (Jour. A. M. A., Jan. 26, 1918, p. 257).

Phenalgin and Ammonol.—At the time that synthetic chemical drugs were coming into fame and when every manufacturer who launched a new headache mixture claimed to have achieved another triumph in synthetic chemistry, Ammonol and Phenalgin were born and duly christened with chemical formulas. However, one of the first reports of the Council on Pharmacy and Chemistry showed them to be mixtures composed of acetanilid, sodium bicarbonate and ammonia carbonate. Since then the unwarranted claims made for these preparations have been exposed repeatedly, and the danger of the indiscriminate use of headache mixtures pointed out. De-

spite the exposure of the methods used in exploiting Ammonol and Phenalgin, one finds just as glaringly false statements made in the advertisements of Phenalgin today as were made in its unsavory past. This would seem to indicate either that physicians have short memories or that they are strangely indifferent to the welfare of their patients, to their own reputation, and to the good name of medicine ( Jour. A. M. A., Feb. 2, 1918, p. 337).

Absorption and Excretion of Mercury.—It may be regarded as clearly established that, in addition to the kidneys, the stomach may participate in this eliminatory function quite as well as the other portions of the alimentary tract. The occurrence of severe intoxications from the use of mercuric chloride in vaginal douches is likewise recognized. The absorption of mercury through the sound skin has been in dispute. To account for the efficacy of mercurial inunction, the contention has been made that the mercury thus applied is volatilized and absorbed through the lungs in greater part if not entirely. Experiments in the dermatologic laboratories of the Philadelphia Polyclinic leaves little doubt that the skin is an important, perhaps the most important path of absorption of mercury applied by inunction (Jour. A. M. A., Feb. 9, 1918, p. 392).

Basy Bread.—This is an asserted obesity cure put out by the Doctors' Essential Food Company, Orange, N. J. The advertising claims are extravagant and typical of other obesity treatment literature. Analyses indicated that in composition Basy Bread was similar to graham bread. Basy Bread sells for \$1 a loaf. Dr. Wiley well sums up the case: "There is one way in which Basy Bread will reduce, that is, don't eat any of it

nor much of it nor much of any other kind". (Jour. A. M. A., Feb. 9, 1918, p. 407).

Campho-Phenique.—The Secretary of the Harvard University Medical School received, from the Campho-Phenique Company of St. Louis, a letter stating that the concern wishes to supply the senior students of all Medical Colleges with samples of Campho-Phenique and Campho-Phenique powder, and ointment and asking the number of students and the name of every student in the graduating class. The Campho-Phenique concern believes in following the old advice, "Catching them young". In 1907, the Council on Pharmacy and Chemistry reported that Campho-Phenique (liquid) was exploited under a false "formula", that it was a solution of camphor and phenol in liquid petrolatum, and that for all practical purposes Champho-Phenique Powder was essentially a camphorated talcum powder containing apparently sufficiently phenol and champhor to give the powder an odor. The report of the Council further brought out the Champho-Phenique Company was in effect one of the numerous trade names adopted by one James F. Ballard. Mr. Ballard seems to market a number of "patent medicines", for some of which Dr. Ballard has pleaded guilty in the federal courts to making false and fraudulent claims (Jour. A. M. A., Feb., 9, p. 408).

Sodium Bicarbonate.—Few patients will object to the taste of sodium bicarbonate if the required dose is administered dissolved in a convenient quantity of cold water. The taste may be dis-

guised by dissolving the sodium bicarbonate in carbonated water or else by adding a little sugar and lemon juice to ordinary water. Sodium bicarbonate may be prescribed in the form of tablets. Though it is better that these be allowed to dissolve in the mouth, in most cases they are swallowed without discomfort (Jour. A. M. A., Feb. 9, 1918, p. 410).

Acetylsalicylic Acid and Phenyl Salicylate Incompatible with Alkalies.—In the presence of moisture, acetylsalicylic acid is decomposed by magnesium oxide (calcined magnesia), as is also phenyl salicylate (salol). Hence these drugs should not be combined with magnesium oxide in a prescription (Jour. A. M. A., Feb. 9, 1918, p. 410).

Trousseau's Wine.—This obsolete combination of drugs acting on the heart and kidneys is made by maceration of digitalis, squill and juniper berries in wine and alcohol, and adding potassium acetate to the expressed liquid (Jour. A. M. A., Feb. 23, 1918, p. 559).

Pyxol.—This is a proprietary preparation somewhat similar to the compound solution of cresol of the U. S. Pharmacopeia. In 1915 Pyxol was declared misbranded under the Insecticide Act.

(Jour. A. M. A., Feb. 23, 1918, p. 559).

Luminal.—Chemically, luminal is phenyl-ethylbarbituric acid, and differs from veronal only in that one ethyl group is replaced by a phenyl group. Luminal is claimed to be a useful hypnotic in nervous insomnia and conditions of excitement of the nervous system. (Jour. A. M. A., Feb. 23, 1918, p. 559).

# The West Virginia Medical Journal

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## RED CROSS IS THE MOBILIZED HEART AND SPIRIT OF THE PEOPLE

H. A. GILTNER, Parkersburg  
(Continued from April Number)

By co-operation with various hospitals and medical schools, fifty base hospitals have been organized, and forty-five ambulance companies have been mustered into the army medical corps, most of which are seeing active service. Similar work has been done for the navy, which includes five base hospitals and eight naval station hospital units. A general hospital of two hundred and fifty beds has been established at Philadelphia, and is now being used by the United States navy.

### *A Staunch Friend.*

Four mobile laboratory units for emergency service have been authorized, each unit being housed in a Pullman car remodeled for the purpose. completely equipped with laboratory apparatus and supplies and manned by a staff of expert bacteriologists.

Soldiers and sailors in camp have a staunch friend in the Red Cross, which

looks out for their welfare in every way possible, care being used that the work of other organizations is not duplicated. This work is carried on through field directors, one at each camp or cantonment.

The field directors not only stand ready to supply necessities (not furnished by the government) and measures for comfort and contentment, but are also assisting in sanitation work in some communities adjoining the camps.

Refreshment units supplement the work of the government in providing sustenance and comforts while traveling, while the attention service mails letters, handles telegrams, money orders, etc.

The work in Europe. Here the Red Cross work reaches its climax, makes beneficent application of its resources in personnel, money and supplies, where is assimilated the products of generous and patriotic Americans already prepared for that purpose on this side of the Atlantic.

While the work is being carried on in all the allied and devastated countries

of Europe, under five separate commissions, the most important is that in France, under the supervision of Major Grayson M. P. Murphy, who also has general charge of all Red Cross work in Europe. While the activities in all European countries are carried on the same general manner, that in France is typical of all, and of that we shall speak in more or less detail.

The French commission is composed of sixteen members, assisted by a medical advisory committee, headed by Dr. Joseph A. Blake. On the staff of the French commission are 864 persons, 517 of whom are serving without salary or allowances. This shows the intense zeal and patriotism of these red-blooded Americans, many of whom are prominent business men and technical experts, who, for the time being, have given up their own business to enlist under the banner of the Red Cross and serve humanity in the best way they know.

#### *Broadly Divided.*

The work is broadly divided into that for our soldiers and those of our allies and that for the civilian population.

Besides the hospital and ambulance units to be discussed later, there are for the soldiers, regardless of nationality, canteens, rest houses, recreation facilities, supplementary equipment and supplies to hospitals and relief for our soldiers held as prisoners by the enemy, very few at present, and if we could only hope there would be no more.

For the civilian population, care and education of destitute children, care of sick and disabled French soldiers, no longer able to fight for their cause, relief work in devastated areas, and guarding against the increase of tuberculosis,

as well as caring for those who have already fallen victims.

It is not only necessary to assist the people of France because of the great suffering she has endured, and is still enduring, for the sake of relieving their distress, but it is highly essential to strengthen their courage and morale at this critical period before our army has been massed on the battlefield and had the necessary training to become fully effective.

Wounded soldiers and their families are assisted, hospitals and dispensaries established, dressings and supplies distributed, infant welfare stations established, refugees supplied with food, shelter and clothing, houses are repaired, and large warehouses for supplies are built.

Large warehouses have been established in Paris, in which 200 tons of supplies are received daily, and 125 tons shipped out to various points. The total capacity of this warehouse is 100,000 tons, and the transportation department has a force of 125 men at the present time, and can handle about 250 tons of supplies daily.

In the work of transportation, 400 motor vehicles are in use, the repairs for which are made in seven garages, all under the control of the Red Cross. The warehouses, supplies and personnel must all be greatly increased as additional American troops arrive in France.

As necessary and exemplary as the aid to the people of France may be, the first and supreme effort, when the time arrives, is to care, of course, for our own army and navy.

#### *Rest Stations.*

Infirmaries and rest stations are established along the route followed by our troops while being transported, each

in charge of a trained nurse. For soldiers in health, there are canteens, where food, baths and rest may be obtained, and tobacco, soap, writing materials and other comforts are supplied. Large donations of tobacco and cigarettes have been made in America, which are distributed by the Red Cross.

Dispensaries are maintained in the army zone, to care for civilians and improve sanitary conditions in the vicinity of our camps.

There are at present more than a dozen base hospitals in active service in France, and at least six hospital units have charge of British base hospitals.

Two large hospitals, formerly under other supervision, are now under the Red Cross, and are designated as American Red Cross hospitals Nos. 1 and 2. These hospitals are intended for the use of our own forces, but are open to French soldiers until such time as our army in France will demand their full capacity.

The hospital supply committee, with Stanley Field, of Marshall Field & Co., of Chicago, at its head, supplies all military hospitals maintained by American and foreign societies and individuals thus centralizing and systematizing this important function.

The goods carried in stock in the warehouses of this service includes medical supplies of every kind, surgical instruments, foodstuffs, clothing, building material and tools of every description.

The larger portion of these supplies are received from America, but where possible purchases are made in France to save shipping.

Adequate provision for anesthetics is made, large quantities of ether being shipped in, and Major Murphy has been authorized by the war council to install

a plant for the manufacture of nitrous oxide in large quantities, the machinery for which will be sent from the United States, and American experts will carry on the work. With the equipment, will be included hundreds of tanks for storing and transporting, as well as complete apparatus for its administration.

It is a matter of interest to the profession that nitrous oxide is a very valuable anesthetic for the numberless short operations, where a longer anesthesia would not only be necessary but detrimental to the patients.

#### *Factory for Repair.*

It is planned to have a factory for the repairing of surgical instruments and apparatus, and the manufacture of splints and hospital appliances.

Ten portable ice plants will be installed for the use of American base hospitals, this being the answer to certain critics who maintained that ice plants were not necessary.

Of untold value to the people of France is the relief work among the refugees, which are numbered by millions, and embraces all classes and ages, except able-bodied men.

As the cost of food increases, the position of these people becomes more difficult, their housing condition is bad, an entire family some times living in a single room, and under these conditions malnutrition and disease are sure to follow. The Red Cross is supplying food and aiding the authorities to lessen the congestion by supplying furniture, by completing buildings already partly constructed, and even by furnishing portable houses when necessary.

Frenchmen of the twentieth century have to begin again where the North American Indian would begin—by hunting for food, temporary shelter, a few

clothes to cover them, a handful of household goods and pots, pans, knives and spoons, an agricultural implement or two, and, perhaps, a rabbit and some chickens, and, if they are very fortunate, a goat or a donkey. It is to help such people as these that the Red Cross has located its relief warehouses just behind the lines at strategic points, and is shipping food, clothes, blankets, beds, mattresses, stoves, kitchen utensils, reapers and binders, mowing machines, threshing machines, garden tools and hundreds of other articles of prime importance to people who were prosperous and contented only three years ago.

Assistance is given to invalided soldiers who must have temporary relief until they recover and find employment.

A factory has been established near Paris for the manufacture of American artificial limbs, and more than six hundred artificial legs of the best type have been provided for mutilated French soldiers.

#### *Children's Hospital.*

The Children's Hospital, a gift of an American committee, is the center of the welfare work among children, many of whom are found in looted villages, homeless, destitute, practically without medical attention, all miserably dirty, half of them infected with skin diseases, and many actually ill. The obvious needs of these poor children are being alleviated by the Red Cross in conjunction with the local authorities.

It is estimated that there are half a million persons in France afflicted with tuberculosis, as a direct result of the war, and efforts to control the spread of this disease are not only of great concern to France herself, but they are of

great importance in making France healthful for our own troops.

In co-operation with the Rockefeller Foundation, a commission for the prevention of tuberculosis is being formed. The headquarters of the administration is in Paris in conjunction with the central committee for the aid of tubercular soldiers. Workers are being educated to man the dispensaries, and it is expected unlimitely that between 300 and 400 anti-tubercular dispensaries will be maintained, largely by local funds.

The Red Cross commission in France is completing the unfinished building of the tuberculosis sanatorium at Bligny, about 20 miles from Paris, and when completed it will be a splendid institution. In addition, assistance is being given to tubercular patients in the Paris hospitals, and a number of private estates have been turned over to the Red Cross, which will be converted into sanitariums.

In Belgium, where conditions are quite similar to those in France, the same magnificent work is being carried on, especially in the work for the children, assisting refugees and reconstruction of villages. Six hundred children from especially dangerous places have been brought to France and there maintained by the Red Cross.

In England, the work is carried on in conjunction with the British Red Cross, and is devoted more to the establishment and maintenance of hospitals.

Other countries of Europe in which the Red Cross is operating are Italy, Russia, Roumania and Serbia.

While there are probably not much over a hundred American prisoners held in Germany at present, plans have been worked out for the care of them, and



will be extended as necessity demands.

Bread and assorted food parcels, as well as clothing, will be supplied, and it is probable that a complete scheme for sustaining prisoners will be worked out jointly with the war and navy departments. Food parcels are sent to the prisoners held in Germany three times every two weeks, and a supply of food-stuff is being accumulated in Berne for further use in this way.

#### *Is Broad Field.*

Thus we may gather some faint idea of the large and varied field which the Red Cross is covering, and the important part it is playing in the great world war. Those men and women who are devoting their time and risking their lives in this great field in Europe are serving the Stars and Stripes just as nobly as the men behind the guns, and the work they are doing is just as essential. Many records of bravery and self-denial will be written of these soldiers of mercy.

The representatives of the medical profession are nobly bearing their part in the Red Cross, the only hope of reward being the knowledge of a duty well done, and that their efforts have counted for something in achieving the object for which we are fighting.

When asked by a correspondent what message he had to send to America, Major Murphy replied: "Save for small overhead expenses, every dollar of the Red Cross millions is being turned into actual relief work. We get direct action; we don't have to wait for an act of congress every time we hang up our hats. The people of the United States may congratulate themselves that their money is a direct gift, and not congressional apportionment, subject to government red tape. Other societies are be-

ing assisted; there is no monopoly of relief work by the Red Cross."

The Red Cross is not merely a humanitarian organization separate and distinct from others, but it is the mobilized heart and spirit of the whole American people. The Red Cross is carrying a message of love and sympathy to American soldiers and sailors, and to the troops and civilian population of our allies.

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#### THE MADNESS OF MEN AND NATIONS

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*Paper read by Dr. W. W. Brown of Shenandoah Junction, W. Va., before the Eastern Panhandle Medical Society at Martinsburg, W. Va. on March 13th, 1918.*

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#### *Explanation.*

I would like to begin with the explanation that I am not a specialist in mental troubles, not a psychiatrist of good reputation, but a plain country doctor whose ignorance must be overlooked. My purpose, however, is to show that certain characteristics that belong to the individual will, under like conditions, belong to the mass.

We believe we have authority for the statements that when an individual's reason is disturbed and his actions guided by strange sentiments and his mental disorders very pronounced, we call this individual a madman and confine him. When his disorder is of a lesser degree, we speak of him as semi-insane, unbalanced, degraded, etc., but in all these classes we term him a Psychopath, morally irresponsible, whose disorder is engendered by exaggeration of the passions anger, vengeance, unrestrained ambition, religious fanaticism,

etc. We further believe the statement to be true that mental disorders have a psychological origin, also a psychopathic contagion by imitation, observed particularly in hysteria, neurasthenia, melancholia, paranoia, etc. For instance the fact that husband and wife with different hereditary tendencies and differently educated may conceive the same false ideas and delusions, would indicate a psychic contagion by imitation.

Mental disorders are influenced by heredity and environment. In fact, environment influences ones whole being, our physical, moral, mental and spiritual natures. For instance,—Billy Sunday, the great preacher, is always in a condition of religious fervor and enthusiasm. Why? Because there is always music and songs of rejoicing, saw-dust trails and well filled purses; but let him keep a grocery store or practice medicine and he would likely lose his religion.

#### *Illustrations.*

All of us are trying to make the world safe for Democracy as it is this form of government in which we believe, where all just powers of the government are obtained by consent of the governed, but there is a perversion of Democracy.

The Russian anarchist, Trotsy comes to our country and defines the word as a license to destroy; returns home and instead of a Democracy he gives the people chaos and death.

#### *Another Example.*

The making of money is legitimate, enjoined by the scriptures and commended by good men; but if a man makes it the supreme effort of his life to get money, we call him money mad, a miser, and his disorder spreads by imitations to the susceptible. Our people have been called Money Mad, with our sordid farmers, our hoarding merchants, our pro-

fitteering in business, and our labor strikes; but are we? I think the facts are to the contrary.

#### *Another Example.*

Some one has said that religion is the natural and normal condition of man and that sin is a psychosis. I don't know about that but I do know that religion is the great force that lifts man and nations to a higher degree of usefulness and service, but pushed too far it becomes a mania and the mass of the people as well as the individual are swept by the force of the passion.

We have two notable examples in the persons of Doctor Dowie and Mrs. Eddy, both psychic degenerates, who labored under the delusion, as most of their class do, that God had given them a special mission. When they die, however, their cult dies with them as the source of the contagion has been removed. God does call men for special service and endow them with special power, but they don't blow up Lusitanias or rape women.

#### *The Kaiser.*

Some years ago, I read an article from a distinguished authority, Dr. McLane Hamilton, that the Kaiser was a paranoiac whose chief symptom was an excessive egotism—ego-phobic in fact. Some one has said that paranoia is a disorder of the aristocrat, of the high blood and high brows. I have wondered since that time, if the Kaiser, besides being hereditarily mad, was not also a product of his environment—an outgrowth of Germanism. Gerard says it is the "system."

The Kaiser's proto-type can be found in another dreamer of world power and dominion, King Nebuchadnezzar with his oft quoted boast, "Is not this great Babylon that I have built." His son Belshazzar was a stupid fellow, who got drunk and lost his trenches. The Crown

Prince, another stupid fellow, got drunk, it is said, before Verdun and lost his trenches. Another thing we must remember: wherever there is Babylon conceit, there is Babylon cruelty.

#### *The Dominating Power.*

Two things dominate the German mind: A consuming conceit and a material philosophy that has landed many an individual in the insane asylum—in fact, one at least, of their princes of hate died in a mad-house. The Kaiser declares his and God's mission is to rule the world and the people echo the words of a teacher—"He who does not believe in the Divine mission of Germany had better kill himself and rather today than tomorrow." The Kaiser says—"I have the right to do what I have the power to do" and the people say that the laws of the strong hold good. The Kaiser has medals struck commemorating the sinking of the Lusitania and the soldiers wear them, proudly and cruelly.

Three agencies are responsible for this criminal blood crazed philosophy. First,—militarism. Second—the schools and colleges, which teach that their Kultur should be forced down the throats of other people with the point of the bayonet. Third—the church, by directly preaching the war spirit of cruelty.

#### *Germany the Criminal.*

The individual criminal is easily caught, we know, as God put a mark on the first criminal that men should know him, and a mark is on the criminal ever since—usually a low order of mentality. The German nation as a criminal has been caught red handed. The Teuton wins with the Slav as the Slav is of in-

ferior blood, but when the Teuton matches his steel and wits against the Anglo-Saxon, he loses. German officers rape Belgian girls, bombard hospitals, and kill doctors, not simply to satisfy their lust, but as a part of a military training to produce a condition of frightfulness to deter other states, but it has had the opposite effect upon the United States, as "Old Glory" is proudly floating over the trenches in France and "Old Glory" never has been pulled down. The nearest it ever came to be was by the very men who gave it birth and made its history. Another comforting fact is that Newt Baker is on the job.

Usually there is one characteristic of the idiot and degenerate; he is a notorious liar. I don't mean to imply that all liars are degenerates, rather that all degenerates are liars. Germany has no conscientious scruples on this matter; all agreements are but "scraps of paper." Woodrow Wilson will not deal with them. Probably the only class free from the contagion of blood is the medical profession and they are not overly so as they are differently educated, under more human environments.

#### *Treatment.*

Where an individual's mental disorder is caused by faulty education and bad environment, he is placed in an institution where he receives a better education under a better environment. That is exactly what Woodrow Wilson is doing toward and for Germany. We call him a "School-master" as kings, priests and statesmen are his pupils and the world his school-room. Other methods some-

times have to be adopted toward the criminal insane—the method of punishment. This is what our army is doing in France.

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### SOME OBSERVATION ON THE ORIGIN AND TREATMENT OF COUGHS

A. H. Hoge, M. D., Bluefield, W. Va.

Read before the Mercer County Medical Society, March 21st, 1918, at Princeton, W. Va.

Mr. President:

In this day of rapid advancement, when we watch the great work of Specialists, and see the wonderful cures obtained by Surgeons, we cannot expect ourselves to be other than human to be attracted by this wonderful glamour.

We find ourselves forever gazing into the distant future, or racing thru life like an angry mob, seeking an unknown remedy and leaving well-known and proven ones in the dust behind us.

Small things in medical practice often make or mar the success or future of a physician. To be a success one must do all things successfully. *The two all important essentials in the practice of medicine are, a correct diagnosis of the case in hand, and an absolute knowledge of the action of the remedies to be used.*

In dealing with this subject, I will not attempt to go into detail, but I hope to remind you of some well known facts concerning coughs that some of us, at least, have almost forgotten. First, we must bear in mind that a cough is merely a symptom and from a diagnostic standpoint may be divided into two classes; direct and indirect. In the former the cause is always due to some form of disease of the larynx, bronchi, lungs or plura. In making a diagnosis;

all of these causes must be excluded by careful physical examination before it can be classed under the direct form.

We hear a great deal about reflex coughs. This is not a good term, for all coughs are reflex. A much better term is the word "indirect" or "transferred." It is this form of cough that I believe we most often overlook. I haven't the slightest doubt but that almost every physician has one or more cases in his practice who have been taking cough mixtures for years, who would be well today if he would only look diligently for the cause instead of giving so much medicine.

If you have a case with a persistent cough and you can exclude any disease of the lungs, don't be satisfied with a diagnosis of Chronic Bronchitis, but get to work and find the real trouble. Examine the heart carefully and you will find many causes. Often-times you have the so called "stomach cough" accompanying gastric catarrh, due most probably to the accompanying pharyngitis.

Recently I saw a young lady who had a very severe cough for which no cause could be found in the chest or head. Examination of the abdomen revealed a very tender gall bladder. Her cough promptly cleared up as soon as this trouble was relieved.

If you can find no cause in the chest or abdomen, then the trouble must be in the head or throat. When it is possible to do so, it is well to have a Specialist go over the case looking for Adenoids, Tonsils or nasal defects. I want to emphasize the importance of a routine examination of the ears, especially in children. Wax, abscesses or foreign bodies will often cause a very distressing cough. Some of the most distressing coughs that I have seen have been due

to infections in the frontal or maxillary sinuses, so in all obscure cases these should be suspected and eliminated.

If we will take more time to go over our patients more carefully, we will often find why our most favored cough mixtures have failed us in our time of need. I am sure that in no department of medicine are the principles of *Materia Medica* and Therapeutics so much abused as in treating coughs. What physician would not throw up his hands in horror at the mere suggestion of giving a patient with Acute Nephritis an irritating diuretic?

I believe I am safe in saying that practically all of you will, without hesitancy, attempt to cure Acute Bronchitis with irritating expectorants like Ammonium Chloride Squill, Terpin Hydrate and others. Time and time again I have seen these remedies used in the first and second stages of Pneumonia. If you consider this good practice, then why not follow the same principle in treating Acute Nephritis, and also treat your cases of Acute Ileocolitis by active and continuous purgation? The real cause of this confusion comes when we first leave school. No sooner are we settled, than we are fooled with literature from various drug houses telling of the wonderful cough medicines they make. How they have added this to overcome constipation, and something else to disguise the taste, and we are left in the dark as to the real ingredients. That line of talk is alright for the drug clerk, but physicians should not accept it; for nearly all of them contain drugs of absolute antagonistic action; for instance, Ipecac loosens a cough. Syrup of Tolu tightens it. Why give them together? Paregoric stops a cough. Squill makes one cough harder. Why give

them together? Squill, Senega and Sanguinaria each irritate and make the patient cough more. Ipecac, lobelia and Apomorphin loosen a cough and increase secretion. Opium, cannabis and Bromides will soothe an irritative cough. Many infants have died from the physician's lack of this knowledge, because they have been permitted to drown from their own secretions collecting in their bronchial tubes.

As a rule, Sedative Expectorants are permissible only in acute stages of bronchitis, when, as in the case in the beginning of all catarrhal inflammations, there is complete or partial suspension of function, absence of secretion, and much irritation in the bronchi, with distressing, harsh, and dry cough.

In these conditions of the respiratory passages the nauseating sedative expectorants serve a useful purpose in lowering arterial tension, lessening the blood-supply to the inflamed parts, and increasing the secretion of mucus.

In sufficiently large doses to procure emesis the same expectorants are frequently employed to expel an accumulation of mucus mechanically by the act of vomiting.

Stimulating expectorants are more serviceable in chronic and relaxed conditions of the mucous membrane. They are usually employed to diminish or disinfect an abnormally increased secretion. These remedies generally increase blood-pressure and facilitate expectoration, being eliminated to a great extent by the mucous membranes which they stimulate.

The alkalies are especially useful in lessening the viscosity of mucus, rendering it more fluid, less tenacious, and therefore more easily expelled.

It requires considerable skill to com-

bine expectorants so as to best suit the various conditions found in practice. The diseases of the respiratory passages gradually merge, so that in the treatment of them it is often difficult to decide which remedy will be of more service, a sedative or a stimulant expectorant. The physician should carefully examine each individual case and decide whether he wishes to diminish or increase the blood-supply to the respiratory tract; to stimulate or depress the respirations; to overcome spasm of the bronchial muscles; to diminish, increase, or disinfect the bronchial secretion.

A thorough knowledge of the patient's condition and of the physiological action of the various remedies at command will enable the observant practitioner to combine expectorants in such manner as to yield ordinarily highly satisfactory results.

If I can only succeed in making you go home and get down that old dusty book on Therapeutics and learn these three things:

When to treat a cough.

Why to treat a cough.

How to treat a cough.

I will always feel that I have accomplished a great good.

*St. Luke's Hospital,  
Bluefield, W. Va.*

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CASE REPORT READ BEFORE THE  
MERCER COUNTY MEDICAL SOCIETY,  
MARCH MEETING, 1918.

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*C. C. Peters, M. M., Princeton, W. Va.*

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October the 5th, 1917, was called to attend a confinement with whom I had no previous engagement.

Patient was 39 years old, and mother of eight children, all of whom are living

except one that came as a breech three years before and was born dead, but was alive and fully matured at onset of labor. Patient had had two miscarriages but am unable to give dates and different periods of gestation. This patient was a strong, stout, robust country woman in good health, except for occasional attacks of asthma and some digestive disturbance for the past two years.

I saw this patient at 2 p. m. She had been in labor since 6 a. m. Waters had broken at 11 a. m. but pains were very irregular and ineffective. Examination showed a large pendulous abdomen, irregular in outline and foetal heart sounds, heard best above and slightly to right of umbilicus. Further external manipulation showed that I was dealing with a transverse presentation with the breech nearer the outlet than the head. I immediately made an internal examination and found the cervix soft and well dilated. I then attempted to do an external cephalic version, which in this case would have been easy to do had the waters been intact, but failing in this after repeated attempts, I worked the breech down into the superior straight, which was comparatively easy, and put on a tight abdominal binder, believing the woman would go into labor immediately, which she did not do, although she continued to have slight contractions at irregular intervals of from eight to twenty minutes. She was given by mouth ten grains quinine sulphate and one-thirtieth grain strychnine sulphate at three-thirty p. m., which did not materially affect the pain and I allowed her to get up for an hour. At 4:30 p. m., I made another vaginal examination to ascertain for sure if I had succeeded in getting the breech in position to engage, finding that I had and finding the

cervix almost completely dilated, I gave her one-half c c pituitrin. I was very much disappointed in this for while I found that the period between the pains were greatly shortened the force of the pains were not materially increased, consequently there was but very little progress. At 5:30 p. m. I gave her a full c c of pituitrin with no results. I decided that the pituitrin was no good and sent for a new package, but the administration of another does at 9:30 convinced me that something else would have to be done.

At 11 p. m. I called a consultant soon after which time she was anesthetised, the presentation being a frank breech and there being plenty of room, the feet were both easily grasped, one at a time, and brought down and the child quickly delivered. The uterus did not contract afterwards, neither did it bleed, but the fundus could be outlined about two inches below ennsiform cartilage rather soft and indistinet. There being no hemorrhage I had the anesthetist stop the ether, with the idea that when she began to react there would be more contraction, but there was none. By this time about thirty minutes had elapsed since delivery of child and I had ether again given and proceeded to ascertain why the uterus did not contract and I found the beginning of placental attachment just above the internal os and on running my finger around I found the pleecental tissue almost completely eniereled the lower uterine segment and further investigation showed that it covered the entire fundus. Beginning at its lower attachment the placenta was loosened and separated until the fundus was most reached, when the fingers were carefully pressed through between pla-

centa and uterine wall and complete detachment accomplished.

The uterus now effectually contracted expelling placenta very forceably and remained contracted.

This placenta covered the largest area of uterine surface of any I have ever delivered and was in fact almost a true east of the entire uterine surface and my conclusions were that this fact explained the inability of the uterus to expel either foetus or placenta without operative procedure.

At end of operation pulse was 96 with good volume and no hemorrhage and uterus well contracted with fundus about two fingers breadth below umbilicus. Patient seen next morning at 10 a. m. with pulse 80, temperature 98.4, fundus two fingers below umbilicus, lochia normal, some after pains. Seen every day for five days with normal temperature and pulse, good appetite, normal kidney and bowel functions and regular sleep, fundus five days after delivery three fingers breadth above symphysis, no tenderness, no abdominal pain or rigidity.

I informed patient and her nurse that I possibly would not return for two or three days, that she was all right and if they needed me to call. She laughingly remarked that if I did not return for several days that I would most likely find her in the kitchen.

The next morning I received a hurried telephone call to come to her at once, and when I arrived about twenty-five minutes later, she was dead. The nurse explained that she called for the bed pan and in using it she lifted her body slightly as she had been accustomed to do, and she began to smother and breathe hard. She let her down immediately and gave her some aromatic spirits of ammonia. ran to the telephone to call me, and on

her return to the bedside, the patient was dead.

I have my own idea as to what caused this unexpected death, but would like to have expressions from the members present in a discussion of the case before I give my opinion, which I will be glad to do at the end of the discussion.

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## NEEDS OF THE MEDICAL SERVICE

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*By Robert E. Noble, M. D.*

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Colonel, M. C., U. S. Army, Chief, Division of Personnel, Office of Surgeon-General, Washington, D. C.

Address, Public Session, Southern Medical Association, Eleventh Annual Meeting, Memphis, Tenn., Nov. 12-15, 1917. Reprinted from Southern Medical Journal by request of Maj. J. E. Cannaday, M. R. C.

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At the 1916 meeting of the Southern Medical Association, in Atlanta, I had the privilege of reading before the Surgical Section of the Association, a paper on "The Relation of the Medical Profession to Medical Preparedness." The closing paragraph was to the effect that "on the medical profession rests a heavy responsibility, for with the medical profession rests the subject of medical preparedness. The country was then at peace; there was but an academic interest in the question; the profession was not awake, nor was the need of the hour apparent to the Nation until war became inevitable. The Reserve Corps first organized in 1908, languished year after year until in November, 1916, there were but 2,026 officers in the Corps and 657 additional approved applications, a

total of 2,683 actual and prospective medical officers. Included in this total were the physically unfit and those over the military age; transferred from the old organization to the present Corps without examination. These 2,683 Medical Reserve officers, if all were physically fit, were sufficient for an army in the field of only 268,300 fighting men, and this in the day of armies numbering millions. The Medical Department circularized the profession, appealed through the medical and lay press, and its officers addressed meetings of medical men, but there was not that response to those appeals that we so earnestly wished. The fault was probably with us rather than with the profession. Late in January and in February of this year it became evident that the country would be inevitably drawn into the war. The profession realized this at once and the response has been generous.

Today there have been recommended for commission 17,653 qualified practitioners. Of these, 1,251 have declined to accept; 228 have been discharged from the service; 1,621 have neither accepted nor declined; and 14,533 have accepted and are available for assignment, a number sufficient for an army of 1,500,000 men in the field. One may say that with this number of medical officers, about equal to the total practitioners in the State of New York, that the service is amply equipped for any demand that may be made upon the Department. This is not the fact—for in war we need medical officers, more medical officers, and yet more. The minimum should not be less than ten medical officers for each thousand men under arms; and in addition we should have available an unlimited Reserve. We not only must provide for medical officers with tactical units, but



must supply ambulance service, field, and evacuation hospitals, hospital trains, base hospitals, hospital ships, convalescent, and general hospitals; and now is introduced a new type of hospital, that for the reconstruction of the wounded, the rebuilding of men, a work that requires time and skill, the combined patience and the co-operation of both the men and the surgeon. We must re-educate the reconstructed so that they will be able to earn a livelihood. This is a duty that the Government owes its soldiers and a duty that can be fulfilled only through the help and co-operation of the medical profession. This rebuilding of men has more than an economical side; there are the sociological and political sides that must be considered. We can no longer feel that the Government has fulfilled its obligation when a man's life is saved; we must place the individual in such physical condition that he can become a producer. To accomplish this we must give the best that the profession has in order that when the war is over and social and political conditions are again normal, each of those who have been wrecked by war and rebuilt by your skill will feel that in his case the Government has done its full duty; that he has received the best that the profession could give; that there was no want of sympathy, no neglect; that everything humanly possible was done to make him a useful productive member of the body politic. Failure to meet these requirements will develop unrest and resentment against the Government that may be far-reaching in its effect.

We may dream dreams of a Utopian service, but only by the co-operation of the profession can such dreams be realized. We have such an abiding faith in the profession, its skill, its willingness

to give, in its ideals of duty and in its patriotism as to believe that the highest hopes will be realized, and when the war is ended the profession will be accorded its rightful share of credit for a success not only on the field of battle, but credit for a far more brilliant success, the salvage of men. It will be asked how can this be done? It can be done by having at the command of the Department an adequate medical service. An adequate medical service does not merely mean a sufficient number of medical officers to fill certain definite positions authorized by the Tables of Organization; it means the mobilization of the medical profession of the country, the selection of the one man in the profession for the one particular place that that man is best qualified to fill, and by that I do not mean the qualification is to be determined by any individual, but the selection is to be made by men of the profession who sit in judgment. For this we now have in the office of the Surgeon-General many of the distinguished men of the country each in charge of or associated with some particular branch of this work. These specialists will select and recommend to the Surgeon-General the man most fitted for a particular duty. This work is hampered because of the fact that we have as yet been unable to mobilize the entire profession. We should commission in the Reserve every man of the profession in the United States who is a graduate of a well-recognized medical school, and is physically, mentally and morally qualified. Today but 10 per cent of the profession is available for assignment. Many of these officers are among the most distinguished in the profession. but their number is too few to permit the selecting of the one man for the one particular place that could be best filled

by that man. The profession has given, but it must give more, and yet more. It must be mobilized—not as individuals but as a whole; otherwise the best results can not be accomplished. So it is just as true today as a year ago that “on the medical profession rests a heavy responsibility, for with the profession rests the subject of medical preparedness”.

The question naturally arises, with the relatively large number of officers in the Medical Reserve Corps, to say nothing of the Medical Corps of the Army and National Guard, what have you done to make the best use of the material on hand? You have 531 medical officers in the regular service, and 1,460 in the National Guard in addition to the 14,553 Reserve officers. Here is a total of 16,544 medical officers. Why more? These are fair questions. We have organized training camps for officers and enlisted men, trained 9,000 Reserve officers in these camps, divided them into regimental sanitary units, organized sanitary trains, supplied the staffs for base and general hospitals, created laboratory sections, operating units (not a part of the staffs of base and general hospitals), selected the personnel for the reconstruction hospitals and assigned them for special training in their professional duties in both the United States and with the armies overseas, and have filled requisitions for medical officers for some of our allies. In this way we have today more than 12,000 Reserve officers on active duty. Of the 2,000 officers remaining on the inactive list a number are far above the age limit for military service. having been transferred from the old Medical Reserve Corps; others are teachers in medical schools and cannot be assigned to duty without manifest injury to the future of the profession, and some

are practitioners in rural communities who cannot be called into the service without depriving these communities of medical aid. While the number of medical officers is sufficient for today, what of tomorrow? Without additional medical officers what of the great number of reconstruction, base and general hospitals that must be created, the staffs of which must be the best the profession can give? What of the demands that will inevitably be made on this country for medical aid? These demands cannot be met unless the profession is mobilized as a profession, and it will be the duty of the profession so to mobilize. It is the duty of the profession to teach the people of the country that an adequate medical service, a service not only adequate in numbers but adequate in skilled specialists, is an economic factor in war of the first importance. An adequate medical service means the salvage of men—the saving to the country of thousands of lives that would otherwise be uselessly sacrificed. It means making whole the wounded, lowering the incidents of disease and the death rate from sickness. An adequate Medical Corps means the profession, and by this I mean the voluntary offering of itself as a profession, say to the Government, “take from our number the man most fitted for the special duty to be performed.”

What preparation is being made? There is much that can not be told, but preparations on a vast scale are under way. Hospitals of from 500 to 1,000 beds have been erected at National Guard and National Army cantonments, thirty-two in number. General hospitals have been established, as have hospitals at the ports of embarkation. Camps in which are more than 1,000,000 men have been made healthy. By co-operation with the civil

authorities extra cantonment areas have been cleaned and are now moral as well as healthy, supply depots established, and requisitions for medical supplies have been promptly filled.

The hospitals have been manned and equipped, and the chiefs of service are men of more than local reputation. In brief, the Department has so far met every demand. But as to the future, the hospitals so far established are but few in comparison to the number that will be demanded. We must establish and maintain a double system of hospitals, one for the care of the sick and wounded in Europe and the other for service in this country. It is not our policy to return all sick or wounded to the United States, but to bring only those who can not be returned to their organizations within a reasonable time. To do otherwise would be a hazardous practice requiring the running of the "U-boat" gauntlet three times instead of once. It would also result in that curse of all armies, military absenteeism.

The hospitals in this country will be of general types, convalescent and reconstructive, while in Europe we will maintain the most extensive hospital system that this country has ever established; equipped with all necessary appliances, and with professional staffs as skilled as any in our civil hospitals. This can be done with credit if we can mobilize the profession; we can then utilize it to the best advantage and without working a hardship upon the civil population, the needs of the city and rural community being safeguarded.

War is the most fearful thing that can come to a people. But its horrors can

be lessened by an adequate medical service. The knowledge that a medical service chosen from the profession, a voluntary draft, the giving of the profession of its best without reservation or stint, will be a comfort to those at home and a tower of strength to the soldier who knows that, sick or wounded, the best brains and skill of the profession will be devoted to his care. This is the kind of service we want and the service we must have.

What of the profession in the South? It must be understood that no section with few cities, many small towns, and with a large rural population, can give in the same ratio as populous cities. But, measured by its ability to give, the South has given liberally.

For example, with but 10 per cent of the profession in the Reserve Corps, Florida has given 16 per cent of her qualified practitioners.

COMMISSIONS IN M. R. C. RECOMMENDED BY SURGEON GENERAL

States	Med. Pop.	Nov. 1	Per Cent
North Carolina .....	2,102	309	14.7
Kentucky .....	3,584	514	14.3
Alabama .....	2,658	285	11.1
Louisiana .....	2,060	229	11.1
Texas .....	6,240	695	11.1
West Virginia .....	1,729	190	10.9
Mississippi .....	2,048	223	10.8
South Carolina .....	1,399	147	10.5
Virginia .....	2,547	268	10.5
Oklahoma .....	2,634	272	10.3
Georgia .....	3,421	346	10.1
Tennessee .....	3,457	108	8.9
Arkansas .....	2,637	158	6.0

And by cities Memphis is first with 23.3 per cent of her medical men in the

Medical Reserve Corps. Other cities are as follows:

Cities	Med. Pop.	Nov. 1	Per Cent
San Antonio .....	234	47	20.1
Baltimore, Md. ....	1,348	257	19.0
Richmond, Va. ....	330	61	18.4
Nashville, Tenn. ....	344	63	18.3
Birmingham, Ala. ....	303	53	17.5
Atlanta, Ga. ....	553	85	15.4
Dallas, Texas .....	312	48	15.4
New Orleans, La. ....	630	97	15.4
Louisville, Ky. ....	626	86	13.7

These percentages are based upon the total number of registered practitioners in each state or city. As generous as these percentages are, the offering must be greater. The Government must be able to select the man for the place, and when that man's services are needed they must be available. This is not the time to say "I will be glad to accept a commission as a Major if I can be guaranteed that I will not be required to serve away from my home town," a remark which has been made by a few. As the Department cannot guarantee that the war will be fought in that particular neighborhood the offer of service cannot be accepted.

This war is the most atrocious ever waged, but for us a necessary war, a war that will require the co-ordinated efforts of the allied nations to win. To lose means a world in arms for generations with the daily menace of other wars.

The sacrifice of life has been enormous; how great no man can tell. Now we are taking up our burden of war and must like men bear this burden until the end. You of the profession can lessen the horrors of war, can lend comfort to the minds of families of the soldiers offering your services, by being enrolled in the Reserve and standing

ready to respond to a call for service. This war will tax the Nation's resources to the utmost and the profession is one of its greatest resources. The medical service is the great conserving agency of war, and without the full and voluntary co-operation of the profession the ultimate benefits of this great agency cannot be had. The country needs you, possibly not today, but tomorrow; so today put your services at the disposition of the Government for the morrow. For it is as true today as in the past that medical preparedness rests with the profession, not as individuals, but as a whole. The time is now.

#### TRAVEL NOTES

*A. P. Butt, M. D., F. A. E. E. Elkins, West Virginia.*

Charity, Presbyterian, French, Touro and Hotel Dieu seem to be the only hospitals of note in New Orleans.

Charity Hospital, is, of course, the great surgical landmark. There are between 1100 and 1200 beds, all free. Over 1800 deaths per year; over 100,000 deaths have occurred in this institution. The usual rate of mortality is between 10 and 11 per cent. Taking into consideration the character of the patients entering this hospital this is probably a very fair record. The old, the very poor, the vicious, those whom (apparently) God has forgotten are seen in large numbers. Alas they are by no means all of this class, one sees many who should not be there, many who, in my opinion, were attempting the almost impossible, trying to beat the game, to get something for nothing. One in particular impressed me, he was a farmer and we all know that farmers are on easy street just now. He shared the attentions of one night nurse with 35 other patients and 17 others during the

day. "Peritonitis," when the almost inevitable occurred a visiting doctor said "God knows it is bad enough at best why try it under unfavorable circumstances in order to save a few dollars." The large death rate among the almost outcasts who come to this hospital, and the liberal laws of Louisiana make it probably the best place in America for necropsies.

To attend surgical clinics in New Orleans one must get up early. Some of the nose and throat men start at 6:30. Dr. Souchon, the younger, seems to be the earliest general surgeon. He often starts at 6:45. Dr. Souchon impressed me as a rapid, skillful, painstaking surgeon. I was so impressed with his attention to little details, such as the application of a collar of gauze, after removing a large carbuncle from the neck of an old diabetic, that I said: "Doctor I will pay you the greatest compliment I know by saying that you did that like Joe Price would have done."

The more surgery I see the more I am impressed when a surgeon arranges his towels, dressings, packing, etc., after some definite prearranged plan. It shows that he knows just what he wants and how he wants it. Never can I forget the beautiful way in which Price applied his dressings after a vaginal hysterectomy. Undoubtedly many good surgeons are careless along this line but I do not remember seeing any surgeon do these things artistically and the operation slovenly.

Some years ago a reporter in New York interviewed a number of noted men and asked them of what they were most afraid. The only answer I remember was this: "Of being late." Had this question been propounded in New Orleans I feel sure Dr. Souchon would have given this answer. "Absolutely no excuse goes with me when my as-

sistants or nurses are late, they have no difficulties that I do not have, if I am on time they must be," said he, as we hurried from the French Hospital to Hotel Dieu. Promptness always impresses me as I too belong to that restless class who must be on time. I hardly know if I want my boys to belong to this class, it uses up so much energy; then one is so dog-gone lonesome, he has so little company.

While one is naturally on the lookout for the good things the errors, or apparent errors, sometimes more apparent than real, are instructive also. At one place I saw a good surgeon put a whole lot of iodoform gauze in an abdomen following the emptying of an appendiceal abscess. I was under the impression that this was wrong and supposed it had been stopped years ago, therefore I jotted his name and ward location down for future observation. He seemed to be doing fairly well, nurse said he was, chart looked fairly good; I began to fear for my prognosis. In about a week he developed a fecal fistulae and in a day or so was dead.

Those of you who have read that most interesting book, Doctors vs. Folks, by Dr. Morris, will remember the following incident. One very bad night Dr. Morris was called up on the phone and asked to see a young man who had been operated on a few days previously by another surgeon. He demurred but finally the father said, "Come and if your bill is \$10,000 I will pay it." Dr. Morris went, he found a condition of ileus and iodoform poisoning due to packing with gauze. He advised the surgeon in charge to anesthetize the patient, remove the gauze and iodoform by means of olive oil. Morris went home to bed, his directions were carried out and the young man recovered. Dr. Morris rendered a bill of \$75.00. The father

refused payment, saying he, Morris, had done nothing, that the work was done by another.

I am reminded of Babcock giving something like this as an aid in differentiating between sepsis and iodoform poisoning. If the patient looks bad and is bad, sepsis; if he looks good and is bad iodoform.

Another case in which I expected a bad result was in a young buck negro who fourteen months before had broken his femur, union faulty.

A Lane plate was applied. Now I regard this as difficult work, especially in the muscular. The surgeon was a young man who evidently had not had a large experience, his assistants were not very skillful, his instruments were faulty and lacking. I noted the patient's name and ward and looked for trouble but not such as followed. He was dead in three days. Some of us rather hoped to find a pneumonia but such was not the case. There was some suspicion that gas gangrene was present.

Now I am satisfied that this man's operative wound should have been widely opened up, flushed out with peroxide, then with permanganate, then continuous flushing with Dakin solution. Possibly complete excision of the involved muscles. Candor compels me to admit that I might not have done this, we always hope for the best and oftentimes keep hoping until it is too late.

It seems to me it takes more courage to do these things than almost anything I know of. The effort is so often useless, the effect on the family usually bad that it takes nerve and above all conscience. I know of one surgeon who made an incision almost if not quite the entire length of the abdomen in a perfectly desperate case of sepsis. Left everything exposed to the air. Recovery.

By the way I got the impression that Dakin solution is not used to any extent in New Orleans. I may be wrong about this.

About the time this darkey was operated on I heard a young (note the adjective) army surgeon say: "That is the way to do it. All fractures should be operated." At this time a group of perhaps fifty M. R. C. men were taking a course under Dr. Matas and others.

Dr. Matas impressed me as being a fine teacher with the proper judicial temperament. Treatment of wounds, amputation, artificial limbs and kindred subjects entered largely into their teaching. I was under the impression that amputations were now being done with removal of half inch of the medulla and half inch of the periosteum. This was not the teaching given them by some surgeon whose name I now forget. Perhaps like other new things its value has not been proven. I have done a couple this way but have not looked them up to see the end result.

Dr. Matas had a number of men present who were wearing artificial limbs. Some one asked the price and the length of service. Price from \$100.00 to \$240.00, length of service from one to five years.

Doctors please take notice—not one of you with any considerable experience who has not been confronted with this problem, "shall this limb be amputated or shall I attempt to save it?" Perhaps other and just as good men have said it must come off, the patient wants it off, the family are willing. Nevertheless your judgment says it may be saved.

You do save it, it lasts for 50 years, it is wonderfully better than any artificial limb ever could be but you don't get the price of a piece of wood that

lasts from one to five years. For this exercise of your judgment the Workmen's Compensation may allow you \$15.00. I have absolutely saved several such limbs and never yet gotten for my work the price of an artificial arm. Oh! it is a grand and glorious calling we are engaged in. Always remember this, however, it is our fault, not the fault of others. The public will put the value upon our services that we demand, no more.

As in numbers are gall-bladders and goiters at Mayos so are pus tubes and hysterectomies in New Orleans. Practically all the tubes are operated in the cold stage with which practice I heartily agree. The hysterectomies are often complete (pan hysterectomy) without, so far as I could see, any good reason for this procedure. I asked a surgeon if any special effort was made to cleanse the vagina previous to such operations. He said not. I then asked if he did not regard the danger of sepsis through the vagina as a real one. He hesitated, then said they did have a considerable number of pelvic inflammations following such operations.

In conversing with another surgeon concerning the Mayo operation for prolapse I said that I had been somewhat deterred from doing this operation for fear of sepsis. That while it was true that the same structures were opened in other vaginal operations, such for instance as vaginal hysterectomy, yet here there was abundant drainage whereas in the prolapse operation there was no such drainage. Also that we probably could not cleanse the vagina thoroughly. After thinking for a moment he said, "Well it is a fact that we have had two or three deaths following this procedure." He told me they had had a couple of deaths from embolus following lipectomy. On this account they had stop-

ped doing these operations. I have been interested in this operation and have occasionally done it but I am liable to have a death from embolus following an uncomplicated lipectomy I shall hesitate in future before tempting such a calamity.

I saw the La Place operation, for the prevention of hernia, a few times. I do not know how new or how old this is but I had never seen it and perhaps this is true of others. In pus cases where from the size and number of drains necessary, and other associated conditions, it seems inevitable that hernia will occur. The edges of the peritoneum and skin are sewed together. Later, usually in three or four weeks, when healing has taken place a secondary operation is done and the wound sewed up in the usual way. My criticism of this would be that one could hardly tell when hernia would occur, surely most wounds escape also that the secondary operation would have to be done in a field necessarily contaminated to some extent.

One is struck with the sameness in the technique seen in New Orleans, Practically all make median incisions; all use Balfour retractors; all use Hagar's needle holder; all use round non-cutting needles for fear of haemorrhage; all use silk-worm gut; all tie, tie, tie. It would seem impossible for any one to bleed after an operation there.

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## ANNOUNCEMENTS AND COMMUNICATIONS

April 5, 1918.

The Editor,  
West Virginia Medical Journal,  
Huntington, W. Va.

Dear Sir:

In view of the reports in current medical literature of untoward results from the use of arsphenamine and neoarsphe-

namine, I have to request that you give publicity to the statement that it is requested that samples of any lots of these arsenicals which have shown undue toxicity be forwarded to the Hygienic Laboratory for examination.

In sending these samples it should be ascertained that the lot number is the same as that of the ampoules used on patients. The samples sent should, if possible, be accompanied by a brief note stating the approximate body weight and age of the patient, the dose and dilution of the drug given, the symptoms and result; that is, whether fatal or not.

Respectfully,  
G. W. McCOY, Director.

Editors,  
West Virginia Medical Journal.

In cleaning up my mail I came across the enclosed letter from the State Tax Commissioner of last January, and as it may be of some service to some forlorn and shipwrecked brother in the diverse seas of the law, I send it. Because by the power of congress, or through the ipse dixit of the Internal Revenue Department, alcohol has been ruled out as an internal resource in the medical art, yet that does not deprive it of its ancient virtues.

The ruling of the United States in denaturing or virtually poisoning alcohol applies to West Virginia but our Commissioner rules superior to the National Government. That is when a doctor prescribes alcohol for internal use the druggist must not denature it.

But the average druggist obeys the National law rather than the saving clause of the West Virginia prohibition law.

The science of medicine in the United

States has fallen into much disrepute when a body of non-medical men say what remedy is, or is not official, or tamper with pharmacology.

Certain medical men yet think there is virtue in the internal use of alcohol, and some of them prefer pure ethel alcohol to whiskey.

If a West Virginia doctor desires to prescribe grain alcohol he has the permission of the West Virginia Commissioner, but if he thinks the National law is over State laws, the same for which his grandfather, or father fought, he cannot legally prescribe alcohol by the mouth.

THOS. R. EVANS, M. D.,  
Acme, W. Va.

April 2nd, 1918.

January 4, 1918.

Dr. Thos. R. Evans,  
Acme, W. Va.

My dear Sir:—

I have your letter of January the 3rd.

I am sure that you will agree with me that the regulations prescribed by the Internal Revenue Department regarding the sale of alcohol by druggists, would in no sense affect the law of this state regarding the sale of alcohol; consequently, we shall expect the druggists of this state to pay strict regard to the provisions of the state law, affecting the sale of alcohol.

Thanking you for your very cordial letter, and extending to you my kindest regards, I am,

Very truly yours,

W. S. HALLANAN,  
State Tax Commissioner.



WAR DEPARTMENT  
Office of the Surgeon General  
Washington

March 27, 1918.

Memorandum to Editors of Medical Publications:

Attention is directed to the inclosed memorandum issued by this office to medical officers of the Army.

The large number of medical officers recently joining the medical department direct from civil life, and unfamiliar with the army regulations governing the publication of scientific papers, has resulted in a number of papers being published in various journals without authority from this office.

Editors of medical publications are requested to cooperate with this office in impressing upon medical officers the necessity for compliance with the inclosed memorandum.

It is requested that papers received from medical officers in the service which do not show that they have been referred to this office, and authority for publication granted by the Surgeon General, be forwarded direct to this office in order to obtain this authority.

In authorizing the publication of a paper this office does not necessarily signify its accordance with views or opinions expressed therein. It is, therefore, requested that editors refrain from appending any note or legend expressing the formal authorization of this office.

By direction of the Surgeon General:  
(Signed) C. L. FURBUSH,  
Lieutenant Colonel,  
Medical Corps, N. A.

Memorandum to Division Surgeons:

1. Attention of medical officers is directed to the provisions of paragraph

423, M. M. D.—“Medical Officers will not publish professional papers requiring reference to official records or to experience gained in the discharge of their duties without the previous authority of the Surgeon General.”

2. Numerous scientific papers written by officers of the medical department have recently appeared in the medical press without specific authority from this office. This practice will be discontinued, and the above regulation will be strictly complied with.

3. Officers desiring publication of professional papers will submit two copies to the Surgeon General with request for permission to publish same. Upon approval, a copy will be forwarded to the journal designated by the officer for publication.

By direction of the Surgeon General:

C. L. FURBUSH,  
Lieutenant Colonel,  
Medical Corps, N. A.

From the Surgeon General.

To Editor, West Virginia Medical Journal, Huntington, W. Va.

Subject: Medical Reserve Corps.

1. I wish to call to the attention of the professional at large the urgent need of additional medical officers. As the war progresses the need for additional officers becomes each day more and more apparent. Although the medical profession of the country has responded as has no other profession, future response must be greater and greater. The De-

partment has almost reached the limit of medical officers available for assignment.

2. I am, therefore, appealing to you to bring to the attention of the profession at large the necessity for additional volunteers. So far the United States has been involved only in the preparatory phase of this war. We are now about to enter upon the active, or the fighting phase, a phase which will make enormous demands upon the resources of the country. The conservation of these resources, especially that of man-power depends entirely upon an adequate medical service. The morning papers publish a statement that by the end of the year a million and a half men will be in France. Fifteen thousand medical officers will be required for that army alone. There are today on active duty 15,174 officers of the Medical Reserve Corps.

3. Within the next two or three months the second draft will be made, to be followed by other drafts, each which will require its proportionate number of medical officers. There are at this time on the available list of the Reserve Corps, an insufficient number of officers to meet the demands of this draft.

4. I cannot emphasize too strongly the supreme demand for medical officers. Will you give the Department your assistance in obtaining these officers? It is not now a question of a few hundred medical men volunteering for service, but it is a question of the mobilization of the profession that in the

large centers of population and at other convenient points as well as at all Army camps and cantonments, boards of officers have been convened for the purpose of examining candidate for commission in the Medical Reserve Corps of the Army. An applicant for the Reserve should apply to the board nearest his home.

5. The requirements for commission in the Medical Reserve Corps are that the applicant be a male citizen of the United States, a graduate of reputable school of medicine, authorized to confer the degree of M. D., between the ages of 22 and 55 years of age, and professionally, morally and physically qualified for service.

6. With deep appreciation of any service you may be able to render the Department, I am

J. C. GORGAS,  
Surgeon General, U. S. Army.

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Dr. James R. Bloss, Editor,  
West Virginia Medical Journal,  
Huntington, W. Va.

Dear Doctor:

I have recently been advised by the Medical Section, Council of National Defense, that the Surgeon General has recently issued, of date of April 2nd, a new appeal for physicians to enroll for war service. As matters now stand there are thirty-one states who have contributed a larger percentage of their physicians to this service, than West Virginia. It is to be hoped that many who have not yet felt the call will come for-

ward and offer their services. Physicians who do enroll are advised not to relinquish their practices until informed by the Surgeon General's office that they are soon to be called into active service. It has been the policy of the Surgeon General's office to allow each physician fifteen days' notice in order that he may have time to arrange his affairs. There is a very great need for physicians and surgeons for work in connection with the war. This need will continue as more and more troops are drafted for the National Army.

There is need for a number of women bacteriologists for the cantonment laboratories. The aim of the Surgeon General's office is to as far as possible, send the present bacteriologists abroad for service in the hospital cantonments in France and to fill as far as possible, their places in the home cantonments by women who have had good bacteriological training. Application for this service should be made to the office of the Surgeon General, War Department, Washington, D. C.

Yours very truly,

J. E. CANNADAY,

Charleston, W. Va.

April 15, 1918.

Dr. James R. Bloss, Editor  
West Virginia Medical Journal,  
Huntington, W. Va.

Dear Doctor Bloss:

I note in the Journal of A. M. A. date of April 13th an appeal from the Surgeon General for more doctors. He states that 5,000 additional applications

for the Medical Reserve Corps are needed immediately. The same number of the Journal also calls attention to the fact that there are more than 600 vacancies in the Army Medical Corps. Enclosed find copy of a telegram just received from Major Simpson, who is Chief of the Medical Section, Council of national Defense.

Sincerely yours,

J. E. CANNADAY,

Major Medical Reserve Corps.  
Charleston, W. Va.

Washington, D. C.,  
April 13, 1918.

Dr. John E. Cannaday,  
Capital and Virginia Streets,  
Charleston, W. Va.

An urgent need exists for several thousand additional medical officers in the Army and Navy. Some for immediate work, some for training and others to be held in reserve. Please urge your state and county committees to speed up enrollment as effectively as possible.

F. F. SIMPSON.

Dr. R. Hardwick, of Huntington, is in New York, where he will spend the coming two months studying in the Polyclinic school of that city.

Dr. W. E. Whiteside who, previous to his receipt of a commission in the M. R. C. as a lieutenant, was located at Harrisville is now stationed at Fort Myer, Va.

# The West Virginia Medical Journal

JAS. R. BLOSS, M. D., EDITOR

G. R. ENSLOW, M. D.

J. E. RADER, M. D. ASSISTANT EDITORS

Huntington, W. Va., April, 1918

THE JOURNAL issued on the first of each month.

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All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

## CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

## ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

## REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: United Woolen Mills Building, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

# Editorial

## Care in Diagnosis and Treatment.

In this issue appears a paper by one of our members, Dr. A. H. Hoge. It is upon a timely subject and contains some excellent advice.

When reading his copy before delivering it to the printer, the particular points "make a correct diagnosis and then know your remedies" caused us to pause and take a mental inventory.

I wonder how many other localities in this State have the problem of chiroprac-

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tors, health healers, et cetra ad nauseam, beside Huntington? I am sure that we are not alone in this matter. How many, many times has this come up in our county society for a "threshing out" The attention of the authorities has been called to it time after time. Yet the condition of affairs remains unchanged. Action, it seems, can not be gotten to enforce the law.

All this aside, however. Why do they exist, persist and flourish? This paper has made the writer wonder, can it be that WE are to blame? What is the matter that sick persons will leave us

“regulars” and go to the “irregulars”!

Certainly we are all familiar with the weaknesses of human nature and know how these irregulars prey upon those coming within their clutches. But I wonder if not every person going to them has not at one time or another been the patient of some one of our members?

How easy it is to grow careless. We are busy; the office may have several waiting; we must be at a directors meeting or attend church. We do not take the time to find out the things necessary to make a correct diagnosis. This is particularly true in cases of chronic diseases or in obscure conditions. They come back time after time and get no permanent relief. Then they leave us for another physician, him for another until they are “floaters.” Then we get sore at the irregular because he tries to do anything. If we carefully examined into the “cures.” (I mean one’s that stick) of the irregular we should find that Suggestive Therapeutics is to be given the credit.

We should know this and apply it ourselves. How can we if we have just made a slipshod diagnosis? There really isn’t such a tremendous lot of difference in the ability of physicians, but there is in the personalities. One of the best diagnosticians and physicians of the writer’s acquaintance is not so very much better off, if any, in the way of mental equipment than the average, but heavens! how careful and painstaking and time consuming he is. There is his success.

Think this over.

#### REPORTING VERNAL DISEASES.

For a number of years there has been more or less agitation concerning the making of Gonorrhoea and Syphilis reportable along with the other infectious and contagious diseases. Physicians

have not, as a rule, been interested in this. We can not believe that this indifference has been from a selfish motive but from a desire to protect the reputations of our patients.

Whatever may be the motive we must realize that the time is close at hand when State Boards of Health will require that these be reported. It is certainly just that this should be done. In the same connection should be the requirement of a certificate of health before the issuance of a license to marry.

Most of us deep inside will agree upon these measures. Those who have daughters, especially. Very few would be a willing party to a daughter marrying a man, regardless of his family standing and financial rating, with the prospect of a Salpingectomy or luetic off-spring just around the corner to say nothing of Ophthalmia Neonatorum and all the rest of the distressing possibilities for the future of the innocents.

In our opinion an unreported case of either of the above diseases is potent for far more evil to the community than one of Smallpox, Measles, Whooping Cough and the others now made reportable.

Below follow some abstracts from “Public Health Reports for January, 1918, showing a few of the measures adopted by various Boards of Health. They are pretty stringent and the punishments drastic. I have an idea that the organized profession in these communities will have a rather hard fight to control the practices of what may be styled “Blind Tiger Quacks” in these localities. These laws are certainly just ones and it is to be trusted that they shall be enforced without fear or favor.

In New Jersey, persons knowing themselves to be diseased, who marry, are guilty of a misdemeanor.

In New York a person must go before

a town or city clerk and swear that he has not been infected with any venereal disease, or if he has been so infected within five years, that he has had a laboratory test within that period showing him to be free from any such disease.

In Ohio, physicians are allowed to inform the other party contemplating marriage that the first party is infected with the disease.

In Oregon, before a license is issued, the male party must bring a sworn statement from a physician showing that he is free from infectious venereal disease.

In Vermont a person who having been told by a physician that he was infected with gonorrhea or lues, and marries without the assurance and certification that he is now free from infection, is liable to a fine of \$500.00 or imprisonment for two years.

In Wisconsin all male persons within 15 days before application for a marriage license, must be examined by a physician as to the existence of venereal disease by recognized clinical and laboratory tests.

Public clerks who fail to file such reports, which must be kept secret, are liable to a fine of \$100.00, and any physician making a false statement shall be fined not more than \$100.00 or imprisoned for six months, or both.

We now find that many States require notification from the Board of Health and are very stringent in the matter. For example, in California the physician is fined \$500.00, or imprisoned, or both, for not reporting a case and also the source of infection. In Chicago notification must be within three days and the patient must be given a circular of information regarding his trouble.

If a patient wishes to change physicians he must first notify his first medical advisor and if he should be absent from treatment longer than ten days, the

first physician must, by law, report him to the Board of Health.

In Iowa, New York City, North Carolina, Philadelphia, Vermont and Wisconsin such cases must also be reported and the same is true in Ohio, though as yet it is not so rigidly enforced.

In Kansas the Board of Health must be notified and the patient is given a number which corresponds with a serial number on the circular of information which is furnished him by the State.

These are simply a few examples of what the legislature of the different States are doing along these lines, and we hope to report further typical cases later.

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Let us insist that the members pay their dues to their Secretaries at once. Then, Mr. Secretary, please send the names in to Dr. Anderson at once. To date only a few more than four hundred names have been sent to me by Dr. Anderson. The mailing list contains for the month of April nearly one thousand names of members. If these men are dropped it will cost about ten dollars more in postage to send them their journals separately, when they begin to write in raising the dickens about not receiving them. Remember, too, that the cost is much greater for each additional hundred journals published.

So please send that check in at once.  
AND BE SURE YOUR ADDRESS IS CORRECT.

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## Society Proceedings

Dartmoor, W. Va.,  
April 20, 1918.

Dr. J. R. Bloss, Editor  
West Virginia Medical Journal.

Dear Doctor:

As we have had so little of interest to report from our Society, we have de-

ferred writing recent proceedings from here.

We held our April meeting on April 17, in Elkins, and had a larger attendance than usual. Dr. Butt, our president, prepared the program, and took special pains to secure attendance, writing personal letters to each member, urging attendance. Notwithstanding this appeal, several who were on the program did not appear. We held two sessions; one in afternoon and one in evening.

The following members were present: Drs. Butt, Fredlock, Gruber, Irons, Moore, S. G., Bosworth, A. S., McIntire, Birdsall, Talbott, Arbuckle, Updike, Hall, Perry, Wilson, and Golden.

Dr. Butt presided, under suspension of rules. Dr. C. W. Birdsall, of Weaver, W. Va., was elected a member of the Society.

On motion, it was ordered that the Secretary keep in standing by paying dues, all the members of our Society, who have been called to army service.

Dr. A. M. Fredlock read an excellent paper on "The Elkins Situation, the Past Three Months," in which he dealt with the typhoid fever epidemic, which has been quite prevalent in Elkins, for some time. He attributed the cause to water pollution, most probably from cases up the river from Elkins, and the neglect of the proper use of the Chlorinating apparatus, by keeping it in a working condition. I herewith send Dr. Fredlock's paper, for the Journal.

Dr. A. S. Bosworth read an excellent paper on "Epidemiology of Typhoid," which paper he has promised to rewrite, to correct, for the Journal.

Dr. S. G. Moore did not have a paper, but gave a good talk on "Diagnosis of Typhoid," and in the absence of Drs.

Murphy and Hamilton, embraced Symptomatology and Prognosis.

The subject of typhoid fever was then discussed by all present, and the Surgery of Typhoid, was discussed by Dr. W. W. Golden, this feature being in the main limited to operations necessary from intestinal perforations, which are often very difficult to diagnose, in early stages, and critical owing to physical conditions for successful operations.

Dr. Moore holds that typhoid cases having persistent diarrhoeas, are most liable to hemorrhages, and on the contrary, when constipation is present, there is much less likelihood of hemorrhages.

Dr. Butt especially condemned the careless use of the clinical thermometer, as it may and often does, no doubt, carry infection. He does not believe a thermometer should be used on different cases.

The matter of diet was especially discussed. Some do not think feeding is essential, while others deem it quite necessary. Most, however, hold that fresh butter-milk is the ideal food.

At the evening session.

Dr. Butt gave a resumé of his efforts to bring a new life into the hitherto lethargic society, and what had appeared to be the immediate result. He then called upon each member for reasons for their indifference, and to give a remedy.

Here are some of the reasons given for lack of interest. Want of interest and lack of appreciation of the good obtained.

The agitation of the war, all over the country, was too absorbing.

The Society did not uphold its members, especially against the irregulars and illegal.

Work, such that cannot attend, too far from meetings, too busy in practice,

too youthful in profession to take active part; factionalism in the Society. Some had no excuse, while one held that the programs were not such as to command interest.

The remedies suggested were: Redoubling of efforts of all the members; forgetting factional difficulties of the past, and cooperative efforts for the present and future, and an educational campaign to teach the public the real value of medical societies so that they may not keep physicians from the meetings, but rather urge attendance.

Dr. Golden reported a very interesting case of a rupture of the Duodenum from an injury by playing with a toy gun, the child running and striking the muzzle against a post, and the breach against the abdomen, in which there were no external evidence of injury.

Dr. Updike reported a case he had treated recently. The patient, being in advanced pregnancy, passed through whooping cough and pneumonia and a safe delivery and having also thyroiditis. Dr. Updike claims he had good results from use of inhaling fumes from unslacked lime, water and of Iodine, when nearly suffocating from pneumonia.

The Society adjourned to meet in July in Tucker County.

J. C. IRONS, Secretary.

—————  
Parkersburg, W. Va.

Dr. Jas. R. Bloss, Editor  
State Medical Journal,  
Huntington, W. Va.  
Dear Sir:

The Little Kanawha and Ohio Valley Medical Society met at the Chancellor Hotel on April 4, 1918 at 9 P. M., the President Dr. Robert L. Brown in the chair. Present Drs. Wise, Jeffers,

Stille, Miller, Bush, McGuire, Harris, Prunty and Giltner.

The minutes of previous meeting read and approved. Application for membership of Dr. T. J. McGuire was received and referred to the board of councilors. A motion was passed instructing the Treasurer to personally interview delinquent members and request them to keep in good standing.

Dr. T. J. McGuire gave a report of autopsy on a case of cancer of the oesophagus which was discussed by the members.

It was decided that the program for the next meeting would consist of practical demonstrations in blood pressure and each member was requested to bring his sphygmomanometer.

The society then adjourned.

Yours truly,  
H. A. GILTNER, Secretary.

—————  
February, 1918.

The Mercer Medical Society met in the Chamber of Commerce, Bluefield, W. Va., on February 19, 1918. President Fox presiding. The minutes of the last meeting were read and adopted.

Under Clinical Cases:

Dr. S. R. Holroyd reported a case of typhoid fever with the usual symptoms without elevation of temperature. Drs. Vass and Morton reported a similar case. Dr. B. W. Bird reported the following case:

The death of a child, cause of which was unknown. History.

Richard B. Age 3 years, 2 months, 21 days. Family history negative. Symptoms of last illness as follows: Mother called me to see her baby at once as it had fainted or had a spasm. This was at 1:10 p. m. I reached the home two minutes later and found the child dying. About one-half hour before this,



the child had eaten dinner, consisting of one softly fried egg, a glass of sweet milk and some bread and butter. Very shortly after this meal it complained of pain in stomach, quickly following this it seemingly had a convulsion and then vomited. About ten minutes after this I reached the home and found the child with no pulse, very cyanotic, irregular and fluttering heart so to speak, slow respiration and absolutely limber. The child expiring about five minutes later. I was called to see this child about ten days prior to its death and at that time it complained of abdominal pain only. The chest organs at that time were negative. I prescribed for the abdominal trouble which seemed to clear up entirely, as the mother said the child seemed very well the last two or three days preceding its death.

The secretary was instructed to ask someone in the State to give us their views as to the diagnosis of this case.

#### Under Papers:

Drs. Martin and Peters being absent were very lucky to have with us Lieuts Stout and Shedd of Washington. Dr Stout gave us a very interesting talk on the various types, diagnosis and treatments of pneumonia. Dr. Shedd spoke of the course given by the Army relative to diagnosis and treatment of the various diseases. Both addresses were very instructive, and the Society appreciated having these gentlemen with them.

There being no further business the Society adjourned to meet the third Thursday in March at the Court House, Princeton, W. Va.

E. H. THOMPSON, Secretary.

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The Mercer Medical Society met at 8 P. M., March 21st at the Court House, Princeton, W. Va., President Fox pre-

siding. The minutes of the last meeting were read and adopted.

#### Under Clinical Cases:

Dr. Peters reported a very interesting Obstetrical case which has been mailed to the Journal for publication. This case was freely discussed by the various members present.

Dr. S. R. Holroyd reported a very interesting case in a farmer 63 years old with an enlarged gland on left cheek which began to appear about ten years ago, and is now as large as a turkey egg. Dr. Holroyd is to have this patient at the next meeting for further observation.

#### Under Papers:

Dr. A. H. Hoge read a very interesting paper on: Some Observations on the Origin and Treatment of Coughs. The secretary has mailed this paper to the Journal for publication, which will appear later.

Dr. Bee later reported a very interesting Clinical case which was discussed by a number of the physicians.

There being no further business, a motion was made and seconded to adjourn and to meet in Bluefield the third Thursday of April.

E. H. THOMPSON, Secretary.

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The Mercer Medical Society met at the Chamber of Commerce, Bluefield, W. Va., April 18, 1918, at 8 p. m. In the absence of the President the Second Vice President, Dr. Becker, presided.

#### Under Clinical Cases:

Dr. H. G. Steele reported a case of Herpes Progenitalis. This case was discussed by a number.

Dr. E. W. Horton reported a very interesting case of appendicitis, which was discussed very freely.

Dr. Holroyd reported an Obstetrical Multipara Breech Presentation, extremely large abdomen, which was very diffi-

cult to deliver. After the delivery he noticed a rupture of the abdominal wall. Child died immediately. It also had Hydrocephalous.

Dr. Hoge reported a case in a primipara in which the patient sustained profound shock about forty minutes after a normal delivery. The doctor could not understand why this shock should occur, and asked the opinion of those present, but all were at a loss to understand what produced it. She reacted promptly, and there was apparently no cause for shock.

Drs. Hoge and Horton, both, reported some interesting cases of pneumonia.

Dr. Martin reported a case of small-pox taken off the Pullman car and isolated.

#### Under Papers:

Both men who were to read papers were unavoidably detained from the meeting. These papers will be read at a later date.

The secretary announced that Dr. J. R. Hunter would be with us at our next meeting.

#### Under Unfinished Business:

A motion was made to refund the dues of those who have already paid for 1918, and to place all on honor roll who were in actual service in the Army.

There being no further business a motion was made and seconded to adjourn and to meet at the Court House at Princeton the third Thursday in May.

E. H. THOMPSON, Secretary.

## State News

Dr. H. P. Gerlach and Mrs. Gerlach, of Huntington, have returned from Florida, where they spent the winter.

Dr. M. A. Tarumianz, a retired officer of the Russian army, and who is now located at Lunsdale, W. Va., gave a very

interesting address recently in Huntington on matters pertaining to the war.

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Dr. J. D. Henderson, formerly of Knoxville, Tenn., now a captain in the M. R. C. stationed at Point Pleasant, was a recent visitor in Huntington.

—  
Mrs. C. McVea Buckner, of Huntington received a cablegram from Dr. Buckner, who is in France saying that he is well and happy. Dr. Buckner is one of the American physicians who was loaned to the British forces and was in the field with them. He is now serving in a base hospital.

—  
Dr. J. W. Lyons, formerly of Huntington, who is in the medical corps of the 150th infantry at Camp Shelby, has been promoted from first lieutenant to captain.

—  
Dr. and Mrs. I. C. Hicks and daughter of Huntington, have gone to New York for an extended stay; the doctor will take a special course in surgery.

—  
Dr. J. R. Hunter, of Huntington, was a visitor in Bluefield and Princeton, in April.

—  
Dr. Lindsay Vinson, of Huntington, will go to France, where he will be connected with a hospital in Paris.

—  
Dr. W. E. Vest, of the C. & O. hospital of Huntington, spent some time recently in Richmond.

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The State Dental Association of West Virginia held a very successful meeting in Huntington, in April.

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Dr. S. L. Cherry, of Clarksburg, will enter into active service in the M. R. C. this month.

Dr. G. T. Thornhill, of Tams, has removed to Bluefield.

Dr. Roy E. Miller, of Parkersburg, and Dr. Harry G. Steele, of Bluefield, have been commissioned as captains in the M. R. C.

Dr. John O. Martin, who has returned from active service in France, was a visitor in Huntington recently en route to Christiana, Pa.

Dr. E. E. Shafer, of Huntington, was called to Cincinnati on account of the illness of his son, who is a student in the University of Cincinnati.

Word has been received that the 23rd Engineers have arrived safe "over there." Dr. Ray Bobbitt, of Huntington, of the M. R. C., is with this contingent.

A public conference was held April 24th, in Huntington. This conference was called by Dr. S. L. Jepson, State Commissioner of Health, to be more or less in the nature of a school of instruction for the health officers of the State.

The program follows:

Morning—9:00 a. m.

1. "What I Have Found in the Examination of 800 Conscripts," Dr. O. B. Beer, county health officer, Upshur county.

2. "Mental Impairment and the Commonwealth," Dr. L. V. Guthrie, superintendent Huntington State hospital.

3. "The Sanitary Condition of Mine Camps," Dr. Tunis Nunemaker, county health officer, Mingo county.

4. "Needed Amendments to Our Public Health Law," E. S. Tisdale, B.

S., assistant engineer, state health department.

5. "Illustrated Lecture on Rural Sanitation," Dr. L. N. Yost, county health officer, Marion county.

Afternoon—1:30 p. m.

6. "Sanitation and Labor Power," Hon. S. B. Montgomery, state commissioner of labor.

7. "The Health Officer and His Problem," Dr. H. A. Brandebury, ex-member state board of health.

8. "The Health and Welfare of the Railroad Employee," Dr. E. M. Parlett, chief safety and welfare bureau, B. & O. Railroad company.

9. "The Sanitation of Rural Schools," Hon. M. P. Shawkey, state superintendent of schools.

10. "The First Cause of Disease," Dr. T. F. Lanham, county health officer, Taylor county.

11. "The Sanitary Control of the Common Infections," Dr. S. L. Jepson, state commissioner of health.

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## Medicine

### ADMINISTRATION OF EPINEPHRIN

Milan has been preaching since 1913 that epinephrin properly administered will ward off and cure all disagreeable or alarming by-effects of treatment with salarsvan and its substitutes. A number of clinicians have confirmed the efficacy of epinephrin in this line, but still it does not seem to be as generally known as it should be. The French dispensatory specifies only homeopathic doses, not over 1 mg. in the twenty-four hours. Martinet advocates up to 2 mg. in twenty-four hours, testing the tolerance, but Milan asserts that he has given 2, 3 and even 4 mg. of epinephrin within a few minutes, to ward off the threatening immediate or tardy dangerous congestion from the salarsvan. The intravenous route

should be reserved for serious emergencies, and a small dose, amply diluted, should be the rule, for example, 100 c.c. of artificial serum containing 0.1 mg. of epinephrin. This solution arrested at once an asthmatic nitritoid attack, with no objective by-effects beyond pallor of the face and rapid rise in the blood pressure. There was no tachycardia until after a second injection of half the dose.

Milan's extensive experience has confirmed the advantages of giving epinephrin before the salvarsan. To ward off the reaction to the intravenous injection of the salvarsan (fever, headache, vomiting, diarrhea, etc.) he gives 2 mg. of epinephrin in a little water by the mouth one hour before and repeats it five minutes before the injection and again an hour after it. It is also advisable to give 1 mg. by the mouth morning and evening on the four following days, when the patient is inclined to be intolerant to alvarsan. To ward off the immediate nitritoid crises (congestion of the face, vomiting, distress, etc.) he gives in the place of the dose by the mouth, five minutes before the injection, a subcutaneous injection of 1 mg. of epinephrin and an intramuscular injection of 0.5 mg. The signs that the patient is duly under the influence of the epinephrin are the blanching of the face—the leukoreaction, he calls it—the rise in the arterial pressure, tachycardia and generalized tremor. The pallor of the face is the most instructive of these signs. When salvarsan serous apoplexy has developed, the doses must be large enough to be promptly effectual. In a typical case described, a frail man of 32 with syphilitic perforation of the palate had been given 0.45 gm. novarsenobenzol by the vein. During the third night thereafter, agonizing headache developed suddenly, and the intern gave 0.25 mg. ep-

inephrin by the mouth. By morning the man was unconscious, the eyes open, temperature 39.5 C. (103 F.), and 2.5 mg. epinephrin were given by the mouth. This induced some improvement but he still lay motionless an hour later, the eyes open but no movement of the eyeballs and no winking. Then 1 mg. epinephrin was injected intramuscularly and 0.5 mg. under the skin, and in a minute the man seemed to come to life again, looking around, drawing up the bedclothes, etc. Milian suggests that extracts of other glands with an internal secretion might advantageously supplement epinephrin. It is possible that the glands along the sympathetic system have a special action on the circulation in their special region. Epinephrin displays something of this specialized action, as it does not seem to have much influence on the cerebral vessels and the coronaries while it acts strongly on the neighboring aorta. The pituitary body may perhaps, have more control over the cerebral and coronary arteries.

—*Jour. A. M. A.* 4-6-18.

#### PNEUMONIA IN EARLY LIFE

Henry T. Price (*Pennsylvania Medical Journal*, November, 1917) outlines the treatment under three heads: 1, hygienic and dietetic measures; 2, the treatment of the pathological condition; 3, the symptomatic treatment. Fresh but not necessarily cold, air is of great value. The diet should be so arranged that it will carry the patient through with the least amount of work for the intestinal tract. If a nursing child is too weak to nurse the milk must be withdrawn from the breast and fed through a Breck feeder or dropper. If the intestinal tract shows signs of indigestion the milk should be diluted one third with plain water. To treat the pathological condition counterirritation

and inhalations should be employed. Counterirritation may be used in the form of hot or cold applications, blisters, and cupping. The mustard plasters is probably the best form. It is indicated early in the disease or during the stage of congestion. Inhalations should be nonirritating and pleasant. Steam inhalations with cresote or benzoin are of greatest value when there is much bronchial irritation. If the child is very restless opium may have to be administered. Otherwise fresh air and a tepid bath are usually sufficient. An initial dose of easter oil should be administered to clear out the intestinal tract. If the stomach is not retentive, enteroclysis or even hypodermoclysis should be used.

When vomiting is a serious symptom acidosis may be present, in which case the bicarbonate of sodium should be added to the solution administered. Heart stimulants are necessary in some cases. If the pulse is rapid but regular, strophanthus should be given. If the pulse is irregular and soft, caffeine seems to be the most effective. The routine use of alcohol stimulation is contraindicated. To combat respiratory failure atropine should be given until the physiological effect is obtained. The use of oxygen inhalations is very beneficial especially if used in conjunction with atropine. The hot mustard bath should be given when the child is cyanotic and greatly depressed.

#### TREATMENT OF PYELITIS

Robert K. Rewalt (*Pennsylvania Medical Journal*, December, 1917) lays stress on the prophylactic treatment. Care should be taken in children to keep the fecal matter away from the vagina and rectum. Dietetic treatment is of paramount importance. In the bottle fed, gavage may have to be employed. Large quantities of water are absolutely es-

sential. If necessary, enteroelyses or hypodermoclyses should be given. Malt soup has been recommended on account of its alkaline reaction. Urotropin has been the drug most generally used in this condition, one to five grains, depending upon the age of the child, four or five times daily, well diluted with water. Salol is useful. The alkaline treatment is not quite so efficient—sodium bicarbonate, ten to thirty grains with potassium citrate, five to ten grains, every two or three hours until the urine becomes alkaline. The alkaline treatment may be alternated with the urotropin treatment, giving each form of treatment for a week at a time.

#### Cammaert, C. A.: Treatment of Tetanus by Intravenous Injections of Magnesium Sulphate

The author has obtained good results from intravenous injections of magnesium sulphate in a case of tetanus. The severe tetanic contractions vanished almost immediately after the first injection. Recovery was effected within eight days.

The intrarachidian and subcutaneous use of magnesium sulphate has accompanying dangers, as it affects the heart and respiration; but when used intravenously elimination is rapid. In the case reported where there was recovery 50 em. of a 10 per cent solution of magnesium sulphate were injected twice daily, 15 injections being made. At the same time subcutaneous injections of morphine and chloral were given. The author is of the opinion that magnesium sulphate injections might be successfully used in the crisis of eclampsia, uræmia, etc.

#### Digitalis in Control of Auricular Fibrillation.

With proper precautions Halsey believes that the following conclusions can

be drawn: The gross irregularity of the ventricle in cases with fibrillation of the auricle can be controlled by digitalis if sufficient drug is administered. The patient should be instructed to continue the use of digitalis for the remainder of life, and should be taught how to determine the amount of the dose necessary from day to day to control the heart rate. Give sufficient drug to maintain the rate of the ventricle below 70 per minute when counted after a rest in the late afternoon. The fibrillating auricle under a short course of digitalis may return to normal rhythm. In auricular flutter the aim of treatment with digitalis is to produce auricular fibrillation and then control the rate of the ventricle with digitalis, hoping in the favorable cases for a renewal of normal sequential rhythm.

J. A. M. A. 4-6-18.

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#### ASTHMA

Richard H. Brown (*Illinois Medical Journal*, November, 1907) sums up his conclusions as follows: Asthmatic paroxysms are anaphylactic attacks of which the underlying cause is sensitization of the system by absorption of protein toxins from the bowels or retained secretins in the nose or elsewhere. The exciting cause is the inhalation or ingestion of this protein poison while the system is so sensitized. Nasal irregularities may tend to focus a toxemic attack in the respiratory tract which might otherwise show in another manner. Finally, thorough treatment of nasal disease or abnormality with proper attention to bowel toxemia cures or prevents a large majority of cases.

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#### RENAL DISEASE

The *Therapeutic Gazette* for February considers editorially the therapeutic limitations in renal diseases. It is unfor-

fortunate that in the study of chronic renal disease the term "nephritis" should have become practically sanctioned by usage, for the condition which is present is a degenerative process rather than one which is definitely inflammatory. Of course, acute inflammation of the kidneys, or true nephritis, does occur in patients who have had no renal lesions previously, and also may be superimposed upon the chronic degenerative processes referred to. As a class renal diseases of the chronic type give us small opportunity for efficient treatment by means of drugs. In acute nephritis it would seem probable that the condition usually clears up if let alone, unless it is so severe as to cause the death of the patient before the inflammation can run its course and subside. The natural tendency in the presence of disease is always toward the administration of medicaments which it is thought or hoped may be advantageous, but in the various types of nephritis, acute or chronic, it is becoming increasingly evident that our therapeutic materia medica is exceedingly limited, and not only limited, but that many measures heretofore employed may prove distinctly harmful. In acute nephritis it is customary to administer so-called alkaline diuretics quite freely, including Basham's mixture, yet, when we stop to consider the condition in the kidneys, it must be evident that they can do little good. It may then be asked. What should the physician do in a case of acute nephritis? It would seem that two or three dry cups over each kidney, with the proper use of hot packs, the administration of purgatives, and the removal of toxic materials by other methods than diuresis, should be attempted; that the diet should be largely a carbohydrate diet, and that broths and similar meat extractives be carefully avoided, absolute rest in bed being also insisted

on, with the double object of diminishing tissue break-down and preventing congestion of the internal viscera by keeping the surface warm. In the chronic forms, it is important to recognize that they are widely separated clinically, pathologically and, for that matter, therapeutically. In the parenchymatous type the proposition is very much like that of acute nephritis. Because of the scanty urinary secretion in this disease the physician is often tempted to administer stimulating diuretics. This is not only capable of doing harm, but as rational as to think that by pouring oil on a piece of worn-out machinery it can be made to do its work properly. We can do little for the renal state except diminish the burden of the kidneys by rest, warmth and avoidance of food from which come educts which must be eliminated to overcome the associated anemia and to act as a diuretic, fails because the underlying cause is not removed. In chronic interstitial nephritis there is polyuria, and therefore the temptation to administer diuretics is not so great, nor is there so much danger of irritating the kidney by the use of stimulating diuretics. In these cases quiet, avoidance of worry, proper diet, regulation of the cardiovascular system, and the administration of certain alteratives, particularly if there is a history of syphilis, makes up the therapeutic procedures.

Abt Cleveland. Med. Jour. 3-18-18.

#### MANUFACTURE OF ORGANIC CHEMICALS.

In *Science*, March 8, 1918, Dr. Roger Adams describes the activities of the laboratories of the University of Illinois in making rare and much needed chemical products for research and teaching work for the laboratories of the United States, the supply of which was formerly obtained largely from abroad. Eight different chemicals in amounts valued

at \$5,000 were made, and more than thirty laboratories and distributing houses were supplied. The work has expanded since so that about 120 different products have been supplied outside the laboratory, valued at about \$9,000, the products being distributed in amounts of a few grams up to pounds. Among the different chemicals synthesized which were in demand in the laboratories are dimethyl glyoxime, nitroso beta naphthol, cupferron, nitron and ninhydrin, besides many others. They have all been tested in comparison with a well known standard product, and in all instances have been found as good and in many instances much better.

#### INVESTIGATE POWDERED GLASS REPORTS.

The New York City Health Department has analyzed in its laboratory more than 100 samples of bread, rolls, candy and other foodstuffs said to contain powdered glass. No glass was found. Fifty per cent, of the samples contained sand or grit. The department states that in normal times only 5 per cent. of persons finding sand or grit in their food would report it, while at the present time 75 or 80 per cent. would report the fact to the department. The department warns the public against the wave of hysteria that seems to be the result of these unfounded reports.

## Surgery

#### GUNSHOT WOUNDS OF THE KNEE-JOINT.

A report of 100 consecutive cases. E. Tissington Tatlow. *British Journal of Surgery*, January, 1918.

Early operation, if the procedure be radical, and especially if the entire capsule can be sutured, results, in 94 per cent of the cases, in a sterile joint, and, therefore in a successful issue. Where a

drain is used down to a tear in the capsule or to cavity in bone, the results can never be depended upon.

The removal of missiles from the joint within the first week, even in the presence of sepsis—other than that due to streptococci—can be followed by immediate suture, "bipp", being used to aid sterilization.

The Carrel-Dakin method is most useful for the treatment of bone lesions or periarticular conditions. It is almost impossible to sterilize a severely infected joint by this method.

In the presence of a general streptococcus infection of a joint, resection gives results, even when performed during the second or third week.

Cases with severe bone injury should be treated more often than they are by an immediate primary resection of the joint at the clearing station.

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#### FRACTURES OF THE NECK OF THE FEMUR.

Willis C. Campbell, *The Journal of the Tennessee State Medical Association*, February, 1918.

The causes of non-union of these fractures are as follows:

1. Faulty mechanics—the ordinary splitting methods do not meet one single mechanical requirement.
2. Failure in diagnosis until primary union cannot be expected.
3. Depletion of the blood supply of the head, leaving only a small vessel through the ligamentum teres.
4. Syphilis.
5. Too early weight bearing.
6. Difficulty of aligning the short fragment in a fracture into a joint.
7. The synovial fluid has a tendency to prevent callus formation.
8. The psoas muscle may be caught between the fragments.

The Whitman method of treatment is the superior one, although occasionally good results are obtained with any method.

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#### COAGULEN (KOCHER-FONIO).

K. K. Bonn, *The Journal of the Indiana State Medical Association*, October 15, 1917.

Coagulen is a substance prepared from blood; it consists solely of blood platelets and is rich in thrombokinase, an essential and important part in the mechanism of blood coagulation.

For use the coagulen powder is dissolved in sterile normal saline solution boiled for three minutes. Fonio states it is never necessary to employ any solution stronger than 5 per cent. This preparation deteriorates when older than one day. For intravenous use the solution should be filtered and made up to a 3½ per cent. strength, the amount injected may range from 30 to 70 cc. Not more than five grains of the coagulen are to be employed at any time. (When administered orally, the preparation five to ten grains is dissolved in milk or tea.) There is no danger of embolism or thrombosis, Fonio claims, but nevertheless he cautions against its use when the patient has impaired vascular walls.

Its best indication is in local hemorrhages. Bonn discusses the many surgical situations where this preparation is especially valuable when the surgeon can apply or spray coagulen directly to the bleeding area. He outlines eight cases in which coagulen was of definite help.

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#### EFFECTS OF FLAVINE IN WOUND TREATMENT

A 1:1,000 solution of acriflavine in sterilized normal saline was used in all cases by Pearson. It was employed as a lotion for irrigating the wounds at each



change of dressings, and also in gauze packs placed in the wounds and in the outer gauze dressings. The cases selected for treatment with flavine were: (1) those in which infection and sepsis were active and not under control when treatment was instituted; (2) those in which infection and sepsis had been controlled and repair had already begun before flavine was employed. In cases in which infection and sepsis were active and uncontrolled the use of flavine following suitable operative measures had no beneficial effect on the subsequent progress of the case in so far as control of sepsis is concerned. Any slight differences observed were unfavorable. In cases in which sepsis had already been controlled and repair had begun flavine acted injuriously, chiefly by producing an unhealthy granulating surface. While these conclusions do not prove that flavine may not possess powerful germicidal properties in certain experimental conditions, Pearson believes they show that its clinical use is not attended with good results. Since completing his observations he had entirely abandoned the use of flavine in his work.

Jour. A. M. A. 4-15-18.

#### TECHNIC FOR REPAIR OF INGUINAL HERNIA

In the modification of the Bassini operation proposed by Payne the cord is laid on top of the line of sutures in the deep layer of Poupart's ligament, and the inferior aponeurotic flap is then united to the muscular flap of the internal, oblique and transversalis muscles, to the external margin of the rectus and conjoined tendon (preferably by interrupted sutures), observing special care in placing the suture to make some tension on the inferior aponeurotic flap, in order that a relaxation of the ten-

sion on the deep suture line may be obtained. The superior aponeurotic flap is now united to the anterior surface of the inferior aponeurotic flap, giving a wide area of approximation. The fascia, fat and skin are united. It is believed that the improved technic in principle and effect accomplishes: A relaxation of tension on the line of sutures, apposing the muscular structures to Poupart's ligament; it allows a wider and easier approximation of tissue, implants an additional layer of tissue in front of the deep ring; furnishing a more convenient source of obtaining fascial support than flaps taken from the rectus sheath. The relaxation of tension on the structure is more easily and more certainly accomplished. It lessens pressure on the spermatic cord, a frequent cause of discomfort after operations for hernia. The relaxation of the tension on the deep suture line allows the regeneration of tissue to be more certain and, therefore, the union between the parts is more capable of resisting the effects of immediate and remote strain. The special feature of the modification suggested is a reinforcement of the wound, by uniting the lower aponeurotic flap to the deep or muscular structures. In addition to this special feature, the various structures brought into apposition are more readily overlapped, at the same time relaxation of tension on the most important suture line is easily accomplished.

Jour. A. M. A. 4-13-18.

#### IMPROVED ALCOHOL STERILIZATION

Christiansen's extensive research seems to have confirmed the hydrate theory of the action of alcohol—one molecule of methyl alcohol combines with 2 molecules of water; of ethyl alcohol with 4; propyl alcohol with 8; butyl alcohol with

16, and amyl alcohol with 32 molecules of water. The two latter alcohols are not very soluble in water and hence not practicable for sterilizing the skin, but propyl alcohol has numerous advantages over ordinary alcohol for sterilization as he explains in detail. It seems that alcohol makes its way rapidly into the cells when the superficial tension of about 0.4 is reached. Once inside the cells, the alcohol induces a kind of fixation, that is, in combination with the salt present in the bacteria it induces an irreversible precipitation of the protoplasm which signifies the death of the bacterium. Higher concentrations of alcohol do not have this effect but merely suck the water out of the protoplasm, which dries up the bacteria, but they are very resistant to drying. The power of alcohols to penetrate the thin layer of grease on the skin parallels their bactericidal powder, as both are the effect of the same cause, namely, a low superficial tension and high solvent power for water and lipoids. And of all the alcohols, propyl alcohol is the most efficient, as he shows by his comprehensive tests on rat skin, human skin and ulcers. Its action compared favorably with that of iodine, phenol, and other powerful disinfectants, and he urges the general use of n-propyl alcohol as a disinfectant for the wounds. When pure it mixes freely with water. Mixed with three times as much water, the superficial tension is 0.4.

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RIVAROLA, R. A.: POSTERIOR APPENDICULAR ABSCESSES; THEIR OPERATION BY THE LUMBAR ROUTE.

Since 1910 in the author's surgical clinic of the Children's Hospital at Buenos Aires, he has observed only two

cases of peri-appendicular abscesses with a posterior localization and one with a retrolateral localization.

In one case the abscess adjoined the posterior face of the colon and cæcum, pushing out toward the front that it provoked the formation of a projecting tumor in a zone near the anterior and superior iliac spine and with a tendency to extend toward the pelvis. In the other two cases the abscess had clearly posterior localization, leaving the anterior part of the right iliac fossa intact. In both cases palpation of the appendicular point was painless and pain could be felt only on very deep palpation.

Such localization of appendicular abscesses is infrequent but occurs more often in children than in adults. Statistics show 28 per cent. in children to 9 per cent. in adults.

Rivarola thinks that such abscesses are due to the inflammation of an ascending retrocæcal or retrocolic appendix; but the formation of a posterior abscess under such circumstances clearly depends on the behavior and disposition of the peritoneum surrounding the peri-appendicular process.

In treatment Rivarola thinks the best route of approach is the lumbar. It is following the precepts of good surgery to select the shortest and most direct route when this does not involve organs that can compromise the patient or increase the disease. Guyon's vertical incision is the best, as it allows ample drainage. One of the advantages of the

lumbar route is that herina and other complications are practically unknown.

many times within ten seconds and the author has rarely consumed more than twenty minutes. GATEWOOD.

**BULKLY, K.: A. METHOD OF PRECISION FOR THE REMOVAL OF NEEDLES IN THE HAND; THE USE OF THE MICROPHONE.**  
*Ann. Surg., Phil., 1917, lxvi, 19.*

From a study of the records of 72 cases of needles in the hand or foot, the author concludes that the methods used at present are not very satisfactory since only 47 per cent were found at the first attempt. In 10 per cent. the needle was searched for twice and not found, and in one patient five attempts were made before the needle was finally recovered. He believes that the majority of needles in the hand assume their final position almost immediately, although in one of his own cases, he failed to locate it on account of the change of position after the X-ray was taken.

The method suggested by the author and used by him in 25 cases of this type with but two failures, is dependent upon the use of the microphone. This instrument, suggested by Alexander Graham Bell in 1883, has a combined resistance of 3,000 ohms, thereby being far more sensitive than the telephone which has a resistance of but 75 ohms. One electrode goes to the patient's mouth or rectum and the other is attached to the knife or other instrument used in the search. Immediately after an X-ray has been taken, a half inch incision is made and a sharp needle in circuit introduced. An unpleasant clickering is heard when the metallic substance is touched, or an irregular grating if it is rubbed. The exploring needle is then replaced by an ear knife and the opening enlarged sufficiently to introduce a fine mosquito forceps, which is also introduced in circuit. The sense of hearing alone is employed. Contact has been obtained

**OPERATIVE RISK IN CARDIAC DISEASE.**

John M. Blackford, Fred A. Willius, and S. B. Haines (*Journal A. M. A., December 15, 1917*) direct attention to the fact that general impressions alone are to be found in the literature regarding the relation of cardiac disease to surgical operations. They have, therefore, investigated the problem in an extensive series of cases and have reached the following conclusions: Valvular disease with good or fair compensation does not materially increase the operative risks and is not a contraindication to operation, or the proper use of ether anesthesia. The cardiac risk is best estimated in surgical cases by a careful interpretation of the patient's ability to stand stress. In ambulatory cases with no marked loss of compensation operation is generally safe. Where decompensation is marked it should be remedied by medical treatment prior to operation. There should be no surgical intervention in a cardiopath, however, unless it is apparent that it is essential to reasonable health or will benefit the cardiac condition. Marked or complete relief of very severe cardiac disease often results from the surgical removal of infective, mechanical, or toxic sources of strain or degeneration, especially is this the case in toxic goitre. Auricular fibrillation increases the operative risk by only three per cent. There seems to be no increased risk and there is often very marked improvement from operation in certain cases of auricular flutter, partial or complete heart block, or intraventricular block. Myocardial insufficiency may reach a point at which improvement from treatment is no longer possible. The

only way to determine this stage is by the therapeutic test, and until it is reached surgical treatment should not be denied the patient as it frequently improves the cardiac condition greatly. The development of definite to marked cardiac improvement in selected cardiac cases occurred in eighty per cent. of the cases studied following surgical treatment, and this, alone, justifies the small increased operative risk under such circumstances.

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BAER, W. S.: SACRO-ILIAC STRAIN

*Bull. Johns Hopkins Hosp.*, 1917  
xxviii, 159.

The sacro-iliac synchondrosis is a misnomer—the sacro-iliac joint is a true joint and possesses a definite amount of motion and therefore is subject to varied strains.

Baer divides sacro-iliac strain into two definite classes with entirely different sets of symptoms: (1) in which the sacrum in its superior border tilts backward, and (2) in which it tilts forward. While conditions of the first class are due to strains of childbirth, direct and indirect traumatism, congenital malformation of the spine, and static abnormalities such as paralysis of one thigh, the injuries of the second type are more often due to general visceroptosis, misplacements, neurological diseases, as progressive muscular atrophy of the spinal muscles, and general lack of muscle tone.

Symptoms vary in character and degree. In the first class the pain varies from that of ache across the lumbar region of one side to that of severe incapacitating pain passing down to the

calf muscles, but in the second case the complaint is usually that of a persistent tired feeling in the hollow of the back. Diagnosis is usually simple. In the first type there are: history of preceding trauma, or strain; pain on pressure over the joint posteriorly or anteriorly just below and to the side of the umbilicus and which is referred down the sciatic nerve; obliteration of lumbar lordosis; deviation of spine in unilateral case; positive Kernig sign; and the X-ray showing a backward tilt of the upper sacrum.

The second type occurring mostly in older girls and nervous women gives no history of trauma, very little tenderness over the joint, no positive Kernig, but there is an indefinite tired feeling and and exaggerated lordosis. Tuberculosis of the sacroiliac joint, arthritis of the lumbar spine, and gynecological conditions must be differentiated.

Treatment must be supportive or manipulatory. Adhesive strapping, or, if necessary, a more permanent brace or sacral pad, may have to be worn, but if this conservative treatment is not sufficient, manipulation is of value. With the patient completely anaesthetized manipulation consists in completely flexing the fully extended limb on the abdomen. Many cases are immediately benefited by this act, provided a plaster cast is worn for ten days. Of the second type cases are relieved by applying proper support and massaging abdominal muscles, correcting visceroptosis, and attending to any existent gynecological conditions.

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## NECROLOGY.

By C. H. Maxwell, Morgantown

Read at Fiftieth Annual Meeting,  
Fairmont, October, 1917

This is a rehash of a paper I read recently before the Monongalia County Society. Its title might just as well have been: "Vital statistics", "Death Certificates", "Products of my Labors", "Black List" or "Slaughter of the Innocents."

Each one of us has some line in which he is better than others: For instance Dr. Wylie specializes above the collar button; Dr. Broek chronic diseases, Dr. Bush in Children's afflictions, Dr. Moser, X-Ray, Dr. Price, G.U. Dr. Hardy general surgery, but none of you make any pretense to compete with me in writing death certificates.

According to the vital statistics reported to the County Clerk I wrote more than three times as many death certificates as any other physician in

town. Therefore I have legitimate right to the distinction of being a specialist in Necrology.

I have never seen an analysis of the causes of death in the practice of an ordinary physician. I concluded therefore to bore you with a few points gleaned from my death list. Medical Societies are especially delighted to listen to the reading of a great galaxy of case reports, all identical except a few minor differences as to names and dates.

In the first place I was very much surprised at the great variety of causes of death. Many of them no doubt could have been attributed to something else, as something had to fill in this blank space in the report. No doubt a more adept expert could have done better, but I give them as I find them on my death list.

I find that erysipelas carried off one little child, the other cases all got well, owing probably to the tendency of self limitation and to the good effects of magnesium sulphate in saturat-

ed solution to the affected parts on compresses. This is the best local application to inflamed areas I know of. One child died of dysentery with the aid of ipecac and polypharmacy. One died of Uremia, and the next on the list is marked "Convulsions"—a small child—it may have been uremic. "Unknown" is the next. It died suddenly and may have been cardiac. "Auto-intoxication" with a question mark after it comes next.

A combination of measles and dysentery marks the next one. Chronic gastro-intestinal disease took one. It may have been tubercular. Tubercular abscess following the drainage of appendicial abscess accounted for one. He lived a year. He spent many weeks in Johns Hopkins.

One died of pulmonary apoplexy, whatever, that is. One died from shock. At any rate it had all the symptoms. The patient had had a miscarriage and was doing well; two days later she took on a shocked condition and died within an hour. One died from the effect of a fall from a chair, rupturing a blood vessel beneath scalp. A large haematoma resulted. Operation failed to stop the bleeding. This baby was in a family of bleeders and it may have been one. Unresolved pneumonia took one, (70 years), after prolonged illness. Laryngeal diphtheria got one in spite of anti-toxin and tracheotomy. One died of umbilical hemorrhage three days after birth—the "idiopathic" or "spontaneous" variety. One of my good friends was called in just as the baby died. At his instigation I was compelled to stand trial for mal-practice; at the trial this good friend went squarely back on the ones he had in-

duced to bring the suit—being afraid to testify as he had promised.

Scarlet fever and co-existing measles killed one. One died of pyaemia. Another was scalded to death in a tub of water. One burned to death from gas fire lighting its clothes.

Pycnephrosis (gonorrhoeal) (?) took one, and obesity another. Typhoid fever and pneumonia took one. Chronic nephritis, acute nephritis, and maternal nephritis, each killed one. One baby lived a day. Its mother had been extremely ill for a long time and her condition may have caused the baby's death. One child with diarrhoea, developed cerebral meningitis and killed it. One baby was found dead in bed, apparently strangled by its own vomitus.

Cerebral meningitis following whooping cough and broncho-pneumonia ended one. Broncho-pneumonia following measles accounted for one. One is marked "auto-intoxication." Pelvic tumors, multiple abscesses and pan-hysterectomy shocked another one to death. Cerebral meningitis following pneumonia carried away one. Albuminuria following over-dose of strychnine, and chloroform anaesthesia to abate spasms disposed of a three day old baby. When the baby was one day old the nurse conceived the idea that some strychnine tablets I had left for the mother were intended for the baby. Thereupon she gave the baby a fortieth. Shortly thereafter I received a message that the baby was in spasms. I put it in a tub of warm water and was giving it veratrum when the nurse remarked that it had not been well since it took "the medicine". Instantly I saw what had been done, and took it out of the

water and stopped handling it and relaxed the spasms with ehloroform. It was several hours before the spasms ceased and the ehloroform withdrawn. Retention of the urine followed and I catheterized it. (How many of you have catheterized a two-day old baby?) But it died the third day evidently from nephritis as its water was loaded with albumen.

One death followed abortion possibly of criminal design.

One baby 20 days old died of indigestion. Myocarditis killed one. One man died from heat cramps, whatever that is. He was a mill worker. One was accidentally shot with a rifle, and one was killed by a bursting fly wheel. One got his final traumatic lesion by tumbling over a cliff.

Two crossed over by the neurasthenic route, and two with generalized tuberculosis. Two died of purpura, one 27 years old, the other a yearling. Pox killed two,—diabetes millitus two. Two pulmonary abscess patients died. Placenta previa prevented two children from living; while infantile inanition accounted for two more.

Cerebral meningitis destroyed three, as did grip. Three babies died from preclapped cord and lack of obstetrical skill of the attending doctor. Plain scarlet fever killed three, and tackled six others in the same family in a two room shack. While one of the children lay dead in the house, and six more down with the trouble, the mother gave birth to a new candidate which however failed to be elected. So did the father, mother and one grown daughter. This was the worst mix-up in my experience.

Post-diphtheretic paralysis killed

three, about ten days in each case, after the throat had cleared.

Inanition took four babies. Probably starvation would be better, but does not sound so well. Dystocia and poor midwifery prevented five babies from living. Typhoid fever took five. Two had profuse hemorrhages before I saw them, each one died three days later. (Possibly they might have been living today had they not sent for an expert neerologist.)

Another was a hemophaeliae and bled to death from the bowels after he had been discharged as cured. I had dismissed him on Wednesday and told him to stay abed till Sunday. Saturday his neighbors had a jockersfest at his home. One of the funny stories started the boy to laughing violently and set up bleeding, which killed him. "Tickled to death" would have been an appropriate title. Another was a young man in a family of eight (the mother being dead) seven of whom had the fever. He nursed all of them through and then took down himself, after two months of this work without interruption and little rest. He died the third week. This is the only case of typhoid fever I have lost that I saw early. (I have to brag a little on myself as no one else will do it).

Pulmonary tuberculosis took seven. This is a low rate, indicating that consumption is not as prevalent in this part of the country as is generally believed, being only four per cent of the deaths in my black list.

Father Time carried away eight. Eight children died of diarrhoea—causes not given—poor food—poor surroundings—poor doctor—poor something—at any rate they died when they

should have been saved. I have lost none since using the Bulgarian bacillus treatment.

Eight children died of mal-nutrition, (and ignorance of attendants). Eight died of mitral or other valvular disease.

Cancer (carcinoma) killed eight—face, liver, stomach-rectum. None died of sarcoma. Broncho-pneumonia with poor therapeutics killed nine, and lobar pneumonia ten. Twelve were still born, cause not recorded, and fifteen died on account of premature birth.

This is the record as I find it in my death book, a black list of 180. When this list was started I never dreamed that some day I would tire your society with my troubles.

But what stands out boldest and with such glaring blackness is the great number of children who have died or failed to live. Fully twenty-five per cent, of the deaths have been children that died before birth, at birth, shortly after birth, or within a few months of birth.

I can account for part of this from the fact that many of my patrons have not the sanitary and financial conditions for the best protection of their children. The list looks too damning to be published. Yet so far as any record of private practice goes (as far as I could learn) this list is the very lowest ever published. It is also the very highest. In fact it is the only one I know of.

Considering the great number of little ones in the list, it seems that "Slaughter of the Innocents" would be the best title to this paper. Yet my birth list has been almost exactly five times the death list, and of almost a thousand obstetrical cases, I have lost

no mother nor have I had a case of "child bed fever." This acts as a sort of salve to a scared conscience.

Withal it has been an interesting study to me. Not so much to you of course, on account of the paucity of your experience in practical Neurology.

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REPORT OF THE ANNUAL MEETINGS OF THE AMERICAN SOCIETY FOR CLINICAL RESEARCH.

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The Gastro-Enterological Society, and the Association of American Physicians held at Atlantic City, May 6th, 7th and 8th.

—By—

*Dr. Frank LeMoyne Hupp.*

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Three of the leading American medical bodies have just completed their annual sessions here in Atlantic City, and as it has been the writer's privilege to be present at these meetings, he has thought that a brief resume of some of the more important papers and discussions might be of interest to the readers of our State Journal.

The American Society for Clinical Investigation, held its tenth session at the Hotel Traymore, and the following interesting program was carried out:

1. President's Address, George Blumer, New Haven.
2. Skull defects, exophthalmos and diabetes insipidus as a symptom complex of pituitary disturbance, Henry A. Christian, Boston.
3. Renal function as measured by the elimination of fluids, salt and nitrogen, and specific gravity of the urine. II. Paper. (With lantern slides). Herman O. Moseenthal, Baltimore.
4. Renal function in acute nephri-



tis. (By invitation). Dana W. Atchley, New York.

5. The application of the laws of Ambard to nephritic cases. J. P. O'Hare, Boston.

6. A new iodine preparation and its antiseptic properties. Albert A. Epstein, New York.

7. The fat and lipoids in maternal and foetal blood at the conclusion of labor. Merris Slemons and (by invitation). H. J. Stander, New Haven.

8. Standardization of antipneumococcus and antimeningococcus serums. Augustus Wadsworth and (by invitation) Miss M. B. Kirkbride and Miss Ruth Gilbert, Albany.

9. Clinical observations on the fragility of erythrocytes. (By invitation) J. Ramsey Hunt, New York.

10. A method for the collection of urine from each kidney separately, in the dog. Quimby and (by invitation) F. S. Hopkins, Boston. (With lantern slides). W. C.

11. Evidence indicating the existence of two systems of fibres for the conduction of motor impulses in peripheral nerves: a cortico-neural system and a strio-neural system. H. Z. Giffin and A. H. Sanford, Rochester, Minn.

12. Acute diabetes. H. Rawle Geyelin, New York.

13. Further observations on chronic family jaundice. Wilder Tileston, New Haven.

14. The frequency of hospitals in association with cholecystitis. (With lantern slides). Evarts A. Graham, Chicago.

15. The uric acid, creatinine and ammonia in the blood of infants with intestinal intoxication. Oscar M. Schloss, New York.

16. The synthesis of B-amidazolylethylamin (histamine). Karl K. Koess-

ler and (by invitation) M. P. Hanks, Chicago.

17. Further observations in the treatment of amebic dysentery. A. W. Sellars, Boston.

18. Prophylactic vaccination against pneumonia. J. Harold Austin and (by invitation) Russell L. Cecil, New York.

19. A prophylactic therapy for varicella. Alfred F. Hess, New York.

20. The energy metabolism of an infant with amaurotic family idiocy. Fritz B. Taylor, Boston.

Following the reading of these papers there was a special discussion. Both the papers and the discussions will be published in the transactions of this Association and in the Archives of Internal Medicine and will be well worth the thoughtful perusal of those interested.

At the same time and under the roof of the palatial Traymore and overlooking the restless yet beautiful sea, the American Gastro-Enterological Association held its twenty-first annual session. This meeting was presided over by Prof. John A. Lichty, of Pittsburgh, and was well attended by experts in this field of research from the United States and Canada.

The first paper read by Dr. R. Walter Mills, of St. Louis; An X-Ray Study of Gastric Motility, dealt with the clinical versus the roentgenological methods of studying the movements of the stomach. Dr. Mills seemed to think that the clinical methods were exact, in cases of marked and moderately marked gastric hypomotility, and while the X-Ray method indicates the finest variations in gastric motility, it furnishes so delicate a test that it is difficult to appreciate influencing factors. He presented the comparative findings based on series of two thousand five hundred sub-

jects graphically studied, to test the constancy of relationship between bodily habitus and visceral peculiarities, and the propriety of judging gastric motility on such a type basis. In each case cited pyloric tonicity was expressed by active and passive canalization by manual manipulation. He then discussed these observations of motility with reference to organic gastric and disovenal lesions including ulcers, and new growths, and included extra gastric organic lesions as, gall bladder disease and appendicitis as well as functional conditions, gastric atony, ptosis, hyper tonus, pylorospasm, incompetent pylorus and achylia gastrica. Miscellaneous factors were also dealt with like: increased intra abdominal tension, nervous depression, headache and nausea.

Dr. I. H. Levy read the second paper entitled, "The Opaque Meal versus the Stomach Tube in the Diagnosis of Gastric Hypomotility." and in this paper he claimed, as the opaque salts do not enter into the human dietary, their use by the Roentgenologist to determine the motor function of the stomach is irrational. He claimed that a stomach tube introduced seven hours after a meal will always give more positive evidence. In fully 20 per cent of a large number of cases studied by both methods, gastric hypomotility was diagnosed with the tube in which the barium meal left the stomach in six hours or less. While the opaque meal may be sufficient to detect gross surgical lesions, it is not delicate enough for some surgical and many functional motor disturbances requiring treatment.

A study of Hyperacidity was the title of a paper read by Dr. Martin E. Reh-

fuss, of Philadelphia. He claimed that it was necessary to revise the whole subject, based on a fractional analysis of over 800 normal cases with all variety of food stuffs, comprising 20,000 titrations, expressing doubt in his conclusions as to whether there was such a condition as hyperacidity. Dr. Jacob Kaufman, of New York, read an interesting essay on the Psychie Element as an Important Factor in the Development and treatment of Peptic Ulcer, claiming that the psychic influence plays an important causative role in the development of the peptic ulcer and emphasized the necessity of its consideration in the plan of treatment.

The subject of perforation in cancer of the stomach was discussed by Dr. Julius Friedenwald, of Baltimore.

Dr. Sidney Simon, of New Orleans, read a paper on Massive Hemorrhage from the Gastro-Intestinal Tract Associated with Arterial Disease and Hypertension, presenting three very interesting cases as a basis for his observations, and in each case the hemorrhage was found to be associated with general arterial disease, and with markedly high blood pressure.

He claimed that only isolated references are found in the literature regarding the question of a localization of arterio-sclerotic processes in the vessels of the stomach and duodenum, and emphasized the importance such a condition may play in the etiology of such bleeding ulcers. The contention was made that this bleeding represented a conservative method on the part of nature in blood letting sparing the more serious results which might be expected

when such an accident occurs in more vital parts.

The treatment of acute gastric hemorrhage was discussed by Dr. W. A. Bastedo, of New York.

A symposium on chronic diseases of the appendix and associated pathological conditions was opened by Dr. White of Boston, who dealt with the effects on gastro-intestinal function.

A study was made of the effect of stimuli from the lower bowel on the rate of emptying of the stomach, the effect of mechanical distension of the colon by enemata, the effect of chemical irritation of the cecum in animals, the effect of diseases of the lower bowel, such as chronic appendicitis, and adhesions of the lower ileum and colon.

Delay in emptying the stomach is the exception in lesions of the lower bowel. A strong stimulus is needed from the lower bowel to slow the stomach.

The stomach emptied a barium meal within the normal time in most cases of ileal stasis, also when the colon was distended with a large enema, also in most cases of chronic appendicitis and chronic inflammation of the colon. Experiments on animals showed that when the colon was irritated by injections into the cecum variable results were obtained, intense irritation caused vomiting; less marked irritation caused either delay in emptying the stomach up to about twice the normal time, or rapid emptying of the stomach and whole digestive tract; moderate or slight irritation had no effect. The results were not perfectly graded, evidently because of variable spasm.

There is evidently a definite correlation of different parts of the digestive canal by a protective mechanism which words under a powerful stimulus, such

as, intestinal surgery or injury, or strong irritation, but which does not work under a moderate stimulus or simple mechanical condition.

Marked delay in emptying the stomach is far more often the result of actual lesions about the pylorus than of reflexes from the bowel. "Stomach symptoms" in intestinal cases are not as a rule the result of slow emptying of the stomach.

The pathology of this subject was handled by Dr. Oscar Klotz, of Pittsburgh, in a very helpful manner, while Dr. Geo. E. Pfahler, of Philadelphia, reviewed the X-Ray phase of the subject, exhibiting a number of lantern demonstrations claiming that by Roentgen Ray examination one can determine whether the appendix is patulous, movable, kinked, abnormally retentive, locally tender, as well as its position, its relation to other organs, its relation to the cecum, together with the outline of the cecum and ascending colon, which data, properly grouped and weighed in connection with clinical symptoms, gives most valuable evidence in the diagnosis of obscure conditions in the right lower quadrant of the abdomen.

The medical and surgical treatment were given over to Drs. Kast and Draper, of New York. Monday evening at the Association smoker an instructive paper was read by Prof. Lewellys F. Barker, entitled *Endocrine Function and the Digestive System*.

On Tuesday morning Dr. McCaskey, of Fort Wayne, read a paper on *Some Observations on the Fractional Study of Gastric Secretion* and dealt with the fluoroscopic study of the air inflated stomach.

(1) The variations in the secretion of gastric juice during the conventional

period of the Ewald test meal are so great as to make entirely unreliable the usual single calculation at the end of one hour. Some cases which show complete achlorhydria in one hour are cases of marked hyperchlorhydria in half or one hour later, and in some instances much within an hour.

(2) The visibility of the magenblase in the normal stomach suggested the feasibility of inflating the stomach and studying its contour, etc., during and after the inflation. In some cases this gives information which the barium meal fails to convey.

The subject of Dr. Max Einhorn's paper was: Further Experiences with the Direct Examination of the Duodenal Contents in Affections of the Gall Bladder and Allied Organs. Dr. Einhorn's vast and original research in this department of stomach work makes his papers of peculiar interest. Dr. Einhorn thinks the turbid bile aspirated from the duodenum in the fasting condition is of importance in the diagnosis of chronic cholecystitis. In ten cases of turbid bile, which came to operation, stones were found in eight. Clear bile of a golden yellow color speaks rather against cholecystitis. Two cases of chronic pancreatitis, one benign, the other malignant, were described; in one the trypsin ferment was greatly diminished, in the other it was constantly absent.

That past master in gastro-enterological research Prof. John C. Hemmeter, of Baltimore, gave an instructive discussion on the chemical and physiological study of the duodenal contents in cholelithiasis, relating his experiences in the radiographic and fluoroscopic studies of gall stone. Dr. Hemmeter said there must be 20 per cent of

calcium in a stone before it will cast a shadow with the X-ray. He thinks the viscosity of the bile can be determined by what he calls a viscometer and that certain degrees of viscosity will so obscure the shadow of a stone that it is utterly impossible to detect it in the roentgenogram. He emphasized the importance of closer cooperation between the surgeon and the internist or the metabolist and chemist in all gall bladder cases, especially following operation. The surgeon, too, often neglects the diet in these cases, cholestraemia continues or recurs even

After thorough drainage of the bile passages and sterilization of the bile, and so there is a reformation of the gall stones much to the distress of the patient and the chagrin of the surgeon. In selected cases it was suggested where there was a specific infection in these gall stone cases that treatment post operatively with an autogenous serum would be profitable. Dr. Frank Smithies' paper on Carcinoma of the Gall Bladder ended this most interesting and instructive session.

The session of the Association of American Physicians are always of a high order of merit and the 33rd annual meeting was no exception. The members of this Association which just finished its deliberations are made up of the teachers and research workers in internal medicine. There are less than 160 members and one of its by-laws makes it obligatory for each member to prepare some meritorious contribution to medical literature and read before the Association at least once in three years, otherwise his membership is forfeited.

We wish it were possible for each reader of our State Journal to sub-

scribe for the transactions of this Association, so that he might read and study this splendid program:

**Tuesday Morning, May 7, 9 a. m.**

1. The President's Address.
2. General Business.
3. Results from the Intravenous Use of Salvarsan in Syphilis of the Nervous System. Dr. B. Sachs.
4. On the Relation of the Chemical Structure of Opium Alkaloids to Their Action on Smooth Muscle and on the Pharmacological and Therapeutic Properties of Some Benzyl Esters. Dr. D. I. Macht (Dr. J. J. Abel).
5. On the Use of Benzyl Alcohol as a Local Anesthetic. Dr. D. I. Macht (Dr. J. J. Abel).
6. Acute Pancreatitis in Typhoid Fever. Dr. T. McCrae.
7. The Clinical Manifestations of Tropical Sprue. Dr. E. J. Wood.
8. Further Observations on the Bacteria of the Intestinal Tract. Dr. W. W. Ford.
9. The Tension of the Gases in the Affluent and Effluent Blood of the Lungs. Dr. R. G. Pearce (Dr. C. F. Hoover).
10. The Respiratory Significance of Moisture in the Air Spaces of the Lungs. Dr. C. F. Hoover.
11. The Practical Value of Diphtheria Toxin-antitoxin Injections in Immunization as Determined After a Test of Three Years. Dr. W. H. Park.
12. The Course of Myelocytic Leukemia as Influenced by Splenectomy following Radium Treatment. Dr. H. Z. Giffin (Dr. L. B. Wilson).
13. Immunity to Tuberculosis Produced by the Transplantation of Tuberculosis Lymph Nodes. Drs. G. B. Webb, C. T. Ryder and G. B. Gilbert.

**Tuesday Afternoon, May 7, 2 p. m.**

14. Immunity in Cancer. Dr. F. C. Wood.
  15. Studies of Chronic Myocarditis. Dr. H. A. Christian.
  16. The Etiology and Pathology of Rocky Mountain Spotted Fever. Dr. S. B. Wolbach.
  17. Clinical Studies in Empyema at Camp Zachary Taylor, Kentucky (Provisional). Dr. W. W. Hamburger.
  18. A Study of the Empyemas at Camp Uptom (Provisional). Dr. H. Brooks.
  19. Experimental Hemochromatosis. Dr. P. Reus and Jean Oliver.
  20. Hemosiderin Granules in Cells of the Urine; An Aid to the Diagnosis of Pernicious Anemia and Hemochromatosis. Dr. P. Rous.
  21. Mould Infections. Dr. C. P. Emerson.
  22. The Rat and Infantile Paralysis: A Theory. (Second Communication.) Dr. M. W. Richardson.
- Wednesday Morning, May 8, 9 a. m.**
23. Thrombosis of the Coronary Artery. Dr. J. B. Herrick.
  24. The Serum Treatment of Meningitis. Dr. S. Flexner.
  25. Intravenous Serum Treatment of Cerebrospinal Meningitis. Dr. W. W. Herrick (Dr. F. H. Williams).
  26. The Essential Properties of a Potent Antimeningococcal Serum. Dr. H. L. Amoss (Dr. F. H. Williams).
  27. On Myrtol and Eucalyptol Poisoning. Drs. L. F. Barker and L. G. Rowntree.
  28. In what Form are Protein Digestion Products Taken up by the Mucosa of the Stomach and Intestines? (Provisional.- Drs. J. J. Abel and C. A. Rouiller.
  29. Clinical Aspects of Peptic Ulcer with Special Reference to Roentgen-ray

Diagnosis. Drs. J. Friedenwald and F. H. Baetier.

30. The Healing of Peptic Uleer. Dr. B. W. Sippy.

31. The Comparative Food Value of Protein, Fat and Alcohol in Diabetes Mellitus as Measured by the Nitrogen Equilibrium, Dr. H. O. Mosenthal and G. Harrop, Jr.

32. A case of Bulimia, with Remarks on the Casual Treatment of some Functional Diseases, Dr. G. Dock.

33. The Praetical Examination of the Duodenal Contents, Dr. M. Einhorn.

34. The Thyroid Homone and its Relation to Metabolism, Mr. E. C. Kendall (Dr. L. B. Wilson).

Wednesday Afternoon, May 8, 2 P. M.

35. The Relation of War Wounds to Acute Endocarditis, Dr. H. T. Karsner.

36. Pneumonia in the Army Camps, Drs. R. Cole and W. G. MacCallum, together with Drs. Dochez, Avery, Von Glahn, Blake, Rivers, Kinsella, Johns and Stevens.

37. The Serum Treatment of Pneumonia (Lobar), Dr. C. N. B. Camac.

38. Observations upon the Mineral Equilibrium of the Blood Plasma, Drs. J. Howland and W. M. Marriott.

39. Studies of some Unusual types of Diarrohea, Dr. T. R. Brown.

40. Remarks on Chronic Septicemic Endocarditis with Splenomegaly: Its treatment by Splenectomy, Dr. D. Riesman.

41. The general theory of clinical diagnosis, with Special referenee to the application of a key principle to major groups of mental diseases, Dr. E. E. Southard.

42. Clinical Types of Paralysis referable to the Pallidal system of the corpus striatum, Dr. J. R. Hunt.

43. Some Preliminary Observations on certain phases of hypertension, Dr. E. S. Smith.

Wednesday Evening, May 8, 8 p. m.

44. Antiscorbutics and Intravenous therapy for scurvy, Dr. A. F. Hess.

45. The Function of the thyroid gland, Dr. H. S. Plummer.

46. A study of the endocardial lesions developing during pneumococcus Immunization in horses, Dr. A. B. Wadsworth.

47. Three unusual cases of low thoracic aneurysm, simulating plural effusion, with two autopsies, Dr. S. S. Cohen.

To do justice adequately to these latest studies of the masters of our art would take up many pages of this Journal, we will therefore only touch upon several of the papers.

In paper No. 4, Dr. Macht has given to humanity and the profession a new local anaesthetic in benzyl benzoate and benzyl acetate. This new drug is used in the same strength as cocain i. e. from one half to four per cent solution. It can be easily sterilized, is practically non toxic, and is twenty times cheaper than either cocain or novocain. Certain of the benzyl esters are anti spasmodics and are therefore most beneficial in anginoid attacks relieving the spasm and diminishing the blood pressure. The drug, given by mouth, is much to be recommended in asthmatic attacks, safely and quickly relaxing all spasmodic affections.

In paper No. 3, Dr. Sachs emphatically diseards the subarachnoid or intraspinous administration of salvarsan in the treatment of cerebro-spinallues.

He has seen many cases of tabes made worse through this mode of medication. He unqualifiedly advises the intravenous use of the antidote and definitely

describes his technic dosage and frequency of administration which should be studied with due reflection, coming as it does from this eminent authority and based upon a large series of closely observed cases at Mt. Sinai Hospital in New York.

The discussions on pneumonia, cerebro-spinal meningitis, measles and trench fever were illuminating, up to the minute, and were attentively listened to, not only by members of the association, but medical army officers representing the cantonments and camps from all over the country. America's participation in the world war with resultant concentration of large bodies of troops in these camps and cantonments for training has been of the utmost value to suffering humanity through epochal medical discoveries, bearing upon some of the most dreaded of human afflictions.

One compensation coming from the war is found in its broadening effect upon medical and surgical knowledge. It is too well known that typhoid vaccine was produced because the need of it was flagrantly demonstrated in the Spanish-American war. While a pneumonia serum was discovered prior to August, 1914, the prevalence of this much dreaded disease in our training camps has spurred research workers on to further study, so that there has developed an improved serum with new modes of technique in its administration which will stay the ravages of this very fatal malady. Dr. Cecil of the Rockefeller Institute has recently announced that the vaccination of 12,000 men in one camp had made them so nearly immune that there were only twelve cases, whereas there were 173 cases among 19,000 men in the same camp who were not protected by vaccination. In a regiment

of negroes, who are peculiarly susceptible to pneumonia, there were only two cases among the vaccinated and twenty-eight among the unvaccinated. These facts seem to hold out hope for the ultimate routing of a disease which has decimated armies in the camps as well as in the trenches, to say nothing of this winter scourage in civil life.

Dr. Rufus Cole of New York in presenting his paper on pneumonia in the army, declared that it was found to trail epidemics of measles. Dr. Camac particularly emphasized the fact that the convalescent measles patient is exquisitely sensitive to pneumonia, and cautioned the army and civilian physician to carefully protect these patients from sudden changes in temperature and invariably spray their throats with dichloramint-T. An interesting observation was made when the throats of many hundreds of healthy surgeons and nurses were found to contain the streptococcus in seventy-two per cent of those examined.

Cerebro spinal meningitis. Colonel Simon Flevner of the medical corps of the National Army and physician in chief to the Rockefeller Institute, and perhaps the foremost authority upon this subject reviewed the history of the serum treatment of cerebro spinal meningitis, from 1907 up to the present time.

He believed the mode of infection, or the portal of entry was through the nasopharyngeal lymphatics and only secondarily through the blood. He said that America's assembly on a military basis had enabled the research workers to get a new point of view. The rare opportunity was offered to study these cases, in every phase, from its earliest stages and under the most favorable circumstances. New practice is being developed in the serum treatment far in ad-

vance of the earlier methods. A specific antimeningo-gococcus therapy must act by opposing the antigen through the activated antibodies; while a polyvalent serum was now used, he felt the ideal must be later the monovalent. Through the new technic of serum therapy the profession is now not only going to retard the development of the disease toward a point where there seems little cause to fear repetition of the deadly epidemics, which swept the country and Europe a few years ago, but they will be able to interrupt the explosive and formerly fatal cases with encouraging results. Dr. Flexner thinks it will require years to train laboratory men to differentiate between the serums for the various types of the disease. Somewhat of a demonstration followed the reading of Captain W. H. Herrick's paper, based on observations made at Camp Jackson. He claimed that the mortality had been decreased from 41 to 16 per cent and the injection of the selected serum was made for the most part intravenously on the combined intravenous and intra spinal. 500 c. c. of the serum was used in many of the cases; the high fever would drop to normal in 48 hours and the specific micro organism disappeared from the spinal fluid in three days: there was little or no delirium and a disappearance of the distressing pydrocephalic cry.

First a desensitizing dose of 1 c. c. is given, and one half hour later one half of the initial dose is administered or about 15 c. c. at the rate of 1 c. c. per minute. If there are no unfavorable signs, a little later 100 c. c., are given and this is repeated intravenously in eight to twelve hours, so that in 48 hours three, four or even six doses are given. Captain Herrick claimed the small doses were

followed by the highest mortality, i. e. about 45 per cent.

There were seven deaths in a series of cases where only 100 c. c. of serum were given and in another series of seven cases where from 300 to 400 c. c. of serum were given, there were no deaths.

By taking cases in the preliminary stages it was found possible to definitely arrest the disease, by following this improved technic.

Dr. E. L. Opie presented the report of the commission for the investigation of trench fever, carried out in northern France. This report was a distinct revelation, establishing as it has done beyond all doubt, as the cause of this distressing and disabling malady, the bite of the louse and the inoculation through the scratching by the soldier. Certainly this investigation is as far reaching and epoch making as was the discovery of the etiology of yellow fever.

If the American boys and their Allied comrades in the trenches can refrain from scratching when bitten, their susceptibility to trench fever will be reduced to a minimum. This has been the conclusion of American and English medical specialists who spent months upon experiments. Fifty men of Pershing's forces volunteered to assist in the research and went through the agonies of the disease so that science might find a remedy to protect other thousands of American soldiers.

The heroism of the half hundred Pershing soldiers in submitting to the inoculation of the trench fever germs at a stationary hospital back of the English lines on the western front was described.

When Pershing forces were ready to take over for the first time a sector on



the Allied front, the subject of trench fever was brought before the general staff. There had been no definite conclusions on its origin, and treatment had therefore been unsatisfactory. A call was made on an American regiment to submit their bodies for experiments, and the response was liberal although the soldiers had seen and had been warned how painful the ravages were.

The experiments established that the fever would not spread by human contact. The fever was contracted in from three to twenty days. It had many painful symptoms, which started with very peculiar twinges similar to rheumatic attacks in the shins. Spots on the skin, as in typhoid, and headaches are among the symptoms.

Dr. Opie, in summing up, said that there was no doubt but that the disease could be and would be eliminated.

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#### THE ELKINS SITUATION DURING THE PAST THREE MONTHS.

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Read before Barbour-Randolph-Tucker  
Society.

By Dr. A. M. Fredlock, Elkins.

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I presume that our President refers to the typhoid situation in Elkins, which began about the middle of January, and since that time we have had over one hundred cases, as I have learned from the other physicians, and my own cases. Perhaps some of these were not typhoid fever, as some of them were sick but a week; but in our excitement when the patient presented an elevated and continued temperature, we at last thought it typhoid and treated it as such and do not think that we made any mistake about it.

When I first discovered that we

were having typhoid, I naturally wanted to know the cause of it, so the first thing I did was to find out if the chlorinating plant was being used and upon inquiry was assured that it was running every day. I then made inquiry of my patients from where they procured their milk supply and they all got it from a different source, some from regular milk dealers, others from private parties, and one family, who came here from Braxton County in September, 1917, had not used milk at all. On account of the extreme cold weather I did not think that it originated from the garbage can, nor from flies or other filth. I then made further inquiry relative to the chlorinating plant and found out the fact that it had not been in use for more than sixty days. I have also learned that the water had not been sent off for analysis but—times in the past year.

Now I don't think that the Board of Health is altogether responsible for this myself, but as to whose duty it is to see that said chlorinating plant is in working order and a supply of chlorinating gas always on hand, I do not know, but do not think it is the place of the Health Board; nor do I know whose duty it is to send the water to the Bacteriological Department for analysis.

Now, how can we account for the typhoid being in the water if this is the origin of it. Late last fall, I have been informed, there were a number of cases of typhoid "somewhere" up the Valley, and we all know that a great many people are extremely careless as to what disposition they make of the excreta from contagious and infectious diseases.

And now, gentlemen, I will quote Dr. Osler in his "Modern Medicine," in

which he gives some illustrations of epidemics of typhoid fever from the water supply, which applies to our situation very closely:

“WATER.—This must be regarded as important means of conveyance and in large epidemics, where the extent is influenced by the amount and freshness of the infection, it usually plays a large part, as well as in the yearly incidence in many communities. Schuder, in the study of 638 epidemics which occurred from 1870 to 1899, found that the infection was carried by water in 71 per cent. There are very few definitely proved records of the recovery of typhoid bacilli from drinking water, but in many instances the time of infection has antedated the time of culture. Willson, who has recently reviewed the subject, considers that only 6 instances of the recovery of typhoid bacilli from drinking water can be regarded as definitely proved. In the sudden outbreaks it may be very easy to trace the source of infection to the water-supply, for such epidemics are often “explosive,” but in places where there is only the usual number of cases this may be difficult. It is probable that by improved cultural methods our knowledge of the life of typhoid bacilli in water will be greatly increased. The amount of light, organic matter and oxygen are important. The possibility of multiplication of the bacilli in water under favorable conditions is not positively determined.

“The steady decrease in the disease in communities as the water-supply is improved is perhaps one of the best proofs of the importance of water-borne infection. In Hamburg from 1885 to 1888 there were 15,804 cases of typhoid fever. The water-supply was taken from the Elbe, not far from the

point where the sewers discharged. The neighboring city of Wandsbeck, with a separate water-supply, was almost free from the disease, giving a demonstration as striking as that of Altona in the cholera epidemic of 1892. In Paris, with a better water-supply, the death-rate from 1882 to 1902 was reduced from 142 to 17 per 100,000. It has to be kept in mind that a polluted water-supply is not a source of infection unless the *B. typhosus* be present. There have been cities which used a greatly polluted water and yet had a low typhoid rate. The outbreak in Plymouth, Pa., in 1885, is one of the most instructive examples of an epidemic due to an infected water-supply. This was a town of 8000 inhabitants and not in a very good sanitary condition. The water-supply was largely derived from a stream, on the watershed of which were only two houses; a small part of the town used water pumped from the Susquehanna River and those who used this supply escaped. The general supply came from a mountain stream on which four storage reservoirs had been built. On April 9th, typhoid fever appeared in Plymouth, and in a few days there were from 50 to 100 new cases a day, and the total number was 1104. The possible sources of infection were investigated and all suspicions centred on the water-supply. It was found that in the house on the stream between the third and fourth reservoirs there had been a patient ill with typhoid fever. He contracted the disease away from home and was sick on his return on January 2nd. Early in March he was convalescent and then had a relapse with hemorrhages and was very ill about the middle of the month. The stools passed during the day were emptied into a

privy, the contents of which lay almost on the ground, which sloped toward the stream. At night the stools were thrown either into the stream or on its banks. The stools in the privy and on the bank lay on the snow and frozen ground until the last week in March, when came unusually warm weather and a thaw, with which the material on the surface was washed into the stream and then into the third reservoir. On March 26, it was found that the first and second reservoirs were nearly empty and that the pipe leading from the third to the second reservoir was frozen. A fire was lightened to melt the ice and so the water in the third reservoir, infected by the accumulation of the excreta of the typhoid patient from January 3d, was let through and passed rapidly into the town, as the lower reservoirs were nearly empty. It can thus be seen that the water supply was very heavily infected. It is said that the physician attending the patient who was the source of infection did not know that the stream supplied the reservoirs, but at any rate no attempt had been made to disinfect the excreta.

"Ice has rarely been proved to be the means of conveyance of typhoid bacilli, although frequently under suspicion. The report of an epidemic due to ice at the St. Lawrence State Hospital, near Ogdensburg, N. Y., is given by Hutchings and Wheeler. The institution had been free from typhoid fever for some time when, early in 1903, they had an epidemic of 39 cases. Six days before the appearance of the first case, ice from a new ice house had been used. This had been filled in February by ice taken from the St. Lawrence River three miles below Ogdensburg, in which city there had been typhoid fever. The sewage from Ogdensburg

was emptied into the river above the point from which the ice was gathered. In the ice there were masses of foreign matter and sediment, in which motile bacilli were found, and typhoid bacilli were grown in cultures from these. The epidemic subsided as soon as the use of this ice was discontinued."

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## THE EYE

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This paper was read before the Lewis County Medical Society, March the 12, 1918, by G. M. Burton, M. D.

Weston, W. Va.

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In presenting this paper, it is my purpose to review the Anatomy and compare symptoms and treatment of some of the more common diseases of the eye.

No matter what branch of medicine we may represent, before we can make a success of it, it is necessary for us to acquaint ourselves with Anatomy of the particular part:

This applies to the Surgeon, the Obstetrician and the general practitioner alike.

A diseased eye, therefore, may be compared to any other diseased organ of the body, and to treat either successfully, it is necessary, not only to know the Anatomy of the particular part, but to be familiar with the surrounding tissues as well.

## ANATOMY

We shall now, in a brief way review the Anatomy and to simplify it, we shall divide the eye ball into two parts, Viz: The shell, and contents of the shell.

The shell of an eye ball is a thin, tough, elastic and collapsible membrane, about one sixteenth of an inch

thick and when in position, and supported by its contents, has definite shape and affords great resistance. It is of much more importance to you, as general practitioners of medicine than is the contents, as most diseases which you will be called upon to treat, will be located in this particular region.

This shell is made up of three separate and distinct coats, and these coats are subdivided into layers and zones.

The outer and only complete coat is the one which we shall now consider. It is composed of five layers.

First, we have the Endothelial layer which is a very thin and delicate structure, and as its name implies, is made up of a thin layer of cells. This thin layer of cells has a great and important function to perform, that is, it serves the same purpose toward the eye, as does the skin toward the body. It is really a partition which separates the eye from the outside world, so to speak, and when this thin delicate membrane is broken, we have an avenue for infection, the same as when there is an abrasion of the skin. This layer is subjected to many injuries from foreign bodies such as cinders, small pieces of metal and grains of sand.

However, in some cases, especially so with rail-road employees who treat each other, we sometimes have an infection as a direct result of the operator, rather than from the foreign body itself. These operators have but little knowledge of or at least but little regard for asepsis and are ready to attack a foreign body, which has lodged in the eye, with almost anything imaginable, from a dirty handkerchief to a crow-bar, and in so doing, they often

tear this thin membrane and at the same time introduce poison into the eye from their instrument.

To illustrate this, I shall refer to a patient in my private practice who came to me with a badly infected eye and with the history that he had gotten a grain of sand in it and his family physician had gotten it out, but in a few days, his eye became inflamed. It grew from bad to worse, until it became necessary to enucleate, as the patient had lost his vision entirely and the pain was so severe that he could not eat or sleep, and there was great danger of sympathetic trouble. I fear this was the result of an untidy operator, who, by the way, was a very popular physician.

We shall now consider the second layer of the outer coat.

"Nature," 'Tis said "is a wise provider," and I see it more and more thoroughly demonstrated each day, in my study of the eye. Beneath this delicate Epithelial membrane, nature has placed a more dense structure, called the anterior limiting membrane, or membrane of Bowman, and this membrane possesses great powers of resistance in the way of throwing off poison and in limiting the course of disease and were it not for this assistance, many eyes would otherwise be completely destroyed. It, therefore, acts as a reinforcement to the Epithelial membrane. We now have, for consideration, the third layer which layer composes about four-fifths of the outer coat, and is made up of a ground substance in Lamellar form which overlap each other and the spaces between these are filled with corpuscles. This layer assists the lens in bringing the rays of light to a focus as they pass

back to the Retina and it is the chief seat for disease in Luetic infection. Just under this layer we find the fourth layer, which is like the second in general makeup and is called the posterior limiting membrane, or membrane of Decemet, and is a very important factor in limiting the course of disease. We may, and sometimes do find an ulcer which has eaten away and completely destroyed the three layers over this one, and when it reaches this membrane it is checked. In this case, however, this membrane, from pressure within the eye, may be forced out like a blister or hernia, and in eases, will rupture and allow the Aqueous humor to escape, and in some cases, part of the Vitreous, and as a result thereof, have blindness and collapse of the membrane.

This brings us to the fifth or Endothelial layer, which, as its name suggests, is made up of Endothelial cells, and is of but little importance to you, as we do not have any diseases which affect this layer alone.

The five layers just described, or generally speaking, the outer coat of the eye is divided into two zones, viz: The Cornea and Sclera. The Cornea composes about one-sixth of the outer coat and is the only part of the eye ball which is exposed to view. It is perfectly transparent, and differs from the Sclera in this respect only. It not only differs from the Sclera, but in fact it differs from almost every other tissue of the body in several different ways.

First, the Cornea has no blood vessels, consequently it derives its nourishment by absorption from the surrounding tissues. Nature, however, comes to the rescue when unusual nourishment is needed, as in eases of Ulcers and Keratitis, and sends new tempor-

ary blood vessels to the seat of trouble, and as the tissue heals, these blood vessels gradually disappear. This is known as Pannus, and is composed of a group of blood vessels, triangular in form, with the apex of the triangle reaching the diseased tissues. Were it not for this provision, we would lose many, many eyes.

Still another Anatomical exception, is, the forty pairs of ciliary nerves throw off their sheath as they pierce the Cornea, and were it not for this provision, the Cornea would not be clear, but would have a milky appearance and thus interfere with vision.

The posterior five-sixths of the outer coat, or Sclera, is opaque and is entirely hidden from view by the Conjunctiva. This particular zone of the eye ball furnishes a seat for the insertion of the six recti muscles which hold the eyeball in position and controls its movements.

The Conjunctiva is a thin delicate membrane and is attached to the eye ball at the margin of the Cornea and extends back over the ball and folds upon itself, forming the cul-de-sac, and then passes forward lining the lids and becoming inserted at their margin.

We shall now consider, briefly, the second coat of the eye ball, or what is commonly called the Uveal tract. It is composed of four layers, Viz: The Endothelial, the Vascular, the Muscular and the Pigment. This layer is also divided into three zones, Viz: The Iris, Choroid and Ciliary body.

The Iris is the anterior part of the second coat. Its function is to control the amount of light which enters the eye ball. Were it not for the Iris, we could not see in extremely light or

dark places, and when subjected to different degrees of light we would be temporarily blinded.

Next in order is the Ciliary body. This zone of the eyeball assists the lens in accommodation and is a very dangerous part of the eye to be injured as it frequently excites sympathetic irritation.

The last of the three zones, is the Choroid. This zone is highly supplied with blood vessels and furnishes nourishment to adjacent tissues.

We now have for consideration, the third coat or Retina. This is in reality a flattened condition of the Optic nerve. It is very thin, but is subdivided into ten layers. This thin membrane is the seat of many constitutional disturbances, however, due to the remoteness of the parts, it will not prove interesting to you.

#### CONTENTS.

The contents are the Aqueous and vitreous humors, the capsule and lens. The cavity of the eye is divided into two parts by the capsule and lens. The capsule is attached at its circumference to the Ciliary body and thus forms a partition. Anteriorly to this we have a small cavity divided into two parts by the Iris. These are known as anterior and posterior chambers and are filled with Aqueous humor. These two chambers, however, communicate through the pupil. Many students get these two chambers confused with the space posterior to the lens and capsule, and for the sake of those who have been wrongly impressed. I repeat, **THAT THE POSTERIOR AND ANTERIOR CHAMBERS ARE BOTH IN FRONT OF THE LENS.**

Behind the lens and capsule, we have a large cavity filled with Vitreous

humor. Sometimes the cavity is very large, as in a near sighted eye, and due to this, or a lack of Vitreous humor, there is not sufficient tension and the result is a detached Retina.

Diseases of the lens and contents of the eye ball in general are not of interest to you, as we can make a diagnosis by use of an ophthalmoscope only.

There is, however, one very common disease of the lens which I will mention and that is Cataract. This is simply an opacity of the lens or capsule, or of both, or it may be but a partial involvement of either. The former condition would be a complete cataract while the latter would be a partial cataract. In incipient or partial cataracts, the lens presents a streaked appearance similar to the spokes of a wheel. The opaque streaks radiate from the center and appear as black streaks. If the condition is observed early enough, we are able sometimes to arrest the progress of the disease by the judicious use of Homatropine and Iodide of Potash. If the treatment does not arrest the progress, these spokes gradually widen out until they meet and then we have a complete cataract. After this stage is reached, the only resort is an operation. The length of time in which a cataract may mature varies in different individuals from a few months to several years. The cause of the cataract, and the general condition of health, as well as the temperament of the patient may play a great part in the length of time it takes to mature.

All cataracts are not alike, or rather we have a number of different kinds. They are classified according to position as follows: Anterior polar, posterior polar, zonular, anterior and

posterior cortical and nuclear. Besides these, senile, congenital, secondary, Morgagnian and traumatic cataracts. All cataracts are partial or complete, or stationary or progressive.

The treatment differs in some of these cases. Sometimes the entire lens is removed by making an incision in the eye ball and rupturing the anterior capsule: Some operators prefer the Smith operation and remove the lens and capsule, and some other cases require a needling operation. It depends upon the kind of cataract as to the operation preferred. Really the thing of most importance is WHEN TO OPERATE, RATHER THAN HOW. There is one rule applicable in all cases, Viz: NEVER OPERATE FOR A CATARACT WHEN THE PATIENT HAS ONE GOOD EYE. Someone may say why? Because one good eye is sufficient for any one and it is not wise to subject the patient to the danger of sympathetic inflammation when he does not suffer from the condition, and will not see any better after the operation. An eye which has been operated on cannot accommodate and does not work with the good eye. Still another reason is, the best of operators do not have perfect results and may leave the patient a permanent suffer. Hence it is well to use discretion as to when to operate.

#### SYMPTOMS AND DISEASES

Symptoms of eye diseases are more confusing than are the symptoms of any other organ of the body. When we are called in to see a patient suffering with pain in the right iliac region, and with it, tenderness over this region, elevation of temperature, constipation

etc., we are warranted in diagnosing appendicitis.

Again, we might be called in to see the second patient who has almost the same group of symptoms, but this time it is in the region of the liver, so we would most likely have Gall Stones.

Later, we might find another patient with pain, elevation of temperature, but this time the pain and soreness is in the thoracic region, so we would at once suspect congestion, but in order to help determine the nature of the trouble, we would look for rales, and if present, we then know the nature of the trouble.

Aside from the character and seat of the pain in general sickness there are many other sources of aid which help us determine the nature of the trouble, such as Urinalysis, test meal, blood count, Wassermann and competent Pathologists. So, with these reinforcements, we have no occasion to look forward with fear and trembling, but rather have every reason to be hopeful and thus inspire the confidence of your patient.

This is not true of eye troubles, by any manner of means, as nine tenths of the patients who consult an Oculist have practically the same group of symptoms, Viz: Pain, Photophobia, redness and Lachrymation. We find this group of symptoms in Keratitis, Iritis, Ulcers, Irido-eyelitis, Uveitis, Choroiditis, Episcleritis, Foreign Bodies, and Scleritis, with many others. In these cases, before we are able to make a diagnosis, it is necessary to get the history of the case as well as the family history, and by so doing, you may unravel the mystery.

Just here, I wish to give an illustra-

tion of how important it is to go into the history of eye cases.

Less than six months ago, I had a lady patient to consult me, who had an inflamed eye. The symptoms were the usual group, *Viz*: Redness, Photophobia, Lachrymation and Pain, but before instituting treatment, it was necessary to ascertain the cause of this set of symptoms, and to do this, I started on the family history, then the history proper.

Upon inquiry, I found that this lady was married and some months previous to calling at my office, had aborted and since aborting, she had suffered with mild sore throat and sore mouth, since which time she had an eruption on her body similar to that of measles. She received treatment for the above from her family physician. The sore throat and mouth being called catarrh and the eruption was pronounced itch, when as a matter of fact, these were mere symptoms. What did I have in the way of eye trouble? It was a specific Iritis and in a sense, a symptom. In this case, however, it was necessary to use Atropine with constitutional treatment. If this patient had received constitutional treatment when she called on her family Physician, she would not have had eye trouble. Eye symptoms, therefore, may be divided into several classes. First, we have primary and secondary symptoms. Primary symptoms are seen in eye cases proper, as in Glaucoma: Secondary symptoms are in those cases where there has been some existing disease, such as local Keratitis, and the inflammation has extended until the Iris or some other body becomes involved secondarily.

Another set of symptoms is demonstrated in the case which I reported.

That is, the real disease is of a constitutional nature, and the symptoms may be in the eye, as is Syphilis or Rheumatism. It is this class of patients which affords the link which binds the general practitioner and the specialist. This class of patients go to make up a large part of clinical practice in the larger cities. We usually find that the Cornea is the first part of the eye to yield in the Luetic patients. This is due to the low powered resistance occasioned by a lack of nourishment. We still have another class of symptoms which are of interest to both the specialist and general practitioner. That is, the class who have apparently normal eyes, but who suffer with headache. In this class of patients, the seat of the trouble lies in the eye, pure and simple. It is not of a Pathological nature, but is Functional. It is caused by the eye ball being too short or because it is not round. Really, we rarely see a perfectly normal eye. For it to be so, it has to be of a mathematical accuracy.

This class of patients is really large. Scarcely one-half of the people who have defective eyes-functionally defective-ever get relief. A big percent of them are so engaged that their work does not occasion close looking and they go through life inconvenienced and to a certain extent suffering and do not know it. We can, as you know, become accustomed to defects and not notice them.

Of all the eye symptoms, the one of most importance, functionally speaking, is headache. While headaches cover a large field for study, and should be made a specialty, we shall attempt to divide this large number of patients into two classes, *Viz*: Those who have headache at any and all times, and



those who usually get up in the morning feeling well and as the day goes by, they begin to feel worse and worse. These patients, or at least forty-nine out of fifty, have, as an underlying cause, EYE STRAIN. Not all patients, however, who have eye strain or defective vision suffer with evening headaches, but you will find these frequent occurring headaches, which grow worse as evening approaches, in those patients who do close work constantly, and their only relief is PROPERLY fitted glasses. Still many people may go along for months and months doing close work and not be inconvenienced at all, and suddenly they will develop a daily headache. In this case, if we investigate properly, we will find that the patients health has depreciated somewhat and he has not the powers of resistance that he had previously had.

The eyes, therefore, being a point of least resistance, are the first organs to give way under the strain.

There is, however, another symptom of much importance to you, and that is Blepharitis. This symptom is usually found in small children, or in the class of patients who are more or less illiterate, and in fact in others who do not read much or use their eyes for close work. This symptom is a reddened condition of the margins of the eye lids. Eye strain favors congestion. Congestion in turn causes swelling and then we have an excess of heat and moisture, so this affords a good field for germ accumulation and promotion, until at last, we find the presence of pus which eats way to the roots of the eye-lashes and they fall out, one by one, until in some cases, there is not a single lash left.

I find that it is a very common

thing for physicians to call Blepharitis, granulated lids. There is as much difference between granulated lids and Blepharitis, as there is between Nephritis and Diabetis. Properly fitted glasses will relieve Blepharitis permanently, while there is no specific for Trachoma. It seems to be a general tendency for physicians to call almost every inflamed condition of the eye lids Trachoma and to give the patient a little Boric Acid solution, or some other inert remedy, and get the fee. Why not get the fee without giving the so called remedy? It is a mistaken idea to teach people that Trachoma is a mild form of trouble. To the contrary they should be taught that Trachoma is one of the most obstinate and should be one of the most dreaded of all eye diseases. When a case of Trachoma is suspected, the patient should be isolated, conditionally. They should be advised to use a separate towel, separate bed linen and individual handkerchiefs. By so doing, the general physician would help limit and stamp out this horrible condition by educating the laity to dread it. You educate them to hate small-pox and other contagious diseases and they hand this well grounded dislike down to their children. There is no contagious disease that is more horrible to me than Trachoma. Fortunately this is a rare trouble in this community.

Really, in my four years work here, I have not seen but two cases and one of these lost one eye, as a result thereof.

In conclusion, we will call your attention to two very common and very disastrous diseases, Viz: Glaucoma and Iritis.

These two diseases attack tissue which is more deeply seated than most

diseases which you will be called upon to treat, yet the same group of symptoms will be found in these troubles as is found in the superficial diseases. They are dangerous, for this special reason, so therefore, before attempting to treat an inflamed eye, you should always be able to exclude these two serious troubles.

It is sometimes very hard for one who has made a special study of the eye to differentiate between Glaucoma and Iritis.

You will usually find slight dilation of the pupil in Glaucoma, while in Iritis, if there is any difference, the pupil will be slightly contracted. We find these exceptions, however, in the typical cases. There are cases of both, Glaucoma and Iritis, which are of a mild nature and in such cases it is very hard to determine the real nature of the trouble.

Here is another suggestion for "the history" of the case. We so often find Iritis associated with Lues, Rheumatism and Gonorrhoea.

When we find a case of Iritis which will not respond to treatment along general lines, they will usually improve under the use of Protiodide. This is one of the routines in clinics.

Iritis differs from Glaucoma in another respect, that is, you will find it in the young as well as the old. Glaucoma is a disease found chiefly in people of middle age or beyond. Both of these diseases are very progressive, and if treatment is not instituted early, the vision will be greatly depreciated, if not entirely lost.

We are sometimes confronted with a case of Non-inflammatory Glaucoma. These cases are very difficult to diagnose and the vision gradually

grows worse and worse, until, finally the vision is entirely lost. Patients of this sort will usually complain of inability to see acutely and this gradually grows worse without any accompanying symptoms. Occasionally these patients are told that they have an approaching cataract and that it will have to ripen before they can have an operation and consequently are kept from those who might be able to diagnose the case. In most of the non-inflammatory cases, or Glaucoma—simplex, the only symptom present is a cupping of the nerve head. This can be detected by the use of an Ophthalmoscope in the hands of one who can use it intelligently. Recognition of this disease, early, is of the most importance, as then everything can be saved. If the diagnostician fails to recognize this trouble early, everything is lost. Tissues destroyed by Glaucoma cannot be replaced. Damage done by this trouble is permanent.

The ability of general Practitioner to differentiate between Iritis and Glaucoma and to recognize the symptoms of Glaucoma simplex is really worth more to his patients than almost anything else mentionable.

Just here, I will ask your pardon for frequent reference to my own patients. However, I have this case which I want to report. Before coming to Weston, I was consulted by a patient who had eye trouble. On inquiring into the history, I found the patient had been treated for three months by a general practitioner. I was personally acquainted with this man, and had the highest regard for his honesty and ability. On making an examination, I found the patient had the usual group of symptoms, viz; congestion, lachrymation, photophobia and pain. Besides

this, I found increased tension, and cupping of the nerve head, plus a slightly dilated pupil. A typical case of Glaucoma from every angle, however, the question arose in my mind as to what the family doctor might have used that would have produced some of the symptoms, so I called him on phone to inquire into the case. His treatment was Boric Acid solution in the eye, and Morphia to relieve the pain. His diagnosis was neuralgia. His results were an everlasting monument of blindness plus the Morphia habit. This man was doing his best so far as he knew, but his diagnosis was not correct.

Gentlemen, if you bear this one fact in mind you will be well paid for the time spent in listening to what I have to say; never treat an eye for an inflamed condition without first being able to determine that the patient is not suffering with Glaucoma or Iritis.

Never use Atropine in an eye without first absolutely knowing that the case is not Glaucoma.

Early treatment is of the greatest importance in these cases, so do not cause delay by using some eye wash because you think it inert. Delay is as dangerous in the treatment of serious eye diseases as it is in the treatment of pneumonia or typhoid fever. You know what the early treatment means in these cases.

So when a patient past middle life, or especially a woman who has gone through an early Menopause consults you concerning poor vision, with a history of a previous inflamed condition of the eye, you have a very suspicious case and the best thing to do in these

cases, especially if you do not use an Ophthalmoscope, is to refer this patient to someone who can diagnose the case, or at least exclude Glaucoma. Still another predisposing cause for Glaucoma, is chronic constipation. Many times we have slight recurring attacks of Glaucoma, which are brought on by indigestion or chronic constipation. If you examine these patients closely, you will find a very shallow anterior chamber, that is, the Iris will be pushed forward from the pressure in the eye ball and this makes the space between the Iris and Cornea very shallow.

While the statistics show that one per cent of all eye cases are made up of Glaucoma, there is still a question concerning the Etiology. At present the definition is, increased tension plus the cause and results of the tension. In days gone by, Glaucoma was always associated with Gout, however, this idea has been abandoned. It is a fact, however, that Glaucoma is found more frequently in far-sighted eyes than in any other. It has been established also, that an eye ball proper, reaches its growth about the age of twenty-five, yet the lens continues to grow until the patient reaches a ripe old age. Some authorities claim that Glaucoma is really caused by the lens becoming too large and the circumference of it pressing against the ciliary body and thus interfering with the filtration angle or the canal of Schlemm. This is a canal which extends around the eye ball at the Junction of the Cornea and Sclera. This canal has a communication with the aqueous chamber of the eye and it empties its contents into the venous circulation. Anything, therefore, which has a tendency to interfere with the fluid passing from the aqueous

chamber into this canal, thence into the circulation, would naturally cause tension.

In a far-sighted eye, or an eye which has to accommodate, great force is brought to bear by the action of the muscles of accommodation and the circumference of the eye is pulled in against the lens, so it is extremely important to have an eye of this kind relieved of strain by the properly fitted glasses.

It is claimed that many cases of Glaucoma could be avoided by the use of glasses fitted before the irritant can accomplish this much.

I realize that the general practitioner is too busy to devote much time to the study of the eye. However, if you will acquaint yourself with the symptoms of Glaucoma, you will then be able to do great service to those who entrust themselves in your care. Sometimes just a word of advice at the proper time is worth a world to those who may be suffering. When you are called in a family to see a patient, and you notice some member of the family has inflamed eyes, it is not only your privilege, but it is your duty as well, to inform the parents that something is wrong and suggest treatment. By so doing, you may be the means of saving the patient much suffering and great inconvenience. It is necessary to educate the public, the fathers and mothers, how to care for their children. Many of these patients fall into the hands of quacks and unscrupulous Opticians, who are basely ignorant and thus keep the patients away from those who might relieve them.

It is really as alarming as it is true, that many of your best patients, people who have the utmost confidence in you as Physicians, will not trust you to

treat an inflamed eye, and yet will patronize some advertising physician or quack many miles away, or even buy glasses from a peddler, or consult a local Optician, who has no more knowledge of the eye, than anyone of us have of an electric motor, and at the same time, feel that all is being done for them that knowledge can afford.

No Optician, in fact no Oculist can adjust glasses to a patient under the age of forty, without the use of a mydriatic, that is, a medicine to put the eye to rest, yet the average patient will very reluctantly consent to the use of it.

You are not in a position to know or study the work of Opticians who fit glasses in a jewelry store as a side line. It is not my purpose to knock them, but when I tell you that I have followed them and do know, it is true, and as an example, I refer to an optician who recently put out a lot of work in this section, and nine out of every ten pair of the glasses which he prescribed for patients under the age for forty, were identically the same kind of glass. And to the contrary, I will venture to say that if a competent man examines one hundred cases under the age of forty, that out of any ten of them, there will be no two corrections alike. These men learn to give placebos and are content to take a patients money for nothing. Many of these patients are sufferers and remain sufferers throughout life because they are of the opinion that all has been done for them that is possible, simply because they have glasses, no matter who fit them.

A study of the eye will help you, it will help the patients who rely on your suggestions.

Have you ever stopped to think what certain symptoms of the eye means to

you in your practice? How many of you ever gave an anesthetic who did not use the eye as a guide? Had you ever thought of that? How many of you ever responded to a call to see a patient, who, when you arrived was unconscious, that you did not look at his pupil to see whether you had a case of Morphinism, or a case of Uremic poison? How many times have you had Keratitis to suggest a Wassermann? How many of you have ever taken the field of vision to help you locate a tumor or hemorrhage of the brain, or to help you to diagnose alcoholic or tobacco Amblyopia? Really, the condition of the pupil is a guide to determine the nature of many pathological lesions, and yet but little attention is paid to this. Finally, as a suggestion toward prophylaxis, and this is within the reach of everyone of you, in your obstetrical work, always use a few drops of a two per cent silver solution in the eyes of the newly born babe, and if you do this in every case, and need it in but one, in a lifetime, you will have been generously paid for your trouble, and at the same time will favor the commonwealth by helping to close the doors of charitable institutions for the blind.

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#### DIFFICULTIES IN DIAGNOSING ACCESSORY SINUS INFLAMMATIONS.

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G. A. Hinnen, M. D., F. A. C. S.,  
Cincinnati, O.

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In recent years the rhinologist has resorted to the X-ray as a diagnostic aid. A suspected case of empyema of the accessory sinuses is transilluminated, and to make doubly sure of his findings, where doubt exists, the pa-

tient is also X-rayed. A number of these cases in which the X-ray negatives and the transillumination did not coincide, tempted me to look more carefully into this matter, with interesting results.

A number of cases will serve to illustrate. The most startling one, Case No. 1, Mr. A B C, who had been transilluminated repeatedly with negative results; in fact no clearer picture could possibly be presented; frontal sinuses negative; antra negative, for the cheeks illuminated perfectly with intense, almost brilliant pupillary reflexes. This case was X-rayed on five different occasions, extending over a long interval of time, and all the results were negative. Despite this, both antra were found to be in dreadful condition—filled with offensive thick yellow pus.

In case No. 2, that of H. P. S., the X-ray was absolutely negative, and the transillumination gave the antra as positive.

Case No. 3, Mrs. M. W. J., gave a negative X-ray, whereas the left antrum was dark on transillumination.

In case No. 4, C. P. H., the X-ray findings were again negative; this at variance with the transillumination, which gave a frontal sinus and an antrum as positive.

Mr. L. J., case No. 6, had a perfectly normal X-ray, whereas the transillumination gave a slightly darker shadow for the left antrum than the right. This was verified by using a trocar, when a quantity of pus was evacuated.

Miss H. D., case No. 6, yielded a perfectly negative X-ray, but the transillumination revealed an infected antrum.

Case No. 7, Mrs. M. L., had a posi-

tive finding for her antra with the transillumination, while the X-ray showed but one to be involved.

Miss O. C., case No. 8, was a positive double antrum with the transilluminator, and the X-ray declared her negative.

Quite distinct from this series of cases is the reverse situation, where the X-ray indicates trouble, which is not borne out by the transillumination or by the use of a trocar.

Miss P. C., case No. 9, had a positive antrum on the right, according to the X-ray; the transillumination did not reveal it nor did syringing of the cavity yield anything.

Mrs. W. H., case No. 10, was an exceedingly bad case. The X-ray pronounced her right antrum positive; the transilluminator said no, yet the trocar revealed an antrum full of the most offensive pus.

Case 11, Miss S. K., had had a number of X-rays, showing involvement of the right antrum; the transillumination made a dozen or more times was invariably negative; still the antrum was diseased as shown by the X-ray.

Case 12, J. K., presented a third type. Here both the X-ray and the transilluminator were positive, and despite this double positive result, the cavity was syringed with a negative result.

With the possible exception of one case, No. 8, these cases were all old chronic affairs. Undoubtedly the mucous membrane lining the cavities had become very thin, atrophic as it were, and would not impede the ready transmission of the rays as a hypertrophic or hyperplastic membrane might. Why then a cavity filled to overflowing with thick yellow pus

should likewise transmit the rays and not impede them, is somewhat mystifying; we know that oft times in acute cases it does do so, but the shadow may be due to the hypertrophic condition of an acutely swollen lining membrane.

In reviewing these cases and summing them up, it is shown that absolute reliance cannot be placed on either method. The cases show conclusively that the X-ray may be negative, while the transillumination gives a positive result, borne out by instrumentation. Likewise, the transillumination may appear negative, whereas the case is positive according to the X-ray and operation.

A third class of cases occurs where both diagnostic measures are at fault giving negative results, which the trocar and cannula disprove. In all suspected cases I urgently advise the syringing of the cavity, and even this may have to be done a number of times, at different intervals, for an old chronic case may at the time of syringing contain little if any pus, there being nothing but a few dried flakes of epithelial debris or dried up pus; in other words, it is a dormant state, ready to assume acute activity at the first provocation or lack of resistance on part of the patient, as shown in case No. 12.

While the cases enumerated have shown the inadvisability of depending entirely upon the X-ray and transilluminative methods for diagnostic purposes, I nevertheless feel they are of great importance. Often the transillumination shows a clouding for the frontal sinuses; the X-ray reveals an absence of these sinuses. Thickness of bone is a great factor in giving results which may be interpreted wrongly,

especially so with the transillumination; here the X-ray is of inestimable value, especially if exposures are made of different intensities, getting various powers of penetration.

The X-ray has another value of great benefit in determining the size of the sinuses, in giving information as to the contour of said sinus, the distance between the anterior and posterior plates in the frontal, etc. No operation should be attempted without an X-ray. At the same time the negative must be studied very critically, and may require additional means of determination, such as vacuum pump, and repeated observations.

The Leverone 4 W. 7th St.

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## ANNOUNCEMENTS AND COMMUNICATIONS

535 North Dearborn Street, Chicago,

April 25, 1918.

Dear Doctor Bloss:—

The Supreme Court of Illinois last week rendered a decision concerning the legality of the American Medical Association's holding meetings and electing officers outside of the state of Illinois. This we have had put into type, and I take the liberty of sending you a proof of it, as well as proof of a brief editorial comment on the subject which appears in *The Journal* this week.

Sincerely yours,

George A. Simmons.

The Supreme Court Decision on the Corporate Rights of the American Medical Association.

In 1910 the state's attorney of Cook County (Chicago) was petitioned to institute "quo warranto" proceed-

ings against the American Medical Association on the grounds that the Association's affairs were being conducted illegally in that its officers were elected at annual sessions held outside of the state of Illinois. The state's attorney refused to take action in the matter, and later, the attorney general of the state, who was appealed to, also refused to act. January 5, 1911, mandamus proceedings were begun in the Circuit Court of Cook County, Illinois, to compel the state's attorney to initiate the quo warranto action which he had declined to institute. Until December 20, 1915, the issue was between the parties asking for the "mandamus" and the state's attorney of Cook County, Illinois; the point at issue being the technical one as to whether the state's attorney was compelled to act or had discretionary authority in the matter. The case went through the lower courts and finally was carried to the Supreme Court of Illinois, which in December, 1915, refused to hear arguments on the merits of the cause as it related to the American Medical Association, but ordered the Circuit Court to take up the original quo warranto proceedings designed to raise the question of whether or not Illinois corporations "not for profit" are compelled to hold their elections and conduct their business within the confines of the state. Up to this point the American Medical Association was not technically interested in the controversy; now, however, it became a party in the action. Quo warranto proceedings against the members of the Board of Trustees were instituted in the Circuit Court of Cook County, Illinois, which after trial rendered a decision favorable to the Association. The case was then carried

to the Appellate Court of Illinois, which confirmed the decision of the Circuit Court. An appeal was finally made to the Supreme Court of Illinois, which last week (April 16) rendered its decision, settling the question. This decision is entirely satisfactory so far as the Association is concerned. One paragraph of the opinion reads:

It seems reasonably to follow that if a corporation not organized for pecuniary profit may hold meetings at stated times outside of the State of Illinois, composed of delegates selected by the constituent associations, for the transaction of business of the corporation, it is not unlawful to authorize and provide for the election by said house of delegates of trustees of the corporation. The American Medical Association was organized solely for the purpose of the advancement of medical science. Its purpose was to improve methods for the treatment and prevention of diseases of the human race. Its usefulness for these purposes would be seriously interfered with, if not absolutely destroyed, if it could not provide for the election of trustees from the most efficient men in the association throughout the United States, by delegates selected by the constituent associations from the various States in the Union. Such authority to the house of delegates is conferred by the by-laws and is not in conflict with or prohibited by the constitution or laws of Illinois relating to corporations not for pecuniary profit.

The decision is important not only to the American Medical Association,

but also to all organizations incorporated under the law of Illinois—in fact of any state—governing corporations “not for profit.”

May 7th, 1918.

Dear Doctor Bloss:—

I heard a recent authoritative statement, which will show how urgent the need for doctors is in France. During one of the great battles on the Somme, in one hospital alone, sixty operating tables were going day and night for three weeks. Many members of the surgical staff did not have their boots off during that time. They would work until ready to drop from exhaustion, lie down, and sleep for two or three hours, then get up and go at it again. At times the row of wounded men on stretchers outside of the hospital where they had been set down by ambulances, was half a mile long, and so great was the press of wounded, that the orderlies on being sent out to bring more wounded to the Operating Room, were told to bring in only the worst cases, as others would have to wait, as there were not enough physicians to give them all the attention that they needed.

If you will be so kind as to call attention to this in the State Journal, I will appreciate it.

Sincerely yours,

J. E. Cannaday.

Major Medical Reserve Corps.

May 10th, 1918.

Dear Doctor:—

I am in receipt of a letter along with application for a commission in the Medical Reserve Corps from the President of our County Medical Society, which is so pertinent to the pre-



sent situation that I have his permission to submit to you for publication, if you have room in the next issue of the Journal.

Sincerely yours,  
J. E. Cannaday,  
Major Medical Reserve Corps.

May 6th, 1918.

Major J. E. Cannaday,  
Charleston, West Virginia.

My Dear Doctor:

I enclose my application for a commission in the Medical Reserve Corps.

I do this because I am prompted by an earnest desire to be of service to my country in the great struggle for humanity in which she is engaged.

I am offering my service from a patriotic standpoint. I do not want it said by anyone in the future, either to my family or friends, that he was a slacker, and did not offer what he had on the altar of his country.

Whether or not I may be accepted, I at least shall feel that I've done my best and can have an easier conscience for the balance of my days.

If there is a place into which I will fit and I am found to be physically qualified for service, even at home, I am ready.

Fraternally,  
Charles E. Copeland.

May 11th, 1918.

Dear Doctor:

Some time ago I submitted to the Attorney General questions as to the legality of a trained nurse or other persons not licensed as a physician administering anaesthetics during a surgical operation. I have just received the opinion of the Attorney General covering this point and for the in-

formation of the surgeons of the state here submit the essentials of it.

“Under our law, the right to administer drugs used in surgical anaesthesia by a person not a licensed physician would not depend upon either the question of preparation by study or otherwise, or compensation or fees charged for services, but upon the question as to whether or not the administration of such drugs would constitute the ‘practice of medicine and surgery’ within the meaning of the statutory definition. Is the administration of the anaesthetic preparatory to a surgical operation an integral part of the operation itself? I think it is. There are certain things preparatory to a surgical operation necessary to be done that can be trusted to nurses and attendants which are not really a part of the operation itself, and require no great amount of skill to perform. However, an anaesthetic is a substance, the unskillfull handling of which is dangerous to human life. The person undergoing the operation places himself absolutely under the control of the person administering the anaesthetic. This is the first dangerous step in the operation; the first one requiring peculiar skill and knowledge. The operating surgeon concentrates his attention to the cutting part of the operation and cannot well exercise careful supervision over the person administering the anaesthetic. The anaesthetic is such a subtle and dangerous agent that the most careful supervision on the part of the operating physician does not remove the danger of the anaesthetic in the hands of an unskillfull person.’ ”

“If it be held that the administration of anaesthetics does not constitute

the 'practice of medicine and surgery,' then the fitness of a person to administer them is determined in each case by the operating surgeon. He would constitute the examining tribunal and might choose either a skilled or unskilled person to perform a recognized dangerous part of the operation. I do not believe the legislature ever intended that any person not a licensed physician should be permitted to administer drugs used in surgical anesthesia even though such person may act under the direction and in the presence of a licensed physician and surgeon."

From the above opinion it appears that under no circumstances can any person, whether trained nurse or otherwise, administer an anaesthetic during a surgical operation unless such person has received a certificate entitling him to practice medicine and surgery. I do not believe that the opinion of the Attorney General would render illegal the administration of anaesthetics in obstetrics, since in such cases only partial anesthesia is sought in the great majority of cases. If complete anaesthesia becomes necessary, it seems that no one except a licensed physician can legally administer the anaesthetic.

Another matter of interest of which the medical profession should know is this. At the recent meeting of the Public Health Council, a resolution was unanimously adopted adding venereal diseases to the list of reportable diseases. A number of regulations had been prepared by the State Health Commissioner, and these had been submitted to the authorities in Washington and met with their approval. Time was not permitted, however, for their careful consideration. This will be given at a meeting to

be held in Wheeling early in July, and after they have been circulated to the physicians of the state, as required by law, they will become operative. Thereafter all cases of syphilis, chancroid, or gonorrhoea must be reported to the State Health Department, probably through the local health official where there is one. Physicians should at once prepare for this innovation which is being introduced in many of the states.

Respectfully yours,  
S. L. Jepson,  
State Health Commissioner.

To the Editor of the West Virginia State Medical Journal.

This bit of information shows the fidelity courage and patriotism of nurses of the country. May the nurses of our state who read the Journal emulate their noble sisters now in the service, and help swell the number to 24,000 needed by January 1, 1919.

The Surgeon General of the Army authorizes the following statement:

The strength of the Army Nurse Corps of the Medical Department yesterday was 9,824 nurses, divided as follows:

In Europe or awaiting trans-	
portation .....	3,488
In United States .....	6,288
Philippines and Hawaii .....	48
	----
Total .....	9,824

All on Active Duty.

These nurses are all women and are all on active duty; 1,448 of them are Regular Army nurses, which means that they have been enrolled directly from civilian life in to the Army Nurse Corps; the other 8,376 are reserve nurses, or nurses who were nominated

by the Red Cross to the Surgeon General's office for enrollment in the Army Nurse Corps.

On December 31, 1917, there were 4,067 nurses, regular and reserve, in the Army Nurse Corps; therefore, 5,757 is the strength added to the corps between January 1 and May 3 of this year. When war was declared, the strength of the corps was 373.

24,000 Needed by January, 1919.

On the basis of the present size of the United States Army, the Surgeon General's office computes that at least 24,000 nurses will be needed in service by January 1, 1919. The rate of increase since January 1 last, if continued throughout this year, will furnish only 21,338 nurses. The prospective deficit may be partially met by a plan for nurses' aides—women who, though not graduate nurses, will have special training fitting them to relieve nurses of many of the simpler tasks involved in caring for the sick and wounded in hospitals.

Increase of Ratio.

It is estimated by the Surgeon General's office that, even for the present size of the Army, the rate of enrollment into the Army Nurse Corps should be increased, and large additional needs will result from the large increase in the size of the American Army which is being planned. These needs can not yet be definitely computed.

Sincerely,

Frank LeMoyné Hupp.

April 25th, 1918.

Dr. James F. Bloss, Editor  
West Virginia Medical Journal,  
Huntington, W. Va.

Dear Doctor:

Enclosed find a list of West Virginia doctors who have accepted their commissions in the Medical Reserve Corps.

Yours very truly,

J. E. CANNADAY

Major Medical Reserve Corps.

LIST OF PHYSICIANS WHO HAVE  
ACCEPTED THEIR COMMISSIONS  
IN THE MEDICAL RESERVE  
CORPS.

From Records in the Council of National  
Defense, April 15, 1918.

West Virginia

Dr. George Fordham, Affinity.

Dr. Charles Francis Mahood, Alderson.

Dr. William Edward Cook, Algoma.

Dr. Clyde Alexander Harper, Amma.

Dr. David Patterson Scott, Ashland.

Dr. John Smith Cayce, Ben Bush.

Dr. Rufus Emory Woodall, Bentree.

Dr. Albert Leslie Grubb, Berkeley Springs.

Dr. William Glen Harper, Beverly.

Dr. John O'Brien, Jr., Blandville.

Dr. Ernest Fred Gott, Bluefield.

Dr. William Oswell Hearn, Bluefield.

Dr. William Clary Slusher, Bluefield.

Dr. Harry George Steele, Bluefield.

Dr. Thurman Elroy Vass, Bluefield.

Dr. George Leedom Pierce, Bower.

Dr. Waitman Willey Orr, Broomfield.

Dr. Alexander H. S. Rouss, Bruce-  
town.

Dr. William Henry Greene, Camden.

Dr. William Phillips Sammons,  
Cameron.

Dr. Edgar Powell Norfleet, Cannel-  
ton.

Dr. Stanley White Barber, Capert-  
ton.

Dr. William Christopher Williams,  
Caretta.

Dr. Timothy Lawrence Barber,  
Charleston.

Dr. Thomas Maxwell Barber, Char-  
leston.

Dr. George Holt Barksdale, Char-  
leston.

Dr. Henry George Bieler, Charles-  
ton.

Dr. John E. Cannaday, Charleston.

Dr. Lewis Clyde Covington, Char-  
leston.

Dr. Robert Fulton Ellison, Charles-  
ton.

Dr. James Morris Fontaine, Char-  
leston.

Dr. Patrick Lamb Gordon, Charles-  
ton.

Dr. Curtis Thomas Hayden, Char-  
leston.

Dr. Earl Bennette Henson, Charles-  
ton.

Dr. Atlee Mairs, Charleston.

Dr. Morris I. Mendeloff, Charleston.

Dr. John William Moore, Charles-  
ton.

Dr. Alvah Londus Parsons, Charles-  
ton.

Dr. Howard Cecil Sarver, Charles-  
ton.

Dr. Walker Allen Johnson, Clarks-  
burg.

Dr. Calvin Maryman Kessler,  
Clarksburg.

Dr. Jesse Frank Williams, Clarks-  
burg.

Dr. Mark Edgar Caldwell, Clenden-  
in.

Dr. George W. Shriver, Clendenin.

Dr. Charles Wesley Myers, Coke-  
ton.

Dr. Raymond Leslie Focer, Colliers.

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- Dr. Lowell Sidney Goin, Wheeling.
- Dr. Eugene Augustus Hildreth, 3rd, Wheeling.
- Dr. Foster C. Howard, Wheeling.
- Dr. Lewis Hoagland Howard, Wheeling.
- Dr. William Eugene Mesters, Wheeling.
- Dr. William H. McLain, Wheeling.
- Dr. Emerson Megrail, Wheeling.
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# The West Virginia Medical Journal

JAS. R. BLOSS, M. D., EDITOR

C. R. ENSLOW, M. D.

J. E. KADER, M. D. ASSISTANT EDITORS

Huntington, W. Va., June, 1918

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All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

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## AN IMPERATIVE APPEAL FOR MEDICAL OFFICERS

An urgent and imperative appeal has just been issued by the Surgeon General of the United States Army, for doctors for the Medical Reserve Corps.

There are today 15,174 officers of the Medical Reserve Corps on active duty and the Medical Department has reached the limit of medical officers at the present time available for assignment. With these facts before the Medical profession of this country, we believe that every doctor who is physically qualified for service between the age of 21 and 55 years, will

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come forward now and apply for a commission in the Medical Reserve Corps.

The Surgeon General says: "So far the United States has been involved only in the preparatory phase of this war. We are now about to enter upon the active fighting phase, which will make enormous demands upon the resources of the country." The conservation of these resources, especially that of man-power, depends entirely upon an adequate medical service.

Drafts of men will continually follow drafts, each of which will require its proportionate number of medical officers

and there are at this time on the available list of the Medical Reserve Corps, an insufficient number to meet the demands of these drafts.

The real necessity for the complete mobilization of the entire profession is imperative. It is not a question of a few hundred men volunteering for service, but of the mobilization of the profession for the conservation of the resources of this country. Let every doctor who reads this editorial an appeal from the Surgeon General, which appeal is based upon dire necessity, act promptly and present his application for a commission in the Medical Reserve Corps at the nearest Medical Examining Board. If you are not informed of the location of your Board, the Editor of this journal will advise you.

#### NEW AND NONOFFICIAL REMEDIES

Under this caption we publish new articles that have been accepted by the Council on Pharmacy and Chemistry. We suggest that members write the advertisers for more complete information concerning the articles—not forgetting to state that your attention has been called to the article by this item in your *Journal*. The following articles have been approved since our last issue and accepted by the Council on Pharmacy and Chemistry for inclusion with New and Nonofficial Remedies:

**Dichloramine-T (Monsanto).**—A brand of dichloramine-T complying with the standards of New and Nonofficial Remedies. For a description of the actions, usages, dosage and chemical and physical properties see *New and Nonofficial Remedies, 1918, p. 157. Monsanto Chem-*

*ical Works, St. Louis, Mo. (Jour. A. M. A., April 6, 1918, p. 999).*

**Normal Horse Serum.**—Marketed in syringes each containing 10 Cc.; also in ampules containing from 10 to 100 Cc. as ordered. Gilliland Laboratories, Ambler, Pa.

**Gilliland's Concentrated and Refined Diphtheria Antitoxin.**—Marketed in syringes containing each 1,000, 3,000, 7,500, 10,000, 15,000 and 20,000 units. Gilliland Laboratories, Ambler, Pa.

**Gilliland's Concentrated and Refined Tetanus Antitoxin.**—Marketed in syringes containing each 1,500 3,000 and 5,000 units, Gilliland Laboratories, Ambler, Pa. (*Jour. A. M. A., April 20, 1918, p. 1159*).

**Typhoid Vaccine.**—Marketed in packages containing three syringes, the first containing 500 million killed typhoid bacilli and the second and third containing each 1,000 million killed typhoid bacilli; in packages containing three ampules, the first containing 500 million killed typhoid bacilli, and the second and third containing each 1,000 million killed typhoid bacilli; also in ampules containing from 5 to 100 Cc. of the vaccine as ordered. Gilliland Laboratories, Amber, Pa.

**Small-Pox Vaccine.**—Marketed in sealed capillary tubes in packages containing one, five and ten tubes each. Gilliland Laboratories, Amber, Pa.

**Original Tuberculin, 'O. T.'**—Marketed in 1 Cc. vials Gilliland Laboratories, Ambler, Pa.

**Tuberculin Ointment in Capsules (For the Moro Percutaneous Diagnostic Test)**—An ointment consisting of tuberculin



“Old” and anhydrous wool fat, equal parts. Marketed in capsules sufficient for one test. Gilliland Laboratories, Ambler, Pa.

Bouillon Filtrate Tuberculin, “B. F.”—Marketed in 1 Cc. and 3 Cc. vials. Gilliland Laboratories, Ambler, Pa.

Bacillen Emulsion Tuberculin, “B. T.”—Marketed in 1 Cc. and 3 Cc. vials. Gilliland Laboratories, Ambler, Pa.

Tuberculin Residue, “T. R.”—Marketed in 1 Cc. and 3 Cc. vials. Gilliland Laboratories, Ambler, Pa.

Tuberculin for the Detre Differential Diagnostic Test.—Consisting of one tube each of Original Tuberculin “O. T.”, Bouillon Filtrate Tuberculin “B. F.” human, and Bouillon Filtrate Tuberculin “B. F.”, bovine. Gilliland Laboratories, Ambler, Pa.

Cresole-Merek.—A brand of cresole, U. S. P. Merek and Co., New York.

Guaiacol Carbonate-Merek.—A brand of guaiacol carbonate, U. S. P. Merek and Co., New York.

Quinine Dihydrochloride-Merk.—A brand of guaiacol carbonate, U. S. P. Merek and Co., New York.

Quinine Dihydrochloride-Merk.—A brand of Quinine dihydrochloride, U. S. P. Merek and Co., New York.

Quinine and Urea Hydrochloride-Merek—A brand of quinine and urea hydrochloride, U. S. P. Merek and Co., New York.

Thymol Iodide-Merk.—A brand of thymol iodide, U. S. P. Merek and Co., New York (Jour. A. M. A., April 27, 1918, p. 1225).

## State News

Dr. Frank LeMoyné Hupp of Wheeling was in attendance at the Annual Meeting of the American Society for Clinical Research, the Gastro-Enterological Society and the Association of American Physicians held at Atlantic City May 6th, 7th and 8th.

Dr. J. E. Rader of Huntington attended the meeting of the Medical Division of the National Council of Defense in Washington May 4th.

Dr. F. C. Hodges house physician at the C. & O. Hospital in Huntington has applied for a commission in the M. R. C. Dr. Hodges is a graduate of the Medical College of Virginia.

The medical societies of Wayne and Cabell Counties are planning for a joint meeting to be held at Camden Park in the summer. The Wayne County society has just been organized.

A recent applicant for a commission in the M. R. C. is Dr. C. C. Cooper of Belleville.

Dr. P. W. McClung of Elizabeth, Wirt County has applied for a commission in the M. R. C. Dr. McClung is a graduate of Starling Medical College, Columbus, Ohio.

The superintendents of the State Hospitals held a meeting recently at Weston. Dr. L. V. Guthrie of Huntington, Dr. G. C. Robertson of Spencer and Dr. C. E. White of Weston were in attendance.

Dr. C. H. McLane of Morgantown was a visitor in Huntington recently.

Lieutenant John K. Lawson who has been taking a special course in surgery in Chicago was a recent visitor in Huntington. Lieutenant Lawson is preparing to go to France.

DR. W. R. CUMMINGS, VETERAN  
HEALER, HEARS LAST CALL

Guyandotte Physician Had Been Practitioner in State Almost Fifty Years, End comes at home Sunday morning, was Past Grand Master of Odd Fellows—Funeral at home.

Dr. William Riley Cummings, for almost fifty years a practicing physician in southern West Virginia, died yesterday morning at ten o'clock at his home on Main street, Guyandotte. He was sixty-eight years old.

Death was due to paralysis, with which Dr. Cummings was first stricken on the evening of March 11, since when he had lain for the most of the time in an unconscious or semi-conscious condition. For two weeks prior to his death he had been entirely unconscious.

Dr. Cummings was a prominent member of the Independent Order of Odd Fellows and a past grand master of the West Virginia grand lodge of that organization. He was also a member of the Masons and the Knights of Pythias.

The Odd Fellows will be in charge of his funeral, which will be held this evening at 7:30 o'clock at the Cummings home, on Main street. The funeral party will go to East Bank, Kanawha county, Tuesday morning, and the interment will take place there. Dr. Cummings was for many years a resident of East Bank, and had hundreds of friends throughout that section.

Dr. Cummings was a physician of an unusual type, blending as he did the characteristics of the traditional country practitioner with those of the scientifically trained modern physician. And

it may truthfully be said that neither type suffered through his representation of it.

He was born in Alleghany county, Virginia, on December 20, 1860. At an early age, he moved to Bottetourt county, in the same state. He was educated in the country schools of Bottetourt county, and in the graded schools of Buckhannon, the county seat.

His college education began in Richmond, in 1872. At the end of two years he was given a certificate which, under the laws of that day, entitled him to practice medicine. In 1874 he came to West Virginia and established himself at Clendennin, Kanawha county.

It was in Clendennin that he was first married. His bride was Estelaine Hays, and they were married on July 15, 1875. Mrs. Cummings died on November 1, 1877, leaving one child, a son, N. Elmer Cummings, of this city.

In 1879, Dr. Cummings again married. The bride was Miss Emma F. Mitchell, of Buckhannon, Va. She, with three children, survives him. The children are Mrs. Frank H. Felows, of Middleport, O.; George Cummings, of the Federal Constabulary at Panama, and Mrs. Irvin Williams, at home.

During the time of his residence at Clendennin and his early years at East Bank, Dr. Cummings continued his studies. On alternating years he would go to the College of Physicians and Surgeons at Baltimore, and in 1882 he received his degree from that institution.

For many years thereafter he practiced medicine at East Bank, and in the surrounding portions of Kanawha and Fayette counties. Volumes are written in that sentence. He practiced medicine—and in the course of that

practice he spent days and nights in the struggle against death and disease. Homes that opened their doors to him as a physician opened their hearts to him as a friend, and, through the physician is gone, the memory of the friendship still dwells within.

It was in 1902 that he left his old surroundings, and came to Huntington. He practiced downtown for two years, and his work was building up well, but in December, 1903, upon the death of Dr. D. W. Dabney, he went to Guyandotte, then an independent municipality. Thereafter his work was mostly in town and city. But it was work, for he constantly devoted himself to the well being of his patients. The measure of success which he had met in East Bank was proportionately greater here, where he drew to the end increasing favor as a physician and as a friend.

Like a good soldier, he was stricken on the line of duty. No one will ever know just how his seizure came upon him. He had been making a professional call on the South Side, and it was apparent from his looks when he reached his son's home that he had fallen. He was never able to tell the story, however, for in a little while he became unconscious. He was removed to the Huntington General Hospital, and later to his home, where he remained until his death.

From his earliest youth he was a member of the M. E. church, South, and for many years he was steward of the East Bank and later of the Guyandotte church. He belonged to the Odd Fellows and the Knights of Pythias at East Bank, and to Western Star Lodge. A. F. & A. M., at Guyandotte.

His funeral will be conducted by Rev. John L. Vinson, pastor of the Guy-

andotte M. E. church, and Rev. John Martin, one of his old and time-tried friends.

His son George, who is at Panama, was unable to obtain leave when news of his father's death reached him, and consequently will not be able to be present at the funeral.

Clipped from the *Huntinging Herald-Dispatch*, May 13, 1918.

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#### DEATH OF DR. GRUBB—EXPIRES ON VESSEL WHILE ON WAY TO FRANCE.

The very distressing news has been received here of the death at sea, from enlargement of the heart, of Captain Albert Leslie Grubb, of the Medical Reserve service of the United States Army. The information came to Mrs. Grubb from an officer in the same regiment and on the same ship bound for France. In the same mail prominent Masons received from the same gentleman the information of Dr. Grubb's death. Not for a long time have we been so shocked. We understand Dr. Grubb died on April 6th, two days out at sea from New York. His remains were embalmed and will possibly be brought here for burial and the arrangements and interment will be in charge of the local Masonic lodge. Dr. Grubb was a native of Missouri, but lived here for about fifteen years and was known and liked by the whole community. For several years he lived in Denver, Colorado, where his mother now resides. Besides his mother he is survived by his wife and two young sons, all of whom are now living here. A few days before he sailed Dr. Grubb was here and told us that he had been recommended for promotion. We hope he got it. It was his ambition to make

such a record in the service as would enable him to be retained in the army after the war and the regular army reorganized. He was about 42 years of age and of large physique, was a doctor of fine ability and hoped with the experience to be gained in France to qualify himself for any position.

Perhaps no one in this community new him any better than the writer. We knew his aims, trials, ambitions and of his troubles. We participated in many of his pleasures and he always added to our pleasures and delights. He was a warm hearted impulsive man, would always have been a boy to those he liked—perhaps that was the secret of his attaching so many people to him. It is with a keen sense of personal loss that we write these lines and if they have a personal tinge we must be pardoned. We were instrumental in urging him to accept the appointment in the army, he loved army life, but at the last the trial of separation from his family and friends was so great that only a strong, stern sense of duty to his country and himself kept him in the service. He died in the line of duty—what more can a man ask? In a little room occupied by the writer hangs a photograph of our friend and several times during the night, following the sad news, we got up out of bed to look upon the old fellow's kindly face and remind him that it would not be long before we would meet.

This death brings the war very close to this community. It is the first from the Morgan contingent, we fear it will not be the last. We who remain be-

hind give of our substance. He gave his all. God rest his soul.

Clipped from The Berkley Springs News.

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## Medicine

### *Alkaline Treatment of Eclampsia.*—

Jose A. Maldonado (La Cronica dedica, of Lima, February, 1918) has found that the normal alkalinity of the blood of sixty per 1,000 is reduced in eclampsia to forty or even thirty. If the patient is first seen in the interval between attacks he gives .01 gram of morphine sulphate by hypodermic and also four grams of chloral hydrate by rectum in fifty c. c. warm water. This treatment usually prevents recurrence of attacks. If the patient is seen during an attack, the morphine is given and the quiet stage awaited before giving the chloral enema. Maldonado considers that chloroform is contradicted, as he has shown that any anesthesia reduces the normal alkalinity of the blood and tissues. One quarter of an hour after the chloral enema he gives another enema with fifty grams sodium bicarbonate in 400 c. c. warm water, which is best given by the Murphy drip method. Later he gives potassium bromide or chloral by mouth every two hours followed the next day by a saline purge. On subsequent days a diuretic treatment is continued with potassium nitrate or acetate in uva ursi and oxymel of squills, a milk or salt free diet is given, with small doses of bromide and chloral three times daily to maintain a state of low nervous excitability.

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